

Classification of Types Inferred in DDP Experiment

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1 Overview

This document gives the classification of each type inferred during the **DDP** experiment reported to ECOOP 2004.

During the classification, some types are assumed to be either good no matter what variable they are inferred for. Likewise, some types are assumed bad regardless of the variable. The next two sections of this paper give each list of such types, along with the number of times the type was inferred during the experiment.

The last section gives an exhaustive listing of every variable type inferred under each pruning threshold, along with whether it was categorized as good or bad.

The types are printed out as follows:

- Top - the top type
- Bottom - the bottom type
- UndefinedObject - a class type for the class “UndefinedObject”.
- Morph++ - a class cone type for class “Morph”, that is, the union of Morph plus all of its subclasses
- #foo - a selector type for the selector #foo
- a BlockType - a block type. The block is not listed in this listing, though it was inspected by the experimenters before categorizing. This loss of information in the report is justifiable because block types are unusual.
- { True UndefinedObject False } - a union of three simple types: the class types for True, UndefinedObject, and False

2 Good Types with Counts

- 427 count(s) of { UndefinedObject Array }
- 415 count(s) of UndefinedObject
- 311 count(s) of { True UndefinedObject False }
- 202 count(s) of { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- 134 count(s) of { UndefinedObject OrderedCollection }
- 130 count(s) of { UndefinedObject SmallInteger }
- 100 count(s) of { UndefinedObject Float }
- 76 count(s) of { UndefinedObject Dictionary }
- 60 count(s) of { CArrayAccessor UndefinedObject }
- 54 count(s) of { UndefinedObject SoundBuffer }
- 50 count(s) of { LedMorph UndefinedObject }
- 48 count(s) of { String UndefinedObject }
- 41 count(s) of { IRCCConnection UndefinedObject }
- 33 count(s) of { Array UndefinedObject OrderedCollection }
- 32 count(s) of { ArrayedCollection++ UndefinedObject }
- 31 count(s) of { False UndefinedObject }
- 30 count(s) of { UndefinedObject Bitmap }
- 30 count(s) of { UndefinedObject WriteStream }
- 30 count(s) of { Form UndefinedObject }
- 30 count(s) of { IdentitySet UndefinedObject }
- 24 count(s) of { UndefinedObject String Character }
- 20 count(s) of { Array UndefinedObject SoundBuffer }
- 20 count(s) of { Random UndefinedObject }
- 20 count(s) of { AlignmentMorph UndefinedObject }
- 20 count(s) of { UndefinedObject TetrisBoard }
- 20 count(s) of { PluggableTextView UndefinedObject }

- 18 count(s) of { CrLfFileStream UndefinedObject }
- 18 count(s) of { SampledSound SequentialSound UndefinedObject
ChatRecorder SoundInputStream SoundRecorder }
- 18 count(s) of { WordGameLetterMorph UndefinedObject }
- 16 count(s) of { Array UndefinedObject FloatArray }
- 15 count(s) of { Text UndefinedObject }
- 10 count(s) of { AlignmentMorphBob1 UndefinedObject SystemWindow
}
- 10 count(s) of { UndefinedObject #stagger #pile #grid }
- 10 count(s) of { UndefinedObject GradientFillStyle }
- 10 count(s) of { GSMCodec UndefinedObject }
- 10 count(s) of { UndefinedObject #inOrder #any }
- 10 count(s) of { Semaphore UndefinedObject }
- 10 count(s) of { PlayingCardDeck UndefinedObject }
- 10 count(s) of { UndefinedObject SortedCollection }
- 10 count(s) of { UndefinedObject True }
- 10 count(s) of { Socket UndefinedObject }
- 10 count(s) of { CrosticQuotePanel UndefinedObject }
- 10 count(s) of { StringMorph UndefinedObject }
- 10 count(s) of { UndefinedObject StandardFileStream }
- 10 count(s) of { PluggableDictionary UndefinedObject }
- 10 count(s) of { UndefinedObject Tetris }
- 10 count(s) of { UndefinedObject #pitch: #modulation: #ratio: }
- 10 count(s) of { UndefinedObject LedTimerMorph }
- 10 count(s) of { TetrisBlock UndefinedObject }
- 10 count(s) of { UndefinedObject InterpreterSimulator
InterpreterSimulatorMSB InterpreterSimulatorLSB }
- 10 count(s) of { StandardSystemView UndefinedObject }
- 10 count(s) of { UndefinedObject #wins #losses }

- 10 count(s) of { FreeCellBoard UndefinedObject }
- 10 count(s) of { UndefinedObject #nthWeekdayOfMonthEachYear #dayOfWeek #dayOfMonth #dateOfYear }
- 10 count(s) of { UndefinedObject POPSocket }
- 10 count(s) of { PlayingCardDeck UndefinedObject #doubleClickInStack:OnCard: }
- 10 count(s) of { FWT UndefinedObject }
- 10 count(s) of { PlayingCardDeck UndefinedObject #cardMoved #cardMovedHome }
- 10 count(s) of { UndefinedObject IRCChannelInfo }
- 10 count(s) of { UndefinedObject FloatArray }
- 10 count(s) of { CrosticPanel UndefinedObject }
- 10 count(s) of { UndefinedObject #updateColorM #updateColorV }
- 10 count(s) of { False UndefinedObject BitBltSimulator }
- 10 count(s) of { UndefinedObject #sameGame #pickGame #won #newGame #lost }
- 10 count(s) of { UndefinedObject #descending #ascending }
- 10 count(s) of { Interpreter UndefinedObject InterpreterSimulatorMSB InterpreterSimulatorLSB Bitmap InterpreterSimulator }
- 10 count(s) of { UndefinedObject PolygonMorph }
- 10 count(s) of { Set UndefinedObject }
- 10 count(s) of { UndefinedObject SameGameBoard }
- 10 count(s) of { PlayingCardDeck UndefinedObject #acceptCard:onStack: #acceptSingleCard:on: }
- 10 count(s) of { RBScanner UndefinedObject }
- 10 count(s) of { TextMorph UndefinedObject }
- 10 count(s) of { PlayingCardDeck UndefinedObject #dragCard:fromHome: #dragCard:fromStack: }
- 10 count(s) of { ChineseCheckers UndefinedObject }
- 10 count(s) of { UndefinedObject #stagger #straight #altStraight #single }

- 10 count(s) of { UndefinedObject #underlined #boxed #plain }
- 10 count(s) of { UndefinedObject #name }
- 9 count(s) of { UndefinedObject MIMEDocument }
- 9 count(s) of { Bitmap LargeNegativeInteger LargePositiveInteger UndefinedObject SmallInteger }
- 7 count(s) of { Boolean++ UndefinedObject #hierarchy #editClass #editComment #none #editMessageCategories #newClass #editMessage #newMessage #editSystemCategories #byteCodes }
- 7 count(s) of { UndefinedObject Rectangle }
- 6 count(s) of { UndefinedObject Compiler }
- 6 count(s) of { UndefinedObject Symbol String Character }
- 5 count(s) of { RBShortAssignmentToken RBOptimizedToken UndefinedObject RBToken RBPatternBlockToken RBScanner RBLiteralToken RBAssignmentToken RBKeywordToken RBBinarySelectorToken RBIdentifierToken RBSpecialCharacterToken }
- 5 count(s) of { SmallInteger LargeNegativeInteger LargePositiveInteger UndefinedObject Array }
- 4 count(s) of { Array UndefinedObject SortedCollection }
- 3 count(s) of { UndefinedObject Symbol }
- 3 count(s) of { CompiledMethod WordArrayForSegment KlattFrame OSAID FloatArray PointArray B3DRotationArray ComponentInstance TranslatedMethod Array2D ShortRunArray ShortPointArray ShortIntegerArray B3DVector2 B3DMatrix4x4 Pixmap Array B3DViewingFrustum ExternalAddress B3DIndexedTriangleArray WeakArray B3DInplaceArray B3DVector3 B3DColor4 B3DPrimitiveLight RunArray Symbol MacExternalData FlippyArray2 CompiledApplescript ByteArray AEDesc UndefinedObject IntegerArray B3DTexture2Array B3DRotation SoundBuffer String B3DFloatArray B3DColor4Array Text B3DMaterialColor ApplescriptInstance WordArray DescType B3DPrimitiveVertexArray B3DExponentTable B3DLightAttenuation B3DVector2Array ArrayedCollection B3DVector3Array DirectoryEntry B3DMaterial B3DIndexedQuadArray Bitmap B3DVector4 }
- 3 count(s) of { RBIdentifierToken UndefinedObject }
- 3 count(s) of { CustomMenu UndefinedObject }
- 3 count(s) of { SmallInteger UndefinedObject Float }

- 2 count(s) of { Boolean++ RShortAssignmentToken
RBOptimizedToken UndefinedObject RBToken RBPatternBlockToken
RBScanner RBLiteralToken RBAssignmentToken RBKeywordToken
RBBinarySelectorToken RBIdentifierToken RBSpecialCharacterToken }
- 2 count(s) of { Integer++ ScrollingToolHolder UndefinedObject
B3DRotation B3DVector3 }
- 1 count(s) of { UndefinedObject a BlockType a BlockType a BlockType
a BlockType a BlockType a BlockType a BlockType a BlockType a
BlockType a BlockType a BlockType a BlockType a BlockType a
BlockType a BlockType a BlockType }
- 1 count(s) of { Integer LargeNegativeInteger LargePositiveInteger
UndefinedObject SmallInteger }
- 1 count(s) of { UndefinedObject a BlockType a BlockType a BlockType
a BlockType a BlockType a BlockType a BlockType a BlockType a
BlockType a BlockType a BlockType a BlockType a BlockType a
BlockType a BlockType a BlockType }
- 1 count(s) of { SmalltalkInterchangeFileInManager++ SmallInteger
UndefinedObject False #forever }
- 1 count(s) of { RBMessageNode++ RBBlockNode++
RBMethodNode++ RBSequenceNode ZipEncoderNode
RBOptimizedNode RBAssignmentNode RBCascadeNode
UndefinedObject RBArrayNode RBReturnNode }
- 1 count(s) of { Boolean LargeNegativeInteger UndefinedObject
SmallInteger Integer class LargePositiveInteger }
- 1 count(s) of { UndefinedObject a BlockType a BlockType a BlockType
a BlockType a BlockType a BlockType a BlockType a BlockType a
BlockType a BlockType a BlockType a BlockType a BlockType a
BlockType a BlockType a BlockType }
- 1 count(s) of { UndefinedObject a BlockType a BlockType a BlockType
a BlockType a BlockType a BlockType a BlockType a BlockType a
BlockType a BlockType a BlockType a BlockType a BlockType a
BlockType a BlockType a BlockType }
- 1 count(s) of { UndefinedObject a BlockType a BlockType a BlockType
a BlockType a BlockType a BlockType a BlockType a BlockType a
BlockType a BlockType a BlockType a BlockType a BlockType a
BlockType a BlockType a BlockType }

- 1 count(s) of { UndefinedObject a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType }
- 1 count(s) of { UndefinedObject a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType }
- 1 count(s) of { UndefinedObject Array OrderedCollection SortedCollection }
- 1 count(s) of { UndefinedObject a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType }
- 1 count(s) of { UndefinedObject a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType }
- 1 count(s) of { UndefinedObject ReadStream CrLfFileStream }

3 Bad Types with Counts

- 4587 count(s) of Top
- 18 count(s) of { Magnitude++ UndefinedObject }
- 13 count(s) of { SequenceableCollection++ Integer++ UndefinedObject B3DIndexedQuad B3DPrimitiveRasterizerData B3DIndexedTriangle }
- 10 count(s) of { PluggableTextMorph++ StringHolderView++ UndefinedObject }
- 9 count(s) of { WaveletCodec MuLawCodec ADPCMCodec SoundCodec UndefinedObject LoopedSampledSound GSMCodec SampledSound }
- 8 count(s) of { PluggableTextMorph++ PluggableListMorph++ PluggableListView++ SimpleHierarchicalListMorph++ PluggableTextView UndefinedObject }
- 7 count(s) of { B3DTexture2Array B3DPrimitiveRasterizerData Integer PointArray CompiledApplescript ByteArray ArrayedCollection SoundBuffer ExternalAddress ShortIntegerArray KlattFrame B3DMaterialColor GraphicSymbol B3DVector3 FlippyArray2 WeakArray Pixmap WordArray B3DVector2Array B3DIndexedQuad }

B3DVector3Array DescType B3DPrimitiveVertexArray B3DRotation
 B3DIndexedTriangleArray WordArrayForSegment
 B3DIndexedQuadArray String B3DPrimitiveLight LargePositiveInteger
 ComponentInstance StandardSourceFileArray B3DIndexedTriangle
 FloatArray B3DColor4 OnceOnlyOrderedCollection TranslatedMethod
 DirectoryEntry Array2D B3DFloatArray AEDesc RunArray Symbol
 B3DInplaceArray Text Array B3DMaterial B3DRotationArray
 ApplescriptInstance MappedCollection B3DColor4Array Interval Heap
 UrlArgumentList SourceFileArray B3DLightAttenuation
 ShortPointArray B3DVector4 B3DVector2 SequenceableCollection
 MacExternalData OrderedCollection B3DExponentTable
 B3DViewingFrustum IntegerArray ShortRunArray SortedCollection
 Bitmap LinkedList B3DMatrix4x4 Semaphore TextLineInterval
 LargeNegativeInteger CompiledMethod OSAID UndefinedObject
 SmallInteger }

- 3 count(s) of { PluggableTextMorph++ FormMenuController
 PluggableButtonController Controller ProjectController
 UndefinedObject FormEditor PluggableListControllerOfMany
 PluggableTextView PluggableListController FillInTheBlankController
 StandardSystemController ListController MorphWorldController
 NoController BitEditor ParagraphEditor ScreenController
 ReadOnlyTextController ModalController StringHolderController
 DeferredActionStandardSystemController PluggableTextController }
- 1 count(s) of { ContextPart class++ EPSCanvas ChangeSorter
 FlashBoundaryShape FormHolderView B3DColor4
 NebraskaNavigationMorph TTSampleStringMorph Arc GIFReadWrite
 IRCChannelObserver ParameterTypeGoal FillInTheBlankView
 UnixFileDirectory CautiousModel HtmlInput LucidVariableExpression
 BasicButton UnionType FillStyle AbstractVariablesRefactoring
 MorphicTransform AddClassRefactoring NullEncoder MorphWorldView
 TempoEvent B3DLightAttenuation RemoveInstanceVariableChange
 InlineMethodRefactoring LineSegment RBLiteralNode TelnetMachine
 RBSpecialCharacterToken BooklikeMorph EToyCommunicatorMorph
 VRMLClassNode LucidMessage Matrix2x3Plugin MacFileDirectory
 RemoteFileStream ReadOnlyTextController LucidRegularClassCode
 WonderlandActor2 AbstractHierarchicalList Set MidiPrimTester PWS
 LucidLocalSymbolTable LucidVariable ScriptingDomain
 SmallIntegerArithmeticPrimitive B3DPrimitiveEdge
 SubclassOfClassToRename TransferMorph B3DFillList
 PlayerReferenceReadout HtmlOrderedList CodeServer FlashSpriteMorph
 UndoColorChange FontCache POEdgeList Bezier3Segment FooPlugin2
 SimpleNeverFailingPrimitive ParagraphEditor HtmlNoEmbed
 LedTimerMorph B3DHardwareEngine SequentialSound
 SketchEditorMorph UnscriptedPlayer ShortRunArray WeakArray
 RecentMessageSet B3DDisplayScreen WonderlandWrapperMorph

RemoveMethodRefactoring VariableEnvironmentTest SlotInformation
B3DMatrix4x4 ProgressMorph RBAssignmentToken TabbedPalette
MVCWiWPasteUpMorph VoiceEvent NebraskaServerMorph
VeryPickyMorph RBAssignmentNode EToyChatOrBadgeMorph
PluggableCodeGenerator GeePrinterPage CollapsedMorph Metaclass
LucidClassCode Morph AbstractClassVariableRefactoring
CanvasCharacterScanner KeyboardEvent FlashThumbnailMorph Viewer
FlashColorTransform WeakValueDictionary FreeTranslation
LucidRespondersGoal LTLiteral TabSorterMorph TextContainer
StringMorph StringSocket StandardViewer AddPoolVariableChange
B3DSimulRasterizer ClassCategoryReader PrettyTextDiffBuilder
MixedSound RBToken FormView ExternalType B3DVector2
B3DPrimitiveTransformer COBJECTACCESSOR LucidInverseTypeGoal
SampledInstrument PullUpInstanceVariableRefactoring B3DViewport
ColorPatchCanvas B3DTexture ChatPage ScorePlayer B3DPickerEngine
GesturalEvent PostscriptCanvas FuddyDudd Array2D LTSELF
TalkGesturalEvent FileStream AttributedTextStream Hierarchical
MoveVariableDefinitionTest AliceCamera FancyCelesteComposition
WonderlandEditorTabs ByteEncoder HtmlForm
CreateAccessorsForVariableRefactoring FlattenEncoder
ExternalFunction Pen VRMLCompositeNode LTComment
RadioButtonSetInput B3DVector3Array UndoParentChange
BlockSimulation ProjectView B3DEnginePart LucidLiteralExpression
MatrixTransformMorph MIDIPianoKeyboardMorph
RemoteControlledHandMorph B3DSceneMorph LargePositiveInteger
ChangeList VRMLProtoNode EToyMorphsWelcomeMorph
MorphAlarm AddClassChange HTMLformatter StringHolderView
ComponentInstance MultiResolutionCanvas CodecDemoMorph
ListItemWrapper FormEditor HtmlBoldEntity B3DSimpleMeshVertex
WonderlandUndoStack CrosticPanel WordGameLetterMorph
Win32Point POTriangle LucidExpression PluggableListView TextDoIt
B3DInplaceArray MimeConverter IllegalResumeAttempt GesturalVoice
TextLink DropDownChoiceMorph TemporaryToInstanceVariableTest
PrimitiveTestCase RBNamespace ControlManager InterpreterProxy
LiteralDictionary LimitingLineStreamWrapper TempVariableNode
FFITester DamageRecorder ZipWriteStream InlineMethodTest
RBFormatter FreeCellStatistics ArrayedCollection LucidSuperExpression
HtmlStyle ScriptableButton MethodMorph FormMenuController
RBVariableNode PhonemeSet MailInboxFile StoreEncoder
SymbolTablePool HtmlAnchor PositionableStream IntegerPokerPlugin
ThumbnailMorph MethodSimulation PluggableListMorph
AuthorizedWriteSwiki BorderedMorph WriteStream AsyncFile
EmphasizedMenu HtmlArea ColorSeerTile RefactoryVariableChange
InflateStream ZLibWriteStream B3DVertexClipper Workspace
ParseTreeLintRule IdentityDictionary KeyWordNode AliceNamespace
B3DPrimitiveClipper RBPatternVariableNode Debugger Component1

MorphExtension AddInstanceVariableTest OSAID PluggableTextView
Association ClassBuilder FillInTheBlank ReceiverAndSelector
Decompiler EtoyUpdatingThreePhaseButtonMorph AddParameterTest
SmalllintChecker SameGameTile SoundEventMorph AliceActor
MIMEDocument HtmlFontEntity B3DFloatArray TTCompositeGlyph
TextPlusJumpEnd TextFontReference UndoPositionChange RBPaser
HtmlParser EmbeddedServerAction GeeMailMorph
B3DHardwareRasterizer HtmlBiggerFontEntity B3DMultiMesh
MatrixTransform2x3 TransformationRule PinMorph MethodDictionary
SmalltalkEnvironment WonderlandMesh AlansTextPlusMorph
POObject UserInputEvent TGoToNode
RenameInstanceVariableRefactoring ColorForm LucidSelfExpression
MenuItemMorph EnvelopeEditorMorph SoundPlugin
RemoveClassRefactoring ClippingCanvas RBClassTest
MorphicEventEncoder Phoneme ObjectViewer CosineInterpolator
MultiuserTinyPaint B3DMaterial StrikeFont LucidKeywordMessage
PluggableMessageCategoryListMorph B3DRotationArray
InstantiationPrimitive LucidBlockReturnFlowGoal TextOnCurve
ColorMap ZoomAndScrollControllerMorph MessageSet
LucidBinaryMessage Time B3DCamera PluggableDictionary
StandardFileStream ActiveSwikiAction MorphicModel ServerAction
EyeMorph BackgroundMorph MouseOverMorph MorphicEvent
FlashShapeMorph EventRecorderMorph LargeIntegersPlugin
TextStream SelfOfMethodFlowPosition WonderlandActorViewer
ExternalScreen LimitedWriteStream AliceScheduler
TTFontTableDirEntry SimpleHierarchicalListMorph
StandardSystemView PushDownClassVariableTest RBBlockReplaceRule
DummyStream FilePluginSimulator Week FlashFileReader
SelectorEnvironmentBrowser SocketPlugin LTCloseBracket
ImageSegmentRootStub LTOpenBracket PianoKeyboardMorph Flipper
ClassConeType SmallIntegerComparisonPrimitive
ExtractMethodRefactoring RecordingControlsMorph
CompositeTransform TranslucentColor PlayWithMe1 RBParseTreeRule
AlwaysFailingPrimitive AcornFileDirectory RBKeywordToken DescType
SurfacePlugin MessageAsTempNode RemoveClassVariableTest
LiteralSimulation FunctionComponent SinglePlugServerAction LintRule
LucidCompiler SoundInputStream IndexTabs FTPSocket ZipEncoder
Preferences ObjectRepresentativeMorph Speaker AliceScript Notification
ConstantPoolTest RenameMethodTest AAATIREADME
StringReadoutTile IRCChannelUsersBrowser LucidClassVarSymbolTable
AddParameterRefactoring EUBlock ParallelAnimation PDA
SmartRefStream CurveMorph MouseActionIndicatorMorph
AliceUndoAnimation SwikiPage SampledSound InterpreterPlugin
Win32HGDIObj MoveVariableDefinitionRefactoring WonderlandActor12
Circle HtmlStrikeEntity MorphThumbnail HierarchicalUrl
FlashTextMorph B3DSceneObject ChineseCheckers

CreateAccessorsForVariableTest TTFontReader HtmlTableRow
HtmlUnderlineEntity CArrayAccessor TableLayoutProperties FMSound
DoCommandOnceMorph B3DAmbientLight IconicButton
WiWPasteUpMorph RBNamespaceTest IntegerArray LTThisContext
SorterTokenMorph ProgressNotification SoundReadoutTile
PoolVariableFlowPosition ParsedCodePoolTestCase Model FilePackage
InstanceVariableTypeSlot RefactoringBrowserTest HtmlBlockQuote
RandomEnvelope LintDialog SerialPlugin DECTalkReader
HtmlTableDataItem HtmlParagraph SwikiAction
ExtractToTemporaryTest PhonemeRecord HtmlBreak
SoundCodecPlugin LucidFlowGoal AutoStart RBMessageNode
PlayWithMe3 MethodNode TextPlusJumpStart LTColonWord
StackMorph CachingMorph RenameInstanceVariableChange
BalloonRectangleMorph WonderlandStyle WonderlandActor7 FtpUrl
Month Symbol RunArray Button HtmlUnorderedList Canvas
WonderlandActor10 TransferMorphLineAnimation
ThreeDSChunkDescription LTSemicolon RenderingSwikiAction
HTTPSocket GraphMorph ScrollPane TextMorphForEditView
SequentialAnimation MarqueeMorph VRMLStandardNode
PaintBoxColorPicker RBBlockNode SimpleSliderMorph B3DSimpleMesh
ComponentLayout TransitionMorph ViewerFlapTab
ObjectExplorerWrapper SimpleClientSocket TIContext
ConnectionQueue B3DActiveEdgeTable ServerDirectory
AddMethodRefactoring VRMLWriter SystemTracer MethodContext
CompiledMethod Socket FWT RBCascadeNode TCaseStmtNode
SendTypeSlot UndoAction B3DShaderPlugin HtmlOptionGroup
HeadingMorph SpectrumAnalyzerMorph Float ExternalLibrary Phrase
WonderlandPositionalLight EventModel
ExtractMethodToComponentTest StandardSystemController
LucidUnaryMessage ObjectExplorer LinearFit LoopbackStringSocket
RenameVariableChange SymbolListTile Command UnaryFloatPrimitive
GeeBookPageMorph InterpreterSupportCode HtmlEmbedded
FormSetFont TextKern SameGameBoard BOBTransformationMorph
Inspector WonderlandQuickReference BlockContext
BinaryFloatPrimitive B3DPrimitiveLight IRCChannelSummary
RemoveMethodTest InflatePlugin TSendNode LessHTMLformatter
B3DPrimitiveEdgeList ComponentLikeModel ClassEnvironment
RenameClassChange ReturnReceiverPrimitive
LucidMethodReturnFlowGoal ChangeListForProjects X11Window
SoundDemoMorph CharacterScanner PullUpClassVariableRefactoring
PostscriptCharacterScanner PerformTypeSlot WeakSet MidiInputMorph
FileDirectory DeepCopier SimpleButtonMorph ProtocolEnvironment
EllipseMorph WonderlandActor9 PlayingCard
WonderlandCameraMorph PluggableListViewOfMany BlockArgsNode
LucidMessageExpression RulerMorph TestResult TextOnCurveContainer
SmalltalkInterchangeSqueakFileInManager WorldWindow

HtmlDefinitionDefinition TransformationB2Morph PNGReadWrite
LocalVariableTypeSlot PseudoClassOrganizer LucidDeadEndFlowGoal
MenuItemMorph ZipEncoderNode PrintableEncoder UndoShowHide
WonderlandVerifier CompositeVoice ProjectController UndoSizeChange
FlashPlayerModel RenderedSwikiAction MouseButtonEvent
RemoveInstanceVariableRefactoring HtmlHorizontalRule HiddenInput
KlattSegmentParameter Url TestOSAPLugin LucidMethodSpecification
LucidSendersGoal EToyFridgeMorph BufferedCanvas Win32Handle
FastInflateStream PswikiAction LTSuper NebraskaDebug
KlattSynthesizer CommandHistory PerfectTypeGoal ListComponent
ExternalObject SimplerTextContainer Bag ZoomAndScrollMorph
LucidMethodSpecificationTestCase ShortPointArray PitchEnvelope
MoodGesturalEvent FloatTruncatedPrimitive TestCClass3
B3DPrimitiveObject NewParagraph ContextlessVariableFlowPosition
HtmlTable MethodTypeGoal DisplayMedium ReadStream
FillInTheBlankMorph PluggableListViewByItem RefactoringWarning
VRMLUnhandledNode VRMLScene PluginCodeLoader
SplitClassRefactoring PluginLauncher AliceRelativeAnimation
AbsoluteAnimation Cursor B3DIndexedQuadMesh
UnfailingSmallIntegerArithmeticPrimitive B3DVertexRasterizer
HtmlText StepMessage IntonationVisitor EmptyFlowPosition
RefractoryTestDataApp HtmlFileStream ProjectViewMorph
ParserRemovedUnusedTemps UndoVisibilityChange GSMCodec
PushDownInstanceVariableTest Word RBStringReplaceRule
HtmlTextEntity AlignmentMorphBob1 SentNotImplementedTestCase
SyntaxAttribute ProgressInitiationException BasicLintRule
RBReplaceRule PDARecurringEvent EToyTextNodeWrapper
CompositeLintRuleTest TMethod OrientedFillStyle FlashSoundEnvelope
LucidEmptySymbolTable HtmlHeadEntity KeyboardMorphForInput
ScreenshotAction DisplayText LucidHopelessFlowGoal RemoteCanvas
ColorSwatch TTPoint Quadrangle WaveletCodec FilePlugin TiTestCode
BlockType InstanceVariableFlowPosition RBArrayNode
B3DVector2Array TextMorphEditor UpdatingRectangleMorph
EToySenderMorph Date LargeNegativeInteger WarpBlt
B3DDirectionalLight F0RenderingVisitor TransformationRuleTest
BalloonState SketchMorph TestInterpreterPlugin TabMorph
ProjectHistory FloatArithmeticPrimitive X11GC B3DAcceleratorPlugin
MessageSendTypeGoal Boolean KlattSegmentSet LedDigitMorph
AddClassVariableTest RenameClassVariableChange LucidSymbolTable
CompositeEvent FileStreamException RemoveParameterRefactoring
CompressedSoundData RemoveClassVariableRefactoring
UpdatingSimpleButtonMorph ExternalStructure
RBShortAssignmentToken MultiCanvas StickySketchMorph
AliceHierarchical VariableRefactoring PluggableTextMorph
StandardFileMenu AtomMorph PushDownMethodTest LucidSenderSet
PushUpInstanceVariableTest MoveMethodTest

PluggableButtonController LiteralNode HtmlTag AlignmentMorph
UtteranceVisitor TAssignmentNode DataStream ReadNewsInboxFile
PointerFinder RadioButtonInput TLabeledCommentNode
LucidReturnExpression Win32HBrush DictionaryInspector LTCaret
HtmlFrame WorldViewModel TetrisBoard VRMLNodeSpec Clause
InlineParameterTest Primitive UpdatingThreePhaseButtonMorph
ViewerRow Browser FlashLineStyle ChatNotes
ChangeMethodNameRefactoring PreferencesPanel ChangeRecord
TParseNode BitBlt LucidPerfectFlowGoal ExternalForm
HtmlTextualEntity PointArray FFIPugin QueueSound B3DColor4Array
ListParagraph UndoTextureChange FreeCell MoveMethodRefactoring
LeafNode PreDebugWindow Tetris AbstractInterpretation
PrintComponent PluggableListMorphByItem RandomNumberTile
ProgressTargetRequestNotification InlineMethodFromComponentTest
FloatingBookControlsMorph Sonogram BottomType
WindowingTransformation Bitmap EToyProjectRenamerMorph
TestModel ScriptStatusControl X11Drawable MouseMoveEvent
PluggableTextController VariableDock Envelope PrintSpecifications
TrashCanMorph WonderlandActor14 CartesianProductTestCase
LargeIntegersTest AtPrimitive RefactoryChange VRMLGenericNode
Message MailtoUrl BasicLintRuleTest ShortIntegerArray NoController
B3DPrimitiveFace ReferenceMorph UpdatingMenuItemMorph
HtmlDefinitionListElement URLMorph Utilities BalloonEnginePlugin
ParseTreeEnvironment EToyGateKeeperMorph TransformationMorph
GZipReadStream PerformPrimitive RemoteString FaceMorph
AIFFFilerReader FormCanvas AddInstanceVariableChange MacRect
PasteUpMorph RenameClassVariableRefactoring Discussion
PlayWithMe2 BlobMorph B3DVector4 B3DEnginePlugin LTOpenParen
PDAChoiceMorph Warning ControlChangeEvent MorphWorldController
ExpressionFlowPosition FlashMorph CPluggableAccessor
JPEGHuffmanTable EToyPeerToPeer LucidScannerTestCase
AudioChatGUI EToyProjectHistoryMorph AbstractFont ScrollBar
MessageTally HtmlList FlowPositionTestCase POVertex TetrisBlock
RectangleMorph VariableSimulation Win32Shell CanvasEncoder
WordNet ClassOrganizer AuthorizedSwikiAction PostscriptEncoder
TextComponent TextAction Animation ClassType NotEnvironment
ExternalAddress Scanner InternalThreadNavigationMorph
WonderlandActorData IRCProtocolMessage RBProgramNode
DumberMenuMorph AddMethodChange ProgramChangeEvent
B3DVector3 SelectorEnvironment ListController VariableTypeGoal
ValueHolder FlippyArray2 FlashButtonMorph TextPlusPasteUpMorph
RBAbstractCondition TranslucentProgressMorph DualChangeSorter
ZASMCameraMarkMorph PluginHTTPRequest HtmlFixedWidthEntity
InlineAllSendersRefactoring PCXReadWrite IRCChannelInfo
LucidLocalVariable AliceTextOutputWindow B3DPrimitiveVertex
WonderlandSpotLight MailAddressTokenizer

CommandLineLauncherExample ActorState ColorTileMorph Scamper
InterpreterSimulatorLSB LucidInstanceVariable LTPeriod
BitmapFillStyle PushDownInstanceVariableRefactoring GeePrinter
BlockLintRule RBMethodName IRCMorph
UpdatingBooleanStringMorph HaloSpec RBMethod HtmlOption View
Switch EnvelopeLineMorph LucidParser PolygonMorph PSwikiPage
TableLayout GradientFillMorph ZipEncoderTree
RenameClassVariableTest PluggableFileListView WordArray
B3DClipperPlugin B3DPrimitiveVertexArray TestTMethod
BlockValueMethodSimulation FlashDamageRecorder
SuperedSendTypeSlot PseudoClass RemoveMethodChange
CachingCanvas CompressedBoundaryShape MailAddressToken
BalloonMorph LipsMorph SelectorNode UndescribedTile LinkedList
POHalfedge HtmlCommentEntity HtmlImage CategoryEnvironment
PushDownMethodRefactoring HtmlButton WonderlandCamera
LTAssignmentOp FXBltSimulator Color
TemporaryToInstanceVariableRefactoring PostscriptDummyWarp
MouseMenuController IndentingListItemMorph B3DIndexedMesh
ScorePlayerMorph SmalltalkInterchangeFileInManager Point
FloatTimesTwoPowerPrimitive UndoAnimation URLmap EToySystem
TIPTestPlugin ComplexProgressIndicator RemoveClassTest
Environment PianoRollNoteMorph B3DSTriangleMesh LTVertBar
MovieFrameSyncMorph PaintInvokingMorph MultipleSelectionModel
WordArrayForSegment TConstantNode
SmalltalkInterchangeSqueakFileOutManager Win32HDC
ZASMScriptMorph B3DMorph SoundLoopMorph
MorphicUnknownEvent HtmlSelect TextURL PhoneticTranscriber
TTFontDescription RBSmallDictionary
ExtractMethodToComponentRefactoring BrowserUrl
GraphicSymbolInstance UpdatingStringMorphWithArgument
CodeLoader SoundTile GeeBookMorph RefactoringBrowser
VRMLEnumerator UndoPOVChange RemoveParameterTest
ReturnNode WeakRegistry FlashPlayerWindow LayoutFrame
InlineTemporaryTest AssignmentSimulation FXBltSimulation
LucidReceiverFlowGoal FishEyeMorph LucidToken RemoveClassChange
ContextPart PluggableTest RefactoryClassChange
ThirtyTwoBitRegister FlashJPEGDecoder HtmlAttributes
RenamedClassSourceReader KlattFrame ScriptInstantiation
AbstractClassVariableTest ExplicitSourceCodePool
RequestAlternateSyntaxSetting Heap PropertyListEncoder
MorphicModel4 ScrollingToolHolder InlineParameterRefactoring
TextFieldMorph LucidAssignmentExpression ZLibReadStream
ObjectScanner MacRGBColor WonderlandActor5 WonderlandActor13
SortedCollection RenameTemporaryRefactoring TextEmphasis
ScriptEditorMorph SymbolTableTestCase VRMLUndefinedNode
ReferenceFinderTest AddClassTest MswUrl B3DPrimitiveRasterizer

BooleanTile LucidTypeGoal IRCCConnection FlashMorphReader
LucidParameter ClassDiffBuilder MovieClipStartMorph
RefactoringManager AbstractSound ContextVariablesInspector PinSpec
WikiPseudoFileStream VRMLProtoClassNode BrowserEnvironment
HtmlTextArea TransferMorphAnimation MuLawCodec VRMLUseNode
AlertMorph FlashKeyframe CursorWithMask TReturnNode
HtmlEntityInspector Oop CompositeRefactoryChange Text
ExtractMethodTest Pixmap ImageSegment PluckedSound
AlicePoolDefiner NebraskaClient RBPatterBlockToken HeadMorph
LinkedMessageSet WonderlandMorph XBMReadWriter
SimpleButtonDelayedMenuMorph ThisContextSimulation
CommentNode NewHandleMorph SequenceableCollection LintRuleTest
MailDBFile DisplayScreen SoundMorph CachedHTTPRequest
FormMenuView TestRunner ClassCommentReader Password
UnloadedSound InstructionStream WonderlandEditor
AliceAbstractAnimation AddClassVariableRefactoring
LucidPoolVariable Semaphore HtmlSubscript TextPlusMorph
LineMorph B3DVertexShader AbstractMediaEventMorph
GazeGesturalEvent LTWord ThreeDSParser GZipWriteStream
Component NameStringInHalo ScaleMorph VRMLDefNode
SuperWikiServer PullUpClassVariableTest Line
SmalltalkInterchangeFileItem FontSet Win32Window
SmalllintResultEditor SoundPlayer FinderTool B3DVertexBuffer
ReturnBooleanPrimitive FileInput MailAddressParser
TestFailureErrorList NoteEvent LucidMetaClassCode
InterimSoundMorph X11Display InlineTemporaryRefactoring Presenter
NumericReadoutTile TestFailure WonderlandActorBrowser
FFITestPoint4 Player1 FlashGlyphMorph Random
RemovePoolVariableChange HttpUrl Exception ParsedCodePool
POTriangulation ParseStack Class ChooserMorph GraphicSymbol
SolidFillStyle MouseDownMorph BooleanScriptEditor
MIDISynthChannel CelesteComposition ScriptEvaluatorMorph
VariablePool WonderlandActor4 Number WonderlandScriptEditor
WonderlandActor21 MorphObjectOut WonderlandCameraControls
MethodNameEditor HtmlFormEntity RequestCurrentWorldNotification
WonderlandActor6 GZipSurrogateStream ScreeningMorph PDAEvent
TIParametersContext DialectMethodNode HtmlBody TilePadMorph
PianoRollScoreMorph DialectStream EToyGateKeeperEntry
B3DInterpolatedMesh B3DViewingFrustum TextFontChange
MonthMorph DigitalSignatureAlgorithm ConstantVariablePool
TransformMorph CompositeAnimation BrowserEnvironmentWrapper
GrafPort RBCondition RBMetaClass CompiledMethod class
FlashPlayerMorph ScriptActivationButton POSimplePolygon
WheelMorph AliceUpdateable HtmlFormatter UndefinedObject
ThreePhaseButtonMorph B3DTexture2Array NetworkTerminalMorph
WaveEditor LucidClassVariable MIDIControllerMorph Session

CanvasDecoder SmalltalkInterchangeFileManager InputSensor
WonderlandDirectionalLight B3DMaterialColor SoundRecorder
MethodParameterTypeSlot PaintBoxMorph DosFileDirectory
ParameterFlowPosition OneOnSwitch EquivalencePrimitive
FatBitsPaint RBLiteralToken HtmlTitle BraceNode WonderlandActor8
BitBltSimulator B3DPrimitiveFaceAttributes SymbolType
WeakKeyDictionary ParserTest FreeCellBoard TinyPaint
MacExternalData DeflateStream B3DRenderEngine MethodFinder
AdvancedB3DSceneMorph BalloonCanvas PackageBrowser
DSCPostscriptCanvas SecureHashAlgorithm ReadWriteStream
DefaultPrimitive Collection RWBinaryOrTextStream
PushUpMethodTest HtmlHead AliceLight B3DPrimitiveRasterizerData
FrameRateMorph TopType MethodTypeSlot PostscriptEncoderToDisk
TestSuite CompoundTileMorph CurrentProjectRefactoring TypeSlot
BalloonBuffer HandleMorph RestSound LoopedSampledSound
IRCChannelListBrowser NullTerminalMorph MessageSendSimulation
B3DPrimitiveRasterizerState B3DPickerPlugin
EToyProjectQueryMorph ExternalSemaphoreTable TStmtListNode
HopelessTypeGoal DSCPostscriptCanvasToDisk PopUpMenu ServerFile
DropEvent WordGamePanelMorph MagnifierMorph
ChineseCheckerPiece SpeakerMorph ObjectMemory MouseOverHandler
GraphicalMenu HtmlFrameSet AbstractLauncher MailDB TextLine
FlashFileWriter TileLikeMorph Magnitude TileMessageNode Parser
BlockCannotReturn SelectionMorph RenameInstanceVariableTest
HTTPRequest BookPageThumbnailMorph SimpleSwitchMorph
TTKernPair PDAClockMorph PluggableCanvas WorldState
BlockParameterTypeGoal FlexMorph CharacterBlockScanner
LucidSingleMessageExpression TIDefaultContext StringHolder
BalloonLineSimulation RBOptimizedNode ExceptionAboutToReturn
BalloonDebugEngine CharRecog TiTestSubSub Refactoring DSAPLugin
AEDesc ExpandReferencedPoolsRefactoring PseudoMetaclass
CardPlayer IRCMessagePattern DurationsVisitor
AliceAbsoluteAnimation DeflatePlugin RFC2047MimeConverter
LookupKey RBSearchRule RelativeAnimation IndexFile
TTContourConstruction HtmlComment Interpreter
VariableEnvironmentBrowser WonderlandScene TIContextTestCase
EventSensor RealEstateAgent PDAMorph PartsWindow
EToyHierarchicalTextGizmo CustomMenu RBPatterMethodNode
CommandTilesMorph VRMLDynamicAttribute
LucidTypeInferenceTestCase StretchyImageMorph ChatButtonMorph
LucidBraceExpression AddInstanceVariableRefactoring RefactoringTest
LucidGoalPool LayoutCell NetNameResolver TypePool
MethodTempsNode B3DIndexedTriangleMesh TextAnchor
FlashSorterMorph LucidUniversalSenderSet
ExtraParsingAndFormattingTests CrosticQuotePanel
PhraseWrapperMorph RBPatterBlockNode EndOfStream

Interpolateable Wonderland CharacterSet ClockMorph
ToggleButtonInput ObjectTracer HtmlMap B3DSpotLight InfiniteForm
FakeClassPool HtmlHeader NetworkTerminalBorderMorph TestCClass2
PluggableTextMorphWithModel MIMEHeaderValue
LucidArgumentFlowGoal AmbientEvent SystemSourceCodePool
VersionsBrowser FileExistsException WonderlandActor3 TVariableNode
SmallintTest TypeTestCase ReturnSimulation
InteractiveAddMethodChange SyntaxError VRMLBaseNode
Transcripser RemoveClassVariableChange HtmlDocument
LucidConstantVariable FileDoesNotExistException KidNavigationMorph
LucidRegularSenderSet ChangeSet PluggableListControllerOfMany
BalloonEngineSimulation FMBassoonSound UndoChangeList
TextDiffBuilder Syllable DirectoryEntry LucidThisContextExpression
CompositeLintRule TextPrinter ApplescriptError ZoomMorph TestCase
ProportionalLayout RBAbstractClass MappedCollection
WonderlandStillCamera B3DCameraPerspective CipherPanel
SourceFileArray ObjectSocket IdentityTransform HtmlToken
RepeatingSound MessagePartNode CachedSwikiAction RNInboxFile
FormInputSet B3DIndexedQuad SoundCodec FileUrl FlasherMorph
LTBinaryOp StaticViewForm HtmlBlockEntity PluggableButtonView
SimpleMIDIPort HtmlDefinitionList CCodeGenerator
HtmlDefinitionTerm SquishedNameMorph EToyIncomingMessage
PlayingCardDeck Authorizer MethodRefactoring Player3
UniversalFlowPosition ModalSystemWindowView LTOpenBrace
SharedQueue StoryboardBookMorph MenuMorph Scheduler
ToggleButtonMorph ParseTreeSearcher TextColor ExternalFormRegistry
FlowPosition ChatRecorder Unsigned MoviePlayerMorph
B3DRasterizerPlugin FlashProgressMorph MenuItem RBIdentifierToken
SmallIntegerDividePrimitive MovieClipEndMorph B3DLightSource
AbstractAnimation HtmlPreformattedRegion EToyMultiChatMorph
DisplayScanner RenameMethodRefactoring SystemOrganizer
ReferenceStream SmalltalkInterchangeFileOutManager CharacterBlock
DoubleClickExample UrlArgumentList CrLfFileStream DrawErrorMorph
MouseEvent AddClassVariableChange Win32Rectangle
ClassRepresentativeMorph VRMLNodeAttribute ExceptionTester
ListView SystemDictionary ImageMorphWithSpotlight RBClass
AbstractInstanceVariableRefactoring ExecutionUnit ScrollController
B3DSimpleMeshFace PhraseTileMorph ChangedMessageSet
FMClarinetsound Comment MIDIScore TTGlyph MultiEnvironment
RBMethodNode FlashCharacterMorph MorphicModel3 Rectangle
RBPatternMessageNode MessageNode MIMEPart MIDIPlugin
VariableTypeTest ImageMorph MIDISynth EToyListenerMorph
MessageFile Action HandMorphForReplay TestCodeGenerator
AsynchFilePlugin TiTestSub ProtocolBrowser Player2
PushDownClassVariableRefactoring TextAnchorPlus TextAttribute
MIDIFileReader IRCMessageSet IntegerAsFloatPrimitive RBValueToken

Stream MessageSend VRMLInterpolatorNode ApplescriptInstance
 RBSequenceNode Link EToyHierarchicalTextMorph SegmentScanner
 DHtmlFormatter TextSqkProjectLink GradientFillStyle PrintEncoder
 GenericUrl TextSqkPageLink BlockNode Error MessageNotUnderstood
 ExternalData CodeHolder EToyProjectDetailsMorph
 FlippyArrayPlugin2 TextLineInterval LucidMethod
 UpdatingStringMorph RBConjunctiveCondition StringHolderController
 Behavior PushUpMethodRefactoring Halt RemoveInstanceVariableTest
 SelfSimulation PDAToDoItem CornerRounder
 IRCDirectMessagesObserver CachingCodeLoader AssertionFailure
 ModalController B3DRotation EUMethod VRMLExternProtoClassNode
 HtmlListItem String RefactoryChangeManager HTTPLoader
 RefactoringError SystemQueryPhrase ClassRefactoring
 BalloonEngineBase EventHandler MovieMorph HtmlEntity
 TranscriptStream RBScanner LucidClassSymbolTable
 ShadowDrawingCanvas JoystickMorph FormInput
 BookPageSorterMorph StringMorphEditor SoundSequencerMorph
 CompositionScanner OrderedCollection IndexFileEntry NullCanvas
 TwoWayScrollPane RBNegationCondition TestCClass1 PerfectTypeSlot
 FlashCodec RBReturnNode SoundBuffer InstVarRefLocator MailNotifier
 WonderlandControls ChildrenToSiblingsTest InterpreterSimulatorMSB
 B3DPositionalLight True FileList2 AbstractInstanceVariableTest FXBlit
 B3DIndexedQuadArray ProtectInstanceVariableTest
 BlockValueTypeGoal MorphicEventDecoder HopelessTypeSlot
 VariableTypeSlot MIDIInputParser B3DPrimitiveShader
 SqueakPageCache WebPageMorph MyTestNotification
 StandardScriptingSystem Foo2 RenameClassTest LiljencrantsFant
 MouseClickState WonderlandEvent OnceOnlyOrderedCollection
 DocLibrary FlashSoundInformation DisplayTextView HtmlItalicsEntity
 ParseNode WeakValueAssociation ProcessBrowser Alarm SqueakPage
 ProjectLoading AliceAlarm Dictionary LayoutProperties
 HierarchyBrowser B3DPoolDefiner FileContentsBrowser
 GraphicalDictionaryMenu RBProgramNodeVisitor LedMorph
 ProtectInstanceVariableRefactoring BitBlitSimulation MVCMenuMorph
 FlashFileStream POPSocket InspectorBrowser Compiler NebraskaServer
 MailMessage PURLmap MyResumableTestError LucidPoolSymbolTable
 LucidScanner ClassChangeRecord ReturnSmallIntegerPrimitive
 BitEditor PenPointRecorder B3DIndexedTriangleArray PhoneticEvent
 BalloonEdgeData FFTPlugin LucidParserFromRB AbstractScoreEvent
 TextMorph SyntaxMorph Array2D class TestInterfaceBase FXGrafPort
 LTCloseParen B3DScene EllipseMidpointTracer WonderlandLightSource
 DialectParser ListViewLine FFITestPoint2 OrderedCollectionInspector
 DeferredActionStandardSystemController SystemMonitor
 PickAFileToWriteNotification JoystickTabletPlugin PDARecord
 BalloonBezierSimulation Path TTSampleFontMorph
 RendererSwikiAction VolumeEnvelope FileList ImageReadWriter

Interval Type PluggableServerAction ExternalStructureInspector
KlattFrameMorph RBValueNode MyTestError HtmlTokenizer
FormEditorView ClassPrimitive VRMLStream
LucidCascadedMessageExpression TextStyle B3DVertexTransformer
Process HtmlMeta StringButtonMorph HtmlSmallerFontEntity
AssignmentTileMorph IndentingListParagraphMorph
LucidConstantSymbolTable IdentitySet BalloonEngine MenuTile
AliceAction PhonemeRecognizerMorph LTCloseBrace VariableNode
EUExpression EToyChatMorph InterpreterSimulator
BinarySmallIntegerPrimitive ExtractToTemporaryRefactoring
JPEGReadWrite MacPoint Encoder FFT Paragraph
EToyGenericDialogMorph ObjectOut PerformMethodSimulation
AbstractInstructionPrinter HaloMorph Character EUSimulation
DecompilerConstructor FlashStreamingSound ViewerEntry
EmbeddedWorldBorderMorph ADPCMCodec JPEGColorComponent
InstructionPrinter RemoteHandMorph DiskProxy DisplayObject
BalloonFillData FlashMorphingMorph IRCRecipientFilter EUVariable
PhoneticRule VRMLWonderlandBuilder PluggableFileList ProtoObject
B3DTransformerPlugin ZASMStepsMorph AddMethodTest
MouseSensorMorph StarMorph KeyboardBuffer EToyTextNode
PDAPerson SmallintContext SystemWindowWithButton Voice
B3DExponentTable WonderlandStillCameraMorph DisplayTransform
QuotedPrintableMimeConverter FloatComparisonPrimitive Object
B3DScanner LucidBlockExpression HtmlSpecialEntity
InlineMethodFromComponentRefactoring FlapTab Celeste False
SameGame PitchBendEvent SMTPSocket
OnceOnlyOrderedCollectionTestCase BrowserEnvironmentTest
PluggableListController TileMorph LocalVariableFlowPosition
MethodHolder ScreenController WonderlandActor
Base64MimeConverter AuthorizedServerAction IRCMessage
FormInspectView MHMailInboxFile LucidParserTestCase
PluggableListMorphOfMany ProjectEntryNotification ExternalTexture
VRMLNamedNode StandardFileMenuResult Note TextOnCurvePS
WireMorph Fraction MethodChangeRecord SelectionMenu
ProjectViewOpenNotification PseudoContext HtmlTableHeader
TheWorldMenu RenameTemporaryTest AcceptableCleanTextMorph
WonderlandAmbientLight PopUpChoiceMorph HtmlSuperscript
B3DGeometry TimeProfileBrowser HtmlFontChangeEntity
UndoByStopping KlattVoice VariableEnvironment PHORreader
InterpolatingImageMorph RBOptimizedToken InfoStringMorph
ColorPickerMorph ExternalLibraryFunction Slider B3DPrimitiveEngine
ParseTreeRewriter ClassToRename UndoRotationChange
FileDirectoryWrapper LucidStackSimulation FlashKeyframes
InteractiveAddClassChange Controller NewWorldWindow
ColorSystemView PlayingCardMorph WatchMorph
KlattSynthesizerPlugin ClassDescription AssignmentNode UserScript

ChildrenToSiblingsRefactoring InlineAllMethodTest
 PluggableButtonMorph WeakKeyAssociation FloatArrayPlugin
 SmallInteger ByteArray CompiledApplescript FormButtonCache
 BouncingAtomsMorph WeekMorph Form WonderlandActor1
 CategoryViewer SelectorBrowser ReverbSound B3DVertexBufferPlugin
 RenameClassRefactoring DownloadingImageMorph UnionFlowPosition
 StandardSourceFileArray B3DIndexedTriangle FloatArray
 ProjectNavigationMorph Spline AliceScene TranslatedMethod Project
 FillInTheBlankController ClassEnvironmentBrowser TextIndent
 Bezier2Segment MorphicModel2 BalloonSolidFillSimulation
 LayoutPolicy PerformTypeGoal Array WonderlandActor11 AliceWorld
 Player B3DBox AndEnvironment SystemWindow TextInput
 CascadeNode ExceptionSet VRMLNodeParser TextMessageLink
 MacPixPatPtr ProcessorScheduler RefactoryTyper
 ThreadNavigationMorph LucidSelfOfMethodFlowGoal LTWordColon
 CategoriesFile B3DNullRasterizer B3DSceneExplorerMorph Applescript
 RBReadBeforeWrittenTester ArbitraryObjectSocket Integer
 ReferenceFinder HandMorph MorphicEventDispatcher TestTest
 WonderlandReaction SourceCodePool LucidGoal
 RBBinarySelectorToken PortugueseLexiconServer PluggableSet
 ZeroDivide KlattSegment SelectionInput GeePrinterDialogMorph
 CurveFitter BookMorph Delay FooLintRuleTest SerialPort }

- 1 count(s) of ProtoObject++
- 1 count(s) of { Boolean++ B3DPrimitiveRasterizerData
 B3DTexture2Array Integer PointArray ByteArray CompiledApplescript
 ArrayedCollection SoundBuffer ExternalAddress ShortIntegerArray
 KlattFrame B3DMaterialColor GraphicSymbol B3DVector3
 FlippyArray2 WeakArray Pixmap WordArray B3DVector2Array
 B3DIndexedQuad B3DVector3Array DescType
 B3DPrimitiveVertexArray B3DRotation B3DIndexedTriangleArray
 WordArrayForSegment B3DIndexedQuadArray String
 B3DPrimitiveLight LargePositiveInteger ComponentInstance
 StandardSourceFileArray B3DIndexedTriangle FloatArray B3DColor4
 OnceOnlyOrderedCollection TranslatedMethod DirectoryEntry Array2D
 B3DFloatArray AEDesc Symbol RunArray B3DInplaceArray Text Array
 B3DMaterial B3DRotationArray ApplescriptInstance MappedCollection
 B3DColor4Array Interval Heap UrlArgumentList SourceFileArray
 B3DLightAttenuation ShortPointArray B3DVector4 B3DVector2
 SequenceableCollection MacExternalData OrderedCollection
 B3DExponentTable B3DViewingFrustum IntegerArray ShortRunArray
 SortedCollection Bitmap LinkedList B3DMatrix4x4 Semaphore
 TextLineInterval LargeNegativeInteger CompiledMethod OSAID
 UndefinedObject SmallInteger }
- 1 count(s) of { UndefinedObject #try #mutedForTrack:put:

#rotateClockWise #stepStillDown:with:
#goToPageMorph:fromBookmark: #selection #volumeForChannel:put:
#quit #playV2 #chooseFrom:categoryItem: #destroyScript
#nextProject #quitWonderland #boardAction: #makeTile
#saveSession #quitSqueak #value #setLoopStart #startPlaying
#forward #debug #playLoop #closeBoxHit #doCancel
#nextOwnerPage #trim #moreCommands #maybeEmptyTrash
#infoFor:inViewer: #chooseTriggerFrom: #toggleWhetherShowingTiles
#durMod:onOff: #emitRest #makePianoRoll #jump10 #acceptSort
#back #startNebraskaClient #chooseAndRevertToVersion #runScript:
#fullScreenOff #buildChord: #goToNextCardInStack #showMenu
#atChannel:from:selectInstrument: #nextYear #toggleFlapsSuppressed
#stepForward #togglePartsBinStatus #playNextMessage
#stopUp:with: #browseRecentSubmissions #goToRelativePosition:
#setLoopEnd #gotoAnother #tabSelected #playV1 #invokeMenu
#editCustomHalos #goUp:with: #rotateY:
#atTrack:from:selectInstrument: #deleteNotes #displayHistory
#pausedUp:with: #pickGame #setLogRate: #acceptAnnotationsFrom:
#writeTape #dismiss #visitStartPage #shrink #startAudioChat
#previous #cancelSort #previousOwnerPage #newProject
#stepBackward #tileClickedAt:newSelection: #overallVolume:
#addPhoneme #makeSoundMorph #replaceToolsFlap #rewind
#toggleStatus #explainFlaps #getNewerVersionIfAvailable
#openPreferencesInspector #moveRight #returnToPreviousProject
#addFovAngle: #doOK #toggleFullView #stopEverything #cancel
#addYesNoToHand #jumpToProject #saySomething #start #playAll
#upArrowHit #stopRecognizing #moveLeft #chooseFrom:soundItem:
#rotateAntiClockWise #record #addDolly: #advanceToNextProject
#duration:onOff: #toggleDiff #chooseFrom:envelopeItem: #newGame
#drawNicest #editAnnotations #toggleDeferred #quitNebraska
#rotateX: #stopSound #dropAllTheWay #play #offerScriptorMenu
#playTestNote #button #panForTrack:put: #statistics #doPreview
#forgetIt #mutedForChannel:put: #startTelemorphic #stopPlaying
#volumeForTrack:put: #scrollTime: #toggleFull #updateFromServer
#firstPage #undo #collapseOrExpand #lastPage #addCategoryViewer
#downArrowHit #sendNow #toggle #rotateZ: #playAfterCursor
#delete #drawFastest #ok #doExpand #tellAFriend #recordLevel:
#goToPreviousCardInStack #tickingUp:with: #reset #submit
#chooseTrigger #repeat: #sameGame #writeTape: #publishProject
#togglePreference: #checkOnAFriend #resumePlaying #makeMovie
#okay #installHaloTheme: #connect #readTape #previousYear
#loopFrames: #panForChannel:put: #previousPage #show
#playBeforeCursor #nextPage #exitTheSequence
#brush:action:nib:evt: #startChat #saveInstrument #tryMe #playV3
#previousProject #shareThisWorld #proceed #accept #fullScreenOn
#toggleShowDocumentation #setDate:fromButton:down:

```

#fileOutChanges #disableReverb: #setOneCycle #drawMedium #next
#newSliderValue: #tool:action:cursor:evt: #offerWindowMenu #pause
#playTest #doNewPainting #positionInScore: #playback
#findAProject #newHead #help #toggleOnOff #windowColorHelp
#doPrint #articulation:onOff: #flash #bufferNebraska #stop
#toggleChoice: #hint #startRecognizing #chooseCategory #reload
#help: }

```

- 1 count(s) of { FloatArray++ String++ LargePositiveInteger++
ByteArray++ OnceOnlyOrderedCollection UndefinedObject Interval
SequenceableCollection IntegerArray DescType Bitmap SortedCollection
WordArrayForSegment WeakArray ArrayedCollection SoundBuffer
StandardSourceFileArray B3DIndexedTriangle Integer GraphicSymbol
ShortPointArray ComponentInstance FlippyArray2 UrlArgumentList
WordArray TranslatedMethod B3DPrimitiveVertexArray
TextLineInterval PointArray DirectoryEntry ShortIntegerArray
MacExternalData ShortRunArray Semaphore SmallInteger Array
LinkedList Array2D RunArray MappedCollection SourceFileArray
Pixmap Text AEDesc B3DPrimitiveRasterizerData B3DIndexedQuad
OrderedCollection OSAID ApplescriptInstance Heap }

4 Individual Results

4.1 Threshold of 50

- Bad: ADPCMCodec.index is of type Top
- Good: ADPCMCodec.indexTable is of type { Array UndefinedObject
SoundBuffer }
- Bad: ADPCMCodec.deltaSignMask is of type Top
- Bad: ADPCMCodec.bitPosition is of type Top
- Bad: ADPCMCodec.encodedBytes is of type Top
- Good: ADPCMCodec.stepSizeTable is of type { Array UndefinedObject
SoundBuffer }
- Bad: ADPCMCodec.sampleIndex is of type Top
- Good: ADPCMCodec.rightSamples is of type { UndefinedObject
SoundBuffer }
- Bad: ADPCMCodec.byteIndex is of type Top
- Bad: ADPCMCodec.frameSizeMask is of type Top
- Bad: ADPCMCodec.bitsPerSample is of type Top

- Bad: ADPCMCodec.predicted is of type Top
- Bad: ADPCMCodec.deltaValueHighBit is of type Top
- Bad: ADPCMCodec.deltaValueMask is of type Top
- Bad: ADPCMCodec.currentByte is of type Top
- Bad: ADPCMCodec.samples is of type Top
- Bad: AIFFFileReader.channelData is of type Top
- Bad: AIFFFileReader.frameCount is of type Top
- Bad: AIFFFileReader.isLooped is of type Top
- Bad: AIFFFileReader.gain is of type Top
- Bad: AIFFFileReader.in is of type Top
- Bad: AIFFFileReader.fileType is of type Top
- Bad: AIFFFileReader.pitch is of type Top
- Good: AIFFFileReader.markers is of type { UndefinedObject Array }
- Bad: AIFFFileReader.channelCount is of type Top
- Bad: AIFFFileReader.bitsPerSample is of type Top
- Good: AIFFFileReader.mergeIfStereo is of type { True UndefinedObject False }
- Good: AIFFFileReader.skipDataChunk is of type { True UndefinedObject False }
- Bad: AIFFFileReader.samplingRate is of type Top
- Bad: AbstractSound.envelopes is of type Top
- Bad: AbstractSound.mSecsSinceStart is of type Top
- Bad: AbstractSound.scaledVolLimit is of type Top
- Bad: AbstractSound.scaledVol is of type Top
- Bad: AbstractSound.samplesUntilNextControl is of type Top
- Bad: AbstractSound.scaledVolIncr is of type Top
- Bad: CompressedSoundData.perceivedPitch is of type Top
- Bad: CompressedSoundData.codecName is of type Top

- Good: CompressedSoundData.channels is of type { UndefinedObject Array }
- Bad: CompressedSoundData.gain is of type Top
- Bad: CompressedSoundData.firstSample is of type Top
- Bad: CompressedSoundData.soundClassName is of type Top
- Bad: CompressedSoundData.cachedSound is of type Top
- Bad: CompressedSoundData.loopLength is of type Top
- Bad: CompressedSoundData.samplingRate is of type Top
- Bad: CompressedSoundData.loopEnd is of type Top
- Bad: Envelope.target is of type Top
- Bad: Envelope.scale is of type Top
- Good: Envelope.updateSelector is of type { UndefinedObject #pitch: #modulation: #ratio: }
- Bad: Envelope.loopEndMsecs is of type Top
- Bad: Envelope.endMsecs is of type Top
- Bad: Envelope.currValue is of type Top
- Bad: Envelope.loopStartIndex is of type Top
- Bad: Envelope.valueIncr is of type Top
- Good: Envelope.noChangesDuringLoop is of type { True UndefinedObject False }
- Bad: Envelope.nextRecomputeTime is of type Top
- Bad: Envelope.loopEndIndex is of type Top
- Bad: Envelope.loopMsecs is of type Top
- Bad: Envelope.loopStartMsecs is of type Top
- Bad: Envelope.decayScale is of type Top
- Bad: Envelope.points is of type Top
- Bad: Envelope.lastValue is of type Top
- Bad: FFT.permTable is of type Top
- Bad: FFT.nu is of type Top

- Bad: FFT.n is of type Top
- Bad: FFT.sinTable is of type Top
- Bad: FFT.imagData is of type Top
- Good: FFT.window is of type { UndefinedObject FloatArray }
- Bad: FFT.realData is of type Top
- Bad: FMSSound.initialCount is of type Top
- Bad: FMSSound.multiplier is of type Top
- Bad: FMSSound.scaledOffsetIndex is of type Top
- Bad: FMSSound.waveTable is of type Top
- Bad: FMSSound.scaledWaveTableSize is of type Top
- Bad: FMSSound.scaledIndex is of type Top
- Bad: FMSSound.normalizedModulation is of type Top
- Bad: FMSSound.scaledOffsetIndexIncr is of type Top
- Bad: FMSSound.modulation is of type Top
- Bad: FMSSound.scaledIndexIncr is of type Top
- Bad: FMSSound.count is of type Top
- Good: FWT.transform is of type { UndefinedObject Array }
- Bad: FWT.beta is of type Top
- Bad: FWT.gTilde is of type Top
- Bad: FWT.coeffs is of type Top
- Bad: FWT.g is of type Top
- Bad: FWT.nSamples is of type Top
- Bad: FWT.nLevels is of type Top
- Bad: FWT.alpha is of type Top
- Bad: FWT.h is of type Top
- Good: FWT.samples is of type { UndefinedObject Array }
- Bad: FWT.hTilde is of type Top
- Bad: GSMCodec.encodeState is of type Top

- Bad: GSMCodec.decodeState is of type Top
- Bad: LoopedSampledSound.initialCount is of type Top
- Bad: LoopedSampledSound.perceivedPitch is of type Top
- Bad: LoopedSampledSound.scaledLoopLength is of type Top
- Bad: LoopedSampledSound.lastSample is of type Top
- Bad: LoopedSampledSound.gain is of type Top
- Bad: LoopedSampledSound.scaledIndexIncr is of type Top
- Bad: LoopedSampledSound.releaseCount is of type Top
- Bad: LoopedSampledSound.firstSample is of type Top
- Bad: LoopedSampledSound.sampleCountForRelease is of type Top
- Bad: LoopedSampledSound.rightSamples is of type Top
- Bad: LoopedSampledSound.leftSamples is of type Top
- Bad: LoopedSampledSound.scaledIndex is of type Top
- Bad: LoopedSampledSound.originalSamplingRate is of type Top
- Bad: LoopedSampledSound.count is of type Top
- Bad: LoopedSampledSound.loopEnd is of type Top
- Good: MixedSound.soundDone is of type { UndefinedObject Array }
- Bad: MixedSound.sounds is of type Top
- Bad: MixedSound.leftVols is of type Top
- Bad: MixedSound.rightVols is of type Top
- Good: PitchEnvelope.centerPitch is of type UndefinedObject
- Bad: PluckedSound.initialCount is of type Top
- Bad: PluckedSound.ring is of type Top
- Bad: PluckedSound.scaledIndexLimit is of type Top
- Bad: PluckedSound.scaledIndex is of type Top
- Bad: PluckedSound.scaledIndexIncr is of type Top
- Bad: PluckedSound.count is of type Top
- Good: RandomEnvelope.rand is of type { Random UndefinedObject }

- Good: RandomEnvelope.highLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.lowLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.delta is of type { UndefinedObject Float }
- Bad: RepeatingSound.iteration is of type Top
- Bad: RepeatingSound.iterationCount is of type Top
- Bad: RepeatingSound.sound is of type Top
- Bad: RepeatingSound.samplesPerIteration is of type Top
- Bad: RestSound.initialCount is of type Top
- Bad: RestSound.count is of type Top
- Good: ReverbSound.tapGains is of type { UndefinedObject Bitmap }
- Bad: ReverbSound.bufferSize is of type Top
- Good: ReverbSound.rightBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.leftBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.tapCount is of type { UndefinedObject SmallInteger }
- Good: ReverbSound.tapDelays is of type { UndefinedObject Bitmap }
- Bad: ReverbSound.bufferIndex is of type Top
- Good: ReverbSound.sound is of type UndefinedObject
- Good: SampledInstrument.sustainedSoft is of type UndefinedObject
- Bad: SampledInstrument.staccatoSoft is of type Top
- Bad: SampledInstrument.staccatoLoud is of type Top
- Good: SampledInstrument.sustainedThreshold is of type { UndefinedObject Float }
- Bad: SampledInstrument.sustainedLoud is of type Top
- Good: SampledInstrument.loudThreshold is of type { UndefinedObject Float }
- Bad: SampledSound.initialCount is of type Top
- Bad: SampledSound.samples is of type Top

- Bad: SampledSound.scaledIncrement is of type Top
- Bad: SampledSound.scaledIndex is of type Top
- Bad: SampledSound.indexHighBits is of type Top
- Bad: SampledSound.samplesSize is of type Top
- Bad: SampledSound.originalSamplingRate is of type Top
- Bad: SampledSound.count is of type Top
- Bad: SequentialSound.sounds is of type Top
- Bad: SequentialSound.currentIndex is of type Top
- Bad: Sonogram.lastX is of type Top
- Good: Sonogram.pixValMap is of type { UndefinedObject Bitmap }
- Good: Sonogram.maxVal is of type { UndefinedObject Float }
- Good: Sonogram.minVal is of type { UndefinedObject Float }
- Good: Sonogram.scrollDelta is of type { UndefinedObject SmallInteger }
- Good: Sonogram.columnForm is of type { Form UndefinedObject }
- Bad: SoundInputStream.mutex is of type Top
- Bad: SoundInputStream.bufferSize is of type Top
- Good: SoundRecorder.currentBuffer is of type { UndefinedObject SoundBuffer }
- Bad: SoundRecorder.recordProcess is of type Top
- Good: SoundRecorder.codec is of type { GSMCodec UndefinedObject }
- Good: SoundRecorder.desiredSampleRate is of type { UndefinedObject Float }
- Bad: SoundRecorder.nextIndex is of type Top
- Good: SoundRecorder.meteringBuffer is of type { UndefinedObject SoundBuffer }
- Bad: SoundRecorder.meterLevel is of type Top
- Good: SoundRecorder.stereo is of type { False UndefinedObject }
- Good: SoundRecorder.recordLevel is of type { UndefinedObject Float }
- Bad: SoundRecorder.soundPlaying is of type Top

- Bad: SoundRecorder.recordedBuffers is of type Top
- Good: SoundRecorder.paused is of type { True UndefinedObject False }
- Bad: SoundRecorder.samplingRate is of type Top
- Bad: SoundRecorder.recordedSound is of type Top
- Good: SoundRecorder.bufferAvailableSema is of type { Semaphore UndefinedObject }
- Bad: VolumeEnvelope.mSecsForChange is of type Top
- Bad: VolumeEnvelope.targetVol is of type Top
- Good: VolumeEnvelope.currentVol is of type UndefinedObject
- Good: WaveletCodec.alpha is of type { UndefinedObject Float }
- Good: WaveletCodec.beta is of type { UndefinedObject Float }
- Good: WaveletCodec.fwt is of type { FWT UndefinedObject }
- Good: WaveletCodec.samplesPerFrame is of type { UndefinedObject SmallInteger }
- Good: WaveletCodec.nLevels is of type { UndefinedObject SmallInteger }
- Bad: IRCChannelInfo.name is of type Top
- Bad: IRCChannelInfo.topic is of type Top
- Good: IRCChannelInfo.subscribers is of type { IdentitySet UndefinedObject }
- Good: IRCChannelInfo.members is of type { Set UndefinedObject }
- Good: IRCChannelInfo.connection is of type { IRCConnection UndefinedObject }
- Good: IRCChannelListBrowser.channelIndex is of type { UndefinedObject SmallInteger }
- Bad: IRCChannelListBrowser.channelList is of type Top
- Good: IRCChannelListBrowser.sortCriterion is of type { UndefinedObject #name }
- Bad: IRCChannelListBrowser.connection is of type Top
- Bad: IRCChannelObserver.chatText is of type Top
- Good: IRCChannelObserver.channelName is of type UndefinedObject

- Bad: IRCChannelObserver.channel is of type Top
- Bad: IRCChannelObserver.connection is of type Top
- Bad: IRCChannelSummary.name is of type Top
- Bad: IRCChannelSummary.topic is of type Top
- Bad: IRCChannelSummary.numUsers is of type Top
- Good: IRCChannelUsersBrowser.channel is of type { UndefinedObject IRCChannelInfo }
- Bad: IRCChannelUsersBrowser.userList is of type Top
- Bad: IRCChannelUsersBrowser.userIndex is of type Top
- Good: IRCConnection.directMessageSubscribers is of type { IdentitySet UndefinedObject }
- Good: IRCConnection.channelListBeingBuilt is of type { UndefinedObject OrderedCollection }
- Good: IRCConnection.protocolMessagesToSend is of type { UndefinedObject OrderedCollection }
- Bad: IRCConnection.sendBuffer is of type Top
- Bad: IRCConnection.server is of type Top
- Good: IRCConnection.motdBeingBuilt is of type { UndefinedObject WriteStream }
- Good: IRCConnection.protocolMessageSubscribers is of type { IdentitySet UndefinedObject }
- Bad: IRCConnection.motd is of type Top
- Bad: IRCConnection.port is of type Top
- Bad: IRCConnection.recieveBuffer is of type Top
- Good: IRCConnection.socket is of type { Socket UndefinedObject }
- Bad: IRCConnection.userName is of type Top
- Bad: IRCConnection.nick is of type Top
- Bad: IRCConnection.channelList is of type Top
- Good: IRCConnection.subscribedChannels is of type { UndefinedObject Dictionary }
- Bad: IRCConnection.fullName is of type Top

- Good: IRCConnection.messagesProcessed is of type { UndefinedObject SmallInteger }
- Bad: IRCConnection.consoleText is of type Top
- Bad: IRCDirectMessagesObserver.chatText is of type Top
- Bad: IRCDirectMessagesObserver.talkingTo is of type Top
- Bad: IRCDirectMessagesObserver.connection is of type Top
- Bad: IRCMessage.text is of type Top
- Bad: IRCMessage.sender is of type Top
- Bad: IRCMessage.recipient is of type Top
- Good: IRCMessagePattern.sender is of type UndefinedObject
- Good: IRCMessagePattern.recipient is of type UndefinedObject
- Good: IRCMessageSet.messages is of type UndefinedObject
- Bad: IRCMorph.userName is of type Top
- Bad: IRCMorph.nick is of type Top
- Bad: IRCMorph.server is of type Top
- Good: IRCMorph.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCMorph.fullName is of type Top
- Good: IRCMorph.messageCollections is of type UndefinedObject
- Bad: IRCMorph.consoleText is of type Top
- Bad: IRCMorph.port is of type Top
- Bad: IRCProtocolMessage.arguments is of type Top
- Good: IRCProtocolMessage.command is of type { String++ UndefinedObject Character }
- Bad: IRCProtocolMessage.prefix is of type Top
- Good: IRCRecipientFilter.recipient is of type UndefinedObject
- Good: ChineseCheckerPiece.myBoard is of type { ChineseCheckers UndefinedObject }
- Bad: ChineseCheckerPiece.boardLoc is of type Top
- Bad: ChineseCheckers.movePhase is of type Top

- Bad: ChineseCheckers.board is of type Top
- Good: ChineseCheckers.plannedMovePhase is of type UndefinedObject
- Good: ChineseCheckers.sixDeltas is of type { UndefinedObject Array }
- Bad: ChineseCheckers.plannedMove is of type Top
- Bad: ChineseCheckers.whoseMove is of type Top
- Bad: ChineseCheckers.teams is of type Top
- Bad: ChineseCheckers.colors is of type Top
- Good: ChineseCheckers.homes is of type { UndefinedObject Array }
- Good: ChineseCheckers.animateMoves is of type { True
UndefinedObject False }
- Good: ChineseCheckers.pathMorphs is of type { UndefinedObject
OrderedCollection }
- Good: ChineseCheckers.autoPlay is of type { UndefinedObject Array }
- Bad: CipherPanel.originalMorphs is of type Top
- Bad: CipherPanel.decodingMorphs is of type Top
- Good: CipherPanel.quote is of type { String++ UndefinedObject
Character }
- Good: CipherPanel.originalText is of type UndefinedObject
- Good: CrosticPanel.crosticPanel is of type UndefinedObject
- Good: CrosticPanel.cluesCol2 is of type { AlignmentMorph
UndefinedObject }
- Bad: CrosticPanel.quote is of type Top
- Good: CrosticPanel.answers is of type { UndefinedObject
OrderedCollection }
- Good: CrosticPanel.clues is of type { UndefinedObject
OrderedCollection }
- Good: CrosticPanel.cluesPanel is of type { AlignmentMorph
UndefinedObject }
- Good: CrosticPanel.quotePanel is of type { CrosticQuotePanel
UndefinedObject }
- Good: CrosticQuotePanel.cluesPanel is of type { CrosticPanel
UndefinedObject }

- Good: FreeCell.lastGameLost is of type UndefinedObject
- Good: FreeCell.cardsRemainingDisplay is of type { LedMorph UndefinedObject }
- Good: FreeCell.gameNumberDisplay is of type { LedMorph UndefinedObject }
- Good: FreeCell.state is of type { UndefinedObject #sameGame #pickGame #won #newGame #lost }
- Good: FreeCell.myFillStyle is of type { UndefinedObject GradientFillStyle }
- Good: FreeCell.elapsedTimeDisplay is of type { UndefinedObject LedTimerMorph }
- Good: FreeCell.board is of type { FreeCellBoard UndefinedObject }
- Bad: FreeCell.autoMoveRecursionCount is of type Top
- Bad: FreeCellBoard.target is of type Top
- Bad: FreeCellBoard.actionSelector is of type Top
- Good: FreeCellBoard.stacks is of type { UndefinedObject Array }
- Good: FreeCellBoard.freeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.homeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.cardDeck is of type { PlayingCardDeck UndefinedObject }
- Good: FreeCellBoard.lastCardDeck is of type UndefinedObject
- Bad: FreeCellStatistics.streakLosses is of type Top
- Bad: FreeCellStatistics.lastGameWon is of type Top
- Bad: FreeCellStatistics.lastGameLost is of type Top
- Bad: FreeCellStatistics.currentCount is of type Top
- Good: FreeCellStatistics.currentType is of type { UndefinedObject #wins #losses }
- Good: FreeCellStatistics.statsMorph is of type { TextMorph UndefinedObject }
- Bad: FreeCellStatistics.window is of type Top
- Bad: FreeCellStatistics.sessionLosses is of type Top

- Bad: FreeCellStatistics.lossesWithReplay is of type Top
- Bad: FreeCellStatistics.sessionWins is of type Top
- Bad: FreeCellStatistics.totalWins is of type Top
- Bad: FreeCellStatistics.streakWins is of type Top
- Bad: FreeCellStatistics.totalLosses is of type Top
- Bad: FreeCellStatistics.winsWithReplay is of type Top
- Bad: LedDigitMorph.digit is of type Top
- Good: LedDigitMorph.highlighted is of type { True UndefinedObject False }
- Good: LedMorph.digits is of type { UndefinedObject SmallInteger }
- Bad: LedMorph.flash is of type Top
- Good: LedMorph.flashing is of type { True UndefinedObject False }
- Bad: LedMorph.value is of type Top
- Good: LedTimerMorph.counting is of type { True UndefinedObject False }
- Bad: LedTimerMorph.startSeconds is of type Top
- Bad: PlayingCard.cardNo is of type Top
- Good: PlayingCard.suitNo is of type UndefinedObject
- Good: PlayingCard.suit is of type UndefinedObject
- Good: PlayingCard.cardForm is of type { Form UndefinedObject }
- Bad: PlayingCardDeck.target is of type Top
- Bad: PlayingCardDeck.seed is of type Top
- Good: PlayingCardDeck.acceptCardSelector is of type { PlayingCardDeck UndefinedObject #acceptCard:onStack: #acceptSingleCard:on: }
- Good: PlayingCardDeck.cardDraggedSelector is of type { PlayingCardDeck UndefinedObject #dragCard:fromHome: #dragCard:fromStack: }
- Good: PlayingCardDeck.stackingOrder is of type { UndefinedObject #descending #ascending }

- Good: PlayingCardDeck.cardDroppedSelector is of type { PlayingCardDeck UndefinedObject #cardMoved #cardMovedHome }
- Good: PlayingCardDeck.cardDoubleClickSelector is of type { PlayingCardDeck UndefinedObject #doubleClickInStack:OnCard: }
- Good: PlayingCardDeck.stackingPolicy is of type { UndefinedObject #stagger #single #altStraight #straight }
- Good: PlayingCardDeck.emptyDropPolicy is of type { UndefinedObject #inOrder #any }
- Good: PlayingCardDeck.layout is of type { UndefinedObject #stagger #pile #grid }
- Bad: PlayingCardMorph.suitNumber is of type Top
- Bad: PlayingCardMorph.cardNumber is of type Top
- Good: SameGame.scoreDisplay is of type { LedMorph UndefinedObject }
- Good: SameGame.board is of type { UndefinedObject SameGameBoard }
- Good: SameGame.selectionDisplay is of type { LedMorph UndefinedObject }
- Bad: SameGame.helpText is of type { StringHolderView++ PluggableTextMorph++ UndefinedObject }
- Bad: SameGameBoard.palette is of type Top
- Bad: SameGameBoard.target is of type Top
- Bad: SameGameBoard.columns is of type Top
- Bad: SameGameBoard.actionSelector is of type Top
- Good: SameGameBoard.selectionColor is of type UndefinedObject
- Good: SameGameBoard.flash is of type { True UndefinedObject False }
- Good: SameGameBoard.arguments is of type { UndefinedObject Array }
- Bad: SameGameBoard.rows is of type Top
- Bad: SameGameBoard.protoTile is of type Top
- Bad: SameGameBoard.flashColor is of type Top
- Good: SameGameBoard.selection is of type UndefinedObject

- Bad: SameGameTile.oldSwitchState is of type Top
- Bad: SameGameTile.switchState is of type Top
- Good: SameGameTile.disabled is of type { True UndefinedObject False }
- Good: Tetris.scoreDisplay is of type { LedMorph UndefinedObject }
- Good: Tetris.board is of type { UndefinedObject TetrisBoard }
- Bad: TetrisBlock.shapeInfo is of type Top
- Good: TetrisBlock.board is of type { UndefinedObject TetrisBoard }
- Bad: TetrisBlock.angle is of type Top
- Bad: TetrisBlock.baseCellNumber is of type Top
- Good: TetrisBoard.game is of type { UndefinedObject Tetris }
- Good: TetrisBoard.gameOver is of type { True UndefinedObject False }
- Bad: TetrisBoard.score is of type Top
- Good: TetrisBoard.paused is of type { True UndefinedObject False }
- Bad: TetrisBoard.delay is of type Top
- Good: TetrisBoard.currentBlock is of type { TetrisBlock UndefinedObject }
- Bad: WordGameLetterMorph.predecessor is of type Top
- Good: WordGameLetterMorph.lineMorph is of type { UndefinedObject PolygonMorph }
- Good: WordGameLetterMorph.style is of type { UndefinedObject #underlined #boxed #plain }
- Good: WordGameLetterMorph.letterMorph is of type { StringMorph UndefinedObject }
- Bad: WordGameLetterMorph.letter is of type Top
- Good: WordGameLetterMorph.originalLetter is of type UndefinedObject
- Bad: WordGameLetterMorph.successor is of type Top
- Bad: WordGameLetterMorph.indexInQuote is of type Top
- Good: WordGameLetterMorph.linkedLetters is of type UndefinedObject
- Bad: WordGamePanelMorph.letterMorphs is of type Top

- Good: WordGamePanelMorph.haveTypedHere is of type { True UndefinedObject False }
- Good: CategoriesFile.categories is of type { UndefinedObject Dictionary }
- Bad: Celeste.currentMessages is of type Top
- Bad: Celeste.customFilterBlock is of type Top
- Bad: Celeste.status is of type Top
- Bad: Celeste.userPassword is of type Top
- Bad: Celeste.currentMsgID is of type Top
- Bad: Celeste.mailDB is of type Top
- Bad: Celeste.currentCategory is of type Top
- Bad: Celeste.lastCategory is of type Top
- Bad: Celeste.lastCategoryList is of type Top
- Good: Celeste.dateFilter is of type UndefinedObject
- Bad: Celeste.currentTOC is of type Top
- Bad: Celeste.fromFilter is of type Top
- Good: Celeste.formatMessages is of type UndefinedObject
- Bad: Celeste.lastCategoryMenu is of type Top
- Bad: Celeste.messageTextView is of type Top
- Bad: Celeste.subjectFilter is of type Top
- Bad: CelesteComposition.textEditor is of type Top
- Bad: CelesteComposition.celeste is of type Top
- Bad: CelesteComposition.messageText is of type Top
- Good: CelesteComposition.morphicWindow is of type { AlignmentMorphBob1 UndefinedObject SystemWindow }
- Good: CelesteComposition.mvcWindow is of type { StandardSystemView UndefinedObject }
- Good: CelesteComposition.attachmentSeparator is of type UndefinedObject
- Bad: FancyCelesteComposition.theLinkToInclude is of type Top

- Bad: FancyCelesteComposition.to is of type Top
- Bad: FancyCelesteComposition.subject is of type Top
- Good: FancyCelesteComposition.textFields is of type { UndefinedObject Array }
- Good: IndexFile.msgDictionary is of type { PluggableDictionary UndefinedObject }
- Good: IndexFile.logfile is of type { UndefinedObject StandardFileStream }
- Good: IndexFile.timeSortedEntries is of type { UndefinedObject SortedCollection }
- Bad: IndexFileEntry.time is of type Top
- Bad: IndexFileEntry.msgID is of type Top
- Bad: IndexFileEntry.messageFile is of type Top
- Bad: IndexFileEntry.cc is of type Top
- Bad: IndexFileEntry.tocLineCache is of type Top
- Bad: IndexFileEntry.location is of type Top
- Bad: IndexFileEntry.to is of type Top
- Bad: IndexFileEntry.textLength is of type Top
- Bad: IndexFileEntry.subject is of type Top
- Bad: IndexFileEntry.from is of type Top
- Good: MIMEHeaderValue.mainValue is of type { String++ UndefinedObject Character }
- Good: MIMEHeaderValue.parameters is of type { UndefinedObject Dictionary }
- Bad: MIMEPart.content is of type Top
- Bad: MIMEPart.parts is of type Top
- Bad: MIMEPart.separator is of type Top
- Bad: MIMEPart.text is of type Top
- Good: MIMEPart.fields is of type { UndefinedObject Dictionary }
- Bad: MailDB.rootFilename is of type Top

- Bad: MailDB.indexFile is of type Top
- Bad: MailDB.messageFile is of type Top
- Bad: MailDB.categoriesFile is of type Top
- Bad: MailDBFile.filename is of type Top
- Good: MailMessage.time is of type { UndefinedObject SmallInteger }
- Bad: MailMessage.separator is of type Top
- Bad: MailMessage.cc is of type Top
- Good: MailMessage.body is of type { UndefinedObject MIMEDocument }
- Bad: MailMessage.to is of type Top
- Bad: MailMessage.text is of type Top
- Bad: MailMessage.subject is of type Top
- Good: MailMessage.fields is of type { UndefinedObject Dictionary }
- Bad: MailMessage.from is of type Top
- Bad: MailMessage.parts is of type Top
- Bad: MailNotifier.lastConnectTime is of type Top
- Bad: MailNotifier.messageCount is of type Top
- Good: MailNotifier.password is of type UndefinedObject
- Good: MailNotifier.socket is of type { UndefinedObject POPSocket }
- Good: MessageFile.file is of type { CrLfFileStream UndefinedObject }
- Bad: ReadNewsInboxFile.currentNewsgroup is of type Top
- Good: ReadNewsInboxFile.msgBuffer is of type { UndefinedObject WriteStream }
- Bad: TextMessageLink.message is of type Top
- Bad: RBAssignmentNode.variable is of type Top
- Bad: RBAssignmentNode.assignment is of type Top
- Bad: RBAssignmentNode.value is of type Top
- Good: RBBlockNode.colons is of type { UndefinedObject OrderedCollection }

- Bad: RBlockNode.bar is of type Top
- Bad: RBlockNode.right is of type Top
- Bad: RBlockNode.left is of type Top
- Bad: RBlockNode.body is of type Top
- Bad: RBlockNode.arguments is of type Top
- Bad: RCascadeNode.messages is of type Top
- Good: RCascadeNode.semicolons is of type { UndefinedObject OrderedCollection }
- Good: RFormatter.codeStream is of type { UndefinedObject WriteStream }
- Bad: RFormatter.lineStart is of type Top
- Bad: RFormatter.firstLineLength is of type Top
- Bad: RFormatter.tabs is of type Top
- Bad: RLiteralNode.token is of type Top
- Bad: RMessageNode.arguments is of type Top
- Bad: RMessageNode.receiver is of type Top
- Bad: RMessageNode.selector is of type Top
- Bad: RMessageNode.selectorParts is of type Top
- Good: RMethodNode.tags is of type UndefinedObject
- Bad: RMethodNode.selector is of type Top
- Bad: RMethodNode.selectorParts is of type Top
- Bad: RMethodNode.body is of type Top
- Bad: RMethodNode.source is of type Top
- Bad: RMethodNode.arguments is of type Top
- Bad: ROptimizedNode.body is of type Top
- Bad: ROptimizedNode.right is of type Top
- Bad: ROptimizedNode.left is of type Top
- Good: RParser.scanner is of type { RBScanner UndefinedObject }
- Good: RParser.tags is of type UndefinedObject

- Bad: RParser.source is of type Top
- Good: RParser.emptyStatements is of type { True UndefinedObject False }
- Bad: RParser.currentToken is of type Top
- Good: RParser.negatedNumbers is of type { True UndefinedObject False }
- Good: RParser.errorBlock is of type { UndefinedObject a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType }
- Bad: RParser.nextToken is of type Top
- Good: RPatternMessageNode.isCascadeList is of type { True UndefinedObject False }
- Good: RPatternMessageNode.isList is of type { True UndefinedObject False }
- Good: RPatternMethodNode.isList is of type { True UndefinedObject False }
- Good: RPatternVariableNode.recurseInto is of type { True UndefinedObject False }
- Good: RPatternVariableNode.isLiteral is of type { True UndefinedObject False }
- Good: RPatternVariableNode.isStatement is of type { True UndefinedObject False }
- Good: RPatternVariableNode.isAnything is of type { True UndefinedObject False }
- Good: RPatternVariableNode.isList is of type { True UndefinedObject False }
- Bad: RProgramNode.parent is of type Top
- Bad: RProgramNode.comments is of type Top
- Bad: RReturnNode.return is of type Top
- Bad: RReturnNode.value is of type Top
- Bad: RSequenceNode.rightBar is of type Top

- Good: RBSequenceNode.periods is of type { UndefinedObject OrderedCollection }
- Bad: RBSequenceNode.temporaries is of type Top
- Bad: RBSequenceNode.statements is of type Top
- Bad: RBSequenceNode.leftBar is of type Top
- Good: RBValueNode.parentheses is of type { UndefinedObject OrderedCollection }
- Bad: RBVariableNode.token is of type Top
- Bad: BitBltSimulation.sy is of type Top
- Bad: BitBltSimulation.halfToneBase is of type Top
- Bad: BitBltSimulation.cmBlueShift is of type Top
- Bad: BitBltSimulation.destWidth is of type Top
- Bad: BitBltSimulation.destX is of type Top
- Bad: BitBltSimulation.width is of type Top
- Bad: BitBltSimulation.scanString is of type Top
- Bad: BitBltSimulation.sourceBits is of type Top
- Bad: BitBltSimulation.scanStop is of type Top
- Bad: BitBltSimulation.dy is of type Top
- Good: BitBltSimulation.warpBitShiftTable is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.destPixSize is of type Top
- Bad: BitBltSimulation.pixPerWord is of type Top
- Good: BitBltSimulation.ditherValues16 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.cmRedMask is of type Top
- Bad: BitBltSimulation.warpSrcMask is of type Top
- Bad: BitBltSimulation.dstBitShift is of type Top
- Bad: BitBltSimulation.destIndex is of type Top
- Bad: BitBltSimulation.sourceIndex is of type Top
- Bad: BitBltSimulation.clipX is of type Top

- Good: BitBltSimulation.hDir is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.nWords is of type Top
- Bad: BitBltSimulation.clipHeight is of type Top
- Bad: BitBltSimulation.bitBltOop is of type Top
- Bad: BitBltSimulation.preload is of type Top
- Bad: BitBltSimulation.opTable is of type Top
- Bad: BitBltSimulation.sourceForm is of type Top
- Bad: BitBltSimulation.warpAlignMask is of type Top
- Bad: BitBltSimulation.skew is of type Top
- Bad: BitBltSimulation.cmDeltaBits is of type Top
- Good: BitBltSimulation.ditherMatrix4x4 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.sourceY is of type Top
- Bad: BitBltSimulation.scanStart is of type Top
- Bad: BitBltSimulation.cmGreenShift is of type Top
- Bad: BitBltSimulation.destBits is of type Top
- Bad: BitBltSimulation.destPitch is of type Top
- Bad: BitBltSimulation.height is of type Top
- Bad: BitBltSimulation.sourcePitch is of type Top
- Bad: BitBltSimulation.destY is of type Top
- Bad: BitBltSimulation.affectedL is of type Top
- Good: BitBltSimulation.maskTable is of type { UndefinedObject Array }
- Good: BitBltSimulation.scanDisplayFlag is of type { True UndefinedObject False }
- Bad: BitBltSimulation.mask1 is of type Top
- Bad: BitBltSimulation.destDelta is of type Top
- Good: BitBltSimulation.noHalftone is of type { True UndefinedObject False }
- Bad: BitBltSimulation.clipWidth is of type Top

- Bad: BitBltSimulation.destForm is of type Top
- Bad: BitBltSimulation.sx is of type Top
- Bad: BitBltSimulation.clipY is of type Top
- Bad: BitBltSimulation.scanRightX is of type Top
- Bad: BitBltSimulation.cmBlueMask is of type Top
- Bad: BitBltSimulation.halfToneHeight is of type Top
- Bad: BitBltSimulation.affectedT is of type Top
- Bad: BitBltSimulation.sourcePixSize is of type Top
- Bad: BitBltSimulation.cmRedShift is of type Top
- Good: BitBltSimulation.noSource is of type { True UndefinedObject False }
- Bad: BitBltSimulation.dx is of type Top
- Bad: BitBltSimulation.destMask is of type Top
- Bad: BitBltSimulation.affectedB is of type Top
- Bad: BitBltSimulation.cmGreenMask is of type Top
- Good: BitBltSimulation.hasSurfaceLock is of type { True UndefinedObject False }
- Bad: BitBltSimulation.stopCode is of type Top
- Bad: BitBltSimulation.combinationRule is of type Top
- Bad: BitBltSimulation.bitCount is of type Top
- Good: BitBltSimulation.vDir is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.destHeight is of type Top
- Good: BitBltSimulation.cmBitsPerColor is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.bbH is of type Top
- Bad: BitBltSimulation.bbW is of type Top
- Bad: BitBltSimulation.srcWidth is of type Top
- Bad: BitBltSimulation.affectedR is of type Top

- Good: BitBltSimulation.ditherThresholds16 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.sourceDelta is of type Top
- Bad: BitBltSimulation.warpSrcShift is of type Top
- Bad: BitBltSimulation.halfToneForm is of type Top
- Bad: BitBltSimulation.mask2 is of type Top
- Bad: BitBltSimulation.scanXTable is of type Top
- Bad: BitBltSimulation.scanStopArray is of type Top
- Bad: BitBltSimulation.sourceAlpha is of type Top
- Bad: BitBltSimulation.colorMap is of type Top
- Bad: BitBltSimulation.warpAlignShift is of type Top
- Bad: BitBltSimulation.sourceX is of type Top
- Bad: BitBltSimulation.srcBitShift is of type Top
- Bad: BitBltSimulation.srcHeight is of type Top
- Bad: Interpreter.activeContext is of type Top
- Bad: Interpreter.nextWakeupTick is of type Top
- Bad: Interpreter.localIP is of type Top
- Bad: Interpreter.localHomeContext is of type Top
- Good: Interpreter.methodCache is of type { UndefinedObject Array }
- Bad: Interpreter.interruptKeycode is of type Top
- Bad: Interpreter.semaphoresToSignalCountA is of type Top
- Bad: Interpreter.interruptCheckCounterFeedBackReset is of type Top
- Good: Interpreter.interpreterVersion is of type UndefinedObject
- Good: Interpreter.obsoleteNamedPrimitiveTable is of type { CArrayAccessor UndefinedObject }
- Good: Interpreter.interpreterProxy is of type { UndefinedObject InterpreterSimulator InterpreterSimulatorMSB InterpreterSimulatorLSB }
- Bad: Interpreter.receiver is of type Top
- Bad: Interpreter.stackPointer is of type Top

- Bad: Interpreter.receiverClass is of type Top
- Good: Interpreter.obsoleteIndexedPrimitiveTable is of type { CArrayAccessor UndefinedObject }
- Bad: Interpreter.successFlag is of type Top
- Good: Interpreter.compilerHooks is of type UndefinedObject
- Bad: Interpreter.fullScreenFlag is of type Top
- Bad: Interpreter.primitiveIndex is of type Top
- Good: Interpreter.semaphoresToSignalB is of type { UndefinedObject Array }
- Bad: Interpreter.compilerInitialized is of type Top
- Bad: Interpreter.localSP is of type Top
- Bad: Interpreter.instructionPointer is of type Top
- Good: Interpreter.semaphoresUseBufferA is of type { True UndefinedObject False }
- Good: Interpreter.deferDisplayUpdates is of type { True UndefinedObject False }
- Bad: Interpreter.theHomeContext is of type Top
- Bad: Interpreter.extraVMMemory is of type Top
- Bad: Interpreter.method is of type Top
- Bad: Interpreter.pendingFinalizationSignals is of type Top
- Bad: Interpreter.newMethod is of type Top
- Good: Interpreter.semaphoresToSignalA is of type { UndefinedObject Array }
- Bad: Interpreter.methodClass is of type Top
- Bad: Interpreter.newNativeMethod is of type Top
- Good: Interpreter.atCache is of type { UndefinedObject Array }
- Bad: Interpreter.argumentCount is of type Top
- Bad: Interpreter.currentBytecode is of type Top
- Good: Interpreter.interruptPending is of type { False UndefinedObject }

- Good: Interpreter.interruptChecksEveryNms is of type { UndefinedObject SmallInteger }
- Bad: Interpreter.nextPollTick is of type Top
- Bad: Interpreter.lkupClass is of type Top
- Bad: Interpreter.reclaimableContextCount is of type Top
- Bad: Interpreter.savedWindowSize is of type Top
- Bad: Interpreter.lastTick is of type Top
- Bad: Interpreter.semaphoresToSignalCountB is of type Top
- Bad: Interpreter.messageSelector is of type Top
- Bad: Interpreter.showSurfaceFn is of type Top
- Good: InterpreterSimulator.myBitBlt is of type { False UndefinedObject BitBltSimulator }
- Good: InterpreterSimulator.traceOn is of type { UndefinedObject True }
- Bad: InterpreterSimulator.imageName is of type Top
- Good: InterpreterSimulator.pluginList is of type { UndefinedObject Array }
- Bad: InterpreterSimulator.sendCount is of type Top
- Good: InterpreterSimulator.displayForm is of type { Form UndefinedObject }
- Bad: InterpreterSimulator.mappedPluginEntries is of type Top
- Good: InterpreterSimulator.filesOpen is of type { UndefinedObject OrderedCollection }
- Bad: InterpreterSimulator.byteCount is of type Top
- Good: ObjectMemory.signalLowSpace is of type { True UndefinedObject False }
- Bad: ObjectMemory.tenuringThreshold is of type Top
- Bad: ObjectMemory.lastHash is of type Top
- Bad: ObjectMemory.statIncrGCMSecs is of type Top
- Good: ObjectMemory.remapBuffer is of type { UndefinedObject Array }
- Bad: ObjectMemory.trueObj is of type Top

- Bad: ObjectMemory.statFullGCMSecs is of type Top
- Bad: ObjectMemory.freeLargeContexts is of type Top
- Bad: ObjectMemory.lowSpaceThreshold is of type Top
- Bad: ObjectMemory.allocationsBetweenGCs is of type Top
- Bad: ObjectMemory.interruptCheckCounter is of type Top
- Bad: ObjectMemory.freeContexts is of type Top
- Bad: ObjectMemory.compStart is of type Top
- Bad: ObjectMemory.youngStart is of type Top
- Bad: ObjectMemory.compEnd is of type Top
- Bad: ObjectMemory.totalObjectFoundAtStartup is of type Top
- Bad: ObjectMemory.memoryLimit is of type Top
- Bad: ObjectMemory.endOfMemory is of type Top
- Bad: ObjectMemory.specialObjectsOop is of type Top
- Bad: ObjectMemory.statFullGCs is of type Top
- Bad: ObjectMemory.statTenures is of type Top
- Bad: ObjectMemory.nilObj is of type Top
- Bad: ObjectMemory.child is of type Top
- Bad: ObjectMemory.fwdTableLast is of type Top
- Bad: ObjectMemory.fwdTableNext is of type Top
- Bad: ObjectMemory.rootTableCount is of type Top
- Bad: ObjectMemory.allocationCount is of type Top
- Bad: ObjectMemory.falseObj is of type Top
- Bad: ObjectMemory.remapBufferCount is of type Top
- Bad: ObjectMemory.parentField is of type Top
- Bad: ObjectMemory.field is of type Top
- Good: ObjectMemory.memory is of type { Interpreter UndefinedObject
InterpreterSimulatorMSB InterpreterSimulatorLSB Bitmap
InterpreterSimulator }
- Bad: ObjectMemory.freeBlock is of type Top

- Bad: ObjectMemory.statRootTableOverflows is of type Top
- Good: ObjectMemory.rootTable is of type { UndefinedObject Array }
- Bad: ObjectMemory.statIncrGCs is of type Top
- Good: ObjectMemory.displayBits is of type { UndefinedObject SmallInteger }
- Bad: SystemMonitor.vmParameters is of type Top
- Bad: SystemMonitor.gcHighWaterMark is of type Top
- Bad: SystemMonitor.baselineSkip is of type Top
- Bad: SystemMonitor.prevAllocCount is of type Top
- Bad: SystemMonitor.prevDeltaIncrGC is of type Top
- Bad: SystemMonitor.prevMcMiss is of type Top
- Bad: SystemMonitor.window is of type Top
- Bad: SystemMonitor.prevDeltaFullGC is of type Top
- Bad: SystemMonitor.prevFullGC is of type Top
- Good: SystemMonitor.valSelectors is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIncrGC is of type Top
- Bad: SystemMonitor.prevMsClock is of type Top
- Good: SystemMonitor.maxValues is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevAllocRate is of type Top
- Bad: SystemMonitor.gcLowWaterMark is of type Top
- Good: SystemMonitor.labels is of type { UndefinedObject Array }
- Good: SystemMonitor.minValues is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIcHit is of type Top
- Bad: SystemMonitor.prevMcHit is of type Top
- Good: SystemTracer.hashGenerator is of type { Random UndefinedObject }
- Bad: SystemTracer.maxOop is of type Top
- Good: SystemTracer.map is of type UndefinedObject
- Good: SystemTracer.initialProcess is of type UndefinedObject

- Good: SystemTracer.oopMap is of type { UndefinedObject Array }
- Bad: SystemTracer.specialObjects is of type Top
- Good: SystemTracer.file is of type { CrLfFileStream UndefinedObject }
- Good: SystemTracer.cleaningUp is of type { False UndefinedObject }
- Good: SystemTracer.writeDict is of type { UndefinedObject Dictionary }
- Good: SystemTracer.imageHeaderSize is of type { UndefinedObject SmallInteger }
- Good: SystemTracer.compactClasses is of type { UndefinedObject Array }
- Good: SystemTracer.replacementClasses is of type { UndefinedObject Dictionary }
- Bad: Browser.classOrganizer is of type Top
- Bad: Browser.systemOrganizer is of type Top
- Bad: Browser.messageListIndex is of type Top
- Bad: Browser.messageCategoryListIndex is of type Top
- Bad: Browser.editSelection is of type Top
- Bad: Browser.metaClassOrganizer is of type Top
- Bad: Browser.systemCategoryListIndex is of type Top
- Bad: Browser.metaClassIndicated is of type Top
- Bad: Browser.classListIndex is of type Top
- Bad: ChangedMessageSet.changeSet is of type Top
- Bad: HierarchyBrowser.centralClass is of type Top
- Bad: HierarchyBrowser.classList is of type Top
- Bad: MessageSet.messageList is of type Top
- Bad: MessageSet.autoSelectString is of type Top
- Bad: PackageBrowser.package is of type Top
- Bad: PackageBrowser.packageListIndex is of type Top
- Good: PackageBrowser.packageList is of type UndefinedObject
- Good: ProtocolBrowser.selectedClass is of type UndefinedObject

- Bad: ProtocolBrowser.selectedSelector is of type Top
- Bad: SelectorBrowser.classListIndex is of type Top
- Bad: SelectorBrowser.classList is of type Top
- Bad: SelectorBrowser.selectorIndex is of type Top
- Bad: SelectorBrowser.selectorList is of type Top
- Bad: PDA.recurringEvents is of type Top
- Good: PDA.peopleList is of type { ArrayedCollection++
UndefinedObject }
- Bad: PDA.date is of type Top
- Good: PDA.dateButtonPressed is of type UndefinedObject
- Bad: PDA.allEvents is of type Top
- Bad: PDA.category is of type Top
- Bad: PDA.currentItem is of type Top
- Bad: PDA.scheduleList is of type Top
- Good: PDA.categoryListIndex is of type UndefinedObject
- Bad: PDA.allPeople is of type Top
- Bad: PDA.scheduleListIndex is of type Top
- Bad: PDA.allToDoItems is of type Top
- Bad: PDA.allNotes is of type Top
- Bad: PDA.notesListIndex is of type Top
- Good: PDA.currentItemSelection is of type UndefinedObject
- Good: PDA.categoryList is of type UndefinedObject
- Bad: PDA.todoList is of type Top
- Bad: PDA.todoListIndex is of type Top
- Bad: PDA.peopleListIndex is of type Top
- Good: PDA.notesList is of type { ArrayedCollection++
UndefinedObject }
- Good: PDA.currentItemText is of type UndefinedObject
- Bad: PDA.userCategories is of type Top

- Good: PDA.viewDescriptionOnly is of type { True UndefinedObject False }
- Bad: PDAChoiceMorph.backgroundColor is of type Top
- Bad: PDAClockMorph.backgroundColor is of type Top
- Bad: PDAEvent.time is of type Top
- Bad: PDAEvent.date is of type Top
- Bad: PDAEvent.duration is of type Top
- Good: PDAEvent.alarm is of type UndefinedObject
- Bad: PDAPerson.name is of type Top
- Bad: PDAPerson.address is of type Top
- Good: PDAPerson.phone is of type { String UndefinedObject }
- Good: PDAPerson.email is of type { String UndefinedObject }
- Bad: PDARecord.description is of type Top
- Bad: PDARecord.key is of type Top
- Good: PDARecord.otherFields is of type { UndefinedObject Dictionary }
- Good: PDARecurringEvent.recurrence is of type { UndefinedObject #dayOfMonth #nthWeekdayOfMonthEachYear #dayOfWeek #dateOfYear }
- Bad: PDARecurringEvent.firstDate is of type Top
- Bad: PDARecurringEvent.lastDate is of type Top
- Good: PDAToDoItem.deadline is of type UndefinedObject
- Bad: PDAToDoItem.result is of type Top
- Bad: PDAToDoItem.dayDone is of type Top
- Bad: PDAToDoItem.dayPosted is of type Top
- Bad: PDAToDoItem.priority is of type Top
- Bad: TestInterfaceBase.duration is of type Top
- Bad: TestInterfaceBase.classPattern is of type Top
- Bad: TestInterfaceBase.result is of type Top
- Bad: TestInterfaceBase.selectorPattern is of type Top

- Bad: TestModel.failureList is of type Top
- Bad: TestModel.patternHistory is of type Top
- Bad: TestModel.errorList is of type Top
- Bad: TestModel.summaryText is of type Top
- Bad: TestModel.summaryTextM is of type { PluggableTextMorph++ PluggableTextView UndefinedObject }
- Good: TestModel.summaryTextV is of type { PluggableTextView UndefinedObject }
- Good: TestModel.updateColorSelector is of type { UndefinedObject #updateColorM #updateColorV }
- Good: TestModel.patternTextV is of type { PluggableTextView UndefinedObject }
- Bad: TestModel.patternTextM is of type { PluggableTextMorph++ PluggableTextView UndefinedObject }
- Bad: TestModel.detailsText is of type Top

4.2 Threshold of 150

- Bad: ADPCMCodec.index is of type Top
- Good: ADPCMCodec.indexTable is of type { Array UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.deltaSignMask is of type Top
- Bad: ADPCMCodec.bitPosition is of type Top
- Bad: ADPCMCodec.encodedBytes is of type Top
- Good: ADPCMCodec.stepSizeTable is of type { Array UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.sampleIndex is of type Top
- Good: ADPCMCodec.rightSamples is of type { UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.byteIndex is of type Top
- Bad: ADPCMCodec.frameSizeMask is of type Top
- Bad: ADPCMCodec.bitsPerSample is of type Top
- Bad: ADPCMCodec.predicted is of type Top

- Bad: ADPCMCodec.deltaValueHighBit is of type Top
- Bad: ADPCMCodec.deltaValueMask is of type Top
- Bad: ADPCMCodec.currentByte is of type Top
- Bad: ADPCMCodec.samples is of type Top
- Good: AIFFFileReader.channelData is of type { UndefinedObject Array }
- Bad: AIFFFileReader.frameCount is of type Top
- Bad: AIFFFileReader.isLooped is of type Top
- Bad: AIFFFileReader.gain is of type Top
- Bad: AIFFFileReader.in is of type Top
- Bad: AIFFFileReader.fileType is of type Top
- Bad: AIFFFileReader.pitch is of type Top
- Good: AIFFFileReader.markers is of type { UndefinedObject Array }
- Bad: AIFFFileReader.channelCount is of type Top
- Bad: AIFFFileReader.bitsPerSample is of type Top
- Good: AIFFFileReader.mergelfStereo is of type { True UndefinedObject False }
- Good: AIFFFileReader.skipDataChunk is of type { True UndefinedObject False }
- Bad: AIFFFileReader.samplingRate is of type Top
- Bad: AbstractSound.envelopes is of type Top
- Bad: AbstractSound.mSecsSinceStart is of type Top
- Bad: AbstractSound.scaledVolLimit is of type Top
- Bad: AbstractSound.scaledVol is of type Top
- Bad: AbstractSound.samplesUntilNextControl is of type Top
- Bad: AbstractSound.scaledVolIncr is of type Top
- Bad: CompressedSoundData.perceivedPitch is of type Top
- Bad: CompressedSoundData.codecName is of type Top
- Good: CompressedSoundData.channels is of type { UndefinedObject Array }

- Bad: CompressedSoundData.gain is of type Top
- Bad: CompressedSoundData.firstSample is of type Top
- Bad: CompressedSoundData.soundClassName is of type Top
- Bad: CompressedSoundData.cachedSound is of type { WaveletCodec MuLawCodec ADPCMCodec SoundCodec UndefinedObject LoopedSampledSound GSMCodec SampledSound }
- Bad: CompressedSoundData.loopLength is of type Top
- Bad: CompressedSoundData.samplingRate is of type Top
- Bad: CompressedSoundData.loopEnd is of type Top
- Bad: Envelope.target is of type Top
- Good: Envelope.scale is of type { UndefinedObject Float }
- Good: Envelope.updateSelector is of type { UndefinedObject #pitch: #modulation: #ratio: }
- Bad: Envelope.loopEndMsecs is of type { Magnitude++ UndefinedObject }
- Bad: Envelope.endMsecs is of type Top
- Bad: Envelope.currValue is of type Top
- Bad: Envelope.loopStartIndex is of type Top
- Bad: Envelope.valueIncr is of type Top
- Good: Envelope.noChangesDuringLoop is of type { True UndefinedObject False }
- Bad: Envelope.nextRecomputeTime is of type Top
- Bad: Envelope.loopEndIndex is of type Top
- Bad: Envelope.loopMsecs is of type Top
- Bad: Envelope.loopStartMsecs is of type Top
- Bad: Envelope.decayScale is of type Top
- Bad: Envelope.points is of type Top
- Bad: Envelope.lastValue is of type Top
- Bad: FFT.permTable is of type Top
- Bad: FFT.nu is of type Top

- Bad: FFT.n is of type Top
- Good: FFT.sinTable is of type { Array UndefinedObject FloatArray }
- Bad: FFT.imagData is of type Top
- Good: FFT.window is of type { UndefinedObject FloatArray }
- Bad: FFT.realData is of type Top
- Bad: FMSSound.initialCount is of type Top
- Bad: FMSSound.multiplier is of type Top
- Bad: FMSSound.scaledOffsetIndex is of type Top
- Bad: FMSSound.waveTable is of type Top
- Bad: FMSSound.scaledWaveTableSize is of type Top
- Bad: FMSSound.scaledIndex is of type Top
- Bad: FMSSound.normalizedModulation is of type Top
- Bad: FMSSound.scaledOffsetIndexIncr is of type Top
- Bad: FMSSound.modulation is of type Top
- Bad: FMSSound.scaledIndexIncr is of type Top
- Bad: FMSSound.count is of type Top
- Good: FWT.transform is of type { UndefinedObject Array }
- Bad: FWT.beta is of type Top
- Good: FWT.gTilde is of type { UndefinedObject Array }
- Bad: FWT.coeffs is of type Top
- Bad: FWT.g is of type Top
- Bad: FWT.nSamples is of type Top
- Bad: FWT.nLevels is of type Top
- Bad: FWT.alpha is of type Top
- Bad: FWT.h is of type Top
- Good: FWT.samples is of type { UndefinedObject Array }
- Bad: FWT.hTilde is of type Top
- Bad: GSMCodec.encodeState is of type Top

- Bad: GSMCodec.decodeState is of type Top
- Bad: LoopedSampledSound.initialCount is of type Top
- Bad: LoopedSampledSound.perceivedPitch is of type Top
- Bad: LoopedSampledSound.scaledLoopLength is of type Top
- Bad: LoopedSampledSound.lastSample is of type Top
- Bad: LoopedSampledSound.gain is of type Top
- Bad: LoopedSampledSound.scaledIndexIncr is of type Top
- Bad: LoopedSampledSound.releaseCount is of type Top
- Bad: LoopedSampledSound.firstSample is of type Top
- Bad: LoopedSampledSound.sampleCountForRelease is of type Top
- Bad: LoopedSampledSound.rightSamples is of type Top
- Bad: LoopedSampledSound.leftSamples is of type Top
- Bad: LoopedSampledSound.scaledIndex is of type Top
- Bad: LoopedSampledSound.originalSamplingRate is of type Top
- Bad: LoopedSampledSound.count is of type Top
- Bad: LoopedSampledSound.loopEnd is of type Top
- Good: MixedSound.soundDone is of type { UndefinedObject Array }
- Good: MixedSound.sounds is of type { UndefinedObject Array }
- Bad: MixedSound.leftVols is of type Top
- Bad: MixedSound.rightVols is of type Top
- Good: PitchEnvelope.centerPitch is of type UndefinedObject
- Bad: PluckedSound.initialCount is of type Top
- Bad: PluckedSound.ring is of type Top
- Bad: PluckedSound.scaledIndexLimit is of type Top
- Bad: PluckedSound.scaledIndex is of type Top
- Bad: PluckedSound.scaledIndexIncr is of type Top
- Bad: PluckedSound.count is of type Top
- Good: RandomEnvelope.rand is of type { Random UndefinedObject }

- Good: RandomEnvelope.highLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.lowLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.delta is of type { UndefinedObject Float }
- Bad: RepeatingSound.iteration is of type Top
- Good: RepeatingSound.iterationCount is of type { SmalltalkInterchangeFileInManager++ SmallInteger UndefinedObject False #forever }
- Bad: RepeatingSound.sound is of type Top
- Bad: RepeatingSound.samplesPerIteration is of type Top
- Bad: RestSound.initialCount is of type Top
- Bad: RestSound.count is of type Top
- Good: ReverbSound.tapGains is of type { UndefinedObject Bitmap }
- Good: ReverbSound.bufferSize is of type { Bitmap LargeNegativeInteger LargePositiveInteger UndefinedObject SmallInteger }
- Good: ReverbSound.rightBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.leftBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.tapCount is of type { UndefinedObject SmallInteger }
- Good: ReverbSound.tapDelays is of type { UndefinedObject Bitmap }
- Bad: ReverbSound.bufferIndex is of type Top
- Good: ReverbSound.sound is of type UndefinedObject
- Bad: SampledInstrument.sustainedSoft is of type Top
- Bad: SampledInstrument.staccatoSoft is of type Top
- Bad: SampledInstrument.staccatoLoud is of type Top
- Good: SampledInstrument.sustainedThreshold is of type { UndefinedObject Float }
- Bad: SampledInstrument.sustainedLoud is of type Top
- Good: SampledInstrument.loudThreshold is of type { UndefinedObject Float }

- Bad: SampledSound.initialCount is of type Top
- Bad: SampledSound.samples is of type Top
- Bad: SampledSound.scaledIncrement is of type Top
- Bad: SampledSound.scaledIndex is of type Top
- Bad: SampledSound.indexHighBits is of type Top
- Bad: SampledSound.samplesSize is of type Top
- Bad: SampledSound.originalSamplingRate is of type Top
- Bad: SampledSound.count is of type Top
- Good: SequentialSound.sounds is of type { UndefinedObject Array }
- Bad: SequentialSound.currentIndex is of type Top
- Bad: Sonogram.lastX is of type Top
- Good: Sonogram.pixValMap is of type { UndefinedObject Bitmap }
- Good: Sonogram.maxVal is of type { UndefinedObject Float }
- Good: Sonogram.minVal is of type { UndefinedObject Float }
- Good: Sonogram.scrollDelta is of type { UndefinedObject SmallInteger }
- Good: Sonogram.columnForm is of type { Form UndefinedObject }
- Bad: SoundInputStream.mutex is of type Top
- Bad: SoundInputStream.bufferSize is of type Top
- Bad: SoundRecorder.currentBuffer is of type Top
- Bad: SoundRecorder.recordProcess is of type Top
- Good: SoundRecorder.codec is of type { GSMCodec UndefinedObject }
- Good: SoundRecorder.desiredSampleRate is of type { UndefinedObject Float }
- Bad: SoundRecorder.nextIndex is of type Top
- Good: SoundRecorder.meteringBuffer is of type { UndefinedObject SoundBuffer }
- Bad: SoundRecorder.meterLevel is of type Top
- Good: SoundRecorder.stereo is of type { False UndefinedObject }
- Good: SoundRecorder.recordLevel is of type { UndefinedObject Float }

- Good: SoundRecorder.soundPlaying is of type { SampledSound SequentialSound UndefinedObject ChatRecorder SoundInputStream SoundRecorder }
- Bad: SoundRecorder.recordedBuffers is of type Top
- Good: SoundRecorder.paused is of type { True UndefinedObject False }
- Bad: SoundRecorder.samplingRate is of type Top
- Good: SoundRecorder.recordedSound is of type { SampledSound SequentialSound UndefinedObject SoundInputStream ChatRecorder SoundRecorder }
- Good: SoundRecorder.bufferAvailableSema is of type { Semaphore UndefinedObject }
- Bad: VolumeEnvelope.mSecsForChange is of type { Magnitude++ UndefinedObject }
- Bad: VolumeEnvelope.targetVol is of type Top
- Good: VolumeEnvelope.currentVol is of type UndefinedObject
- Bad: WaveletCodec.alpha is of type Top
- Bad: WaveletCodec.beta is of type Top
- Good: WaveletCodec.fwt is of type { FWT UndefinedObject }
- Bad: WaveletCodec.samplesPerFrame is of type Top
- Bad: WaveletCodec.nLevels is of type Top
- Bad: IRCChannelInfo.name is of type Top
- Bad: IRCChannelInfo.topic is of type Top
- Good: IRCChannelInfo.subscribers is of type { IdentitySet UndefinedObject }
- Good: IRCChannelInfo.members is of type { Set UndefinedObject }
- Good: IRCChannelInfo.connection is of type { IRCConnection UndefinedObject }
- Good: IRCChannelListBrowser.channelIndex is of type { UndefinedObject SmallInteger }
- Bad: IRCChannelListBrowser.channelList is of type Top
- Good: IRCChannelListBrowser.sortCriterion is of type { UndefinedObject #name }

- Bad: IRCChannelListBrowser.connection is of type Top
- Bad: IRCChannelObserver.chatText is of type Top
- Good: IRCChannelObserver.channelName is of type UndefinedObject
- Bad: IRCChannelObserver.channel is of type Top
- Bad: IRCChannelObserver.connection is of type Top
- Bad: IRCChannelSummary.name is of type Top
- Bad: IRCChannelSummary.topic is of type Top
- Bad: IRCChannelSummary.numUsers is of type Top
- Good: IRCChannelUsersBrowser.channel is of type { UndefinedObject IRCChannelInfo }
- Bad: IRCChannelUsersBrowser.userList is of type Top
- Bad: IRCChannelUsersBrowser.userIndex is of type Top
- Good: IRCConnection.directMessageSubscribers is of type { IdentitySet UndefinedObject }
- Good: IRCConnection.channelListBeingBuilt is of type { UndefinedObject OrderedCollection }
- Good: IRCConnection.protocolMessagesToSend is of type { UndefinedObject OrderedCollection }
- Bad: IRCConnection.sendBuffer is of type Top
- Bad: IRCConnection.server is of type Top
- Good: IRCConnection.motdBeingBuilt is of type { UndefinedObject WriteStream }
- Good: IRCConnection.protocolMessageSubscribers is of type { IdentitySet UndefinedObject }
- Bad: IRCConnection.motd is of type Top
- Bad: IRCConnection.port is of type Top
- Good: IRCConnection.recieveBuffer is of type { String UndefinedObject }
- Good: IRCConnection.socket is of type { Socket UndefinedObject }
- Bad: IRCConnection.userName is of type Top
- Bad: IRCConnection.nick is of type Top

- Good: IRCConnection.channelList is of type { UndefinedObject Array }
- Good: IRCConnection.subscribedChannels is of type { UndefinedObject Dictionary }
- Bad: IRCConnection.fullName is of type Top
- Good: IRCConnection.messagesProcessed is of type { UndefinedObject SmallInteger }
- Bad: IRCConnection.consoleText is of type Top
- Bad: IRCDirectMessagesObserver.chatText is of type Top
- Bad: IRCDirectMessagesObserver.talkingTo is of type Top
- Bad: IRCDirectMessagesObserver.connection is of type Top
- Bad: IRCMessage.text is of type Top
- Bad: IRCMessage.sender is of type Top
- Bad: IRCMessage.recipient is of type Top
- Good: IRCMessagePattern.sender is of type UndefinedObject
- Good: IRCMessagePattern.recipient is of type UndefinedObject
- Good: IRCMessageSet.messages is of type UndefinedObject
- Bad: IRCMorph.userName is of type Top
- Bad: IRCMorph.nick is of type Top
- Bad: IRCMorph.server is of type Top
- Good: IRCMorph.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCMorph.fullName is of type Top
- Good: IRCMorph.messageCollections is of type UndefinedObject
- Bad: IRCMorph.consoleText is of type Top
- Bad: IRCMorph.port is of type Top
- Bad: IRCProtocolMessage.arguments is of type Top
- Good: IRCProtocolMessage.command is of type { UndefinedObject String Character }
- Bad: IRCProtocolMessage.prefix is of type Top
- Good: IRCRecipientFilter.recipient is of type UndefinedObject

- Good: ChineseCheckerPiece.myBoard is of type { ChineseCheckers
UndefinedObject }
- Bad: ChineseCheckerPiece.boardLoc is of type Top
- Bad: ChineseCheckers.movePhase is of type Top
- Good: ChineseCheckers.board is of type { UndefinedObject Array }
- Good: ChineseCheckers.plannedMovePhase is of type UndefinedObject
- Good: ChineseCheckers.sixDeltas is of type { UndefinedObject Array }
- Good: ChineseCheckers.plannedMove is of type UndefinedObject
- Bad: ChineseCheckers.whoseMove is of type Top
- Good: ChineseCheckers.teams is of type { UndefinedObject Array }
- Good: ChineseCheckers.colors is of type { UndefinedObject Array }
- Good: ChineseCheckers.homes is of type { UndefinedObject Array }
- Good: ChineseCheckers.animateMoves is of type { True
UndefinedObject False }
- Good: ChineseCheckers.pathMorphs is of type { UndefinedObject
OrderedCollection }
- Good: ChineseCheckers.autoPlay is of type { UndefinedObject Array }
- Good: CipherPanel.originalMorphs is of type UndefinedObject
- Bad: CipherPanel.decodingMorphs is of type Top
- Good: CipherPanel.quote is of type { UndefinedObject Symbol String
Character }
- Good: CipherPanel.originalText is of type UndefinedObject
- Good: CrosticPanel.crosticPanel is of type UndefinedObject
- Good: CrosticPanel.cluesCol2 is of type { AlignmentMorph
UndefinedObject }
- Bad: CrosticPanel.quote is of type Top
- Good: CrosticPanel.answers is of type { UndefinedObject
OrderedCollection }
- Good: CrosticPanel.clues is of type { UndefinedObject
OrderedCollection }

- Good: CrosticPanel.cluesPanel is of type { AlignmentMorph UndefinedObject }
- Good: CrosticPanel.quotePanel is of type { CrosticQuotePanel UndefinedObject }
- Good: CrosticQuotePanel.cluesPanel is of type { CrosticPanel UndefinedObject }
- Good: FreeCell.lastGameLost is of type UndefinedObject
- Good: FreeCell.cardsRemainingDisplay is of type { LedMorph UndefinedObject }
- Good: FreeCell.gameNumberDisplay is of type { LedMorph UndefinedObject }
- Good: FreeCell.state is of type { UndefinedObject #sameGame #pickGame #won #newGame #lost }
- Good: FreeCell.myFillStyle is of type { UndefinedObject GradientFillStyle }
- Good: FreeCell.elapsedTimeDisplay is of type { UndefinedObject LedTimerMorph }
- Good: FreeCell.board is of type { FreeCellBoard UndefinedObject }
- Bad: FreeCell.autoMoveRecursionCount is of type Top
- Bad: FreeCellBoard.target is of type Top
- Bad: FreeCellBoard.actionSelector is of type Top
- Good: FreeCellBoard.stacks is of type { UndefinedObject Array }
- Good: FreeCellBoard.freeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.homeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.cardDeck is of type { PlayingCardDeck UndefinedObject }
- Good: FreeCellBoard.lastCardDeck is of type UndefinedObject
- Bad: FreeCellStatistics.streakLosses is of type Top
- Bad: FreeCellStatistics.lastGameWon is of type Top
- Bad: FreeCellStatistics.lastGameLost is of type Top
- Bad: FreeCellStatistics.currentCount is of type Top

- Good: FreeCellStatistics.currentType is of type { UndefinedObject #wins #losses }
- Good: FreeCellStatistics.statsMorph is of type { TextMorph UndefinedObject }
- Good: FreeCellStatistics.window is of type UndefinedObject
- Bad: FreeCellStatistics.sessionLosses is of type Top
- Bad: FreeCellStatistics.lossesWithReplay is of type Top
- Bad: FreeCellStatistics.sessionWins is of type Top
- Bad: FreeCellStatistics.totalWins is of type Top
- Bad: FreeCellStatistics.streakWins is of type Top
- Bad: FreeCellStatistics.totalLosses is of type Top
- Bad: FreeCellStatistics.winsWithReplay is of type Top
- Bad: LedDigitMorph.digit is of type Top
- Good: LedDigitMorph.highlighted is of type { True UndefinedObject False }
- Good: LedMorph.digits is of type { UndefinedObject SmallInteger }
- Bad: LedMorph.flash is of type Top
- Good: LedMorph.flashing is of type { True UndefinedObject False }
- Bad: LedMorph.value is of type Top
- Good: LedTimerMorph.counting is of type { True UndefinedObject False }
- Bad: LedTimerMorph.startSeconds is of type Top
- Bad: PlayingCard.cardNo is of type Top
- Bad: PlayingCard.suitNo is of type Top
- Good: PlayingCard.suit is of type UndefinedObject
- Good: PlayingCard.cardForm is of type { Form UndefinedObject }
- Bad: PlayingCardDeck.target is of type Top
- Bad: PlayingCardDeck.seed is of type Top
- Good: PlayingCardDeck.acceptCardSelector is of type { PlayingCardDeck UndefinedObject #acceptCard:onStack: #acceptSingleCard:on: }

- Good: `PlayingCardDeck.cardDraggedSelector` is of type { `PlayingCardDeck UndefinedObject #dragCard:fromHome: #dragCard:fromStack: }`
- Good: `PlayingCardDeck.stackingOrder` is of type { `UndefinedObject #descending #ascending }`
- Good: `PlayingCardDeck.cardDroppedSelector` is of type { `PlayingCardDeck UndefinedObject #cardMoved #cardMovedHome }`
- Good: `PlayingCardDeck.cardDoubleClickSelector` is of type { `PlayingCardDeck UndefinedObject #doubleClickInStack:OnCard: }`
- Good: `PlayingCardDeck.stackingPolicy` is of type { `UndefinedObject #stagger #single #altStraight #straight }`
- Good: `PlayingCardDeck.emptyDropPolicy` is of type { `UndefinedObject #inOrder #any }`
- Good: `PlayingCardDeck.layout` is of type { `UndefinedObject #stagger #pile #grid }`
- Good: `PlayingCardMorph.suitNumber` is of type { `UndefinedObject SmallInteger }`
- Bad: `PlayingCardMorph.cardNumber` is of type `Top`
- Good: `SameGame.scoreDisplay` is of type { `LedMorph UndefinedObject }`
- Good: `SameGame.board` is of type { `UndefinedObject SameGameBoard }`
- Good: `SameGame.selectionDisplay` is of type { `LedMorph UndefinedObject }`
- Bad: `SameGame.helpText` is of type { `StringHolderView++ PluggableTextMorph++ UndefinedObject }`
- Good: `SameGameBoard.palette` is of type { `UndefinedObject OrderedCollection }`
- Bad: `SameGameBoard.target` is of type `Top`
- Bad: `SameGameBoard.columns` is of type `Top`
- Bad: `SameGameBoard.actionSelector` is of type `Top`
- Good: `SameGameBoard.selectionColor` is of type `UndefinedObject`
- Good: `SameGameBoard.flash` is of type { `True UndefinedObject False }`

- Good: SameGameBoard.arguments is of type { UndefinedObject Array }
- Good: SameGameBoard.rows is of type { UndefinedObject SmallInteger }
- Bad: SameGameBoard.protoTile is of type Top
- Bad: SameGameBoard.flashColor is of type Top
- Good: SameGameBoard.selection is of type UndefinedObject
- Bad: SameGameTile.oldSwitchState is of type Top
- Bad: SameGameTile.switchState is of type Top
- Good: SameGameTile.disabled is of type { False UndefinedObject }
- Good: Tetris.scoreDisplay is of type { LedMorph UndefinedObject }
- Good: Tetris.board is of type { UndefinedObject TetrisBoard }
- Bad: TetrisBlock.shapeInfo is of type Top
- Good: TetrisBlock.board is of type { UndefinedObject TetrisBoard }
- Bad: TetrisBlock.angle is of type Top
- Bad: TetrisBlock.baseCellNumber is of type Top
- Good: TetrisBoard.game is of type { UndefinedObject Tetris }
- Good: TetrisBoard.gameOver is of type { True UndefinedObject False }
- Bad: TetrisBoard.score is of type Top
- Good: TetrisBoard.paused is of type { True UndefinedObject False }
- Bad: TetrisBoard.delay is of type { Magnitude++ UndefinedObject }
- Good: TetrisBoard.currentBlock is of type { TetrisBlock UndefinedObject }
- Good: WordGameLetterMorph.predecessor is of type { WordGameLetterMorph UndefinedObject }
- Good: WordGameLetterMorph.lineMorph is of type { UndefinedObject PolygonMorph }
- Good: WordGameLetterMorph.style is of type { UndefinedObject #plain #boxed #underlined }
- Good: WordGameLetterMorph.letterMorph is of type { StringMorph UndefinedObject }

- Bad: WordGameLetterMorph.letter is of type Top
- Good: WordGameLetterMorph.originalLetter is of type UndefinedObject
- Good: WordGameLetterMorph.successor is of type { WordGameLetterMorph UndefinedObject }
- Bad: WordGameLetterMorph.indexInQuote is of type Top
- Good: WordGameLetterMorph.linkedLetters is of type UndefinedObject
- Good: WordGamePanelMorph.letterMorphs is of type { Array UndefinedObject OrderedCollection }
- Good: WordGamePanelMorph.haveTypedHere is of type { True UndefinedObject False }
- Bad: RBAssignmentNode.variable is of type Top
- Bad: RBAssignmentNode.assignment is of type Top
- Bad: RBAssignmentNode.value is of type Top
- Good: RBBlockNode.colons is of type { UndefinedObject OrderedCollection }
- Bad: RBBlockNode.bar is of type Top
- Bad: RBBlockNode.right is of type Top
- Bad: RBBlockNode.left is of type Top
- Bad: RBBlockNode.body is of type Top
- Bad: RBBlockNode.arguments is of type Top
- Bad: RBCascadeNode.messages is of type Top
- Good: RBCascadeNode.semicolons is of type { UndefinedObject OrderedCollection }
- Good: RBFormatter.codeStream is of type { UndefinedObject WriteStream }
- Bad: RBFormatter.lineStart is of type Top
- Bad: RBFormatter.firstLineLength is of type Top
- Bad: RBFormatter.tabs is of type Top
- Bad: RBLiteralNode.token is of type Top
- Bad: RBMessageNode.arguments is of type Top

- Bad: RBMessageNode.receiver is of type Top
- Bad: RBMessageNode.selector is of type Top
- Bad: RBMessageNode.selectorParts is of type Top
- Good: RBMethodNode.tags is of type UndefinedObject
- Bad: RBMethodNode.selector is of type Top
- Bad: RBMethodNode.selectorParts is of type Top
- Bad: RBMethodNode.body is of type Top
- Bad: RBMethodNode.source is of type Top
- Bad: RBMethodNode.arguments is of type Top
- Bad: RBOptimizedNode.body is of type Top
- Bad: RBOptimizedNode.right is of type Top
- Bad: RBOptimizedNode.left is of type Top
- Good: RBParser.scanner is of type { RBScanner UndefinedObject }
- Bad: RBParser.tags is of type Object++
- Bad: RBParser.source is of type Top
- Good: RBParser.emptyStatements is of type { True UndefinedObject False }
- Bad: RBParser.currentToken is of type Top
- Good: RBParser.negatedNumbers is of type { True UndefinedObject False }
- Good: RBParser.errorBlock is of type { UndefinedObject a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType }
- Bad: RBParser.nextToken is of type Top
- Good: RBPatternMessageNode.isCascadeList is of type { True UndefinedObject False }
- Good: RBPatternMessageNode.isList is of type { True UndefinedObject False }
- Good: RBPatternMethodNode.isList is of type { True UndefinedObject False }

- Good: RBPatternVariableNode.recurseInto is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isLiteral is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isStatement is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isAnything is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isList is of type { True UndefinedObject False }
- Bad: RBProgramNode.parent is of type Top
- Bad: RBProgramNode.comments is of type Top
- Bad: RBReturnNode.return is of type Top
- Bad: RBReturnNode.value is of type Top
- Good: RBSequenceNode.rightBar is of type UndefinedObject
- Good: RBSequenceNode.periods is of type UndefinedObject
- Bad: RBSequenceNode.temporaries is of type Top
- Bad: RBSequenceNode.statements is of type Top
- Bad: RBSequenceNode.leftBar is of type Top
- Good: RBValueNode.parentheses is of type { UndefinedObject OrderedCollection }
- Bad: RBVariableNode.token is of type Top
- Good: CategoriesFile.categories is of type { UndefinedObject Dictionary }
- Bad: Celeste.currentMessages is of type Top
- Bad: Celeste.customFilterBlock is of type Top
- Bad: Celeste.status is of type Top
- Bad: Celeste.userPassword is of type Top
- Bad: Celeste.currentMsgID is of type Top
- Bad: Celeste.mailDB is of type Top
- Bad: Celeste.currentCategory is of type Top

- Bad: Celeste.lastCategory is of type Top
- Good: Celeste.lastCategoryList is of type UndefinedObject
- Good: Celeste.dateFilter is of type UndefinedObject
- Bad: Celeste.currentTOC is of type Top
- Bad: Celeste.fromFilter is of type Top
- Good: Celeste.formatMessages is of type UndefinedObject
- Good: Celeste.lastCategoryMenu is of type { CustomMenu
UndefinedObject }
- Bad: Celeste.messageTextView is of type Top
- Bad: Celeste.subjectFilter is of type Top
- Bad: CelesteComposition.textEditor is of type Top
- Bad: CelesteComposition.celeste is of type Top
- Bad: CelesteComposition.messageText is of type Top
- Good: CelesteComposition.morphicWindow is of type {
AlignmentMorphBob1 UndefinedObject SystemWindow }
- Good: CelesteComposition.mvcWindow is of type {
StandardSystemView UndefinedObject }
- Good: CelesteComposition.attachmentSeparator is of type
UndefinedObject
- Good: FancyCelesteComposition.theLinkToInclude is of type { String
UndefinedObject }
- Bad: FancyCelesteComposition.to is of type Top
- Bad: FancyCelesteComposition.subject is of type Top
- Good: FancyCelesteComposition.textFields is of type { UndefinedObject
Array }
- Good: IndexFile.msgDictionary is of type { PluggableDictionary
UndefinedObject }
- Good: IndexFile.logfile is of type { UndefinedObject StandardFileStream
}
- Good: IndexFile.timeSortedEntries is of type { UndefinedObject
SortedCollection }

- Bad: IndexFileEntry.time is of type Top
- Bad: IndexFileEntry.msgID is of type Top
- Bad: IndexFileEntry.messageFile is of type Top
- Bad: IndexFileEntry.cc is of type Top
- Bad: IndexFileEntry.tocLineCache is of type Top
- Bad: IndexFileEntry.location is of type Top
- Bad: IndexFileEntry.to is of type Top
- Bad: IndexFileEntry.textLength is of type Top
- Bad: IndexFileEntry.subject is of type Top
- Bad: IndexFileEntry.from is of type Top
- Good: MIMEHeaderValue.mainValue is of type { UndefinedObject String Character }
- Good: MIMEHeaderValue.parameters is of type { UndefinedObject Dictionary }
- Bad: MIMEPart.content is of type Top
- Good: MIMEPart.parts is of type { Array UndefinedObject OrderedCollection }
- Bad: MIMEPart.separator is of type Top
- Bad: MIMEPart.text is of type Top
- Good: MIMEPart.fields is of type { UndefinedObject Dictionary }
- Bad: MailDB.rootFilename is of type Top
- Bad: MailDB.indexFile is of type Top
- Bad: MailDB.messageFile is of type Top
- Bad: MailDB.categoriesFile is of type Top
- Bad: MailDBFile.filename is of type Top
- Bad: MailMessage.time is of type Top
- Bad: MailMessage.separator is of type Top
- Bad: MailMessage.cc is of type Top
- Good: MailMessage.body is of type { UndefinedObject MIMEDocument }

- Bad: MailMessage.to is of type Top
- Bad: MailMessage.text is of type Top
- Bad: MailMessage.subject is of type Top
- Good: MailMessage.fields is of type { UndefinedObject Dictionary }
- Bad: MailMessage.from is of type Top
- Good: MailMessage.parts is of type { Array UndefinedObject OrderedCollection }
- Bad: MailNotifier.lastConnectTime is of type Top
- Good: MailNotifier.messageCount is of type { Integer LargeNegativeInteger LargePositiveInteger UndefinedObject SmallInteger }
- Good: MailNotifier.password is of type UndefinedObject
- Good: MailNotifier.socket is of type { UndefinedObject POPSocket }
- Good: MessageFile.file is of type { CrLfFileStream UndefinedObject }
- Bad: ReadNewsInboxFile.currentNewsgroup is of type Top
- Good: ReadNewsInboxFile.msgBuffer is of type { UndefinedObject WriteStream }
- Bad: TextMessageLink.message is of type Top
- Bad: Browser.classOrganizer is of type Top
- Bad: Browser.systemOrganizer is of type Top
- Bad: Browser.messageListIndex is of type Top
- Bad: Browser.messageCategoryListIndex is of type Top
- Bad: Browser.editSelection is of type Top
- Bad: Browser.metaClassOrganizer is of type Top
- Bad: Browser.systemCategoryListIndex is of type Top
- Bad: Browser.metaClassIndicated is of type Top
- Bad: Browser.classListIndex is of type Top
- Bad: ChangedMessageSet.changeSet is of type Top
- Bad: HierarchyBrowser.centralClass is of type Top
- Bad: HierarchyBrowser.classList is of type Top

- Bad: MessageSet.messageList is of type Top
- Bad: MessageSet.autoSelectString is of type Top
- Bad: PackageBrowser.package is of type Top
- Bad: PackageBrowser.packageListIndex is of type Top
- Good: PackageBrowser.packageList is of type UndefinedObject
- Good: ProtocolBrowser.selectedClass is of type UndefinedObject
- Bad: ProtocolBrowser.selectedSelector is of type Top
- Bad: SelectorBrowser.classListIndex is of type Top
- Bad: SelectorBrowser.classList is of type Top
- Bad: SelectorBrowser.selectorIndex is of type Top
- Bad: SelectorBrowser.selectorList is of type Top
- Bad: BitBltSimulation.sy is of type Top
- Bad: BitBltSimulation.halfToneBase is of type Top
- Bad: BitBltSimulation.cmBlueShift is of type Top
- Bad: BitBltSimulation.destWidth is of type Top
- Bad: BitBltSimulation.destX is of type Top
- Bad: BitBltSimulation.width is of type Top
- Bad: BitBltSimulation.scanString is of type Top
- Bad: BitBltSimulation.sourceBits is of type Top
- Bad: BitBltSimulation.scanStop is of type Top
- Bad: BitBltSimulation.dy is of type Top
- Good: BitBltSimulation.warpBitShiftTable is of type { CArrayAccessor
UndefinedObject }
- Bad: BitBltSimulation.destPixSize is of type Top
- Bad: BitBltSimulation.pixPerWord is of type Top
- Good: BitBltSimulation.ditherValues16 is of type { CArrayAccessor
UndefinedObject }
- Bad: BitBltSimulation.cmRedMask is of type Top
- Bad: BitBltSimulation.warpSrcMask is of type Top

- Bad: BitBltSimulation.dstBitShift is of type Top
- Bad: BitBltSimulation.destIndex is of type Top
- Bad: BitBltSimulation.sourceIndex is of type Top
- Bad: BitBltSimulation.clipX is of type Top
- Good: BitBltSimulation.hDir is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.nWords is of type Top
- Bad: BitBltSimulation.clipHeight is of type Top
- Bad: BitBltSimulation.bitBltOop is of type Top
- Bad: BitBltSimulation.preload is of type Top
- Bad: BitBltSimulation.opTable is of type Top
- Bad: BitBltSimulation.sourceForm is of type Top
- Bad: BitBltSimulation.warpAlignMask is of type Top
- Bad: BitBltSimulation.skew is of type Top
- Bad: BitBltSimulation.cmDeltaBits is of type Top
- Good: BitBltSimulation.ditherMatrix4x4 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.sourceY is of type Top
- Bad: BitBltSimulation.scanStart is of type Top
- Bad: BitBltSimulation.cmGreenShift is of type Top
- Bad: BitBltSimulation.destBits is of type Top
- Bad: BitBltSimulation.destPitch is of type Top
- Bad: BitBltSimulation.height is of type Top
- Bad: BitBltSimulation.sourcePitch is of type Top
- Bad: BitBltSimulation.destY is of type Top
- Bad: BitBltSimulation.affectedL is of type Top
- Good: BitBltSimulation.maskTable is of type { UndefinedObject Array }
- Good: BitBltSimulation.scanDisplayFlag is of type { True UndefinedObject False }

- Bad: BitBltSimulation.mask1 is of type Top
- Bad: BitBltSimulation.destDelta is of type Top
- Good: BitBltSimulation.noHalftone is of type { True UndefinedObject False }
- Bad: BitBltSimulation.clipWidth is of type Top
- Bad: BitBltSimulation.destForm is of type Top
- Bad: BitBltSimulation.sx is of type Top
- Bad: BitBltSimulation.clipY is of type Top
- Bad: BitBltSimulation.scanRightX is of type Top
- Bad: BitBltSimulation.cmBlueMask is of type Top
- Bad: BitBltSimulation.halftoneHeight is of type Top
- Bad: BitBltSimulation.affectedT is of type Top
- Bad: BitBltSimulation.sourcePixSize is of type Top
- Bad: BitBltSimulation.cmRedShift is of type Top
- Good: BitBltSimulation.noSource is of type { True UndefinedObject False }
- Bad: BitBltSimulation.dx is of type Top
- Bad: BitBltSimulation.destMask is of type Top
- Bad: BitBltSimulation.affectedB is of type Top
- Bad: BitBltSimulation.cmGreenMask is of type Top
- Good: BitBltSimulation.hasSurfaceLock is of type { True UndefinedObject False }
- Bad: BitBltSimulation.stopCode is of type Top
- Bad: BitBltSimulation.combinationRule is of type Top
- Bad: BitBltSimulation.bitCount is of type Top
- Good: BitBltSimulation.vDir is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.destHeight is of type Top
- Good: BitBltSimulation.cmBitsPerColor is of type { UndefinedObject SmallInteger }

- Bad: BitBltSimulation.bbH is of type Top
- Bad: BitBltSimulation.bbW is of type Top
- Bad: BitBltSimulation.srcWidth is of type Top
- Bad: BitBltSimulation.affectedR is of type Top
- Good: BitBltSimulation.ditherThresholds16 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.sourceDelta is of type Top
- Bad: BitBltSimulation.warpSrcShift is of type Top
- Bad: BitBltSimulation.halfToneForm is of type Top
- Bad: BitBltSimulation.mask2 is of type Top
- Bad: BitBltSimulation.scanXTable is of type Top
- Bad: BitBltSimulation.scanStopArray is of type Top
- Bad: BitBltSimulation.sourceAlpha is of type Top
- Bad: BitBltSimulation.colorMap is of type Top
- Bad: BitBltSimulation.warpAlignShift is of type Top
- Bad: BitBltSimulation.sourceX is of type Top
- Bad: BitBltSimulation.srcBitShift is of type Top
- Bad: BitBltSimulation.srcHeight is of type Top
- Bad: Interpreter.activeContext is of type Top
- Bad: Interpreter.nextWakeupTick is of type Top
- Bad: Interpreter.localIP is of type Top
- Bad: Interpreter.localHomeContext is of type Top
- Good: Interpreter.methodCache is of type { UndefinedObject Array }
- Bad: Interpreter.interruptKeycode is of type Top
- Bad: Interpreter.semaphoresToSignalCountA is of type Top
- Bad: Interpreter.interruptCheckCounterFeedBackReset is of type Top
- Good: Interpreter.interpreterVersion is of type UndefinedObject
- Good: Interpreter.obsoleteNamedPrimitiveTable is of type { CArrayAccessor UndefinedObject }

- Good: Interpreter.interpreterProxy is of type { UndefinedObject InterpreterSimulator InterpreterSimulatorMSB InterpreterSimulatorLSB }
- Bad: Interpreter.receiver is of type Top
- Bad: Interpreter.stackPointer is of type Top
- Bad: Interpreter.receiverClass is of type Top
- Good: Interpreter.obsoleteIndexedPrimitiveTable is of type { CArrayAccessor UndefinedObject }
- Bad: Interpreter.successFlag is of type Top
- Good: Interpreter.compilerHooks is of type UndefinedObject
- Bad: Interpreter.fullScreenFlag is of type Top
- Bad: Interpreter.primitiveIndex is of type Top
- Good: Interpreter.semaphoresToSignalB is of type { UndefinedObject Array }
- Bad: Interpreter.compilerInitialized is of type Top
- Bad: Interpreter.localSP is of type Top
- Bad: Interpreter.instructionPointer is of type Top
- Good: Interpreter.semaphoresUseBufferA is of type { True UndefinedObject False }
- Good: Interpreter.deferDisplayUpdates is of type { True UndefinedObject False }
- Bad: Interpreter.theHomeContext is of type Top
- Bad: Interpreter.extraVMMemory is of type Top
- Bad: Interpreter.method is of type Top
- Bad: Interpreter.pendingFinalizationSignals is of type Top
- Bad: Interpreter.newMethod is of type Top
- Good: Interpreter.semaphoresToSignalA is of type { UndefinedObject Array }
- Bad: Interpreter.methodClass is of type Top
- Bad: Interpreter.newNativeMethod is of type Top
- Good: Interpreter.atCache is of type { UndefinedObject Array }

- Bad: Interpreter.argumentCount is of type Top
- Bad: Interpreter.currentBytecode is of type Top
- Good: Interpreter.interruptPending is of type { False UndefinedObject }
- Good: Interpreter.interruptChecksEveryNms is of type { UndefinedObject SmallInteger }
- Bad: Interpreter.nextPollTick is of type Top
- Bad: Interpreter.lkupClass is of type Top
- Bad: Interpreter.reclaimableContextCount is of type Top
- Bad: Interpreter.savedWindowSize is of type Top
- Bad: Interpreter.lastTick is of type Top
- Bad: Interpreter.semaphoresToSignalCountB is of type Top
- Bad: Interpreter.messageSelector is of type Top
- Bad: Interpreter.showSurfaceFn is of type Top
- Good: InterpreterSimulator.myBitBlt is of type { False UndefinedObject BitBltSimulator }
- Good: InterpreterSimulator.traceOn is of type { UndefinedObject True }
- Bad: InterpreterSimulator.imageName is of type Top
- Good: InterpreterSimulator.pluginList is of type { UndefinedObject Array }
- Bad: InterpreterSimulator.sendCount is of type Top
- Good: InterpreterSimulator.displayForm is of type { Form UndefinedObject }
- Good: InterpreterSimulator.mappedPluginEntries is of type { UndefinedObject Array }
- Good: InterpreterSimulator.filesOpen is of type { UndefinedObject OrderedCollection }
- Bad: InterpreterSimulator.byteCount is of type Top
- Good: ObjectMemory.signalLowSpace is of type { True UndefinedObject False }
- Bad: ObjectMemory.tenuringThreshold is of type Top
- Bad: ObjectMemory.lastHash is of type Top

- Bad: ObjectMemory.statIncrGCMSecs is of type Top
- Good: ObjectMemory.remapBuffer is of type { UndefinedObject Array }
- Bad: ObjectMemory.trueObj is of type Top
- Bad: ObjectMemory.statFullGCMSecs is of type Top
- Bad: ObjectMemory.freeLargeContexts is of type Top
- Bad: ObjectMemory.lowSpaceThreshold is of type Top
- Bad: ObjectMemory.allocationsBetweenGCs is of type Top
- Bad: ObjectMemory.interruptCheckCounter is of type Top
- Bad: ObjectMemory.freeContexts is of type Top
- Bad: ObjectMemory.compStart is of type Top
- Bad: ObjectMemory.youngStart is of type Top
- Bad: ObjectMemory.compEnd is of type Top
- Bad: ObjectMemory.totalObjectFoundAtStartup is of type Top
- Bad: ObjectMemory.memoryLimit is of type Top
- Bad: ObjectMemory.endOfMemory is of type Top
- Bad: ObjectMemory.specialObjectsOop is of type Top
- Bad: ObjectMemory.statFullGCs is of type Top
- Bad: ObjectMemory.statTenures is of type Top
- Bad: ObjectMemory.nilObj is of type Top
- Bad: ObjectMemory.child is of type Top
- Bad: ObjectMemory.fwdTableLast is of type Top
- Bad: ObjectMemory.fwdTableNext is of type Top
- Bad: ObjectMemory.rootTableCount is of type Top
- Bad: ObjectMemory.allocationCount is of type Top
- Bad: ObjectMemory.falseObj is of type Top
- Bad: ObjectMemory.remapBufferCount is of type Top
- Bad: ObjectMemory.parentField is of type Top
- Bad: ObjectMemory.field is of type Top

- Good: ObjectMemory.memory is of type { Interpreter UndefinedObject InterpreterSimulatorMSB InterpreterSimulatorLSB Bitmap InterpreterSimulator }
- Bad: ObjectMemory.freeBlock is of type Top
- Bad: ObjectMemory.statRootTableOverflows is of type Top
- Good: ObjectMemory.rootTable is of type { UndefinedObject Array }
- Bad: ObjectMemory.statIncrGCs is of type Top
- Good: ObjectMemory.displayBits is of type { UndefinedObject SmallInteger }
- Bad: SystemMonitor.vmParameters is of type Top
- Bad: SystemMonitor.gcHighWaterMark is of type Top
- Bad: SystemMonitor.baselineSkip is of type Top
- Bad: SystemMonitor.prevAllocCount is of type Top
- Bad: SystemMonitor.prevDeltaIncrGC is of type Top
- Bad: SystemMonitor.prevMcMiss is of type Top
- Good: SystemMonitor.window is of type { UndefinedObject Rectangle }
- Bad: SystemMonitor.prevDeltaFullGC is of type Top
- Bad: SystemMonitor.prevFullGC is of type Top
- Good: SystemMonitor.valSelectors is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIncrGC is of type Top
- Bad: SystemMonitor.prevMsClock is of type Top
- Good: SystemMonitor.maxValues is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevAllocRate is of type Top
- Bad: SystemMonitor.gcLowWaterMark is of type Top
- Good: SystemMonitor.labels is of type { UndefinedObject Array }
- Good: SystemMonitor.minValues is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIcHit is of type Top
- Bad: SystemMonitor.prevMcHit is of type Top
- Good: SystemTracer.hashGenerator is of type { Random UndefinedObject }

- Bad: SystemTracer.maxOop is of type Top
- Good: SystemTracer.map is of type UndefinedObject
- Good: SystemTracer.initialProcess is of type UndefinedObject
- Good: SystemTracer.oopMap is of type { UndefinedObject Array }
- Bad: SystemTracer.specialObjects is of type Top
- Good: SystemTracer.file is of type { CrLfFileStream UndefinedObject }
- Good: SystemTracer.cleaningUp is of type { False UndefinedObject }
- Good: SystemTracer.writeDict is of type { UndefinedObject Dictionary }
- Good: SystemTracer.imageHeaderSize is of type { UndefinedObject SmallInteger }
- Good: SystemTracer.compactClasses is of type { UndefinedObject Array }
- Good: SystemTracer.replacementClasses is of type { UndefinedObject Dictionary }
- Bad: TestInterfaceBase.duration is of type Top
- Bad: TestInterfaceBase.classPattern is of type Top
- Bad: TestInterfaceBase.result is of type Top
- Bad: TestInterfaceBase.selectorPattern is of type Top
- Good: TestModel.failureList is of type { UndefinedObject OrderedCollection }
- Good: TestModel.patternHistory is of type { UndefinedObject OrderedCollection }
- Good: TestModel.errorList is of type { UndefinedObject OrderedCollection }
- Bad: TestModel.summaryText is of type Top
- Bad: TestModel.summaryTextM is of type { PluggableTextMorph++ PluggableTextView UndefinedObject }
- Good: TestModel.summaryTextV is of type { PluggableTextView UndefinedObject }
- Good: TestModel.updateColorSelector is of type { UndefinedObject #updateColorM #updateColorV }

- Good: TestModel.patternTextV is of type { PluggableTextView UndefinedObject }
- Bad: TestModel.patternTextM is of type { PluggableTextMorph++ PluggableTextView UndefinedObject }
- Bad: TestModel.detailsText is of type Top
- Bad: PDA.recurringEvents is of type Top
- Good: PDA.peopleList is of type { ArrayedCollection++ UndefinedObject }
- Bad: PDA.date is of type Top
- Good: PDA.dateButtonPressed is of type UndefinedObject
- Bad: PDA.allEvents is of type Top
- Bad: PDA.category is of type Top
- Bad: PDA.currentItem is of type Top
- Bad: PDA.scheduleList is of type Top
- Good: PDA.categoryListIndex is of type UndefinedObject
- Bad: PDA.allPeople is of type Top
- Bad: PDA.scheduleListIndex is of type Top
- Bad: PDA.allToDoItems is of type Top
- Bad: PDA.allNotes is of type Top
- Bad: PDA.notesListIndex is of type Top
- Good: PDA.currentItemSelection is of type UndefinedObject
- Good: PDA.categoryList is of type UndefinedObject
- Good: PDA.todoList is of type { ArrayedCollection++ UndefinedObject }
- Bad: PDA.todoListIndex is of type Top
- Bad: PDA.peopleListIndex is of type Top
- Good: PDA.notesList is of type { ArrayedCollection++ UndefinedObject }
- Good: PDA.currentItemText is of type UndefinedObject
- Bad: PDA.userCategories is of type Top

- Good: PDA.viewDescriptionOnly is of type { True UndefinedObject
False }
- Bad: PDAChoiceMorph.backgroundColor is of type Top
- Bad: PDAClockMorph.backgroundColor is of type Top
- Bad: PDAEvent.time is of type Top
- Bad: PDAEvent.date is of type Top
- Bad: PDAEvent.duration is of type Top
- Good: PDAEvent.alarm is of type UndefinedObject
- Bad: PDAPerson.name is of type Top
- Bad: PDAPerson.address is of type Top
- Good: PDAPerson.phone is of type { String UndefinedObject }
- Good: PDAPerson.email is of type { String UndefinedObject }
- Bad: PDARecord.description is of type Top
- Bad: PDARecord.key is of type Top
- Good: PDARecord.otherFields is of type { UndefinedObject Dictionary }
- Good: PDARecurringEvent.recurrence is of type { UndefinedObject
#dayOfMonth #dayOfWeek #nthWeekdayOfMonthEachYear
#dateOfYear }
- Bad: PDARecurringEvent.firstDate is of type Top
- Bad: PDARecurringEvent.lastDate is of type Top
- Good: PDAToDoItem.deadline is of type UndefinedObject
- Bad: PDAToDoItem.result is of type Top
- Bad: PDAToDoItem.dayDone is of type Top
- Bad: PDAToDoItem.dayPosted is of type Top
- Bad: PDAToDoItem.priority is of type Top

4.3 Threshold of 500

- Bad: ADPCMCodec.index is of type Top
- Good: ADPCMCodec.indexTable is of type { Array UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.deltaSignMask is of type Top
- Bad: ADPCMCodec.bitPosition is of type Top
- Bad: ADPCMCodec.encodedBytes is of type Top
- Good: ADPCMCodec.stepSizeTable is of type { Array UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.sampleIndex is of type Top
- Good: ADPCMCodec.rightSamples is of type { UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.byteIndex is of type Top
- Bad: ADPCMCodec.frameSizeMask is of type Top
- Bad: ADPCMCodec.bitsPerSample is of type Top
- Bad: ADPCMCodec.predicted is of type Top
- Bad: ADPCMCodec.deltaValueHighBit is of type Top
- Bad: ADPCMCodec.deltaValueMask is of type Top
- Bad: ADPCMCodec.currentByte is of type Top
- Bad: ADPCMCodec.samples is of type Top
- Good: AIFFFileReader.channelData is of type { UndefinedObject Array }
- Bad: AIFFFileReader.frameCount is of type Top
- Good: AIFFFileReader.isLooped is of type { True UndefinedObject False }
- Bad: AIFFFileReader.gain is of type Top
- Bad: AIFFFileReader.in is of type Top
- Bad: AIFFFileReader.fileType is of type Top
- Bad: AIFFFileReader.pitch is of type Top
- Good: AIFFFileReader.markers is of type { UndefinedObject Array }

- Bad: AIFFFileReader.channelCount is of type Top
- Good: AIFFFileReader.bitsPerSample is of type { UndefinedObject SmallInteger }
- Good: AIFFFileReader.mergelfStereo is of type { True UndefinedObject False }
- Good: AIFFFileReader.skipDataChunk is of type { True UndefinedObject False }
- Bad: AIFFFileReader.samplingRate is of type Top
- Bad: AbstractSound.envelopes is of type Top
- Bad: AbstractSound.mSecsSinceStart is of type Top
- Bad: AbstractSound.scaledVolLimit is of type Top
- Bad: AbstractSound.scaledVol is of type Top
- Bad: AbstractSound.samplesUntilNextControl is of type Top
- Bad: AbstractSound.scaledVolIncr is of type Top
- Bad: CompressedSoundData.perceivedPitch is of type Top
- Bad: CompressedSoundData.codecName is of type ProtoObject++
- Good: CompressedSoundData.channels is of type { UndefinedObject Array }
- Bad: CompressedSoundData.gain is of type Top
- Bad: CompressedSoundData.firstSample is of type Top
- Bad: CompressedSoundData.soundClassName is of type Top
- Bad: CompressedSoundData.cachedSound is of type { WaveletCodec MuLawCodec ADPCMCodec SoundCodec UndefinedObject LoopedSampledSound GSMCodec SampledSound }
- Bad: CompressedSoundData.loopLength is of type Top
- Bad: CompressedSoundData.samplingRate is of type Top
- Bad: CompressedSoundData.loopEnd is of type Top
- Bad: Envelope.target is of type Top
- Bad: Envelope.scale is of type Top
- Good: Envelope.updateSelector is of type { UndefinedObject #pitch: #modulation: #ratio: }

- Bad: Envelope.loopEndMSecs is of type { Magnitude++ UndefinedObject }
- Bad: Envelope.endMSecs is of type Top
- Bad: Envelope.currValue is of type Top
- Bad: Envelope.loopStartIndex is of type Top
- Bad: Envelope.valueIncr is of type Top
- Good: Envelope.noChangesDuringLoop is of type { True UndefinedObject False }
- Bad: Envelope.nextRecomputeTime is of type Top
- Bad: Envelope.loopEndIndex is of type Top
- Bad: Envelope.loopMSecs is of type Top
- Bad: Envelope.loopStartMSecs is of type Top
- Bad: Envelope.decayScale is of type Top
- Bad: Envelope.points is of type Top
- Bad: Envelope.lastValue is of type Top
- Bad: FFT.permTable is of type Top
- Bad: FFT.nu is of type Top
- Bad: FFT.n is of type Top
- Good: FFT.sinTable is of type { Array UndefinedObject FloatArray }
- Bad: FFT.imagData is of type Top
- Good: FFT.window is of type { UndefinedObject FloatArray }
- Good: FFT.realData is of type { Array UndefinedObject FloatArray }
- Bad: FMSSound.initialCount is of type Top
- Bad: FMSSound.multiplier is of type Top
- Bad: FMSSound.scaledOffsetIndex is of type Top
- Bad: FMSSound.waveTable is of type Top
- Bad: FMSSound.scaledWaveTableSize is of type Top
- Bad: FMSSound.scaledIndex is of type Top
- Bad: FMSSound.normalizedModulation is of type Top

- Bad: FMSSound.scaledOffsetIndexIncr is of type Top
- Bad: FMSSound.modulation is of type Top
- Bad: FMSSound.scaledIndexIncr is of type Top
- Bad: FMSSound.count is of type Top
- Bad: FWT.transform is of type Top
- Bad: FWT.beta is of type Top
- Good: FWT.gTilde is of type { UndefinedObject Array }
- Bad: FWT.coeffs is of type Top
- Good: FWT.g is of type { UndefinedObject Array }
- Bad: FWT.nSamples is of type Top
- Bad: FWT.nLevels is of type Top
- Bad: FWT.alpha is of type Top
- Good: FWT.h is of type { UndefinedObject Array }
- Bad: FWT.samples is of type Top
- Good: FWT.hTilde is of type { UndefinedObject Array }
- Bad: GSMCodec.encodeState is of type Top
- Bad: GSMCodec.decodeState is of type Top
- Bad: LoopedSampledSound.initialCount is of type Top
- Bad: LoopedSampledSound.perceivedPitch is of type Top
- Bad: LoopedSampledSound.scaledLoopLength is of type Top
- Bad: LoopedSampledSound.lastSample is of type Top
- Good: LoopedSampledSound.gain is of type { UndefinedObject Float }
- Bad: LoopedSampledSound.scaledIndexIncr is of type Top
- Bad: LoopedSampledSound.releaseCount is of type Top
- Bad: LoopedSampledSound.firstSample is of type Top
- Bad: LoopedSampledSound.sampleCountForRelease is of type Top
- Bad: LoopedSampledSound.rightSamples is of type Top
- Bad: LoopedSampledSound.leftSamples is of type Top

- Bad: LoopedSampledSound.scaledIndex is of type Top
- Bad: LoopedSampledSound.originalSamplingRate is of type Top
- Bad: LoopedSampledSound.count is of type Top
- Bad: LoopedSampledSound.loopEnd is of type Top
- Good: MixedSound.soundDone is of type { UndefinedObject Array }
- Good: MixedSound.sounds is of type { UndefinedObject Array }
- Good: MixedSound.leftVols is of type { UndefinedObject Array }
- Bad: MixedSound.rightVols is of type Top
- Bad: PitchEnvelope.centerPitch is of type Top
- Bad: PluckedSound.initialCount is of type Top
- Good: PluckedSound.ring is of type { UndefinedObject SoundBuffer }
- Bad: PluckedSound.scaledIndexLimit is of type Top
- Bad: PluckedSound.scaledIndex is of type Top
- Bad: PluckedSound.scaledIndexIncr is of type Top
- Bad: PluckedSound.count is of type Top
- Good: RandomEnvelope.rand is of type { Random UndefinedObject }
- Good: RandomEnvelope.highLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.lowLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.delta is of type { UndefinedObject Float }
- Bad: RepeatingSound.iteration is of type Top
- Bad: RepeatingSound.iterationCount is of type Top
- Bad: RepeatingSound.sound is of type Top
- Bad: RepeatingSound.samplesPerIteration is of type Top
- Bad: RestSound.initialCount is of type Top
- Bad: RestSound.count is of type Top
- Good: ReverbSound.tapGains is of type { UndefinedObject Bitmap }
- Good: ReverbSound.bufferSize is of type { Bitmap LargeNegativeInteger LargePositiveInteger UndefinedObject SmallInteger }

- Good: ReverbSound.rightBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.leftBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.tapCount is of type { UndefinedObject SmallInteger }
- Good: ReverbSound.tapDelays is of type { UndefinedObject Bitmap }
- Bad: ReverbSound.bufferIndex is of type Top
- Good: ReverbSound.sound is of type UndefinedObject
- Good: SampledInstrument.sustainedSoft is of type { UndefinedObject Array }
- Bad: SampledInstrument.staccatoSoft is of type Top
- Good: SampledInstrument.staccatoLoud is of type { UndefinedObject Array }
- Good: SampledInstrument.sustainedThreshold is of type { UndefinedObject Float }
- Good: SampledInstrument.sustainedLoud is of type { UndefinedObject Array }
- Good: SampledInstrument.loudThreshold is of type { UndefinedObject Float }
- Bad: SampledSound.initialCount is of type Top
- Bad: SampledSound.samples is of type Top
- Bad: SampledSound.scaledIncrement is of type Top
- Bad: SampledSound.scaledIndex is of type Top
- Bad: SampledSound.indexHighBits is of type Top
- Bad: SampledSound.samplesSize is of type Top
- Bad: SampledSound.originalSamplingRate is of type Top
- Bad: SampledSound.count is of type Top
- Good: SequentialSound.sounds is of type { UndefinedObject Array }
- Bad: SequentialSound.currentIndex is of type Top
- Bad: Sonogram.lastX is of type Top

- Good: Sonogram.pixValMap is of type { UndefinedObject Bitmap }
- Good: Sonogram.maxVal is of type { UndefinedObject Float }
- Good: Sonogram.minVal is of type { UndefinedObject Float }
- Good: Sonogram.scrollDelta is of type { UndefinedObject SmallInteger }
- Good: Sonogram.columnForm is of type { Form UndefinedObject }
- Bad: SoundInputStream.mutex is of type Top
- Bad: SoundInputStream.bufferSize is of type Top
- Good: SoundRecorder.currentBuffer is of type { UndefinedObject SoundBuffer }
- Bad: SoundRecorder.recordProcess is of type Top
- Good: SoundRecorder.codec is of type { GSMCodec UndefinedObject }
- Good: SoundRecorder.desiredSampleRate is of type { UndefinedObject Float }
- Bad: SoundRecorder.nextIndex is of type Top
- Good: SoundRecorder.meteringBuffer is of type { UndefinedObject SoundBuffer }
- Bad: SoundRecorder.meterLevel is of type Top
- Good: SoundRecorder.stereo is of type { False UndefinedObject }
- Good: SoundRecorder.recordLevel is of type { UndefinedObject Float }
- Good: SoundRecorder.soundPlaying is of type { SampledSound SequentialSound UndefinedObject ChatRecorder SoundInputStream SoundRecorder }
- Good: SoundRecorder.recordedBuffers is of type { Array UndefinedObject OrderedCollection }
- Good: SoundRecorder.paused is of type { True UndefinedObject False }
- Bad: SoundRecorder.samplingRate is of type Top
- Good: SoundRecorder.recordedSound is of type { SampledSound SequentialSound UndefinedObject ChatRecorder SoundInputStream SoundRecorder }
- Good: SoundRecorder.bufferAvailableSema is of type { Semaphore UndefinedObject }

- Bad: VolumeEnvelope.mSecsForChange is of type Top
- Bad: VolumeEnvelope.targetVol is of type Top
- Good: VolumeEnvelope.currentVol is of type UndefinedObject
- Bad: WaveletCodec.alpha is of type Top
- Bad: WaveletCodec.beta is of type Top
- Good: WaveletCodec.fwt is of type { FWT UndefinedObject }
- Good: WaveletCodec.samplesPerFrame is of type { Integer++ ScrollingToolHolder UndefinedObject B3DRotation B3DVector3 }
- Bad: WaveletCodec.nLevels is of type Top
- Bad: IRCChannelInfo.name is of type Top
- Bad: IRCChannelInfo.topic is of type Top
- Good: IRCChannelInfo.subscribers is of type { IdentitySet UndefinedObject }
- Good: IRCChannelInfo.members is of type { Set UndefinedObject }
- Good: IRCChannelInfo.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCChannelListBrowser.channelIndex is of type Top
- Bad: IRCChannelListBrowser.channelList is of type Top
- Good: IRCChannelListBrowser.sortCriterion is of type { UndefinedObject #name }
- Bad: IRCChannelListBrowser.connection is of type Top
- Bad: IRCChannelObserver.chatText is of type Top
- Good: IRCChannelObserver.channelName is of type UndefinedObject
- Bad: IRCChannelObserver.channel is of type Top
- Bad: IRCChannelObserver.connection is of type Top
- Bad: IRCChannelSummary.name is of type Top
- Bad: IRCChannelSummary.topic is of type Top
- Bad: IRCChannelSummary.numUsers is of type Top
- Good: IRCChannelUsersBrowser.channel is of type { UndefinedObject IRCChannelInfo }

- Good: IRCChannelUsersBrowser.userList is of type { UndefinedObject Array }
- Bad: IRCChannelUsersBrowser.userIndex is of type Top
- Good: IRCConnection.directMessageSubscribers is of type { IdentitySet UndefinedObject }
- Good: IRCConnection.channelListBeingBuilt is of type { UndefinedObject OrderedCollection }
- Good: IRCConnection.protocolMessagesToSend is of type { UndefinedObject OrderedCollection }
- Bad: IRCConnection.sendBuffer is of type Top
- Bad: IRCConnection.server is of type Top
- Good: IRCConnection.motdBeingBuilt is of type { UndefinedObject WriteStream }
- Good: IRCConnection.protocolMessageSubscribers is of type { IdentitySet UndefinedObject }
- Bad: IRCConnection.motd is of type Top
- Bad: IRCConnection.port is of type Top
- Good: IRCConnection.recieveBuffer is of type { String UndefinedObject }
- Good: IRCConnection.socket is of type { Socket UndefinedObject }
- Bad: IRCConnection.userName is of type Top
- Bad: IRCConnection.nick is of type Top
- Good: IRCConnection.channelList is of type { UndefinedObject Array }
- Good: IRCConnection.subscribedChannels is of type { UndefinedObject Dictionary }
- Bad: IRCConnection.fullName is of type Top
- Good: IRCConnection.messagesProcessed is of type { UndefinedObject SmallInteger }
- Bad: IRCConnection.consoleText is of type Top
- Bad: IRCDirectMessagesObserver.chatText is of type Top
- Bad: IRCDirectMessagesObserver.talkingTo is of type Top

- Bad: IRCDirectMessagesObserver.connection is of type { Boolean++ HtmlComment HtmlText IRCConnection UndefinedObject HtmlTag }
- Bad: IRCMessage.text is of type Top
- Bad: IRCMessage.sender is of type Top
- Bad: IRCMessage.recipient is of type Top
- Good: IRCMessagePattern.sender is of type UndefinedObject
- Good: IRCMessagePattern.recipient is of type UndefinedObject
- Good: IRCMessageSet.messages is of type UndefinedObject
- Bad: IRCMorph.userName is of type Top
- Bad: IRCMorph.nick is of type Top
- Bad: IRCMorph.server is of type Top
- Good: IRCMorph.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCMorph.fullName is of type Top
- Good: IRCMorph.messageCollections is of type UndefinedObject
- Bad: IRCMorph.consoleText is of type Top
- Bad: IRCMorph.port is of type Top
- Bad: IRCProtocolMessage.arguments is of type Top
- Good: IRCProtocolMessage.command is of type { UndefinedObject String Character }
- Bad: IRCProtocolMessage.prefix is of type Top
- Good: IRCRecipientFilter.recipient is of type UndefinedObject
- Good: ChineseCheckerPiece.myBoard is of type { ChineseCheckers UndefinedObject }
- Bad: ChineseCheckerPiece.boardLoc is of type Top
- Bad: ChineseCheckers.movePhase is of type Top
- Good: ChineseCheckers.board is of type { UndefinedObject Array }
- Good: ChineseCheckers.plannedMovePhase is of type UndefinedObject
- Good: ChineseCheckers.sixDeltas is of type { UndefinedObject Array }
- Good: ChineseCheckers.plannedMove is of type UndefinedObject

- Bad: ChineseCheckers.whoseMove is of type Top
- Bad: ChineseCheckers.teams is of type Top
- Good: ChineseCheckers.colors is of type { UndefinedObject Array }
- Good: ChineseCheckers.homes is of type { UndefinedObject Array }
- Good: ChineseCheckers.animateMoves is of type { True
UndefinedObject False }
- Good: ChineseCheckers.pathMorphs is of type { UndefinedObject
OrderedCollection }
- Good: ChineseCheckers.autoPlay is of type { UndefinedObject Array }
- Good: CipherPanel.originalMorphs is of type { UndefinedObject Array }
- Good: CipherPanel.decodingMorphs is of type { UndefinedObject Array
}
- Good: CipherPanel.quote is of type { String++ UndefinedObject
Character }
- Good: CipherPanel.originalText is of type UndefinedObject
- Good: CrosticPanel.crosticPanel is of type UndefinedObject
- Good: CrosticPanel.cluesCol2 is of type { AlignmentMorph
UndefinedObject }
- Bad: CrosticPanel.quote is of type Top
- Good: CrosticPanel.answers is of type { UndefinedObject
OrderedCollection }
- Good: CrosticPanel.clues is of type { UndefinedObject
OrderedCollection }
- Good: CrosticPanel.cluesPanel is of type { AlignmentMorph
UndefinedObject }
- Good: CrosticPanel.quotePanel is of type { CrosticQuotePanel
UndefinedObject }
- Good: CrosticQuotePanel.cluesPanel is of type { CrosticPanel
UndefinedObject }
- Good: FreeCell.lastGameLost is of type UndefinedObject
- Good: FreeCell.cardsRemainingDisplay is of type { LedMorph
UndefinedObject }

- Good: FreeCell.gameNumberDisplay is of type { LedMorph
UndefinedObject }
- Good: FreeCell.state is of type { UndefinedObject #sameGame
#pickGame #won #newGame #lost }
- Good: FreeCell.myFillStyle is of type { UndefinedObject
GradientFillStyle }
- Good: FreeCell.elapsedTimeDisplay is of type { UndefinedObject
LedTimerMorph }
- Good: FreeCell.board is of type { FreeCellBoard UndefinedObject }
- Bad: FreeCell.autoMoveRecursionCount is of type Top
- Bad: FreeCellBoard.target is of type Top
- Bad: FreeCellBoard.actionSelector is of type Top
- Good: FreeCellBoard.stacks is of type { UndefinedObject Array }
- Good: FreeCellBoard.freeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.homeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.cardDeck is of type { PlayingCardDeck
UndefinedObject }
- Good: FreeCellBoard.lastCardDeck is of type UndefinedObject
- Bad: FreeCellStatistics.streakLosses is of type Top
- Bad: FreeCellStatistics.lastGameWon is of type Top
- Bad: FreeCellStatistics.lastGameLost is of type Top
- Bad: FreeCellStatistics.currentCount is of type Top
- Good: FreeCellStatistics.currentType is of type { UndefinedObject
#losses #wins }
- Good: FreeCellStatistics.statsMorph is of type { TextMorph
UndefinedObject }
- Good: FreeCellStatistics.window is of type UndefinedObject
- Bad: FreeCellStatistics.sessionLosses is of type Top
- Bad: FreeCellStatistics.lossesWithReplay is of type Top
- Bad: FreeCellStatistics.sessionWins is of type Top
- Bad: FreeCellStatistics.totalWins is of type Top

- Bad: FreeCellStatistics.streakWins is of type Top
- Bad: FreeCellStatistics.totalLosses is of type Top
- Bad: FreeCellStatistics.winsWithReplay is of type Top
- Bad: LedDigitMorph.digit is of type Top
- Good: LedDigitMorph.highlighted is of type { True UndefinedObject False }
- Good: LedMorph.digits is of type { UndefinedObject SmallInteger }
- Bad: LedMorph.flash is of type Top
- Good: LedMorph.flashing is of type { True UndefinedObject False }
- Bad: LedMorph.value is of type Top
- Good: LedTimerMorph.counting is of type { True UndefinedObject False }
- Bad: LedTimerMorph.startSeconds is of type Top
- Bad: PlayingCard.cardNo is of type Top
- Bad: PlayingCard.suitNo is of type Top
- Good: PlayingCard.suit is of type UndefinedObject
- Good: PlayingCard.cardForm is of type { Form UndefinedObject }
- Bad: PlayingCardDeck.target is of type Top
- Bad: PlayingCardDeck.seed is of type Top
- Good: PlayingCardDeck.acceptCardSelector is of type { PlayingCardDeck UndefinedObject #acceptCard:onStack: #acceptSingleCard:on: }
- Good: PlayingCardDeck.cardDraggedSelector is of type { PlayingCardDeck UndefinedObject #dragCard:fromHome: #dragCard:fromStack: }
- Good: PlayingCardDeck.stackingOrder is of type { UndefinedObject #descending #ascending }
- Good: PlayingCardDeck.cardDroppedSelector is of type { PlayingCardDeck UndefinedObject #cardMoved #cardMovedHome }
- Good: PlayingCardDeck.cardDoubleClickSelector is of type { PlayingCardDeck UndefinedObject #doubleClickInStack:OnCard: }

- Good: PlayingCardDeck.stackingPolicy is of type { UndefinedObject #stagger #single #altStraight #straight }
- Good: PlayingCardDeck.emptyDropPolicy is of type { UndefinedObject #inOrder #any }
- Good: PlayingCardDeck.layout is of type { UndefinedObject #stagger #pile #grid }
- Good: PlayingCardMorph.suitNumber is of type { UndefinedObject SmallInteger }
- Bad: PlayingCardMorph.cardNumber is of type Top
- Good: SameGame.scoreDisplay is of type { LedMorph UndefinedObject }
- Good: SameGame.board is of type { UndefinedObject SameGameBoard }
- Good: SameGame.selectionDisplay is of type { LedMorph UndefinedObject }
- Bad: SameGame.helpText is of type { StringHolderView++ PluggableTextMorph++ UndefinedObject }
- Good: SameGameBoard.palette is of type { UndefinedObject OrderedCollection }
- Bad: SameGameBoard.target is of type Top
- Bad: SameGameBoard.columns is of type Top
- Bad: SameGameBoard.actionSelector is of type Top
- Good: SameGameBoard.selectionColor is of type UndefinedObject
- Good: SameGameBoard.flash is of type { True UndefinedObject False }
- Good: SameGameBoard.arguments is of type { UndefinedObject Array }
- Good: SameGameBoard.rows is of type { UndefinedObject SmallInteger }
- Bad: SameGameBoard.protoTile is of type Top
- Bad: SameGameBoard.flashColor is of type Top
- Good: SameGameBoard.selection is of type UndefinedObject
- Bad: SameGameTile.oldSwitchState is of type Top
- Bad: SameGameTile.switchState is of type Top

- Good: SameGameTile.disabled is of type { True UndefinedObject False }
- Good: Tetris.scoreDisplay is of type { LedMorph UndefinedObject }
- Good: Tetris.board is of type { UndefinedObject TetrisBoard }
- Bad: TetrisBlock.shapeInfo is of type Top
- Good: TetrisBlock.board is of type { UndefinedObject TetrisBoard }
- Bad: TetrisBlock.angle is of type Top
- Bad: TetrisBlock.baseCellNumber is of type Top
- Good: TetrisBoard.game is of type { UndefinedObject Tetris }
- Good: TetrisBoard.gameOver is of type { True UndefinedObject False }
- Bad: TetrisBoard.score is of type Top
- Good: TetrisBoard.paused is of type { True UndefinedObject False }
- Bad: TetrisBoard.delay is of type { Magnitude++ UndefinedObject }
- Good: TetrisBoard.currentBlock is of type { TetrisBlock UndefinedObject }
- Good: WordGameLetterMorph.predecessor is of type { WordGameLetterMorph UndefinedObject }
- Good: WordGameLetterMorph.lineMorph is of type { UndefinedObject PolygonMorph }
- Good: WordGameLetterMorph.style is of type { UndefinedObject #plain #boxed #underlined }
- Good: WordGameLetterMorph.letterMorph is of type { StringMorph UndefinedObject }
- Bad: WordGameLetterMorph.letter is of type Top
- Good: WordGameLetterMorph.originalLetter is of type UndefinedObject
- Good: WordGameLetterMorph.successor is of type { WordGameLetterMorph UndefinedObject }
- Bad: WordGameLetterMorph.indexInQuote is of type Top
- Good: WordGameLetterMorph.linkedLetters is of type UndefinedObject
- Bad: WordGamePanelMorph.letterMorphs is of type Top
- Good: WordGamePanelMorph.haveTypedHere is of type { True UndefinedObject False }

- Good: CategoriesFile.categories is of type { UndefinedObject Dictionary }
- Bad: Celeste.currentMessages is of type Top
- Good: Celeste.customFilterBlock is of type UndefinedObject
- Bad: Celeste.status is of type Top
- Bad: Celeste.userPassword is of type Top
- Bad: Celeste.currentMsgID is of type Top
- Bad: Celeste.mailDB is of type Top
- Bad: Celeste.currentCategory is of type Top
- Bad: Celeste.lastCategory is of type Top
- Bad: Celeste.lastCategoryList is of type Top
- Good: Celeste.dateFilter is of type UndefinedObject
- Bad: Celeste.currentTOC is of type Top
- Bad: Celeste.fromFilter is of type Top
- Good: Celeste.formatMessages is of type UndefinedObject
- Good: Celeste.lastCategoryMenu is of type UndefinedObject
- Bad: Celeste.messageTextView is of type { PluggableListView++ PluggableListMorph++ SimpleHierarchicalListMorph++ PluggableTextMorph++ PluggableTextView UndefinedObject }
- Bad: Celeste.subjectFilter is of type Top
- Bad: CelesteComposition.textEditor is of type Top
- Bad: CelesteComposition.celeste is of type Top
- Bad: CelesteComposition.messageText is of type Top
- Good: CelesteComposition.morphicWindow is of type { AlignmentMorphBob1 UndefinedObject SystemWindow }
- Good: CelesteComposition.mvcWindow is of type { StandardSystemView UndefinedObject }
- Good: CelesteComposition.attachmentSeparator is of type UndefinedObject
- Good: FancyCelesteComposition.theLinkToInclude is of type UndefinedObject

- Bad: FancyCelesteComposition.to is of type Top
- Bad: FancyCelesteComposition.subject is of type Top
- Good: FancyCelesteComposition.textFields is of type { UndefinedObject Array }
- Good: IndexFile.msgDictionary is of type { PluggableDictionary UndefinedObject }
- Good: IndexFile.logfile is of type { UndefinedObject StandardFileStream }
- Good: IndexFile.timeSortedEntries is of type { UndefinedObject SortedCollection }
- Bad: IndexFileEntry.time is of type Top
- Bad: IndexFileEntry.msgID is of type Top
- Bad: IndexFileEntry.messageFile is of type Top
- Bad: IndexFileEntry.cc is of type Top
- Bad: IndexFileEntry.tocLineCache is of type Top
- Bad: IndexFileEntry.location is of type Top
- Bad: IndexFileEntry.to is of type Top
- Bad: IndexFileEntry.textLength is of type Top
- Bad: IndexFileEntry.subject is of type Top
- Bad: IndexFileEntry.from is of type Top
- Good: MIMEHeaderValue.mainValue is of type { UndefinedObject String Character }
- Good: MIMEHeaderValue.parameters is of type { UndefinedObject Dictionary }
- Bad: MIMEPart.content is of type Top
- Bad: MIMEPart.parts is of type Top
- Bad: MIMEPart.separator is of type Top
- Bad: MIMEPart.text is of type Top
- Good: MIMEPart.fields is of type { UndefinedObject Dictionary }
- Bad: MailDB.rootFilename is of type Top

- Bad: MailDB.indexFile is of type Top
- Bad: MailDB.messageFile is of type Top
- Bad: MailDB.categoriesFile is of type Top
- Bad: MailDBFile.filename is of type Top
- Bad: MailMessage.time is of type Top
- Bad: MailMessage.separator is of type Top
- Bad: MailMessage.cc is of type Top
- Good: MailMessage.body is of type { UndefinedObject MIMEDocument }
- Bad: MailMessage.to is of type Top
- Bad: MailMessage.text is of type Top
- Bad: MailMessage.subject is of type Top
- Good: MailMessage.fields is of type { UndefinedObject Dictionary }
- Bad: MailMessage.from is of type Top
- Bad: MailMessage.parts is of type Top
- Bad: MailNotifier.lastConnectTime is of type Top
- Bad: MailNotifier.messageCount is of type Top
- Good: MailNotifier.password is of type UndefinedObject
- Good: MailNotifier.socket is of type { UndefinedObject POPSocket }
- Good: MessageFile.file is of type { CrLfFileStream UndefinedObject }
- Bad: ReadNewsInboxFile.currentNewsgroup is of type Top
- Good: ReadNewsInboxFile.msgBuffer is of type { UndefinedObject WriteStream }
- Bad: TextMessageLink.message is of type Top
- Bad: RBAssignmentNode.variable is of type Top
- Bad: RBAssignmentNode.assignment is of type Top
- Bad: RBAssignmentNode.value is of type Top
- Good: RBBlockNode.colons is of type { UndefinedObject OrderedCollection }

- Bad: RBlockNode.bar is of type Top
- Bad: RBlockNode.right is of type Top
- Bad: RBlockNode.left is of type Top
- Bad: RBlockNode.body is of type Top
- Bad: RBlockNode.arguments is of type Top
- Bad: RCascadeNode.messages is of type Top
- Good: RCascadeNode.semicolons is of type { UndefinedObject OrderedCollection }
- Good: RBFormatter.codeStream is of type { UndefinedObject WriteStream }
- Bad: RBFormatter.lineStart is of type Top
- Bad: RBFormatter.firstLineLength is of type Top
- Bad: RBFormatter.tabs is of type Top
- Bad: RBLiteralNode.token is of type Top
- Bad: RBMessageNode.arguments is of type Top
- Bad: RBMessageNode.receiver is of type Top
- Bad: RBMessageNode.selector is of type Top
- Bad: RBMessageNode.selectorParts is of type Top
- Bad: RBMethodNode.tags is of type Object++
- Bad: RBMethodNode.selector is of type Top
- Bad: RBMethodNode.selectorParts is of type Top
- Bad: RBMethodNode.body is of type Top
- Bad: RBMethodNode.source is of type Top
- Bad: RBMethodNode.arguments is of type Top
- Bad: RBOptimizedNode.body is of type Top
- Bad: RBOptimizedNode.right is of type Top
- Bad: RBOptimizedNode.left is of type Top
- Good: RBParser.scanner is of type { RBScanner UndefinedObject }
- Bad: RBParser.tags is of type Top

- Bad: RBPParser.source is of type Top
- Good: RBPParser.emptyStatements is of type { True UndefinedObject False }
- Bad: RBPParser.currentToken is of type Top
- Good: RBPParser.negatedNumbers is of type { True UndefinedObject False }
- Good: RBPParser.errorBlock is of type { UndefinedObject a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType }
- Bad: RBPParser.nextToken is of type Top
- Good: RBPatternMessageNode.isCascadeList is of type { True UndefinedObject False }
- Good: RBPatternMessageNode.isList is of type { True UndefinedObject False }
- Good: RBPatternMethodNode.isList is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.recurseInto is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isLiteral is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isStatement is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isAnything is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isList is of type { True UndefinedObject False }
- Bad: RBProgramNode.parent is of type Top
- Bad: RBProgramNode.comments is of type Top
- Bad: RBReturnNode.return is of type Top
- Bad: RBReturnNode.value is of type Top
- Bad: RBSequenceNode.rightBar is of type Top
- Good: RBSequenceNode.periods is of type UndefinedObject

- Bad: RBSequenceNode.temporaries is of type Top
- Bad: RBSequenceNode.statements is of type Top
- Bad: RBSequenceNode.leftBar is of type Top
- Good: RBValueNode.parentheses is of type { UndefinedObject
OrderedCollection }
- Bad: RBVariableNode.token is of type Top
- Bad: Browser.classOrganizer is of type Top
- Bad: Browser.systemOrganizer is of type Top
- Bad: Browser.messageListIndex is of type Top
- Bad: Browser.messageCategoryListIndex is of type Top
- Good: Browser.editSelection is of type { Boolean++ UndefinedObject
#hierarchy #editClass #editComment #none #editMessageCategories
#newClass #editMessage #newMessage #editSystemCategories
#byteCodes }
- Bad: Browser.metaClassOrganizer is of type Top
- Bad: Browser.systemCategoryListIndex is of type Top
- Bad: Browser.metaClassIndicated is of type Top
- Bad: Browser.classListIndex is of type Top
- Bad: ChangedMessageSet.changeSet is of type Top
- Bad: HierarchyBrowser.centralClass is of type Top
- Bad: HierarchyBrowser.classList is of type Top
- Bad: MessageSet.messageList is of type Top
- Bad: MessageSet.autoSelectString is of type Top
- Bad: PackageBrowser.package is of type Top
- Bad: PackageBrowser.packageListIndex is of type Top
- Good: PackageBrowser.packageList is of type UndefinedObject
- Good: ProtocolBrowser.selectedClass is of type UndefinedObject
- Bad: ProtocolBrowser.selectedSelector is of type Top
- Bad: SelectorBrowser.classListIndex is of type Top
- Bad: SelectorBrowser.classList is of type Top

- Bad: SelectorBrowser.selectorIndex is of type Top
- Bad: SelectorBrowser.selectorList is of type Top
- Bad: BitBltSimulation.sy is of type Top
- Bad: BitBltSimulation.halfToneBase is of type Top
- Bad: BitBltSimulation.cmBlueShift is of type {
SequenceableCollection++ Integer++ B3DIndexedQuad
UndefinedObject B3DPrimitiveRasterizerData B3DIndexedTriangle }
- Bad: BitBltSimulation.destWidth is of type Top
- Bad: BitBltSimulation.destX is of type Top
- Bad: BitBltSimulation.width is of type Top
- Bad: BitBltSimulation.scanString is of type Top
- Bad: BitBltSimulation.sourceBits is of type Top
- Bad: BitBltSimulation.scanStop is of type Top
- Bad: BitBltSimulation.dy is of type Top
- Good: BitBltSimulation.warpBitShiftTable is of type { CArrayAccessor
UndefinedObject }
- Bad: BitBltSimulation.destPixSize is of type Top
- Bad: BitBltSimulation.pixPerWord is of type Top
- Good: BitBltSimulation.ditherValues16 is of type { CArrayAccessor
UndefinedObject }
- Bad: BitBltSimulation.cmRedMask is of type Top
- Bad: BitBltSimulation.warpSrcMask is of type Top
- Bad: BitBltSimulation.dstBitShift is of type Top
- Bad: BitBltSimulation.destIndex is of type Top
- Bad: BitBltSimulation.sourceIndex is of type Top
- Bad: BitBltSimulation.clipX is of type Top
- Good: BitBltSimulation.hDir is of type { UndefinedObject SmallInteger
}
- Bad: BitBltSimulation.nWords is of type Top
- Bad: BitBltSimulation.clipHeight is of type Top

- Bad: BitBltSimulation.bitBltOop is of type Top
- Bad: BitBltSimulation.preload is of type Top
- Bad: BitBltSimulation.opTable is of type Top
- Bad: BitBltSimulation.sourceForm is of type Top
- Bad: BitBltSimulation.warpAlignMask is of type Top
- Bad: BitBltSimulation.skew is of type Top
- Bad: BitBltSimulation.cmDeltaBits is of type {
SequenceableCollection++ Integer++ UndefinedObject
B3DIndexedQuad B3DPrimitiveRasterizerData B3DIndexedTriangle }
- Good: BitBltSimulation.ditherMatrix4x4 is of type { CArrayAccessor
UndefinedObject }
- Bad: BitBltSimulation.sourceY is of type Top
- Bad: BitBltSimulation.scanStart is of type Top
- Bad: BitBltSimulation.cmGreenShift is of type Top
- Bad: BitBltSimulation.destBits is of type Top
- Bad: BitBltSimulation.destPitch is of type Top
- Bad: BitBltSimulation.height is of type Top
- Bad: BitBltSimulation.sourcePitch is of type Top
- Bad: BitBltSimulation.destY is of type Top
- Bad: BitBltSimulation.affectedL is of type Top
- Good: BitBltSimulation.maskTable is of type { UndefinedObject Array }
- Good: BitBltSimulation.scanDisplayFlag is of type { True
UndefinedObject False }
- Bad: BitBltSimulation.mask1 is of type Top
- Bad: BitBltSimulation.destDelta is of type Top
- Good: BitBltSimulation.noHalftone is of type { True UndefinedObject
False }
- Bad: BitBltSimulation.clipWidth is of type Top
- Bad: BitBltSimulation.destForm is of type Top
- Bad: BitBltSimulation.sx is of type Top

- Bad: BitBltSimulation.clipY is of type Top
- Bad: BitBltSimulation.scanRightX is of type Top
- Bad: BitBltSimulation.cmBlueMask is of type Top
- Bad: BitBltSimulation.halfToneHeight is of type Top
- Bad: BitBltSimulation.affectedT is of type Top
- Bad: BitBltSimulation.sourcePixSize is of type Top
- Bad: BitBltSimulation.cmRedShift is of type Top
- Good: BitBltSimulation.noSource is of type { True UndefinedObject False }
- Bad: BitBltSimulation.dx is of type Top
- Bad: BitBltSimulation.destMask is of type Top
- Bad: BitBltSimulation.affectedB is of type Top
- Bad: BitBltSimulation.cmGreenMask is of type Top
- Good: BitBltSimulation.hasSurfaceLock is of type { True UndefinedObject False }
- Bad: BitBltSimulation.stopCode is of type Top
- Bad: BitBltSimulation.combinationRule is of type Top
- Bad: BitBltSimulation.bitCount is of type Top
- Good: BitBltSimulation.vDir is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.destHeight is of type Top
- Good: BitBltSimulation.cmBitsPerColor is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.bbH is of type Top
- Bad: BitBltSimulation.bbW is of type Top
- Bad: BitBltSimulation.srcWidth is of type Top
- Bad: BitBltSimulation.affectedR is of type Top
- Good: BitBltSimulation.ditherThresholds16 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.sourceDelta is of type Top

- Bad: BitBltSimulation.warpSrcShift is of type Top
- Bad: BitBltSimulation.halfToneForm is of type Top
- Bad: BitBltSimulation.mask2 is of type Top
- Bad: BitBltSimulation.scanXTable is of type Top
- Bad: BitBltSimulation.scanStopArray is of type Top
- Bad: BitBltSimulation.sourceAlpha is of type Top
- Bad: BitBltSimulation.colorMap is of type Top
- Bad: BitBltSimulation.warpAlignShift is of type Top
- Bad: BitBltSimulation.sourceX is of type Top
- Bad: BitBltSimulation.srcBitShift is of type Top
- Bad: BitBltSimulation.srcHeight is of type Top
- Bad: Interpreter.activeContext is of type Top
- Bad: Interpreter.nextWakeupTick is of type Top
- Bad: Interpreter.localIP is of type Top
- Bad: Interpreter.localHomeContext is of type Top
- Good: Interpreter.methodCache is of type { UndefinedObject Array }
- Bad: Interpreter.interruptKeycode is of type Top
- Bad: Interpreter.semaphoresToSignalCountA is of type Top
- Bad: Interpreter.interruptCheckCounterFeedBackReset is of type Top
- Good: Interpreter.interpreterVersion is of type UndefinedObject
- Good: Interpreter.obsoleteNamedPrimitiveTable is of type { CArrayAccessor UndefinedObject }
- Good: Interpreter.interpreterProxy is of type { UndefinedObject InterpreterSimulator InterpreterSimulatorMSB InterpreterSimulatorLSB }
- Bad: Interpreter.receiver is of type Top
- Bad: Interpreter.stackPointer is of type Top
- Bad: Interpreter.receiverClass is of type Top
- Good: Interpreter.obsoleteIndexedPrimitiveTable is of type { CArrayAccessor UndefinedObject }

- Bad: Interpreter.successFlag is of type Top
- Good: Interpreter.compilerHooks is of type UndefinedObject
- Bad: Interpreter.fullScreenFlag is of type { Interpreter InterpreterSimulator InterpreterSimulatorLSB UndefinedObject InterpreterSimulatorMSB }
- Bad: Interpreter.primitiveIndex is of type Top
- Good: Interpreter.semaphoresToSignalB is of type { UndefinedObject Array }
- Bad: Interpreter.compilerInitialized is of type Top
- Bad: Interpreter.localSP is of type Top
- Bad: Interpreter.instructionPointer is of type Top
- Good: Interpreter.semaphoresUseBufferA is of type { True UndefinedObject False }
- Good: Interpreter.deferDisplayUpdates is of type { True UndefinedObject False }
- Bad: Interpreter.theHomeContext is of type Top
- Bad: Interpreter.extraVMMemory is of type Top
- Bad: Interpreter.method is of type Top
- Bad: Interpreter.pendingFinalizationSignals is of type Top
- Bad: Interpreter.newMethod is of type Top
- Good: Interpreter.semaphoresToSignalA is of type { UndefinedObject Array }
- Bad: Interpreter.methodClass is of type Top
- Bad: Interpreter.newNativeMethod is of type Top
- Good: Interpreter.atCache is of type { UndefinedObject Array }
- Bad: Interpreter.argumentCount is of type Top
- Bad: Interpreter.currentBytecode is of type Top
- Good: Interpreter.interruptPending is of type { False UndefinedObject }
- Good: Interpreter.interruptChecksEveryNms is of type { UndefinedObject SmallInteger }
- Bad: Interpreter.nextPollTick is of type Top

- Bad: Interpreter.lkupClass is of type Top
- Bad: Interpreter.reclaimableContextCount is of type Top
- Bad: Interpreter.savedWindowSize is of type Top
- Bad: Interpreter.lastTick is of type Top
- Bad: Interpreter.semaphoresToSignalCountB is of type Top
- Bad: Interpreter.messageSelector is of type Top
- Bad: Interpreter.showSurfaceFn is of type Top
- Good: InterpreterSimulator.myBitBlit is of type { False UndefinedObject BitBlitSimulator }
- Good: InterpreterSimulator.traceOn is of type { UndefinedObject True }
- Bad: InterpreterSimulator.imageName is of type Top
- Bad: InterpreterSimulator.pluginList is of type Top
- Bad: InterpreterSimulator.sendCount is of type Top
- Good: InterpreterSimulator.displayForm is of type { Form UndefinedObject }
- Bad: InterpreterSimulator.mappedPluginEntries is of type Top
- Good: InterpreterSimulator.filesOpen is of type { UndefinedObject OrderedCollection }
- Bad: InterpreterSimulator.byteCount is of type Top
- Good: ObjectMemory.signalLowSpace is of type { True UndefinedObject False }
- Bad: ObjectMemory.tenuringThreshold is of type Top
- Bad: ObjectMemory.lastHash is of type Top
- Bad: ObjectMemory.statIncrGCMSecs is of type Top
- Good: ObjectMemory.remapBuffer is of type { UndefinedObject Array }
- Bad: ObjectMemory.trueObj is of type Top
- Bad: ObjectMemory.statFullGCMSecs is of type Top
- Bad: ObjectMemory.freeLargeContexts is of type Top
- Bad: ObjectMemory.lowSpaceThreshold is of type Top
- Bad: ObjectMemory.allocationsBetweenGCs is of type Top

- Bad: ObjectMemory.interruptCheckCounter is of type Top
- Bad: ObjectMemory.freeContexts is of type Top
- Bad: ObjectMemory.compStart is of type Top
- Bad: ObjectMemory.youngStart is of type Top
- Bad: ObjectMemory.compEnd is of type Top
- Bad: ObjectMemory.totalObjectFoundAtStartup is of type Top
- Bad: ObjectMemory.memoryLimit is of type Top
- Bad: ObjectMemory.endOfMemory is of type Top
- Bad: ObjectMemory.specialObjectsOop is of type Top
- Bad: ObjectMemory.statFullGCs is of type Top
- Bad: ObjectMemory.statTenures is of type Top
- Bad: ObjectMemory.nilObj is of type Top
- Bad: ObjectMemory.child is of type Top
- Bad: ObjectMemory.fwdTableLast is of type Top
- Bad: ObjectMemory.fwdTableNext is of type Top
- Bad: ObjectMemory.rootTableCount is of type Top
- Bad: ObjectMemory.allocationCount is of type Top
- Bad: ObjectMemory.falseObj is of type Top
- Bad: ObjectMemory.remapBufferCount is of type Top
- Bad: ObjectMemory.parentField is of type Top
- Bad: ObjectMemory.field is of type Top
- Good: ObjectMemory.memory is of type { Interpreter UndefinedObject
InterpreterSimulatorMSB InterpreterSimulatorLSB Bitmap
InterpreterSimulator }
- Bad: ObjectMemory.freeBlock is of type Top
- Bad: ObjectMemory.statRootTableOverflows is of type Top
- Good: ObjectMemory.rootTable is of type { UndefinedObject Array }
- Bad: ObjectMemory.statIncrGCs is of type Top

- Good: ObjectMemory.displayBits is of type { UndefinedObject SmallInteger }
- Bad: SystemMonitor.vmParameters is of type Top
- Bad: SystemMonitor.gcHighWaterMark is of type Top
- Bad: SystemMonitor.baselineSkip is of type Top
- Bad: SystemMonitor.prevAllocCount is of type Top
- Bad: SystemMonitor.prevDeltaIncrGC is of type Top
- Bad: SystemMonitor.prevMcMiss is of type Top
- Good: SystemMonitor.window is of type { UndefinedObject Rectangle }
- Bad: SystemMonitor.prevDeltaFullGC is of type Top
- Bad: SystemMonitor.prevFullGC is of type Top
- Good: SystemMonitor.valSelectors is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIncrGC is of type Top
- Bad: SystemMonitor.prevMsClock is of type Top
- Good: SystemMonitor.maxValues is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevAllocRate is of type Top
- Bad: SystemMonitor.gcLowWaterMark is of type Top
- Good: SystemMonitor.labels is of type { UndefinedObject Array }
- Good: SystemMonitor.minValues is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIcHit is of type Top
- Bad: SystemMonitor.prevMcHit is of type Top
- Good: SystemTracer.hashGenerator is of type { Random UndefinedObject }
- Bad: SystemTracer.maxOop is of type Top
- Good: SystemTracer.map is of type UndefinedObject
- Good: SystemTracer.initialProcess is of type UndefinedObject
- Good: SystemTracer.oopMap is of type { UndefinedObject Array }
- Bad: SystemTracer.specialObjects is of type Top
- Good: SystemTracer.file is of type { CrLfFileStream UndefinedObject }

- Good: SystemTracer.cleaningUp is of type { False UndefinedObject }
- Good: SystemTracer.writeDict is of type { UndefinedObject Dictionary }
- Good: SystemTracer.imageHeaderSize is of type { UndefinedObject SmallInteger }
- Good: SystemTracer.compactClasses is of type { UndefinedObject Array }
- Good: SystemTracer.replacementClasses is of type { UndefinedObject Dictionary }
- Bad: TestInterfaceBase.duration is of type Top
- Bad: TestInterfaceBase.classPattern is of type Top
- Bad: TestInterfaceBase.result is of type Top
- Bad: TestInterfaceBase.selectorPattern is of type Top
- Good: TestModel.failureList is of type { UndefinedObject OrderedCollection }
- Bad: TestModel.patternHistory is of type Top
- Good: TestModel.errorList is of type { UndefinedObject OrderedCollection }
- Bad: TestModel.summaryText is of type Top
- Bad: TestModel.summaryTextM is of type { PluggableTextMorph++ PluggableTextView UndefinedObject }
- Good: TestModel.summaryTextV is of type { PluggableTextView UndefinedObject }
- Good: TestModel.updateColorSelector is of type { UndefinedObject #updateColorM #updateColorV }
- Good: TestModel.patternTextV is of type { PluggableTextView UndefinedObject }
- Bad: TestModel.patternTextM is of type { PluggableTextMorph++ PluggableTextView UndefinedObject }
- Bad: TestModel.detailsText is of type Top
- Bad: PDA.recurringEvents is of type Top
- Good: PDA.peopleList is of type { ArrayedCollection++ UndefinedObject }

- Bad: PDA.date is of type Top
- Good: PDA.dateButtonPressed is of type UndefinedObject
- Bad: PDA.allEvents is of type Top
- Bad: PDA.category is of type Top
- Bad: PDA.currentItem is of type Top
- Bad: PDA.scheduleList is of type Top
- Good: PDA.categoryListIndex is of type UndefinedObject
- Bad: PDA.allPeople is of type Top
- Bad: PDA.scheduleListIndex is of type Top
- Bad: PDA.allToDoItems is of type Top
- Bad: PDA.allNotes is of type Top
- Bad: PDA.notesListIndex is of type Top
- Good: PDA.currentItemSelection is of type UndefinedObject
- Good: PDA.categoryList is of type UndefinedObject
- Bad: PDA.todoList is of type Top
- Bad: PDA.todoListIndex is of type Top
- Bad: PDA.peopleListIndex is of type Top
- Good: PDA.notesList is of type { ArrayedCollection++
UndefinedObject }
- Good: PDA.currentItemText is of type UndefinedObject
- Bad: PDA.userCategories is of type Top
- Good: PDA.viewDescriptionOnly is of type { True UndefinedObject
False }
- Bad: PDAChoiceMorph.backgroundColor is of type Top
- Bad: PDAClockMorph.backgroundColor is of type Top
- Bad: PDAEvent.time is of type Top
- Bad: PDAEvent.date is of type Top
- Bad: PDAEvent.duration is of type Top
- Good: PDAEvent.alarm is of type UndefinedObject

- Bad: PDAPerson.name is of type Top
- Bad: PDAPerson.address is of type Top
- Good: PDAPerson.phone is of type { String UndefinedObject }
- Good: PDAPerson.email is of type { String UndefinedObject }
- Bad: PDAREcord.description is of type Top
- Bad: PDAREcord.key is of type Top
- Good: PDAREcord.otherFields is of type { UndefinedObject Dictionary }
- Good: PDAREcurringEvent.recurrence is of type { UndefinedObject
#dayOfMonth #dayOfWeek #nthWeekdayOfMonthEachYear
#dateOfYear }
- Bad: PDAREcurringEvent.firstDate is of type Top
- Bad: PDAREcurringEvent.lastDate is of type Top
- Good: PDAToDoItem.deadline is of type UndefinedObject
- Bad: PDAToDoItem.result is of type Top
- Bad: PDAToDoItem.dayDone is of type Top
- Bad: PDAToDoItem.dayPosted is of type Top
- Bad: PDAToDoItem.priority is of type Top

4.4 Threshold of 1000

- Bad: PDA.recurringEvents is of type Top
- Good: PDA.peopleList is of type { ArrayedCollection++
UndefinedObject }
- Bad: PDA.date is of type Top
- Good: PDA.dateButtonPressed is of type UndefinedObject
- Bad: PDA.allEvents is of type Top
- Bad: PDA.category is of type Top
- Bad: PDA.currentItem is of type Top
- Good: PDA.scheduleList is of type { ArrayedCollection++
UndefinedObject }
- Good: PDA.categoryListIndex is of type UndefinedObject

- Bad: PDA.allPeople is of type Top
- Bad: PDA.scheduleListIndex is of type Top
- Bad: PDA.allToDoItems is of type Top
- Bad: PDA.allNotes is of type Top
- Bad: PDA.notesListIndex is of type Top
- Good: PDA.currentItemSelection is of type UndefinedObject
- Good: PDA.categoryList is of type UndefinedObject
- Good: PDA.todoList is of type { ArrayedCollection++
UndefinedObject }
- Bad: PDA.todoListIndex is of type Top
- Bad: PDA.peopleListIndex is of type Top
- Good: PDA.notesList is of type { ArrayedCollection++
UndefinedObject }
- Good: PDA.currentItemText is of type UndefinedObject
- Bad: PDA.userCategories is of type Top
- Good: PDA.viewDescriptionOnly is of type { True UndefinedObject
False }
- Bad: PDAChoiceMorph.backgroundColor is of type Top
- Bad: PDAClockMorph.backgroundColor is of type Top
- Bad: PDAEvent.time is of type Top
- Bad: PDAEvent.date is of type Top
- Bad: PDAEvent.duration is of type Top
- Good: PDAEvent.alarm is of type UndefinedObject
- Bad: PDAPerson.name is of type Top
- Bad: PDAPerson.address is of type Top
- Good: PDAPerson.phone is of type { String UndefinedObject }
- Good: PDAPerson.email is of type { String UndefinedObject }
- Bad: PDARecord.description is of type Top
- Bad: PDARecord.key is of type Top

- Good: PDARecord.otherFields is of type { UndefinedObject Dictionary }
- Good: PDARecurringEvent.recurrence is of type { UndefinedObject #nthWeekdayOfMonthEachYear #dayOfWeek #dayOfMonth #dateOfYear }
- Bad: PDARecurringEvent.firstDate is of type Top
- Bad: PDARecurringEvent.lastDate is of type Top
- Good: PDAToDoItem.deadline is of type UndefinedObject
- Bad: PDAToDoItem.result is of type Top
- Bad: PDAToDoItem.dayDone is of type Top
- Bad: PDAToDoItem.dayPosted is of type Top
- Bad: PDAToDoItem.priority is of type Top
- Bad: IRCChannelInfo.name is of type Top
- Bad: IRCChannelInfo.topic is of type Top
- Good: IRCChannelInfo.subscribers is of type { IdentitySet UndefinedObject }
- Good: IRCChannelInfo.members is of type { Set UndefinedObject }
- Good: IRCChannelInfo.connection is of type { IRCConnection UndefinedObject }
- Good: IRCChannelListBrowser.channelIndex is of type { UndefinedObject SmallInteger }
- Good: IRCChannelListBrowser.channelList is of type { Array UndefinedObject SortedCollection }
- Good: IRCChannelListBrowser.sortCriterion is of type { UndefinedObject #name }
- Good: IRCChannelListBrowser.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCChannelObserver.chatText is of type Top
- Good: IRCChannelObserver.channelName is of type UndefinedObject
- Bad: IRCChannelObserver.channel is of type Top
- Good: IRCChannelObserver.connection is of type { IRCConnection UndefinedObject }

- Bad: IRCChannelSummary.name is of type Top
- Bad: IRCChannelSummary.topic is of type Top
- Bad: IRCChannelSummary.numUsers is of type Top
- Good: IRCChannelUsersBrowser.channel is of type { UndefinedObject IRCChannelInfo }
- Good: IRCChannelUsersBrowser.userList is of type { UndefinedObject Array }
- Bad: IRCChannelUsersBrowser.userIndex is of type Top
- Good: IRCConnection.directMessageSubscribers is of type { IdentitySet UndefinedObject }
- Good: IRCConnection.channelListBeingBuilt is of type { UndefinedObject OrderedCollection }
- Good: IRCConnection.protocolMessagesToSend is of type { UndefinedObject OrderedCollection }
- Bad: IRCConnection.sendBuffer is of type Top
- Bad: IRCConnection.server is of type Top
- Good: IRCConnection.motdBeingBuilt is of type { UndefinedObject WriteStream }
- Good: IRCConnection.protocolMessageSubscribers is of type { IdentitySet UndefinedObject }
- Bad: IRCConnection.motd is of type Top
- Bad: IRCConnection.port is of type Top
- Good: IRCConnection.recieveBuffer is of type { String UndefinedObject }
- Good: IRCConnection.socket is of type { Socket UndefinedObject }
- Bad: IRCConnection.userName is of type Top
- Bad: IRCConnection.nick is of type Top
- Good: IRCConnection.channelList is of type { UndefinedObject Array }
- Good: IRCConnection.subscribedChannels is of type { UndefinedObject Dictionary }
- Bad: IRCConnection.fullName is of type Top

- Good: IRCConnection.messagesProcessed is of type { UndefinedObject SmallInteger }
- Bad: IRCConnection.consoleText is of type Top
- Bad: IRCDirectMessagesObserver.chatText is of type Top
- Bad: IRCDirectMessagesObserver.talkingTo is of type Top
- Good: IRCDirectMessagesObserver.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCMessage.text is of type Top
- Bad: IRCMessage.sender is of type Top
- Bad: IRCMessage.recipient is of type Top
- Good: IRCMessagePattern.sender is of type UndefinedObject
- Good: IRCMessagePattern.recipient is of type UndefinedObject
- Good: IRCMessageSet.messages is of type UndefinedObject
- Bad: IRCMorph.userName is of type Top
- Bad: IRCMorph.nick is of type Top
- Bad: IRCMorph.server is of type Top
- Good: IRCMorph.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCMorph.fullName is of type Top
- Good: IRCMorph.messageCollections is of type UndefinedObject
- Bad: IRCMorph.consoleText is of type Top
- Bad: IRCMorph.port is of type Top
- Bad: IRCProtocolMessage.arguments is of type Top
- Good: IRCProtocolMessage.command is of type { UndefinedObject String Character }
- Bad: IRCProtocolMessage.prefix is of type Top
- Good: IRCRecipientFilter.recipient is of type UndefinedObject
- Good: CategoriesFile.categories is of type { UndefinedObject Dictionary }
- Bad: Celeste.currentMessages is of type Top

- Good: Celeste.customFilterBlock is of type { UndefinedObject Compiler }
- Bad: Celeste.status is of type Top
- Bad: Celeste.userPassword is of type Top
- Bad: Celeste.currentMsgID is of type Top
- Bad: Celeste.mailDB is of type Top
- Bad: Celeste.currentCategory is of type Top
- Bad: Celeste.lastCategory is of type Top
- Good: Celeste.lastCategoryList is of type UndefinedObject
- Good: Celeste.dateFilter is of type UndefinedObject
- Bad: Celeste.currentTOC is of type Top
- Bad: Celeste.fromFilter is of type Top
- Good: Celeste.formatMessages is of type UndefinedObject
- Good: Celeste.lastCategoryMenu is of type UndefinedObject
- Bad: Celeste.messageTextView is of type { PluggableListMorph++ SimpleHierarchicalListMorph++ PluggableListView++ PluggableTextMorph++ PluggableTextView UndefinedObject }
- Bad: Celeste.subjectFilter is of type Top
- Bad: CelesteComposition.textEditor is of type Top
- Bad: CelesteComposition.celeste is of type Top
- Bad: CelesteComposition.messageText is of type Top
- Good: CelesteComposition.morphicWindow is of type { AlignmentMorphBob1 UndefinedObject SystemWindow }
- Good: CelesteComposition.mvcWindow is of type { StandardSystemView UndefinedObject }
- Good: CelesteComposition.attachmentSeparator is of type UndefinedObject
- Good: FancyCelesteComposition.theLinkToInclude is of type UndefinedObject
- Bad: FancyCelesteComposition.to is of type Top
- Bad: FancyCelesteComposition.subject is of type Top

- Good: FancyCelesteComposition.textFields is of type { UndefinedObject Array }
- Good: IndexFile.msgDictionary is of type { PluggableDictionary UndefinedObject }
- Good: IndexFile.logfile is of type { UndefinedObject StandardFileStream }
- Good: IndexFile.timeSortedEntries is of type { UndefinedObject SortedCollection }
- Bad: IndexFileEntry.time is of type Top
- Bad: IndexFileEntry.msgID is of type Top
- Bad: IndexFileEntry.messageFile is of type Top
- Bad: IndexFileEntry.cc is of type Top
- Bad: IndexFileEntry.tocLineCache is of type Top
- Bad: IndexFileEntry.location is of type Top
- Bad: IndexFileEntry.to is of type Top
- Bad: IndexFileEntry.textLength is of type Top
- Bad: IndexFileEntry.subject is of type Top
- Bad: IndexFileEntry.from is of type Top
- Good: MIMEHeaderValue.mainValue is of type { UndefinedObject String Character }
- Good: MIMEHeaderValue.parameters is of type { UndefinedObject Dictionary }
- Bad: MIMEPart.content is of type { SequenceableCollection++ Integer++ UndefinedObject B3DIndexedQuad B3DPrimitiveRasterizerData B3DIndexedTriangle }
- Good: MIMEPart.parts is of type { Array UndefinedObject OrderedCollection }
- Bad: MIMEPart.separator is of type Top
- Bad: MIMEPart.text is of type Top
- Good: MIMEPart.fields is of type { UndefinedObject Dictionary }
- Bad: MailDB.rootFilename is of type Top

- Bad: MailDB.indexFile is of type Top
- Bad: MailDB.messageFile is of type Top
- Bad: MailDB.categoriesFile is of type Top
- Bad: MailDBFile.filename is of type Top
- Bad: MailMessage.time is of type Top
- Bad: MailMessage.separator is of type Top
- Bad: MailMessage.cc is of type Top
- Good: MailMessage.body is of type { UndefinedObject MIMEDocument }
- Bad: MailMessage.to is of type Top
- Bad: MailMessage.text is of type Top
- Good: MailMessage.subject is of type { String UndefinedObject }
- Good: MailMessage.fields is of type { UndefinedObject Dictionary }
- Good: MailMessage.from is of type { String UndefinedObject }
- Good: MailMessage.parts is of type { Array UndefinedObject OrderedCollection }
- Bad: MailNotifier.lastConnectTime is of type Top
- Bad: MailNotifier.messageCount is of type Top
- Good: MailNotifier.password is of type UndefinedObject
- Good: MailNotifier.socket is of type { UndefinedObject POPSocket }
- Good: MessageFile.file is of type UndefinedObject
- Bad: ReadNewsInboxFile.currentNewsgroup is of type Top
- Good: ReadNewsInboxFile.msgBuffer is of type { UndefinedObject WriteStream }
- Bad: TextMessageLink.message is of type Top
- Bad: RBAssignmentNode.variable is of type Top
- Bad: RBAssignmentNode.assignment is of type Top
- Bad: RBAssignmentNode.value is of type Top
- Good: RBBlockNode.colons is of type { UndefinedObject OrderedCollection }

- Bad: RBlockNode.bar is of type Top
- Bad: RBlockNode.right is of type Top
- Bad: RBlockNode.left is of type Top
- Bad: RBlockNode.body is of type Top
- Bad: RBlockNode.arguments is of type Top
- Bad: RCascadeNode.messages is of type Top
- Good: RCascadeNode.semicolons is of type { UndefinedObject OrderedCollection }
- Good: RBFormatter.codeStream is of type { UndefinedObject WriteStream }
- Bad: RBFormatter.lineStart is of type Top
- Bad: RBFormatter.firstLineLength is of type Top
- Bad: RBFormatter.tabs is of type Top
- Bad: RBLiteralNode.token is of type Top
- Bad: RBMessageNode.arguments is of type Top
- Bad: RBMessageNode.receiver is of type Top
- Bad: RBMessageNode.selector is of type Top
- Bad: RBMessageNode.selectorParts is of type Top
- Bad: RBMethodNode.tags is of type Object++
- Bad: RBMethodNode.selector is of type Top
- Bad: RBMethodNode.selectorParts is of type Top
- Bad: RBMethodNode.body is of type Top
- Bad: RBMethodNode.source is of type Top
- Bad: RBMethodNode.arguments is of type Top
- Bad: RBOptimizedNode.body is of type Top
- Bad: RBOptimizedNode.right is of type Top
- Bad: RBOptimizedNode.left is of type Top
- Good: RBParser.scanner is of type { RBScanner UndefinedObject }
- Good: RBParser.tags is of type { UndefinedObject OrderedCollection }

- Bad: RBParser.source is of type Top
- Good: RBParser.emptyStatements is of type { True UndefinedObject False }
- Bad: RBParser.currentToken is of type Top
- Good: RBParser.negatedNumbers is of type { True UndefinedObject False }
- Bad: RBParser.errorBlock is of type Top
- Bad: RBParser.nextToken is of type Top
- Good: RBPatternMessageNode.isCascadeList is of type { True UndefinedObject False }
- Good: RBPatternMessageNode.isList is of type { True UndefinedObject False }
- Good: RBPatternMethodNode.isList is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.recurseInto is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isLiteral is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isStatement is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isAnything is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isList is of type { True UndefinedObject False }
- Bad: RBProgramNode.parent is of type Top
- Bad: RBProgramNode.comments is of type { OrderedCollection++ Array UndefinedObject Heap }
- Bad: RBReturnNode.return is of type Top
- Bad: RBReturnNode.value is of type Top
- Bad: RBSequenceNode.rightBar is of type Top
- Good: RBSequenceNode.periods is of type { UndefinedObject OrderedCollection }
- Bad: RBSequenceNode.temporaries is of type Top

- Bad: RBSequenceNode.statements is of type Top
- Bad: RBSequenceNode.leftBar is of type Top
- Good: RBValueNode.parentheses is of type { UndefinedObject OrderedCollection }
- Good: RBVariableNode.token is of type { RBIdentifierToken UndefinedObject }
- Bad: ADPCMCodec.index is of type Top
- Good: ADPCMCodec.indexTable is of type { Array UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.deltaSignMask is of type Top
- Bad: ADPCMCodec.bitPosition is of type Top
- Bad: ADPCMCodec.encodedBytes is of type Top
- Good: ADPCMCodec.stepSizeTable is of type { Array UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.sampleIndex is of type Top
- Good: ADPCMCodec.rightSamples is of type { UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.byteIndex is of type Top
- Bad: ADPCMCodec.frameSizeMask is of type Top
- Bad: ADPCMCodec.bitsPerSample is of type Top
- Bad: ADPCMCodec.predicted is of type Top
- Bad: ADPCMCodec.deltaValueHighBit is of type Top
- Bad: ADPCMCodec.deltaValueMask is of type Top
- Bad: ADPCMCodec.currentByte is of type Top
- Bad: ADPCMCodec.samples is of type Top
- Bad: AIFFFileReader.channelData is of type Top
- Bad: AIFFFileReader.frameCount is of type Top
- Bad: AIFFFileReader.isLooped is of type Top
- Good: AIFFFileReader.gain is of type { SmallInteger UndefinedObject Float }

- Bad: AIFFFileReader.in is of type Top
- Bad: AIFFFileReader.fileType is of type Top
- Bad: AIFFFileReader.pitch is of type Top
- Good: AIFFFileReader.markers is of type { UndefinedObject Array }
- Good: AIFFFileReader.channelCount is of type { UndefinedObject SmallInteger }
- Good: AIFFFileReader.bitsPerSample is of type { UndefinedObject SmallInteger }
- Good: AIFFFileReader.mergeIfStereo is of type { True UndefinedObject False }
- Good: AIFFFileReader.skipDataChunk is of type { True UndefinedObject False }
- Bad: AIFFFileReader.samplingRate is of type Top
- Bad: AbstractSound.envelopes is of type Top
- Bad: AbstractSound.mSecsSinceStart is of type Top
- Bad: AbstractSound.scaledVolLimit is of type Top
- Bad: AbstractSound.scaledVol is of type Top
- Bad: AbstractSound.samplesUntilNextControl is of type Top
- Bad: AbstractSound.scaledVolIncr is of type Top
- Bad: CompressedSoundData.perceivedPitch is of type Top
- Bad: CompressedSoundData.codecName is of type Top
- Good: CompressedSoundData.channels is of type { UndefinedObject Array }
- Bad: CompressedSoundData.gain is of type Top
- Bad: CompressedSoundData.firstSample is of type Top
- Good: CompressedSoundData.soundClassName is of type { UndefinedObject Symbol }
- Bad: CompressedSoundData.cachedSound is of type { WaveletCodec MuLawCodec ADPCMCodec SoundCodec UndefinedObject LoopedSampledSound GSMCodec SampledSound }
- Bad: CompressedSoundData.loopLength is of type Top

- Bad: CompressedSoundData.samplingRate is of type Top
- Bad: CompressedSoundData.loopEnd is of type Top
- Bad: Envelope.target is of type Top
- Bad: Envelope.scale is of type Top
- Good: Envelope.updateSelector is of type { UndefinedObject #pitch: #modulation: #ratio: }
- Bad: Envelope.loopEndMsecs is of type { Magnitude++ UndefinedObject }
- Bad: Envelope.endMsecs is of type Top
- Bad: Envelope.currValue is of type Top
- Bad: Envelope.loopStartIndex is of type Top
- Bad: Envelope.valueIncr is of type Top
- Good: Envelope.noChangesDuringLoop is of type { True UndefinedObject False }
- Bad: Envelope.nextRecomputeTime is of type Top
- Bad: Envelope.loopEndIndex is of type Top
- Bad: Envelope.loopMsecs is of type Top
- Bad: Envelope.loopStartMsecs is of type Top
- Bad: Envelope.decayScale is of type Top
- Bad: Envelope.points is of type Top
- Bad: Envelope.lastValue is of type Top
- Bad: FFT.permTable is of type Top
- Bad: FFT.nu is of type Top
- Bad: FFT.n is of type Top
- Good: FFT.sinTable is of type { Array UndefinedObject FloatArray }
- Good: FFT.imagData is of type { Array UndefinedObject FloatArray }
- Good: FFT.window is of type { UndefinedObject FloatArray }
- Bad: FFT.realData is of type Top
- Bad: FMSSound.initialCount is of type Top

- Bad: FMSSound.multiplier is of type Top
- Bad: FMSSound.scaledOffsetIndex is of type Top
- Bad: FMSSound.waveTable is of type Top
- Bad: FMSSound.scaledWaveTableSize is of type Top
- Bad: FMSSound.scaledIndex is of type Top
- Bad: FMSSound.normalizedModulation is of type Top
- Bad: FMSSound.scaledOffsetIndexIncr is of type Top
- Bad: FMSSound.modulation is of type Top
- Bad: FMSSound.scaledIndexIncr is of type Top
- Bad: FMSSound.count is of type Top
- Good: FWT.transform is of type { UndefinedObject Array }
- Bad: FWT.beta is of type Top
- Good: FWT.gTilde is of type { UndefinedObject Array }
- Good: FWT.coeffs is of type { UndefinedObject Array }
- Good: FWT.g is of type { UndefinedObject Array }
- Bad: FWT.nSamples is of type Top
- Bad: FWT.nLevels is of type Top
- Bad: FWT.alpha is of type Top
- Good: FWT.h is of type { UndefinedObject Array }
- Good: FWT.samples is of type { UndefinedObject Array }
- Good: FWT.hTilde is of type { UndefinedObject Array }
- Bad: GSMCodec.encodeState is of type Top
- Bad: GSMCodec.decodeState is of type Top
- Bad: LoopedSampledSound.initialCount is of type Top
- Bad: LoopedSampledSound.perceivedPitch is of type Top
- Bad: LoopedSampledSound.scaledLoopLength is of type Top
- Bad: LoopedSampledSound.lastSample is of type Top
- Bad: LoopedSampledSound.gain is of type Top

- Bad: LoopedSampledSound.scaledIndexIncr is of type Top
- Bad: LoopedSampledSound.releaseCount is of type Top
- Bad: LoopedSampledSound.firstSample is of type Top
- Bad: LoopedSampledSound.sampleCountForRelease is of type Top
- Bad: LoopedSampledSound.rightSamples is of type Top
- Bad: LoopedSampledSound.leftSamples is of type Top
- Bad: LoopedSampledSound.scaledIndex is of type Top
- Bad: LoopedSampledSound.originalSamplingRate is of type Top
- Bad: LoopedSampledSound.count is of type Top
- Bad: LoopedSampledSound.loopEnd is of type Top
- Good: MixedSound.soundDone is of type { UndefinedObject Array }
- Good: MixedSound.sounds is of type { UndefinedObject Array }
- Good: MixedSound.leftVols is of type { UndefinedObject Array }
- Good: MixedSound.rightVols is of type { UndefinedObject Array }
- Bad: PitchEnvelope.centerPitch is of type Top
- Bad: PluckedSound.initialCount is of type Top
- Good: PluckedSound.ring is of type { UndefinedObject SoundBuffer }
- Bad: PluckedSound.scaledIndexLimit is of type { Number++ UndefinedObject }
- Bad: PluckedSound.scaledIndex is of type Top
- Bad: PluckedSound.scaledIndexIncr is of type Top
- Bad: PluckedSound.count is of type Top
- Good: RandomEnvelope.rand is of type { Random UndefinedObject }
- Good: RandomEnvelope.highLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.lowLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.delta is of type { UndefinedObject Float }
- Bad: RepeatingSound.iteration is of type Top
- Bad: RepeatingSound.iterationCount is of type Top

- Bad: RepeatingSound.sound is of type Top
- Bad: RepeatingSound.samplesPerIteration is of type Top
- Bad: RestSound.initialCount is of type Top
- Bad: RestSound.count is of type Top
- Good: ReverbSound.tapGains is of type { UndefinedObject Bitmap }
- Good: ReverbSound.bufferSize is of type { Bitmap LargeNegativeInteger LargePositiveInteger UndefinedObject SmallInteger }
- Good: ReverbSound.rightBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.leftBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.tapCount is of type { UndefinedObject SmallInteger }
- Good: ReverbSound.tapDelays is of type { UndefinedObject Bitmap }
- Bad: ReverbSound.bufferIndex is of type Top
- Good: ReverbSound.sound is of type UndefinedObject
- Good: SampledInstrument.sustainedSoft is of type { UndefinedObject Array }
- Good: SampledInstrument.staccatoSoft is of type { UndefinedObject Array }
- Good: SampledInstrument.staccatoLoud is of type { UndefinedObject Array }
- Good: SampledInstrument.sustainedThreshold is of type { UndefinedObject Float }
- Good: SampledInstrument.sustainedLoud is of type { UndefinedObject Array }
- Good: SampledInstrument.loudThreshold is of type { UndefinedObject Float }
- Bad: SampledSound.initialCount is of type Top
- Bad: SampledSound.samples is of type Top
- Bad: SampledSound.scaledIncrement is of type Top
- Bad: SampledSound.scaledIndex is of type Top

- Bad: SampledSound.indexHighBits is of type Top
- Bad: SampledSound.samplesSize is of type Top
- Bad: SampledSound.originalSamplingRate is of type Top
- Bad: SampledSound.count is of type Top
- Good: SequentialSound.sounds is of type { UndefinedObject Array }
- Bad: SequentialSound.currentIndex is of type Top
- Bad: Sonogram.lastX is of type Top
- Good: Sonogram.pixValMap is of type { UndefinedObject Bitmap }
- Good: Sonogram.maxVal is of type { UndefinedObject Float }
- Good: Sonogram.minVal is of type { UndefinedObject Float }
- Good: Sonogram.scrollDelta is of type { UndefinedObject SmallInteger }
- Good: Sonogram.columnForm is of type { Form UndefinedObject }
- Bad: SoundInputStream.mutex is of type Top
- Bad: SoundInputStream.bufferSize is of type Top
- Good: SoundRecorder.currentBuffer is of type { UndefinedObject SoundBuffer }
- Bad: SoundRecorder.recordProcess is of type Top
- Good: SoundRecorder.codec is of type { GSMCodec UndefinedObject }
- Good: SoundRecorder.desiredSampleRate is of type { UndefinedObject Float }
- Bad: SoundRecorder.nextIndex is of type Top
- Good: SoundRecorder.meteringBuffer is of type { UndefinedObject SoundBuffer }
- Bad: SoundRecorder.meterLevel is of type Top
- Good: SoundRecorder.stereo is of type { False UndefinedObject }
- Good: SoundRecorder.recordLevel is of type { UndefinedObject Float }
- Good: SoundRecorder.soundPlaying is of type { SampledSound SequentialSound UndefinedObject ChatRecorder SoundInputStream SoundRecorder }

- Good: SoundRecorder.recordedBuffers is of type { Array UndefinedObject OrderedCollection }
- Good: SoundRecorder.paused is of type { True UndefinedObject False }
- Bad: SoundRecorder.samplingRate is of type Top
- Good: SoundRecorder.recordedSound is of type { SampledSound SequentialSound UndefinedObject ChatRecorder SoundInputStream SoundRecorder }
- Good: SoundRecorder.bufferAvailableSema is of type { Semaphore UndefinedObject }
- Bad: VolumeEnvelope.mSecsForChange is of type Top
- Bad: VolumeEnvelope.targetVol is of type Top
- Good: VolumeEnvelope.currentVol is of type UndefinedObject
- Bad: WaveletCodec.alpha is of type Top
- Bad: WaveletCodec.beta is of type Top
- Good: WaveletCodec.fwt is of type { FWT UndefinedObject }
- Bad: WaveletCodec.samplesPerFrame is of type Top
- Good: WaveletCodec.nLevels is of type { UndefinedObject SmallInteger }
- Bad: TestInterfaceBase.duration is of type Top
- Bad: TestInterfaceBase.classPattern is of type { Boolean++ String UndefinedObject }
- Bad: TestInterfaceBase.result is of type Top
- Bad: TestInterfaceBase.selectorPattern is of type Top
- Bad: TestModel.failureList is of type { OrderedCollection++ Heap UndefinedObject }
- Bad: TestModel.patternHistory is of type Top
- Good: TestModel.errorList is of type { UndefinedObject OrderedCollection }
- Bad: TestModel.summaryText is of type { Boolean++ String UndefinedObject }
- Bad: TestModel.summaryTextM is of type { PluggableTextMorph++ PluggableTextView UndefinedObject }

- Good: TestModel.summaryTextV is of type { PluggableTextView UndefinedObject }
- Good: TestModel.updateColorSelector is of type { UndefinedObject #updateColorM #updateColorV }
- Good: TestModel.patternTextV is of type { PluggableTextView UndefinedObject }
- Bad: TestModel.patternTextM is of type { PluggableTextMorph++ PluggableTextView UndefinedObject }
- Bad: TestModel.detailsText is of type Top
- Bad: Browser.classOrganizer is of type Top
- Bad: Browser.systemOrganizer is of type Top
- Bad: Browser.messageListIndex is of type Top
- Bad: Browser.messageCategoryListIndex is of type Top
- Good: Browser.editSelection is of type { Boolean++ UndefinedObject #hierarchy #editClass #editComment #none #editMessageCategories #newClass #editMessage #newMessage #editSystemCategories #byteCodes }
- Bad: Browser.metaClassOrganizer is of type Top
- Bad: Browser.systemCategoryListIndex is of type Top
- Bad: Browser.metaClassIndicated is of type Top
- Bad: Browser.classListIndex is of type Top
- Bad: ChangedMessageSet.changeSet is of type Top
- Bad: HierarchyBrowser.centralClass is of type Top
- Bad: HierarchyBrowser.classList is of type Top
- Bad: MessageSet.messageList is of type Top
- Bad: MessageSet.autoSelectString is of type Top
- Bad: PackageBrowser.package is of type Top
- Bad: PackageBrowser.packageListIndex is of type Top
- Good: PackageBrowser.packageList is of type UndefinedObject
- Good: ProtocolBrowser.selectedClass is of type UndefinedObject
- Bad: ProtocolBrowser.selectedSelector is of type Top

- Bad: SelectorBrowser.classListIndex is of type Top
- Bad: SelectorBrowser.classList is of type Top
- Bad: SelectorBrowser.selectorIndex is of type Top
- Bad: SelectorBrowser.selectorList is of type Top
- Bad: BitBltSimulation.sy is of type Top
- Bad: BitBltSimulation.halfToneBase is of type Top
- Bad: BitBltSimulation.cmBlueShift is of type Top
- Bad: BitBltSimulation.destWidth is of type Top
- Bad: BitBltSimulation.destX is of type Top
- Bad: BitBltSimulation.width is of type Top
- Bad: BitBltSimulation.scanString is of type Top
- Bad: BitBltSimulation.sourceBits is of type Top
- Bad: BitBltSimulation.scanStop is of type Top
- Bad: BitBltSimulation.dy is of type Top
- Good: BitBltSimulation.warpBitShiftTable is of type { CArrayAccessor
UndefinedObject }
- Bad: BitBltSimulation.destPixSize is of type Top
- Bad: BitBltSimulation.pixPerWord is of type Top
- Good: BitBltSimulation.ditherValues16 is of type { CArrayAccessor
UndefinedObject }
- Bad: BitBltSimulation.cmRedMask is of type Top
- Bad: BitBltSimulation.warpSrcMask is of type Top
- Bad: BitBltSimulation.dstBitShift is of type Top
- Bad: BitBltSimulation.destIndex is of type Top
- Bad: BitBltSimulation.sourceIndex is of type Top
- Bad: BitBltSimulation.clipX is of type Top
- Good: BitBltSimulation.hDir is of type { UndefinedObject SmallInteger
}
- Bad: BitBltSimulation.nWords is of type Top

- Bad: BitBltSimulation.clipHeight is of type Top
- Bad: BitBltSimulation.bitBltOop is of type Top
- Bad: BitBltSimulation.preload is of type Top
- Bad: BitBltSimulation.opTable is of type Top
- Bad: BitBltSimulation.sourceForm is of type Top
- Bad: BitBltSimulation.warpAlignMask is of type Top
- Bad: BitBltSimulation.skew is of type Top
- Bad: BitBltSimulation.cmDeltaBits is of type Top
- Good: BitBltSimulation.ditherMatrix4x4 is of type { CArrayAccessor
UndefinedObject }
- Bad: BitBltSimulation.sourceY is of type Top
- Bad: BitBltSimulation.scanStart is of type Top
- Bad: BitBltSimulation.cmGreenShift is of type Top
- Bad: BitBltSimulation.destBits is of type Top
- Bad: BitBltSimulation.destPitch is of type Top
- Bad: BitBltSimulation.height is of type Top
- Bad: BitBltSimulation.sourcePitch is of type Top
- Bad: BitBltSimulation.destY is of type Top
- Bad: BitBltSimulation.affectedL is of type Top
- Good: BitBltSimulation.maskTable is of type { UndefinedObject Array }
- Good: BitBltSimulation.scanDisplayFlag is of type { True
UndefinedObject False }
- Bad: BitBltSimulation.mask1 is of type Top
- Bad: BitBltSimulation.destDelta is of type Top
- Good: BitBltSimulation.noHalftone is of type { True UndefinedObject
False }
- Bad: BitBltSimulation.clipWidth is of type Top
- Bad: BitBltSimulation.destForm is of type Top
- Bad: BitBltSimulation.sx is of type Top

- Bad: BitBltSimulation.clipY is of type Top
- Bad: BitBltSimulation.scanRightX is of type Top
- Bad: BitBltSimulation.cmBlueMask is of type Top
- Bad: BitBltSimulation.halfToneHeight is of type Top
- Bad: BitBltSimulation.affectedT is of type Top
- Bad: BitBltSimulation.sourcePixSize is of type Top
- Bad: BitBltSimulation.cmRedShift is of type Top
- Good: BitBltSimulation.noSource is of type { True UndefinedObject False }
- Bad: BitBltSimulation.dx is of type Top
- Bad: BitBltSimulation.destMask is of type Top
- Bad: BitBltSimulation.affectedB is of type Top
- Bad: BitBltSimulation.cmGreenMask is of type Top
- Good: BitBltSimulation.hasSurfaceLock is of type { True UndefinedObject False }
- Bad: BitBltSimulation.stopCode is of type Top
- Bad: BitBltSimulation.combinationRule is of type Top
- Bad: BitBltSimulation.bitCount is of type Top
- Good: BitBltSimulation.vDir is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.destHeight is of type Top
- Good: BitBltSimulation.cmBitsPerColor is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.bbH is of type Top
- Bad: BitBltSimulation.bbW is of type Top
- Bad: BitBltSimulation.srcWidth is of type Top
- Bad: BitBltSimulation.affectedR is of type Top
- Good: BitBltSimulation.ditherThresholds16 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.sourceDelta is of type Top

- Bad: BitBltSimulation.warpSrcShift is of type Top
- Bad: BitBltSimulation.halfToneForm is of type Top
- Bad: BitBltSimulation.mask2 is of type Top
- Bad: BitBltSimulation.scanXTable is of type Top
- Bad: BitBltSimulation.scanStopArray is of type Top
- Bad: BitBltSimulation.sourceAlpha is of type Top
- Bad: BitBltSimulation.colorMap is of type Top
- Bad: BitBltSimulation.warpAlignShift is of type Top
- Bad: BitBltSimulation.sourceX is of type Top
- Bad: BitBltSimulation.srcBitShift is of type Top
- Bad: BitBltSimulation.srcHeight is of type Top
- Bad: Interpreter.activeContext is of type Top
- Bad: Interpreter.nextWakeupTick is of type Top
- Bad: Interpreter.localIP is of type Top
- Bad: Interpreter.localHomeContext is of type Top
- Good: Interpreter.methodCache is of type { UndefinedObject Array }
- Bad: Interpreter.interruptKeycode is of type Top
- Bad: Interpreter.semaphoresToSignalCountA is of type Top
- Bad: Interpreter.interruptCheckCounterFeedBackReset is of type Top
- Good: Interpreter.interpreterVersion is of type UndefinedObject
- Good: Interpreter.obsoleteNamedPrimitiveTable is of type { CArrayAccessor UndefinedObject }
- Good: Interpreter.interpreterProxy is of type { UndefinedObject InterpreterSimulator InterpreterSimulatorMSB InterpreterSimulatorLSB }
- Bad: Interpreter.receiver is of type { UndefinedObject InterpreterSimulatorMSB Bitmap InterpreterSimulator InterpreterLargeNegativeInteger InterpreterSimulatorLSB SmallInteger LargePositiveInteger }
- Bad: Interpreter.stackPointer is of type Top

- Bad: Interpreter.receiverClass is of type Top
- Good: Interpreter.obsoleteIndexedPrimitiveTable is of type { CArrayAccessor UndefinedObject }
- Bad: Interpreter.successFlag is of type Top
- Good: Interpreter.compilerHooks is of type UndefinedObject
- Bad: Interpreter.fullScreenFlag is of type { Interpreter InterpreterSimulator InterpreterSimulatorLSB UndefinedObject InterpreterSimulatorMSB }
- Bad: Interpreter.primitiveIndex is of type Top
- Good: Interpreter.semaphoresToSignalB is of type { UndefinedObject Array }
- Bad: Interpreter.compilerInitialized is of type Top
- Bad: Interpreter.localSP is of type Top
- Bad: Interpreter.instructionPointer is of type Top
- Good: Interpreter.semaphoresUseBufferA is of type { True UndefinedObject False }
- Good: Interpreter.deferDisplayUpdates is of type { True UndefinedObject False }
- Bad: Interpreter.theHomeContext is of type Top
- Bad: Interpreter.extraVMMemory is of type Top
- Bad: Interpreter.method is of type { LargePositiveInteger InterpreterSimulatorMSB Bitmap InterpreterSimulator Interpreter LargeNegativeInteger InterpreterSimulatorLSB SmallInteger UndefinedObject }
- Bad: Interpreter.pendingFinalizationSignals is of type Top
- Bad: Interpreter.newMethod is of type Top
- Good: Interpreter.semaphoresToSignalA is of type { UndefinedObject Array }
- Bad: Interpreter.methodClass is of type Top
- Bad: Interpreter.newNativeMethod is of type Top
- Good: Interpreter.atCache is of type { UndefinedObject Array }
- Bad: Interpreter.argumentCount is of type Top

- Bad: Interpreter.currentBytecode is of type Top
- Good: Interpreter.interruptPending is of type { False UndefinedObject }
- Good: Interpreter.interruptChecksEveryNms is of type { UndefinedObject SmallInteger }
- Bad: Interpreter.nextPollTick is of type Top
- Bad: Interpreter.lkupClass is of type Top
- Bad: Interpreter.reclaimableContextCount is of type Top
- Bad: Interpreter.savedWindowSize is of type Top
- Bad: Interpreter.lastTick is of type Top
- Bad: Interpreter.semaphoresToSignalCountB is of type Top
- Bad: Interpreter.messageSelector is of type Top
- Bad: Interpreter.showSurfaceFn is of type Top
- Good: InterpreterSimulator.myBitBlt is of type { False UndefinedObject BitBltSimulator }
- Good: InterpreterSimulator.traceOn is of type { UndefinedObject True }
- Bad: InterpreterSimulator.imageName is of type Top
- Bad: InterpreterSimulator.pluginList is of type Top
- Bad: InterpreterSimulator.sendCount is of type Top
- Good: InterpreterSimulator.displayForm is of type { Form UndefinedObject }
- Good: InterpreterSimulator.mappedPluginEntries is of type { UndefinedObject Array }
- Good: InterpreterSimulator.filesOpen is of type { UndefinedObject OrderedCollection }
- Bad: InterpreterSimulator.byteCount is of type Top
- Good: ObjectMemory.signalLowSpace is of type { True UndefinedObject False }
- Bad: ObjectMemory.tenuringThreshold is of type Top
- Bad: ObjectMemory.lastHash is of type Top
- Bad: ObjectMemory.statIncrGCMSecs is of type Top

- Good: ObjectMemory.remapBuffer is of type { UndefinedObject Array }
- Bad: ObjectMemory.trueObj is of type { UndefinedObject InterpreterSimulatorMSB Bitmap InterpreterSimulator Interpreter LargeNegativeInteger InterpreterSimulatorLSB SmallInteger LargePositiveInteger }
- Bad: ObjectMemory.statFullGCMSecs is of type Top
- Bad: ObjectMemory.freeLargeContexts is of type Top
- Bad: ObjectMemory.lowSpaceThreshold is of type Top
- Bad: ObjectMemory.allocationsBetweenGCs is of type Top
- Bad: ObjectMemory.interruptCheckCounter is of type Top
- Bad: ObjectMemory.freeContexts is of type Top
- Bad: ObjectMemory.compStart is of type Top
- Bad: ObjectMemory.youngStart is of type Top
- Bad: ObjectMemory.compEnd is of type Top
- Bad: ObjectMemory.totalObjectFoundAtStartup is of type Top
- Bad: ObjectMemory.memoryLimit is of type Top
- Bad: ObjectMemory.endOfMemory is of type Top
- Bad: ObjectMemory.specialObjectsOop is of type Top
- Bad: ObjectMemory.statFullGCs is of type Top
- Bad: ObjectMemory.statTenures is of type Top
- Bad: ObjectMemory.nilObj is of type Top
- Bad: ObjectMemory.child is of type Top
- Bad: ObjectMemory.fwdTableLast is of type Top
- Bad: ObjectMemory.fwdTableNext is of type Top
- Bad: ObjectMemory.rootTableCount is of type Top
- Bad: ObjectMemory.allocationCount is of type Top
- Bad: ObjectMemory.falseObj is of type Top
- Bad: ObjectMemory.remapBufferCount is of type Top
- Bad: ObjectMemory.parentField is of type Top

- Bad: ObjectMemory.field is of type Top
- Good: ObjectMemory.memory is of type { Interpreter UndefinedObject InterpreterSimulatorMSB InterpreterSimulatorLSB Bitmap InterpreterSimulator }
- Bad: ObjectMemory.freeBlock is of type Top
- Bad: ObjectMemory.statRootTableOverflows is of type Top
- Good: ObjectMemory.rootTable is of type { UndefinedObject Array }
- Bad: ObjectMemory.statIncrGCs is of type Top
- Good: ObjectMemory.displayBits is of type { UndefinedObject SmallInteger }
- Bad: SystemMonitor.vmParameters is of type Top
- Bad: SystemMonitor.gcHighWaterMark is of type Top
- Bad: SystemMonitor.baselineSkip is of type Top
- Bad: SystemMonitor.prevAllocCount is of type Top
- Bad: SystemMonitor.prevDeltaIncrGC is of type Top
- Bad: SystemMonitor.prevMcMiss is of type Top
- Bad: SystemMonitor.window is of type Top
- Bad: SystemMonitor.prevDeltaFullGC is of type Top
- Bad: SystemMonitor.prevFullGC is of type Top
- Good: SystemMonitor.valSelectors is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIncrGC is of type Top
- Bad: SystemMonitor.prevMsClock is of type Top
- Good: SystemMonitor.maxValues is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevAllocRate is of type Top
- Bad: SystemMonitor.gcLowWaterMark is of type Top
- Good: SystemMonitor.labels is of type { UndefinedObject Array }
- Good: SystemMonitor.minValues is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIcHit is of type Top
- Bad: SystemMonitor.prevMcHit is of type Top

- Good: SystemTracer.hashGenerator is of type { Random UndefinedObject }
- Bad: SystemTracer.maxOop is of type Top
- Good: SystemTracer.map is of type UndefinedObject
- Good: SystemTracer.initialProcess is of type UndefinedObject
- Good: SystemTracer.oopMap is of type { UndefinedObject Array }
- Bad: SystemTracer.specialObjects is of type Top
- Good: SystemTracer.file is of type { CrLfFileStream UndefinedObject }
- Good: SystemTracer.cleaningUp is of type { False UndefinedObject }
- Good: SystemTracer.writeDict is of type { UndefinedObject Dictionary }
- Good: SystemTracer.imageHeaderSize is of type { UndefinedObject SmallInteger }
- Good: SystemTracer.compactClasses is of type { UndefinedObject Array }
- Good: SystemTracer.replacementClasses is of type { UndefinedObject Dictionary }
- Good: ChineseCheckerPiece.myBoard is of type { ChineseCheckers UndefinedObject }
- Bad: ChineseCheckerPiece.boardLoc is of type Top
- Bad: ChineseCheckers.movePhase is of type Top
- Good: ChineseCheckers.board is of type { UndefinedObject Array }
- Good: ChineseCheckers.plannedMovePhase is of type UndefinedObject
- Good: ChineseCheckers.sixDeltas is of type { UndefinedObject Array }
- Bad: ChineseCheckers.plannedMove is of type Top
- Bad: ChineseCheckers.whoseMove is of type Top
- Good: ChineseCheckers.teams is of type { UndefinedObject Array }
- Good: ChineseCheckers.colors is of type { UndefinedObject Array }
- Good: ChineseCheckers.homes is of type { UndefinedObject Array }
- Good: ChineseCheckers.animateMoves is of type { True UndefinedObject False }

- Good: ChineseCheckers.pathMorphs is of type { UndefinedObject
OrderedCollection }
- Good: ChineseCheckers.autoPlay is of type { UndefinedObject Array }
- Good: CipherPanel.originalMorphs is of type { UndefinedObject Array }
- Good: CipherPanel.decodingMorphs is of type { UndefinedObject Array
}
- Good: CipherPanel.quote is of type { UndefinedObject String Character
}
- Good: CipherPanel.originalText is of type UndefinedObject
- Good: CrosticPanel.crosticPanel is of type UndefinedObject
- Good: CrosticPanel.cluesCol2 is of type { AlignmentMorph
UndefinedObject }
- Bad: CrosticPanel.quote is of type Top
- Good: CrosticPanel.answers is of type { UndefinedObject
OrderedCollection }
- Good: CrosticPanel.clues is of type { UndefinedObject
OrderedCollection }
- Good: CrosticPanel.cluesPanel is of type { AlignmentMorph
UndefinedObject }
- Good: CrosticPanel.quotePanel is of type { CrosticQuotePanel
UndefinedObject }
- Good: CrosticQuotePanel.cluesPanel is of type { CrosticPanel
UndefinedObject }
- Good: FreeCell.lastGameLost is of type UndefinedObject
- Good: FreeCell.cardsRemainingDisplay is of type { LedMorph
UndefinedObject }
- Good: FreeCell.gameNumberDisplay is of type { LedMorph
UndefinedObject }
- Good: FreeCell.state is of type { UndefinedObject #sameGame
#pickGame #won #newGame #lost }
- Good: FreeCell.myFillStyle is of type { UndefinedObject
GradientFillStyle }
- Good: FreeCell.elapsedTimeDisplay is of type { UndefinedObject
LedTimerMorph }

- Good: FreeCell.board is of type { FreeCellBoard UndefinedObject }
- Bad: FreeCell.autoMoveRecursionCount is of type Top
- Bad: FreeCellBoard.target is of type Top
- Bad: FreeCellBoard.actionSelector is of type Top
- Good: FreeCellBoard.stacks is of type { UndefinedObject Array }
- Good: FreeCellBoard.freeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.homeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.cardDeck is of type { PlayingCardDeck UndefinedObject }
- Good: FreeCellBoard.lastCardDeck is of type UndefinedObject
- Bad: FreeCellStatistics.streakLosses is of type Top
- Bad: FreeCellStatistics.lastGameWon is of type Top
- Bad: FreeCellStatistics.lastGameLost is of type Top
- Bad: FreeCellStatistics.currentCount is of type Top
- Good: FreeCellStatistics.currentType is of type { UndefinedObject #losses #wins }
- Good: FreeCellStatistics.statsMorph is of type { TextMorph UndefinedObject }
- Good: FreeCellStatistics.window is of type UndefinedObject
- Bad: FreeCellStatistics.sessionLosses is of type Top
- Bad: FreeCellStatistics.lossesWithReplay is of type Top
- Bad: FreeCellStatistics.sessionWins is of type Top
- Bad: FreeCellStatistics.totalWins is of type Top
- Bad: FreeCellStatistics.streakWins is of type Top
- Bad: FreeCellStatistics.totalLosses is of type Top
- Bad: FreeCellStatistics.winsWithReplay is of type Top
- Bad: LedDigitMorph.digit is of type Top
- Good: LedDigitMorph.highlighted is of type { True UndefinedObject False }
- Good: LedMorph.digits is of type { UndefinedObject SmallInteger }

- Bad: LedMorph.flash is of type Top
- Good: LedMorph.flashing is of type { True UndefinedObject False }
- Bad: LedMorph.value is of type Top
- Good: LedTimerMorph.counting is of type { True UndefinedObject False }
- Bad: LedTimerMorph.startSeconds is of type Top
- Bad: PlayingCard.cardNo is of type Top
- Bad: PlayingCard.suitNo is of type Top
- Good: PlayingCard.suit is of type UndefinedObject
- Good: PlayingCard.cardForm is of type { Form UndefinedObject }
- Bad: PlayingCardDeck.target is of type Top
- Bad: PlayingCardDeck.seed is of type Top
- Good: PlayingCardDeck.acceptCardSelector is of type { PlayingCardDeck UndefinedObject #acceptCard:onStack: #acceptSingleCard:on: }
- Good: PlayingCardDeck.cardDraggedSelector is of type { PlayingCardDeck UndefinedObject #dragCard:fromHome: #dragCard:fromStack: }
- Good: PlayingCardDeck.stackingOrder is of type { UndefinedObject #descending #ascending }
- Good: PlayingCardDeck.cardDroppedSelector is of type { PlayingCardDeck UndefinedObject #cardMoved #cardMovedHome }
- Good: PlayingCardDeck.cardDoubleClickSelector is of type { PlayingCardDeck UndefinedObject #doubleClickInStack:OnCard: }
- Good: PlayingCardDeck.stackingPolicy is of type { UndefinedObject #stagger #straight #altStraight #single }
- Good: PlayingCardDeck.emptyDropPolicy is of type { UndefinedObject #inOrder #any }
- Good: PlayingCardDeck.layout is of type { UndefinedObject #stagger #pile #grid }
- Good: PlayingCardMorph.suitNumber is of type { UndefinedObject SmallInteger }
- Bad: PlayingCardMorph.cardNumber is of type Top

- Good: SameGame.scoreDisplay is of type { LedMorph UndefinedObject }
- Good: SameGame.board is of type { UndefinedObject SameGameBoard }
- Good: SameGame.selectionDisplay is of type { LedMorph UndefinedObject }
- Bad: SameGame.helpText is of type { PluggableTextMorph++ StringHolderView++ UndefinedObject }
- Good: SameGameBoard.palette is of type { UndefinedObject OrderedCollection }
- Bad: SameGameBoard.target is of type Top
- Bad: SameGameBoard.columns is of type Top
- Bad: SameGameBoard.actionSelector is of type Top
- Good: SameGameBoard.selectionColor is of type UndefinedObject
- Good: SameGameBoard.flash is of type { True UndefinedObject False }
- Good: SameGameBoard.arguments is of type { UndefinedObject Array }
- Bad: SameGameBoard.rows is of type Top
- Bad: SameGameBoard.protoTile is of type Top
- Bad: SameGameBoard.flashColor is of type Top
- Good: SameGameBoard.selection is of type UndefinedObject
- Bad: SameGameTile.oldSwitchState is of type Top
- Bad: SameGameTile.switchState is of type Top
- Good: SameGameTile.disabled is of type { True UndefinedObject False }
- Good: Tetris.scoreDisplay is of type { LedMorph UndefinedObject }
- Good: Tetris.board is of type { UndefinedObject TetrisBoard }
- Bad: TetrisBlock.shapeInfo is of type Top
- Good: TetrisBlock.board is of type { UndefinedObject TetrisBoard }
- Bad: TetrisBlock.angle is of type Top
- Bad: TetrisBlock.baseCellNumber is of type Top
- Good: TetrisBoard.game is of type { UndefinedObject Tetris }

- Good: TetrisBoard.gameOver is of type { True UndefinedObject False }
- Bad: TetrisBoard.score is of type Top
- Good: TetrisBoard.paused is of type { True UndefinedObject False }
- Bad: TetrisBoard.delay is of type { Magnitude++ UndefinedObject }
- Good: TetrisBoard.currentBlock is of type { TetrisBlock UndefinedObject }
- Good: WordGameLetterMorph.predecessor is of type { WordGameLetterMorph UndefinedObject }
- Good: WordGameLetterMorph.lineMorph is of type { UndefinedObject PolygonMorph }
- Good: WordGameLetterMorph.style is of type { UndefinedObject #underlined #boxed #plain }
- Good: WordGameLetterMorph.letterMorph is of type { StringMorph UndefinedObject }
- Bad: WordGameLetterMorph.letter is of type Top
- Good: WordGameLetterMorph.originalLetter is of type UndefinedObject
- Good: WordGameLetterMorph.successor is of type { WordGameLetterMorph UndefinedObject }
- Bad: WordGameLetterMorph.indexInQuote is of type Top
- Good: WordGameLetterMorph.linkedLetters is of type UndefinedObject
- Good: WordGamePanelMorph.letterMorphs is of type { Array UndefinedObject OrderedCollection }
- Good: WordGamePanelMorph.haveTypedHere is of type { True UndefinedObject False }

4.5 Threshold of 1500

- Bad: PDA.recurringEvents is of type Top
- Good: PDA.peopleList is of type { ArrayedCollection++ UndefinedObject }
- Bad: PDA.date is of type Top
- Good: PDA.dateButtonPressed is of type UndefinedObject
- Bad: PDA.allEvents is of type Top

- Bad: PDA.category is of type Top
- Bad: PDA.currentItem is of type Top
- Good: PDA.scheduleList is of type { ArrayedCollection++
UndefinedObject }
- Good: PDA.categoryListIndex is of type UndefinedObject
- Bad: PDA.allPeople is of type Top
- Bad: PDA.scheduleListIndex is of type Top
- Bad: PDA.allToDoItems is of type Top
- Bad: PDA.allNotes is of type Top
- Bad: PDA.notesListIndex is of type Top
- Good: PDA.currentItemSelection is of type UndefinedObject
- Good: PDA.categoryList is of type UndefinedObject
- Good: PDA.todoList is of type { ArrayedCollection++
UndefinedObject }
- Bad: PDA.todoListIndex is of type Top
- Bad: PDA.peopleListIndex is of type Top
- Good: PDA.notesList is of type { ArrayedCollection++
UndefinedObject }
- Good: PDA.currentItemText is of type UndefinedObject
- Bad: PDA.userCategories is of type Top
- Good: PDA.viewDescriptionOnly is of type { True UndefinedObject
False }
- Bad: PDAChoiceMorph.backgroundColor is of type Top
- Bad: PDAClockMorph.backgroundColor is of type Top
- Bad: PDAAEvent.time is of type Top
- Bad: PDAAEvent.date is of type Top
- Bad: PDAAEvent.duration is of type Top
- Good: PDAAEvent.alarm is of type UndefinedObject
- Bad: PDAPerson.name is of type Top
- Bad: PDAPerson.address is of type Top

- Good: PDAPerson.phone is of type { String UndefinedObject }
- Good: PDAPerson.email is of type { String UndefinedObject }
- Bad: PDARecord.description is of type Top
- Bad: PDARecord.key is of type Top
- Good: PDARecord.otherFields is of type { UndefinedObject Dictionary }
- Good: PDARecurringEvent.recurrence is of type { UndefinedObject #nthWeekdayOfMonthEachYear #dayOfWeek #dayOfMonth #dateOfYear }
- Bad: PDARecurringEvent.firstDate is of type Top
- Bad: PDARecurringEvent.lastDate is of type Top
- Good: PDAToDoItem.deadline is of type UndefinedObject
- Bad: PDAToDoItem.result is of type Top
- Bad: PDAToDoItem.dayDone is of type Top
- Bad: PDAToDoItem.dayPosted is of type Top
- Bad: PDAToDoItem.priority is of type Top
- Bad: IRCChannelInfo.name is of type Top
- Bad: IRCChannelInfo.topic is of type Top
- Good: IRCChannelInfo.subscribers is of type { IdentitySet UndefinedObject }
- Good: IRCChannelInfo.members is of type { Set UndefinedObject }
- Good: IRCChannelInfo.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCChannelListBrowser.channelIndex is of type Top
- Bad: IRCChannelListBrowser.channelList is of type Top
- Good: IRCChannelListBrowser.sortCriterion is of type { UndefinedObject #name }
- Good: IRCChannelListBrowser.connection is of type { IRCConnection UndefinedObject }
- Good: IRCChannelObserver.chatText is of type { Text UndefinedObject }
- Good: IRCChannelObserver.channelName is of type UndefinedObject

- Bad: IRCChannelObserver.channel is of type Top
- Good: IRCChannelObserver.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCChannelSummary.name is of type Top
- Bad: IRCChannelSummary.topic is of type Top
- Bad: IRCChannelSummary.numUsers is of type Top
- Good: IRCChannelUsersBrowser.channel is of type { UndefinedObject IRCChannelInfo }
- Good: IRCChannelUsersBrowser.userList is of type { UndefinedObject Array }
- Bad: IRCChannelUsersBrowser.userIndex is of type Top
- Good: IRCConnection.directMessageSubscribers is of type { IdentitySet UndefinedObject }
- Good: IRCConnection.channelListBeingBuilt is of type { UndefinedObject OrderedCollection }
- Good: IRCConnection.protocolMessagesToSend is of type { UndefinedObject OrderedCollection }
- Bad: IRCConnection.sendBuffer is of type Top
- Bad: IRCConnection.server is of type Top
- Good: IRCConnection.motdBeingBuilt is of type { UndefinedObject WriteStream }
- Good: IRCConnection.protocolMessageSubscribers is of type { IdentitySet UndefinedObject }
- Bad: IRCConnection.motd is of type Top
- Bad: IRCConnection.port is of type Top
- Good: IRCConnection.recieveBuffer is of type { String UndefinedObject }
- Good: IRCConnection.socket is of type { Socket UndefinedObject }
- Bad: IRCConnection.userName is of type Top
- Bad: IRCConnection.nick is of type Top
- Good: IRCConnection.channelList is of type { UndefinedObject Array }

- Good: IRCConnection.subscribedChannels is of type { UndefinedObject Dictionary }
- Bad: IRCConnection.fullName is of type Top
- Good: IRCConnection.messagesProcessed is of type { UndefinedObject SmallInteger }
- Bad: IRCConnection.consoleText is of type Top
- Bad: IRCDirectMessagesObserver.chatText is of type Top
- Bad: IRCDirectMessagesObserver.talkingTo is of type Top
- Good: IRCDirectMessagesObserver.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCMessage.text is of type Top
- Bad: IRCMessage.sender is of type Top
- Bad: IRCMessage.recipient is of type Top
- Good: IRCMessagePattern.sender is of type UndefinedObject
- Good: IRCMessagePattern.recipient is of type UndefinedObject
- Good: IRCMessageSet.messages is of type UndefinedObject
- Bad: IRCMorph.userName is of type Top
- Bad: IRCMorph.nick is of type Top
- Bad: IRCMorph.server is of type Top
- Good: IRCMorph.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCMorph.fullName is of type Top
- Good: IRCMorph.messageCollections is of type UndefinedObject
- Good: IRCMorph.consoleText is of type { Text UndefinedObject }
- Bad: IRCMorph.port is of type Top
- Bad: IRCProtocolMessage.arguments is of type Top
- Good: IRCProtocolMessage.command is of type { UndefinedObject String Character }
- Bad: IRCProtocolMessage.prefix is of type Top
- Good: IRCRecipientFilter.recipient is of type UndefinedObject

- Good: CategoriesFile.categories is of type { UndefinedObject Dictionary }
- Bad: Celeste.currentMessages is of type Top
- Good: Celeste.customFilterBlock is of type UndefinedObject
- Bad: Celeste.status is of type Top
- Bad: Celeste.userPassword is of type Top
- Bad: Celeste.currentMsgID is of type Top
- Bad: Celeste.mailDB is of type Top
- Bad: Celeste.currentCategory is of type Top
- Bad: Celeste.lastCategory is of type Top
- Good: Celeste.lastCategoryList is of type UndefinedObject
- Good: Celeste.dateFilter is of type UndefinedObject
- Bad: Celeste.currentTOC is of type Top
- Bad: Celeste.fromFilter is of type Top
- Good: Celeste.formatMessages is of type UndefinedObject
- Good: Celeste.lastCategoryMenu is of type UndefinedObject
- Bad: Celeste.messageTextView is of type { PluggableTextMorph++ PluggableListMorph++ PluggableListView++ SimpleHierarchicalListMorph++ PluggableTextView UndefinedObject }
- Bad: Celeste.subjectFilter is of type Top
- Bad: CelesteComposition.textEditor is of type { PluggableTextMorph++ FormMenuController PluggableButtonController Controller ProjectController UndefinedObject FormEditor PluggableListControllerOfMany PluggableTextView PluggableListController FillInTheBlankController StandardSystemController ListController MorphWorldController NoController BitEditor ParagraphEditor ScreenController ReadOnlyTextController ModalController StringHolderController DeferredActionStandardSystemController PluggableTextController }
- Bad: CelesteComposition.celeste is of type Top
- Bad: CelesteComposition.messageText is of type Top
- Good: CelesteComposition.morphicWindow is of type { AlignmentMorphBob1 UndefinedObject SystemWindow }

- Good: CelesteComposition.mvcWindow is of type { StandardSystemView UndefinedObject }
- Good: CelesteComposition.attachmentSeparator is of type UndefinedObject
- Good: FancyCelesteComposition.theLinkToInclude is of type UndefinedObject
- Bad: FancyCelesteComposition.to is of type Top
- Bad: FancyCelesteComposition.subject is of type Top
- Good: FancyCelesteComposition.textFields is of type { UndefinedObject Array }
- Good: IndexFile.msgDictionary is of type { PluggableDictionary UndefinedObject }
- Good: IndexFile.logfile is of type { UndefinedObject StandardFileStream }
- Good: IndexFile.timeSortedEntries is of type { UndefinedObject SortedCollection }
- Bad: IndexFileEntry.time is of type Top
- Bad: IndexFileEntry.msgID is of type Top
- Bad: IndexFileEntry.messageFile is of type Top
- Bad: IndexFileEntry.cc is of type Top
- Bad: IndexFileEntry.tocLineCache is of type Top
- Bad: IndexFileEntry.location is of type Top
- Bad: IndexFileEntry.to is of type Top
- Bad: IndexFileEntry.textLength is of type Top
- Bad: IndexFileEntry.subject is of type Top
- Bad: IndexFileEntry.from is of type Top
- Good: MIMEHeaderValue.mainValue is of type { UndefinedObject String Character }
- Bad: MIMEHeaderValue.parameters is of type { Set++ UndefinedObject SystemTracer SharedQueue }
- Bad: MIMEPart.content is of type { SequenceableCollection++ Integer++ B3DIndexedQuad UndefinedObject B3DPrimitiveRasterizerData B3DIndexedTriangle }

- Good: MIMEPart.parts is of type { Array UndefinedObject OrderedCollection }
- Bad: MIMEPart.separator is of type Top
- Bad: MIMEPart.text is of type Top
- Good: MIMEPart.fields is of type { UndefinedObject Dictionary }
- Bad: MailDB.rootFilename is of type Top
- Bad: MailDB.indexFile is of type Top
- Bad: MailDB.messageFile is of type Top
- Bad: MailDB.categoriesFile is of type Top
- Bad: MailDBFile.filename is of type Top
- Good: MailMessage.time is of type { UndefinedObject SmallInteger }
- Bad: MailMessage.separator is of type Top
- Bad: MailMessage.cc is of type Top
- Good: MailMessage.body is of type { UndefinedObject MIMEDocument }
- Good: MailMessage.to is of type { String UndefinedObject }
- Bad: MailMessage.text is of type Top
- Good: MailMessage.subject is of type { String UndefinedObject }
- Good: MailMessage.fields is of type { UndefinedObject Dictionary }
- Good: MailMessage.from is of type { String UndefinedObject }
- Good: MailMessage.parts is of type { Array UndefinedObject OrderedCollection }
- Bad: MailNotifier.lastConnectTime is of type Top
- Bad: MailNotifier.messageCount is of type Top
- Good: MailNotifier.password is of type UndefinedObject
- Good: MailNotifier.socket is of type { UndefinedObject POPSocket }
- Good: MessageFile.file is of type { CrLfFileStream UndefinedObject }
- Bad: ReadNewsInboxFile.currentNewsgroup is of type Top
- Good: ReadNewsInboxFile.msgBuffer is of type { UndefinedObject WriteStream }

- Bad: TextMessageLink.message is of type Top
- Bad: RBAssignmentNode.variable is of type Top
- Bad: RBAssignmentNode.assignment is of type Top
- Bad: RBAssignmentNode.value is of type Top
- Good: RBBlockNode.colons is of type { UndefinedObject
OrderedCollection }
- Bad: RBBlockNode.bar is of type Top
- Bad: RBBlockNode.right is of type Top
- Bad: RBBlockNode.left is of type Top
- Bad: RBBlockNode.body is of type Top
- Bad: RBBlockNode.arguments is of type Top
- Bad: RBCascadeNode.messages is of type Top
- Good: RBCascadeNode.semicolons is of type { UndefinedObject
OrderedCollection }
- Good: RBFormatter.codeStream is of type { UndefinedObject
WriteStream }
- Bad: RBFormatter.lineStart is of type Top
- Bad: RBFormatter.firstLineLength is of type Top
- Bad: RBFormatter.tabs is of type Top
- Bad: RBLiteralNode.token is of type Top
- Bad: RBMessageNode.arguments is of type Top
- Bad: RBMessageNode.receiver is of type Top
- Bad: RBMessageNode.selector is of type Top
- Bad: RBMessageNode.selectorParts is of type Top
- Bad: RBMethodNode.tags is of type Object++
- Bad: RBMethodNode.selector is of type Top
- Bad: RBMethodNode.selectorParts is of type Top
- Bad: RBMethodNode.body is of type Top
- Bad: RBMethodNode.source is of type Top

- Bad: RBMethodNode.arguments is of type Top
- Bad: RBOptimizedNode.body is of type Top
- Bad: RBOptimizedNode.right is of type Top
- Bad: RBOptimizedNode.left is of type Top
- Good: RBParser.scanner is of type { RBScanner UndefinedObject }
- Good: RBParser.tags is of type { UndefinedObject OrderedCollection }
- Bad: RBParser.source is of type Top
- Good: RBParser.emptyStatements is of type { True UndefinedObject False }
- Bad: RBParser.currentToken is of type Top
- Good: RBParser.negatedNumbers is of type { True UndefinedObject False }
- Good: RBParser.errorBlock is of type { UndefinedObject a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType }
- Bad: RBParser.nextToken is of type Top
- Good: RBPatternMessageNode.isCascadeList is of type { True UndefinedObject False }
- Good: RBPatternMessageNode.isList is of type { True UndefinedObject False }
- Good: RBPatternMethodNode.isList is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.recurseInto is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isLiteral is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isStatement is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isAnything is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isList is of type { True UndefinedObject False }

- Bad: RBProgramNode.parent is of type Top
- Bad: RBProgramNode.comments is of type Top
- Bad: RBReturnNode.return is of type Top
- Bad: RBReturnNode.value is of type Top
- Bad: RBSequenceNode.rightBar is of type Top
- Good: RBSequenceNode.periods is of type { UndefinedObject OrderedCollection }
- Bad: RBSequenceNode.temporaries is of type Top
- Bad: RBSequenceNode.statements is of type Top
- Bad: RBSequenceNode.leftBar is of type Top
- Good: RBValueNode.parentheses is of type { UndefinedObject OrderedCollection }
- Good: RBVariableNode.token is of type { RBIdentifierToken UndefinedObject }
- Bad: ADPCMCodec.index is of type Top
- Good: ADPCMCodec.indexTable is of type { Array UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.deltaSignMask is of type Top
- Bad: ADPCMCodec.bitPosition is of type Top
- Bad: ADPCMCodec.encodedBytes is of type Top
- Good: ADPCMCodec.stepSizeTable is of type { Array UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.sampleIndex is of type Top
- Good: ADPCMCodec.rightSamples is of type { UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.byteIndex is of type Top
- Bad: ADPCMCodec.frameSizeMask is of type Top
- Bad: ADPCMCodec.bitsPerSample is of type Top
- Bad: ADPCMCodec.predicted is of type Top
- Good: ADPCMCodec.deltaValueHighBit is of type { SmallInteger UndefinedObject Float }

- Bad: ADPCMCodec.deltaValueMask is of type Top
- Bad: ADPCMCodec.currentByte is of type Top
- Bad: ADPCMCodec.samples is of type Top
- Bad: AIFFFileReader.channelData is of type Top
- Bad: AIFFFileReader.frameCount is of type Top
- Good: AIFFFileReader.isLooped is of type { True UndefinedObject False }
- Good: AIFFFileReader.gain is of type { SmallInteger UndefinedObject Float }
- Bad: AIFFFileReader.in is of type Top
- Bad: AIFFFileReader.fileType is of type Top
- Bad: AIFFFileReader.pitch is of type Top
- Bad: AIFFFileReader.markers is of type Top
- Good: AIFFFileReader.channelCount is of type { Integer++ ScrollingToolHolder UndefinedObject B3DRotation B3DVector3 }
- Good: AIFFFileReader.bitsPerSample is of type { UndefinedObject SmallInteger }
- Good: AIFFFileReader.mergelfStereo is of type { True UndefinedObject False }
- Good: AIFFFileReader.skipDataChunk is of type { True UndefinedObject False }
- Bad: AIFFFileReader.samplingRate is of type Top
- Bad: AbstractSound.envelopes is of type Top
- Bad: AbstractSound.mSecsSinceStart is of type Top
- Bad: AbstractSound.scaledVolLimit is of type Top
- Bad: AbstractSound.scaledVol is of type Top
- Bad: AbstractSound.samplesUntilNextControl is of type Top
- Bad: AbstractSound.scaledVolIncr is of type Top
- Good: CompressedSoundData.perceivedPitch is of type { UndefinedObject Float }
- Bad: CompressedSoundData.codecName is of type Top

- Good: CompressedSoundData.channels is of type { UndefinedObject Array }
- Bad: CompressedSoundData.gain is of type Top
- Bad: CompressedSoundData.firstSample is of type Top
- Bad: CompressedSoundData.soundClassName is of type Top
- Bad: CompressedSoundData.cachedSound is of type { WaveletCodec MuLawCodec ADPCMCodec SoundCodec UndefinedObject LoopedSampledSound GSMCodec SampledSound }
- Bad: CompressedSoundData.loopLength is of type Top
- Bad: CompressedSoundData.samplingRate is of type Top
- Bad: CompressedSoundData.loopEnd is of type Top
- Bad: Envelope.target is of type Top
- Bad: Envelope.scale is of type Top
- Good: Envelope.updateSelector is of type { UndefinedObject #pitch: #modulation: #ratio: }
- Bad: Envelope.loopEndMsecs is of type { Magnitude++ UndefinedObject }
- Bad: Envelope.endMsecs is of type Top
- Bad: Envelope.currValue is of type Top
- Bad: Envelope.loopStartIndex is of type Top
- Bad: Envelope.valueIncr is of type Top
- Good: Envelope.noChangesDuringLoop is of type { True UndefinedObject False }
- Bad: Envelope.nextRecomputeTime is of type Top
- Bad: Envelope.loopEndIndex is of type Top
- Bad: Envelope.loopMsecs is of type Top
- Bad: Envelope.loopStartMsecs is of type Top
- Bad: Envelope.decayScale is of type Top
- Bad: Envelope.points is of type Top
- Bad: Envelope.lastValue is of type Top

- Bad: FFT.permTable is of type Top
- Bad: FFT.nu is of type Top
- Bad: FFT.n is of type Top
- Good: FFT.sinTable is of type UndefinedObject
- Good: FFT.imagData is of type { Array UndefinedObject FloatArray }
- Good: FFT.window is of type { UndefinedObject FloatArray }
- Good: FFT.realData is of type { Array UndefinedObject FloatArray }
- Bad: FMSSound.initialCount is of type Top
- Bad: FMSSound.multiplier is of type Top
- Bad: FMSSound.scaledOffsetIndex is of type Top
- Bad: FMSSound.waveTable is of type Top
- Bad: FMSSound.scaledWaveTableSize is of type Top
- Bad: FMSSound.scaledIndex is of type Top
- Bad: FMSSound.normalizedModulation is of type Top
- Bad: FMSSound.scaledOffsetIndexIncr is of type Top
- Bad: FMSSound.modulation is of type Top
- Bad: FMSSound.scaledIndexIncr is of type Top
- Bad: FMSSound.count is of type Top
- Good: FWT.transform is of type { UndefinedObject Array }
- Bad: FWT.beta is of type Top
- Good: FWT.gTilde is of type { UndefinedObject Array }
- Good: FWT.coeffs is of type { UndefinedObject Array }
- Good: FWT.g is of type { UndefinedObject Array }
- Bad: FWT.nSamples is of type Top
- Bad: FWT.nLevels is of type Top
- Bad: FWT.alpha is of type Top
- Good: FWT.h is of type { UndefinedObject Array }
- Good: FWT.samples is of type { UndefinedObject Array }

- Good: FWT.hTilde is of type { UndefinedObject Array }
- Bad: GSMCodec.encodeState is of type Top
- Bad: GSMCodec.decodeState is of type Top
- Bad: LoopedSampledSound.initialCount is of type Top
- Bad: LoopedSampledSound.perceivedPitch is of type Top
- Bad: LoopedSampledSound.scaledLoopLength is of type Top
- Bad: LoopedSampledSound.lastSample is of type Top
- Bad: LoopedSampledSound.gain is of type Top
- Bad: LoopedSampledSound.scaledIndexIncr is of type Top
- Bad: LoopedSampledSound.releaseCount is of type Top
- Bad: LoopedSampledSound.firstSample is of type Top
- Bad: LoopedSampledSound.sampleCountForRelease is of type Top
- Bad: LoopedSampledSound.rightSamples is of type Top
- Bad: LoopedSampledSound.leftSamples is of type Top
- Bad: LoopedSampledSound.scaledIndex is of type Top
- Bad: LoopedSampledSound.originalSamplingRate is of type Top
- Bad: LoopedSampledSound.count is of type Top
- Bad: LoopedSampledSound.loopEnd is of type Top
- Good: MixedSound.soundDone is of type { UndefinedObject Array }
- Good: MixedSound.sounds is of type { UndefinedObject Array }
- Good: MixedSound.leftVols is of type { UndefinedObject Array }
- Good: MixedSound.rightVols is of type { UndefinedObject Array }
- Bad: PitchEnvelope.centerPitch is of type Top
- Bad: PluckedSound.initialCount is of type Top
- Bad: PluckedSound.ring is of type Top
- Bad: PluckedSound.scaledIndexLimit is of type Top
- Bad: PluckedSound.scaledIndex is of type Top
- Bad: PluckedSound.scaledIndexIncr is of type Top

- Bad: PluckedSound.count is of type Top
- Good: RandomEnvelope.rand is of type { Random UndefinedObject }
- Good: RandomEnvelope.highLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.lowLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.delta is of type { UndefinedObject Float }
- Bad: RepeatingSound.iteration is of type Top
- Bad: RepeatingSound.iterationCount is of type Top
- Bad: RepeatingSound.sound is of type Top
- Bad: RepeatingSound.samplesPerIteration is of type Top
- Bad: RestSound.initialCount is of type Top
- Bad: RestSound.count is of type Top
- Good: ReverbSound.tapGains is of type { UndefinedObject Bitmap }
- Good: ReverbSound.bufferSize is of type { Bitmap LargeNegativeInteger LargePositiveInteger UndefinedObject SmallInteger }
- Good: ReverbSound.rightBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.leftBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.tapCount is of type { UndefinedObject SmallInteger }
- Good: ReverbSound.tapDelays is of type { UndefinedObject Bitmap }
- Bad: ReverbSound.bufferIndex is of type Top
- Good: ReverbSound.sound is of type UndefinedObject
- Good: SampledInstrument.sustainedSoft is of type { UndefinedObject Array }
- Good: SampledInstrument.staccatoSoft is of type { UndefinedObject Array }
- Good: SampledInstrument.staccatoLoud is of type { UndefinedObject Array }
- Good: SampledInstrument.sustainedThreshold is of type { UndefinedObject Float }

- Good: SampledInstrument.sustainedLoud is of type { UndefinedObject Array }
- Good: SampledInstrument.loudThreshold is of type { UndefinedObject Float }
- Bad: SampledSound.initialCount is of type Top
- Bad: SampledSound.samples is of type Top
- Bad: SampledSound.scaledIncrement is of type Top
- Bad: SampledSound.scaledIndex is of type Top
- Bad: SampledSound.indexHighBits is of type Top
- Bad: SampledSound.samplesSize is of type Top
- Bad: SampledSound.originalSamplingRate is of type Top
- Bad: SampledSound.count is of type Top
- Good: SequentialSound.sounds is of type { UndefinedObject Array }
- Bad: SequentialSound.currentIndex is of type Top
- Bad: Sonogram.lastX is of type Top
- Good: Sonogram.pixValMap is of type { UndefinedObject Bitmap }
- Good: Sonogram.maxVal is of type { UndefinedObject Float }
- Good: Sonogram.minVal is of type { UndefinedObject Float }
- Good: Sonogram.scrollDelta is of type { UndefinedObject SmallInteger }
- Good: Sonogram.columnForm is of type { Form UndefinedObject }
- Bad: SoundInputStream.mutex is of type Top
- Bad: SoundInputStream.bufferSize is of type Top
- Good: SoundRecorder.currentBuffer is of type { UndefinedObject SoundBuffer }
- Bad: SoundRecorder.recordProcess is of type Top
- Good: SoundRecorder.codec is of type { GSMCodec UndefinedObject }
- Good: SoundRecorder.desiredSampleRate is of type { UndefinedObject Float }
- Bad: SoundRecorder.nextIndex is of type Top

- Good: SoundRecorder.meteringBuffer is of type { UndefinedObject
SoundBuffer }
- Bad: SoundRecorder.meterLevel is of type Top
- Good: SoundRecorder.stereo is of type { False UndefinedObject }
- Good: SoundRecorder.recordLevel is of type { UndefinedObject Float }
- Good: SoundRecorder.soundPlaying is of type { SampledSound
SequentialSound UndefinedObject ChatRecorder SoundInputStream
SoundRecorder }
- Good: SoundRecorder.recordedBuffers is of type { Array
UndefinedObject OrderedCollection }
- Good: SoundRecorder.paused is of type { True UndefinedObject False }
- Bad: SoundRecorder.samplingRate is of type Top
- Good: SoundRecorder.recordedSound is of type { SampledSound
SequentialSound UndefinedObject ChatRecorder SoundInputStream
SoundRecorder }
- Good: SoundRecorder.bufferAvailableSema is of type { Semaphore
UndefinedObject }
- Bad: VolumeEnvelope.mSecsForChange is of type { Magnitude++
UndefinedObject }
- Bad: VolumeEnvelope.targetVol is of type Top
- Good: VolumeEnvelope.currentVol is of type UndefinedObject
- Bad: WaveletCodec.alpha is of type Top
- Bad: WaveletCodec.beta is of type Top
- Good: WaveletCodec.fwt is of type { FWT UndefinedObject }
- Good: WaveletCodec.samplesPerFrame is of type { UndefinedObject
SmallInteger }
- Bad: WaveletCodec.nLevels is of type Top
- Bad: TestInterfaceBase.duration is of type Top
- Bad: TestInterfaceBase.classPattern is of type Top
- Bad: TestInterfaceBase.result is of type Top
- Bad: TestInterfaceBase.selectorPattern is of type Top

- Good: TestModel.failureList is of type { UndefinedObject OrderedCollection }
- Bad: TestModel.patternHistory is of type Top
- Bad: TestModel.errorList is of type Top
- Bad: TestModel.summaryText is of type { Boolean++ String UndefinedObject }
- Bad: TestModel.summaryTextM is of type { PluggableTextMorph++ PluggableTextView UndefinedObject }
- Good: TestModel.summaryTextV is of type { PluggableTextView UndefinedObject }
- Good: TestModel.updateColorSelector is of type { UndefinedObject #updateColorM #updateColorV }
- Good: TestModel.patternTextV is of type { PluggableTextView UndefinedObject }
- Bad: TestModel.patternTextM is of type { PluggableTextMorph++ PluggableTextView UndefinedObject }
- Bad: TestModel.detailsText is of type Top
- Bad: Browser.classOrganizer is of type Top
- Bad: Browser.systemOrganizer is of type Top
- Bad: Browser.messageListIndex is of type Top
- Bad: Browser.messageCategoryListIndex is of type Top
- Good: Browser.editSelection is of type { Boolean++ UndefinedObject #hierarchy #editClass #editComment #none #editMessageCategories #newClass #editMessage #newMessage #editSystemCategories #byteCodes }
- Bad: Browser.metaClassOrganizer is of type Top
- Bad: Browser.systemCategoryListIndex is of type Top
- Bad: Browser.metaClassIndicated is of type Top
- Bad: Browser.classListIndex is of type Top
- Bad: ChangedMessageSet.changeSet is of type Top
- Bad: HierarchyBrowser.centralClass is of type Top
- Bad: HierarchyBrowser.classList is of type Top

- Bad: MessageSet.messageList is of type Top
- Bad: MessageSet.autoSelectString is of type Top
- Bad: PackageBrowser.package is of type Top
- Bad: PackageBrowser.packageListIndex is of type Top
- Good: PackageBrowser.packageList is of type UndefinedObject
- Good: ProtocolBrowser.selectedClass is of type UndefinedObject
- Bad: ProtocolBrowser.selectedSelector is of type Top
- Bad: SelectorBrowser.classListIndex is of type Top
- Bad: SelectorBrowser.classList is of type Top
- Bad: SelectorBrowser.selectorIndex is of type Top
- Bad: SelectorBrowser.selectorList is of type Top
- Bad: BitBltSimulation.sy is of type Top
- Bad: BitBltSimulation.halfToneBase is of type Top
- Bad: BitBltSimulation.cmBlueShift is of type Top
- Bad: BitBltSimulation.destWidth is of type Top
- Bad: BitBltSimulation.destX is of type Top
- Bad: BitBltSimulation.width is of type Top
- Bad: BitBltSimulation.scanString is of type Top
- Bad: BitBltSimulation.sourceBits is of type Top
- Bad: BitBltSimulation.scanStop is of type Top
- Bad: BitBltSimulation.dy is of type Top
- Good: BitBltSimulation.warpBitShiftTable is of type { CArrayAccessor
UndefinedObject }
- Bad: BitBltSimulation.destPixSize is of type Top
- Bad: BitBltSimulation.pixPerWord is of type Top
- Good: BitBltSimulation.ditherValues16 is of type { CArrayAccessor
UndefinedObject }
- Bad: BitBltSimulation.cmRedMask is of type Top
- Bad: BitBltSimulation.warpSrcMask is of type Top

- Bad: BitBltSimulation.dstBitShift is of type Top
- Bad: BitBltSimulation.destIndex is of type Top
- Bad: BitBltSimulation.sourceIndex is of type Top
- Bad: BitBltSimulation.clipX is of type Top
- Good: BitBltSimulation.hDir is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.nWords is of type Top
- Bad: BitBltSimulation.clipHeight is of type Top
- Bad: BitBltSimulation.bitBltOop is of type Top
- Bad: BitBltSimulation.preload is of type Top
- Bad: BitBltSimulation.opTable is of type Top
- Bad: BitBltSimulation.sourceForm is of type Top
- Bad: BitBltSimulation.warpAlignMask is of type Top
- Bad: BitBltSimulation.skew is of type Top
- Bad: BitBltSimulation.cmDeltaBits is of type Top
- Good: BitBltSimulation.ditherMatrix4x4 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.sourceY is of type Top
- Bad: BitBltSimulation.scanStart is of type Top
- Bad: BitBltSimulation.cmGreenShift is of type Top
- Bad: BitBltSimulation.destBits is of type Top
- Bad: BitBltSimulation.destPitch is of type Top
- Bad: BitBltSimulation.height is of type Top
- Bad: BitBltSimulation.sourcePitch is of type Top
- Bad: BitBltSimulation.destY is of type Top
- Bad: BitBltSimulation.affectedL is of type Top
- Good: BitBltSimulation.maskTable is of type { UndefinedObject Array }
- Good: BitBltSimulation.scanDisplayFlag is of type { True UndefinedObject False }

- Bad: BitBltSimulation.mask1 is of type Top
- Bad: BitBltSimulation.destDelta is of type Top
- Good: BitBltSimulation.noHalftone is of type { True UndefinedObject False }
- Bad: BitBltSimulation.clipWidth is of type Top
- Bad: BitBltSimulation.destForm is of type Top
- Bad: BitBltSimulation.sx is of type Top
- Bad: BitBltSimulation.clipY is of type Top
- Bad: BitBltSimulation.scanRightX is of type Top
- Bad: BitBltSimulation.cmBlueMask is of type Top
- Bad: BitBltSimulation.halftoneHeight is of type Top
- Bad: BitBltSimulation.affectedT is of type Top
- Bad: BitBltSimulation.sourcePixSize is of type Top
- Bad: BitBltSimulation.cmRedShift is of type Top
- Good: BitBltSimulation.noSource is of type { True UndefinedObject False }
- Bad: BitBltSimulation.dx is of type Top
- Bad: BitBltSimulation.destMask is of type Top
- Bad: BitBltSimulation.affectedB is of type Top
- Bad: BitBltSimulation.cmGreenMask is of type Top
- Good: BitBltSimulation.hasSurfaceLock is of type { True UndefinedObject False }
- Bad: BitBltSimulation.stopCode is of type Top
- Bad: BitBltSimulation.combinationRule is of type Top
- Bad: BitBltSimulation.bitCount is of type Top
- Good: BitBltSimulation.vDir is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.destHeight is of type Top
- Good: BitBltSimulation.cmBitsPerColor is of type { UndefinedObject SmallInteger }

- Bad: BitBltSimulation.bbH is of type Top
- Bad: BitBltSimulation.bbW is of type Top
- Bad: BitBltSimulation.srcWidth is of type Top
- Bad: BitBltSimulation.affectedR is of type Top
- Good: BitBltSimulation.ditherThresholds16 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.sourceDelta is of type Top
- Bad: BitBltSimulation.warpSrcShift is of type Top
- Bad: BitBltSimulation.halfToneForm is of type Top
- Bad: BitBltSimulation.mask2 is of type Top
- Bad: BitBltSimulation.scanXTable is of type Top
- Bad: BitBltSimulation.scanStopArray is of type Top
- Bad: BitBltSimulation.sourceAlpha is of type Top
- Bad: BitBltSimulation.colorMap is of type Top
- Bad: BitBltSimulation.warpAlignShift is of type Top
- Bad: BitBltSimulation.sourceX is of type Top
- Bad: BitBltSimulation.srcBitShift is of type Top
- Bad: BitBltSimulation.srcHeight is of type Top
- Bad: Interpreter.activeContext is of type Top
- Bad: Interpreter.nextWakeupTick is of type Top
- Bad: Interpreter.localIP is of type Top
- Bad: Interpreter.localHomeContext is of type Top
- Good: Interpreter.methodCache is of type { UndefinedObject Array }
- Bad: Interpreter.interruptKeycode is of type Top
- Bad: Interpreter.semaphoresToSignalCountA is of type Top
- Bad: Interpreter.interruptCheckCounterFeedBackReset is of type Top
- Good: Interpreter.interpreterVersion is of type UndefinedObject
- Good: Interpreter.obsoleteNamedPrimitiveTable is of type { CArrayAccessor UndefinedObject }

- Good: Interpreter.interpreterProxy is of type { UndefinedObject InterpreterSimulator InterpreterSimulatorMSB InterpreterSimulatorLSB }
- Bad: Interpreter.receiver is of type Top
- Bad: Interpreter.stackPointer is of type Top
- Bad: Interpreter.receiverClass is of type Top
- Good: Interpreter.obsoleteIndexedPrimitiveTable is of type { CArrayAccessor UndefinedObject }
- Bad: Interpreter.successFlag is of type Top
- Good: Interpreter.compilerHooks is of type UndefinedObject
- Bad: Interpreter.fullScreenFlag is of type { Interpreter InterpreterSimulator InterpreterSimulatorLSB UndefinedObject InterpreterSimulatorMSB }
- Bad: Interpreter.primitiveIndex is of type Top
- Good: Interpreter.semaphoresToSignalB is of type { UndefinedObject Array }
- Bad: Interpreter.compilerInitialized is of type Top
- Bad: Interpreter.localSP is of type Top
- Bad: Interpreter.instructionPointer is of type Top
- Good: Interpreter.semaphoresUseBufferA is of type { True UndefinedObject False }
- Good: Interpreter.deferDisplayUpdates is of type { True UndefinedObject False }
- Bad: Interpreter.theHomeContext is of type Top
- Bad: Interpreter.extraVMMemory is of type Top
- Bad: Interpreter.method is of type Top
- Bad: Interpreter.pendingFinalizationSignals is of type Top
- Bad: Interpreter.newMethod is of type Top
- Good: Interpreter.semaphoresToSignalA is of type { UndefinedObject Array }
- Bad: Interpreter.methodClass is of type Top

- Bad: Interpreter.newNativeMethod is of type Top
- Good: Interpreter.atCache is of type { UndefinedObject Array }
- Bad: Interpreter.argumentCount is of type Top
- Bad: Interpreter.currentBytecode is of type Top
- Good: Interpreter.interruptPending is of type { False UndefinedObject }
- Good: Interpreter.interruptChecksEveryNms is of type { UndefinedObject SmallInteger }
- Bad: Interpreter.nextPollTick is of type Top
- Bad: Interpreter.lkupClass is of type Top
- Bad: Interpreter.reclaimableContextCount is of type Top
- Bad: Interpreter.savedWindowSize is of type Top
- Bad: Interpreter.lastTick is of type Top
- Bad: Interpreter.semaphoresToSignalCountB is of type Top
- Bad: Interpreter.messageSelector is of type Top
- Bad: Interpreter.showSurfaceFn is of type Top
- Good: InterpreterSimulator.myBitBlt is of type { False UndefinedObject BitBltSimulator }
- Good: InterpreterSimulator.traceOn is of type { UndefinedObject True }
- Bad: InterpreterSimulator.imageName is of type Top
- Bad: InterpreterSimulator.pluginList is of type Top
- Bad: InterpreterSimulator.sendCount is of type Top
- Good: InterpreterSimulator.displayForm is of type { Form UndefinedObject }
- Good: InterpreterSimulator.mappedPluginEntries is of type { UndefinedObject Array }
- Good: InterpreterSimulator.filesOpen is of type { UndefinedObject OrderedCollection }
- Bad: InterpreterSimulator.byteCount is of type Top
- Good: ObjectMemory.signalLowSpace is of type { True UndefinedObject False }

- Bad: ObjectMemory.tenuringThreshold is of type Top
- Bad: ObjectMemory.lastHash is of type Top
- Bad: ObjectMemory.statIncrGCMSecs is of type Top
- Good: ObjectMemory.remapBuffer is of type { UndefinedObject Array }
- Bad: ObjectMemory.trueObj is of type Top
- Bad: ObjectMemory.statFullGCMSecs is of type Top
- Bad: ObjectMemory.freeLargeContexts is of type Top
- Bad: ObjectMemory.lowSpaceThreshold is of type Top
- Bad: ObjectMemory.allocationsBetweenGCs is of type Top
- Bad: ObjectMemory.interruptCheckCounter is of type Top
- Bad: ObjectMemory.freeContexts is of type Top
- Bad: ObjectMemory.compStart is of type Top
- Bad: ObjectMemory.youngStart is of type Top
- Bad: ObjectMemory.compEnd is of type Top
- Bad: ObjectMemory.totalObjectFoundAtStartup is of type Top
- Bad: ObjectMemory.memoryLimit is of type Top
- Bad: ObjectMemory.endOfMemory is of type Top
- Bad: ObjectMemory.specialObjectsOop is of type Top
- Bad: ObjectMemory.statFullGCs is of type Top
- Bad: ObjectMemory.statTenures is of type Top
- Good: ObjectMemory.nilObj is of type UndefinedObject
- Bad: ObjectMemory.child is of type Top
- Bad: ObjectMemory.fwdTableLast is of type Top
- Bad: ObjectMemory.fwdTableNext is of type Top
- Bad: ObjectMemory.rootTableCount is of type Top
- Bad: ObjectMemory.allocationCount is of type Top
- Bad: ObjectMemory.falseObj is of type Top
- Bad: ObjectMemory.remapBufferCount is of type Top

- Bad: ObjectMemory.parentField is of type Top
- Bad: ObjectMemory.field is of type Top
- Good: ObjectMemory.memory is of type { Interpreter UndefinedObject InterpreterSimulatorMSB InterpreterSimulatorLSB Bitmap InterpreterSimulator }
- Bad: ObjectMemory.freeBlock is of type Top
- Bad: ObjectMemory.statRootTableOverflows is of type Top
- Good: ObjectMemory.rootTable is of type { UndefinedObject Array }
- Bad: ObjectMemory.statIncrGCs is of type Top
- Good: ObjectMemory.displayBits is of type { UndefinedObject SmallInteger }
- Bad: SystemMonitor.vmParameters is of type Top
- Bad: SystemMonitor.gcHighWaterMark is of type Top
- Bad: SystemMonitor.baselineSkip is of type Top
- Bad: SystemMonitor.prevAllocCount is of type Top
- Bad: SystemMonitor.prevDeltaIncrGC is of type Top
- Bad: SystemMonitor.prevMcMiss is of type Top
- Good: SystemMonitor.window is of type { UndefinedObject Rectangle }
- Bad: SystemMonitor.prevDeltaFullGC is of type Top
- Bad: SystemMonitor.prevFullGC is of type Top
- Good: SystemMonitor.valSelectors is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIncrGC is of type Top
- Bad: SystemMonitor.prevMsClock is of type Top
- Good: SystemMonitor.maxValues is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevAllocRate is of type Top
- Bad: SystemMonitor.gcLowWaterMark is of type Top
- Good: SystemMonitor.labels is of type { UndefinedObject Array }
- Good: SystemMonitor.minValues is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIcHit is of type Top

- Bad: SystemMonitor.prevMcHit is of type Top
- Good: SystemTracer.hashGenerator is of type { Random UndefinedObject }
- Bad: SystemTracer.maxOop is of type Top
- Good: SystemTracer.map is of type UndefinedObject
- Good: SystemTracer.initialProcess is of type UndefinedObject
- Good: SystemTracer.oopMap is of type { UndefinedObject Array }
- Bad: SystemTracer.specialObjects is of type Top
- Good: SystemTracer.file is of type { CrLfFileStream UndefinedObject }
- Good: SystemTracer.cleaningUp is of type { False UndefinedObject }
- Good: SystemTracer.writeDict is of type { UndefinedObject Dictionary }
- Good: SystemTracer.imageHeaderSize is of type { UndefinedObject SmallInteger }
- Good: SystemTracer.compactClasses is of type { UndefinedObject Array }
- Good: SystemTracer.replacementClasses is of type { UndefinedObject Dictionary }
- Good: ChineseCheckerPiece.myBoard is of type { ChineseCheckers UndefinedObject }
- Bad: ChineseCheckerPiece.boardLoc is of type Top
- Bad: ChineseCheckers.movePhase is of type Top
- Good: ChineseCheckers.board is of type { UndefinedObject Array }
- Good: ChineseCheckers.plannedMovePhase is of type UndefinedObject
- Good: ChineseCheckers.sixDeltas is of type { UndefinedObject Array }
- Bad: ChineseCheckers.plannedMove is of type Top
- Bad: ChineseCheckers.whoseMove is of type Top
- Good: ChineseCheckers.teams is of type { UndefinedObject Array }
- Good: ChineseCheckers.colors is of type { UndefinedObject Array }
- Good: ChineseCheckers.homes is of type { UndefinedObject Array }

- Good: ChineseCheckers.animateMoves is of type { True
UndefinedObject False }
- Good: ChineseCheckers.pathMorphs is of type { UndefinedObject
OrderedCollection }
- Good: ChineseCheckers.autoPlay is of type { UndefinedObject Array }
- Good: CipherPanel.originalMorphs is of type { UndefinedObject Array }
- Good: CipherPanel.decodingMorphs is of type { UndefinedObject Array
}
- Good: CipherPanel.quote is of type { UndefinedObject String Character
}
- Good: CipherPanel.originalText is of type UndefinedObject
- Good: CrosticPanel.crosticPanel is of type UndefinedObject
- Good: CrosticPanel.cluesCol2 is of type { AlignmentMorph
UndefinedObject }
- Bad: CrosticPanel.quote is of type Top
- Good: CrosticPanel.answers is of type { UndefinedObject
OrderedCollection }
- Good: CrosticPanel.clues is of type { UndefinedObject
OrderedCollection }
- Good: CrosticPanel.cluesPanel is of type { AlignmentMorph
UndefinedObject }
- Good: CrosticPanel.quotePanel is of type { CrosticQuotePanel
UndefinedObject }
- Good: CrosticQuotePanel.cluesPanel is of type { CrosticPanel
UndefinedObject }
- Good: FreeCell.lastGameLost is of type UndefinedObject
- Good: FreeCell.cardsRemainingDisplay is of type { LedMorph
UndefinedObject }
- Good: FreeCell.gameNumberDisplay is of type { LedMorph
UndefinedObject }
- Good: FreeCell.state is of type { UndefinedObject #sameGame
#pickGame #won #newGame #lost }
- Good: FreeCell.myFillStyle is of type { UndefinedObject
GradientFillStyle }

- Good: FreeCell.elapsedTimeDisplay is of type { UndefinedObject LedTimerMorph }
- Good: FreeCell.board is of type { FreeCellBoard UndefinedObject }
- Bad: FreeCell.autoMoveRecursionCount is of type Top
- Bad: FreeCellBoard.target is of type Top
- Bad: FreeCellBoard.actionSelector is of type Top
- Good: FreeCellBoard.stacks is of type { UndefinedObject Array }
- Good: FreeCellBoard.freeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.homeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.cardDeck is of type { PlayingCardDeck UndefinedObject }
- Good: FreeCellBoard.lastCardDeck is of type UndefinedObject
- Bad: FreeCellStatistics.streakLosses is of type Top
- Bad: FreeCellStatistics.lastGameWon is of type Top
- Bad: FreeCellStatistics.lastGameLost is of type Top
- Bad: FreeCellStatistics.currentCount is of type Top
- Good: FreeCellStatistics.currentType is of type { UndefinedObject #wins #losses }
- Good: FreeCellStatistics.statsMorph is of type { TextMorph UndefinedObject }
- Good: FreeCellStatistics.window is of type UndefinedObject
- Bad: FreeCellStatistics.sessionLosses is of type Top
- Bad: FreeCellStatistics.lossesWithReplay is of type Top
- Bad: FreeCellStatistics.sessionWins is of type Top
- Bad: FreeCellStatistics.totalWins is of type Top
- Bad: FreeCellStatistics.streakWins is of type Top
- Bad: FreeCellStatistics.totalLosses is of type Top
- Bad: FreeCellStatistics.winsWithReplay is of type Top
- Bad: LedDigitMorph.digit is of type Top

- Good: LedDigitMorph.highlighted is of type { True UndefinedObject False }
- Good: LedMorph.digits is of type { UndefinedObject SmallInteger }
- Bad: LedMorph.flash is of type Top
- Good: LedMorph.flashing is of type { True UndefinedObject False }
- Bad: LedMorph.value is of type Top
- Good: LedTimerMorph.counting is of type { True UndefinedObject False }
- Bad: LedTimerMorph.startSeconds is of type Top
- Bad: PlayingCard.cardNo is of type Top
- Bad: PlayingCard.suitNo is of type Top
- Good: PlayingCard.suit is of type UndefinedObject
- Good: PlayingCard.cardForm is of type { Form UndefinedObject }
- Bad: PlayingCardDeck.target is of type Top
- Bad: PlayingCardDeck.seed is of type Top
- Good: PlayingCardDeck.acceptCardSelector is of type { PlayingCardDeck UndefinedObject #acceptCard:onStack: #acceptSingleCard:on: }
- Good: PlayingCardDeck.cardDraggedSelector is of type { PlayingCardDeck UndefinedObject #dragCard:fromHome: #dragCard:fromStack: }
- Good: PlayingCardDeck.stackingOrder is of type { UndefinedObject #descending #ascending }
- Good: PlayingCardDeck.cardDroppedSelector is of type { PlayingCardDeck UndefinedObject #cardMoved #cardMovedHome }
- Good: PlayingCardDeck.cardDoubleClickSelector is of type { PlayingCardDeck UndefinedObject #doubleClickInStack:OnCard: }
- Good: PlayingCardDeck.stackingPolicy is of type { UndefinedObject #stagger #straight #altStraight #single }
- Good: PlayingCardDeck.emptyDropPolicy is of type { UndefinedObject #inOrder #any }
- Good: PlayingCardDeck.layout is of type { UndefinedObject #stagger #pile #grid }

- Good: PlayingCardMorph.suitNumber is of type { UndefinedObject SmallInteger }
- Bad: PlayingCardMorph.cardNumber is of type Top
- Good: SameGame.scoreDisplay is of type { LedMorph UndefinedObject }
- Good: SameGame.board is of type { UndefinedObject SameGameBoard }
- Good: SameGame.selectionDisplay is of type { LedMorph UndefinedObject }
- Bad: SameGame.helpText is of type { StringHolderView++ PluggableTextMorph++ UndefinedObject }
- Good: SameGameBoard.palette is of type { UndefinedObject OrderedCollection }
- Bad: SameGameBoard.target is of type Top
- Bad: SameGameBoard.columns is of type Top
- Bad: SameGameBoard.actionSelector is of type Top
- Good: SameGameBoard.selectionColor is of type UndefinedObject
- Good: SameGameBoard.flash is of type { True UndefinedObject False }
- Good: SameGameBoard.arguments is of type { UndefinedObject Array }
- Bad: SameGameBoard.rows is of type Top
- Bad: SameGameBoard.protoTile is of type Top
- Bad: SameGameBoard.flashColor is of type Top
- Good: SameGameBoard.selection is of type UndefinedObject
- Bad: SameGameTile.oldSwitchState is of type Top
- Bad: SameGameTile.switchState is of type Top
- Good: SameGameTile.disabled is of type { True UndefinedObject False }
- Good: Tetris.scoreDisplay is of type { LedMorph UndefinedObject }
- Good: Tetris.board is of type { UndefinedObject TetrisBoard }
- Bad: TetrisBlock.shapeInfo is of type Top
- Good: TetrisBlock.board is of type { UndefinedObject TetrisBoard }

- Bad: TetrisBlock.angle is of type Top
- Bad: TetrisBlock.baseCellNumber is of type Top
- Good: TetrisBoard.game is of type { UndefinedObject Tetris }
- Good: TetrisBoard.gameOver is of type { True UndefinedObject False }
- Bad: TetrisBoard.score is of type Top
- Good: TetrisBoard.paused is of type { True UndefinedObject False }
- Bad: TetrisBoard.delay is of type { Magnitude++ UndefinedObject }
- Good: TetrisBoard.currentBlock is of type { TetrisBlock UndefinedObject }
- Good: WordGameLetterMorph.predecessor is of type { WordGameLetterMorph UndefinedObject }
- Good: WordGameLetterMorph.lineMorph is of type { UndefinedObject PolygonMorph }
- Good: WordGameLetterMorph.style is of type { UndefinedObject #underlined #boxed #plain }
- Good: WordGameLetterMorph.letterMorph is of type { StringMorph UndefinedObject }
- Bad: WordGameLetterMorph.letter is of type Top
- Good: WordGameLetterMorph.originalLetter is of type UndefinedObject
- Good: WordGameLetterMorph.successor is of type { WordGameLetterMorph UndefinedObject }
- Bad: WordGameLetterMorph.indexInQuote is of type Top
- Good: WordGameLetterMorph.linkedLetters is of type UndefinedObject
- Good: WordGamePanelMorph.letterMorphs is of type { Array UndefinedObject OrderedCollection }
- Good: WordGamePanelMorph.haveTypedHere is of type { True UndefinedObject False }

4.6 Threshold of 2000

- Bad: PDA.recurringEvents is of type Top
- Good: PDA.peopleList is of type { ArrayedCollection++ UndefinedObject }
- Bad: PDA.date is of type Top
- Good: PDA.dateButtonPressed is of type UndefinedObject
- Bad: PDA.allEvents is of type Top
- Bad: PDA.category is of type Top
- Bad: PDA.currentItem is of type Top
- Good: PDA.scheduleList is of type { ArrayedCollection++ UndefinedObject }
- Good: PDA.categoryListIndex is of type UndefinedObject
- Bad: PDA.allPeople is of type Top
- Bad: PDA.scheduleListIndex is of type Top
- Bad: PDA.allToDoItems is of type Top
- Bad: PDA.allNotes is of type Top
- Bad: PDA.notesListIndex is of type Top
- Good: PDA.currentItemSelection is of type UndefinedObject
- Good: PDA.categoryList is of type UndefinedObject
- Good: PDA.todoList is of type { ArrayedCollection++ UndefinedObject }
- Bad: PDA.todoListIndex is of type Top
- Bad: PDA.peopleListIndex is of type Top
- Good: PDA.notesList is of type { ArrayedCollection++ UndefinedObject }
- Good: PDA.currentItemText is of type UndefinedObject
- Bad: PDA.userCategories is of type Top
- Good: PDA.viewDescriptionOnly is of type { True UndefinedObject False }
- Bad: PDAChoiceMorph.backgroundColor is of type Top

- Bad: PDAClockMorph.backgroundColor is of type Top
- Bad: PDAEvent.time is of type Top
- Bad: PDAEvent.date is of type Top
- Bad: PDAEvent.duration is of type Top
- Good: PDAEvent.alarm is of type UndefinedObject
- Bad: PDAPerson.name is of type Top
- Good: PDAPerson.address is of type UndefinedObject
- Good: PDAPerson.phone is of type { String UndefinedObject }
- Good: PDAPerson.email is of type { String UndefinedObject }
- Bad: PDARecord.description is of type Top
- Bad: PDARecord.key is of type Top
- Good: PDARecord.otherFields is of type { UndefinedObject Dictionary }
- Good: PDARecurringEvent.recurrence is of type { UndefinedObject
#nthWeekdayOfMonthEachYear #dayOfMonth #dayOfWeek
#dateOfYear }
- Bad: PDARecurringEvent.firstDate is of type Top
- Bad: PDARecurringEvent.lastDate is of type Top
- Good: PDAToDoItem.deadline is of type UndefinedObject
- Bad: PDAToDoItem.result is of type Top
- Bad: PDAToDoItem.dayDone is of type Top
- Bad: PDAToDoItem.dayPosted is of type Top
- Bad: PDAToDoItem.priority is of type Top
- Bad: IRCChannelInfo.name is of type Top
- Bad: IRCChannelInfo.topic is of type Top
- Good: IRCChannelInfo.subscribers is of type { IdentitySet
UndefinedObject }
- Good: IRCChannelInfo.members is of type { Set UndefinedObject }
- Good: IRCChannelInfo.connection is of type { IRCConnection
UndefinedObject }
- Bad: IRCChannelListBrowser.channelIndex is of type Top

- Bad: IRCChannelListBrowser.channelList is of type Top
- Good: IRCChannelListBrowser.sortCriterion is of type { UndefinedObject #name }
- Good: IRCChannelListBrowser.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCChannelObserver.chatText is of type Top
- Good: IRCChannelObserver.channelName is of type UndefinedObject
- Bad: IRCChannelObserver.channel is of type Top
- Good: IRCChannelObserver.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCChannelSummary.name is of type Top
- Bad: IRCChannelSummary.topic is of type Top
- Bad: IRCChannelSummary.numUsers is of type Top
- Good: IRCChannelUsersBrowser.channel is of type { UndefinedObject IRCChannelInfo }
- Good: IRCChannelUsersBrowser.userList is of type { UndefinedObject Array }
- Bad: IRCChannelUsersBrowser.userIndex is of type Top
- Good: IRCConnection.directMessageSubscribers is of type { IdentitySet UndefinedObject }
- Good: IRCConnection.channelListBeingBuilt is of type { UndefinedObject OrderedCollection }
- Good: IRCConnection.protocolMessagesToSend is of type { UndefinedObject OrderedCollection }
- Bad: IRCConnection.sendBuffer is of type Top
- Bad: IRCConnection.server is of type Top
- Good: IRCConnection.motdBeingBuilt is of type { UndefinedObject WriteStream }
- Good: IRCConnection.protocolMessageSubscribers is of type { IdentitySet UndefinedObject }
- Bad: IRCConnection.motd is of type { SequenceableCollection++ Integer++ UndefinedObject B3DIndexedQuad B3DPrimitiveRasterizerData B3DIndexedTriangle }

- Bad: IRCConnection.port is of type Top
- Good: IRCConnection.receiveBuffer is of type { String UndefinedObject }
- Good: IRCConnection.socket is of type { Socket UndefinedObject }
- Bad: IRCConnection.userName is of type Top
- Bad: IRCConnection.nick is of type Top
- Good: IRCConnection.channelList is of type { UndefinedObject Array }
- Good: IRCConnection.subscribedChannels is of type { UndefinedObject Dictionary }
- Bad: IRCConnection.fullName is of type Top
- Good: IRCConnection.messagesProcessed is of type { UndefinedObject SmallInteger }
- Good: IRCConnection.consoleText is of type { Text UndefinedObject }
- Bad: IRCDirectMessagesObserver.chatText is of type Top
- Bad: IRCDirectMessagesObserver.talkingTo is of type Top
- Good: IRCDirectMessagesObserver.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCMessage.text is of type Top
- Bad: IRCMessage.sender is of type Top
- Bad: IRCMessage.recipient is of type Top
- Good: IRCMessagePattern.sender is of type UndefinedObject
- Good: IRCMessagePattern.recipient is of type UndefinedObject
- Good: IRCMessageSet.messages is of type UndefinedObject
- Bad: IRCMorph.userName is of type Top
- Bad: IRCMorph.nick is of type Top
- Bad: IRCMorph.server is of type Top
- Good: IRCMorph.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCMorph.fullName is of type Top
- Good: IRCMorph.messageCollections is of type UndefinedObject

- Bad: IRCMorph.consoleText is of type Top
- Bad: IRCMorph.port is of type Top
- Bad: IRCProtocolMessage.arguments is of type Top
- Good: IRCProtocolMessage.command is of type { String++ UndefinedObject Character }
- Bad: IRCProtocolMessage.prefix is of type { SequenceableCollection++ Integer++ UndefinedObject B3DIndexedQuad B3DPrimitiveRasterizerData B3DIndexedTriangle }
- Good: IRCRecipientFilter.recipient is of type UndefinedObject
- Good: CategoriesFile.categories is of type { UndefinedObject Dictionary }
- Bad: Celeste.currentMessages is of type Top
- Good: Celeste.customFilterBlock is of type { UndefinedObject Compiler }
- Bad: Celeste.status is of type Top
- Bad: Celeste.userPassword is of type Top
- Bad: Celeste.currentMsgID is of type Top
- Bad: Celeste.mailDB is of type Top
- Bad: Celeste.currentCategory is of type Top
- Bad: Celeste.lastCategory is of type Top
- Good: Celeste.lastCategoryList is of type UndefinedObject
- Good: Celeste.dateFilter is of type UndefinedObject
- Good: Celeste.currentTOC is of type { Array UndefinedObject OrderedCollection }
- Bad: Celeste.fromFilter is of type Top
- Good: Celeste.formatMessages is of type UndefinedObject
- Good: Celeste.lastCategoryMenu is of type { CustomMenu UndefinedObject }
- Bad: Celeste.messageTextView is of type { PluggableListView++ PluggableListMorph++ SimpleHierarchicalListMorph++ PluggableTextMorph++ PluggableTextView UndefinedObject }

- Bad: Celeste.subjectFilter is of type Top
- Bad: CelesteComposition.textEditor is of type Top
- Bad: CelesteComposition.celeste is of type Top
- Bad: CelesteComposition.messageText is of type Top
- Good: CelesteComposition.morphicWindow is of type { AlignmentMorphBob1 UndefinedObject SystemWindow }
- Good: CelesteComposition.mvcWindow is of type { StandardSystemView UndefinedObject }
- Good: CelesteComposition.attachmentSeparator is of type UndefinedObject
- Good: FancyCelesteComposition.theLinkToInclude is of type { String UndefinedObject }
- Bad: FancyCelesteComposition.to is of type Top
- Bad: FancyCelesteComposition.subject is of type Top
- Good: FancyCelesteComposition.textFields is of type { UndefinedObject Array }
- Good: IndexFile.msgDictionary is of type { PluggableDictionary UndefinedObject }
- Good: IndexFile.logfile is of type { UndefinedObject StandardFileStream }
- Good: IndexFile.timeSortedEntries is of type { UndefinedObject SortedCollection }
- Bad: IndexFileEntry.time is of type Top
- Bad: IndexFileEntry.msgID is of type Top
- Bad: IndexFileEntry.messageFile is of type Top
- Bad: IndexFileEntry.cc is of type Top
- Bad: IndexFileEntry.tocLineCache is of type Top
- Bad: IndexFileEntry.location is of type Top
- Bad: IndexFileEntry.to is of type Top
- Bad: IndexFileEntry.textLength is of type Top
- Bad: IndexFileEntry.subject is of type Top

- Bad: IndexFileEntry.from is of type Top
- Good: MIMEHeaderValue.mainValue is of type { UndefinedObject String Character }
- Good: MIMEHeaderValue.parameters is of type UndefinedObject
- Bad: MIMEPart.content is of type { FloatArray++ String++ LargePositiveInteger++ ByteArray++ OnceOnlyOrderedCollection UndefinedObject Interval SequenceableCollection IntegerArray DescType Bitmap SortedCollection WordArrayForSegment WeakArray ArrayedCollection SoundBuffer StandardSourceFileArray B3DIndexedTriangle Integer GraphicSymbol ShortPointArray ComponentInstance FlippyArray2 UrlArgumentList WordArray TranslatedMethod B3DPrimitiveVertexArray TextLineInterval PointArray DirectoryEntry ShortIntegerArray MacExternalData ShortRunArray Semaphore SmallInteger Array LinkedList Array2D RunArray MappedCollection SourceFileArray Pixmap Text AEDesc B3DPrimitiveRasterizerData B3DIndexedQuad OrderedCollection OSAID ApplescriptInstance Heap }
- Good: MIMEPart.parts is of type { Array UndefinedObject OrderedCollection }
- Bad: MIMEPart.separator is of type Top
- Bad: MIMEPart.text is of type Top
- Good: MIMEPart.fields is of type { UndefinedObject Dictionary }
- Bad: MailDB.rootFilename is of type Top
- Bad: MailDB.indexFile is of type Top
- Bad: MailDB.messageFile is of type Top
- Bad: MailDB.categoriesFile is of type Top
- Bad: MailDBFile.filename is of type Top
- Bad: MailMessage.time is of type Top
- Bad: MailMessage.separator is of type Top
- Bad: MailMessage.cc is of type Top
- Good: MailMessage.body is of type { UndefinedObject MIMEDocument }
- Bad: MailMessage.to is of type Top
- Bad: MailMessage.text is of type Top

- Good: MailMessage.subject is of type { String UndefinedObject }
- Good: MailMessage.fields is of type { UndefinedObject Dictionary }
- Bad: MailMessage.from is of type Top
- Good: MailMessage.parts is of type { Array UndefinedObject OrderedCollection }
- Bad: MailNotifier.lastConnectTime is of type Top
- Bad: MailNotifier.messageCount is of type Top
- Good: MailNotifier.password is of type UndefinedObject
- Good: MailNotifier.socket is of type { UndefinedObject POPSocket }
- Good: MessageFile.file is of type { CrLfFileStream UndefinedObject }
- Bad: ReadNewsInboxFile.currentNewsgroup is of type Top
- Good: ReadNewsInboxFile.msgBuffer is of type { UndefinedObject WriteStream }
- Bad: TextMessageLink.message is of type Top
- Bad: RBAssignmentNode.variable is of type Top
- Bad: RBAssignmentNode.assignment is of type Top
- Bad: RBAssignmentNode.value is of type Top
- Good: RBBlockNode.colons is of type { UndefinedObject OrderedCollection }
- Bad: RBBlockNode.bar is of type Top
- Bad: RBBlockNode.right is of type Top
- Bad: RBBlockNode.left is of type Top
- Bad: RBBlockNode.body is of type Top
- Bad: RBBlockNode.arguments is of type Top
- Bad: RBCascadeNode.messages is of type Top
- Good: RBCascadeNode.semicolons is of type { UndefinedObject OrderedCollection }
- Good: RBFormatter.codeStream is of type { UndefinedObject WriteStream }
- Bad: RBFormatter.lineStart is of type Top

- Bad: RBFormatter.firstLineLength is of type Top
- Good: RBFormatter.tabs is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: RBLiteralNode.token is of type Top
- Bad: RBMessageNode.arguments is of type Top
- Bad: RBMessageNode.receiver is of type Top
- Bad: RBMessageNode.selector is of type Top
- Bad: RBMessageNode.selectorParts is of type Top
- Bad: RBMethodNode.tags is of type Object++
- Bad: RBMethodNode.selector is of type Top
- Bad: RBMethodNode.selectorParts is of type Top
- Bad: RBMethodNode.body is of type Top
- Bad: RBMethodNode.source is of type Top
- Bad: RBMethodNode.arguments is of type Top
- Bad: RBOptimizedNode.body is of type Top
- Bad: RBOptimizedNode.right is of type Top
- Bad: RBOptimizedNode.left is of type Top
- Good: RBParser.scanner is of type { RBScanner UndefinedObject }
- Good: RBParser.tags is of type { UndefinedObject OrderedCollection }
- Bad: RBParser.source is of type Top
- Good: RBParser.emptyStatements is of type { True UndefinedObject False }
- Bad: RBParser.currentToken is of type Top
- Good: RBParser.negatedNumbers is of type { True UndefinedObject False }
- Good: RBParser.errorBlock is of type { UndefinedObject a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType }
- Bad: RBParser.nextToken is of type Top

- Good: RBPatternMessageNode.isCascadeList is of type { True UndefinedObject False }
- Good: RBPatternMessageNode.isList is of type { True UndefinedObject False }
- Good: RBPatternMethodNode.isList is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.recurseInto is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isLiteral is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isStatement is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isAnything is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isList is of type { True UndefinedObject False }
- Good: RBProgramNode.parent is of type { RBMessageNode++ RBBlockNode++ RBMethodNode++ RBSequenceNode ZipEncoderNode RBOptimizedNode RBAssignmentNode RBCascadeNode UndefinedObject RBArrayNode RBReturnNode }
- Bad: RBProgramNode.comments is of type Top
- Bad: RBReturnNode.return is of type Top
- Bad: RBReturnNode.value is of type Top
- Bad: RBSequenceNode.rightBar is of type Top
- Good: RBSequenceNode.periods is of type { UndefinedObject OrderedCollection }
- Bad: RBSequenceNode.temporaries is of type Top
- Bad: RBSequenceNode.statements is of type Top
- Bad: RBSequenceNode.leftBar is of type Top
- Good: RBValueNode.parentheses is of type { UndefinedObject OrderedCollection }
- Bad: RBVariableNode.token is of type Top
- Bad: ADPCMCodec.index is of type Top

- Good: ADPCMCodec.indexTable is of type { Array UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.deltaSignMask is of type Top
- Bad: ADPCMCodec.bitPosition is of type Top
- Bad: ADPCMCodec.encodedBytes is of type Top
- Good: ADPCMCodec.stepSizeTable is of type { Array UndefinedObject SoundBuffer }
- Good: ADPCMCodec.sampleIndex is of type { SmallInteger LargeNegativeInteger LargePositiveInteger UndefinedObject Array }
- Good: ADPCMCodec.rightSamples is of type { UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.byteIndex is of type Top
- Good: ADPCMCodec.frameSizeMask is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ADPCMCodec.bitsPerSample is of type Top
- Bad: ADPCMCodec.predicted is of type Top
- Bad: ADPCMCodec.deltaValueHighBit is of type Top
- Bad: ADPCMCodec.deltaValueMask is of type Top
- Bad: ADPCMCodec.currentByte is of type Top
- Bad: ADPCMCodec.samples is of type Top
- Good: AIFFFileReader.channelData is of type { UndefinedObject Array }
- Good: AIFFFileReader.frameCount is of type { UndefinedObject SmallInteger }
- Bad: AIFFFileReader.isLooped is of type Top
- Bad: AIFFFileReader.gain is of type Top
- Bad: AIFFFileReader.in is of type { ReadStream++ RWBinaryOrTextStream++ FileStream++ UndefinedObject GZipSurrogateStream DummyStream }
- Bad: AIFFFileReader.fileType is of type Top
- Bad: AIFFFileReader.pitch is of type Top

- Good: AIFFFileReader.markers is of type { UndefinedObject Array }
- Bad: AIFFFileReader.channelCount is of type Top
- Bad: AIFFFileReader.bitsPerSample is of type Top
- Good: AIFFFileReader.mergeIfStereo is of type { True UndefinedObject False }
- Good: AIFFFileReader.skipDataChunk is of type { True UndefinedObject False }
- Bad: AIFFFileReader.samplingRate is of type Top
- Bad: AbstractSound.envelopes is of type Top
- Bad: AbstractSound.mSecsSinceStart is of type Top
- Bad: AbstractSound.scaledVolLimit is of type Top
- Bad: AbstractSound.scaledVol is of type Top
- Bad: AbstractSound.samplesUntilNextControl is of type Top
- Bad: AbstractSound.scaledVolIncr is of type Top
- Good: CompressedSoundData.perceivedPitch is of type { UndefinedObject Float }
- Good: CompressedSoundData.codecName is of type { UndefinedObject Symbol }
- Good: CompressedSoundData.channels is of type { UndefinedObject Array }
- Bad: CompressedSoundData.gain is of type Top
- Bad: CompressedSoundData.firstSample is of type Top
- Bad: CompressedSoundData.soundClassName is of type Top
- Bad: CompressedSoundData.cachedSound is of type { WaveletCodec MuLawCodec ADPCMCodec SoundCodec UndefinedObject LoopedSampledSound GSMCodec SampledSound }
- Bad: CompressedSoundData.loopLength is of type Top
- Good: CompressedSoundData.samplingRate is of type UndefinedObject
- Bad: CompressedSoundData.loopEnd is of type Top
- Bad: Envelope.target is of type Top
- Bad: Envelope.scale is of type Top

- Good: Envelope.updateSelector is of type { UndefinedObject #pitch: #modulation: #ratio: }
- Bad: Envelope.loopEndMSecs is of type { Magnitude++ UndefinedObject }
- Bad: Envelope.endMSecs is of type Top
- Bad: Envelope.currValue is of type Top
- Bad: Envelope.loopStartIndex is of type Top
- Bad: Envelope.valueIncr is of type Top
- Good: Envelope.noChangesDuringLoop is of type { True UndefinedObject False }
- Bad: Envelope.nextRecomputeTime is of type Top
- Bad: Envelope.loopEndIndex is of type Top
- Bad: Envelope.loopMSecs is of type Top
- Bad: Envelope.loopStartMSecs is of type Top
- Bad: Envelope.decayScale is of type Top
- Bad: Envelope.points is of type Top
- Bad: Envelope.lastValue is of type Top
- Bad: FFT.permTable is of type Top
- Bad: FFT.nu is of type Top
- Bad: FFT.n is of type Top
- Bad: FFT.sinTable is of type Top
- Bad: FFT.imagData is of type Top
- Good: FFT.window is of type { UndefinedObject FloatArray }
- Good: FFT.realData is of type { Array UndefinedObject FloatArray }
- Bad: FMSound.initialCount is of type Top
- Bad: FMSound.multiplier is of type Top
- Bad: FMSound.scaledOffsetIndex is of type Top
- Bad: FMSound.waveTable is of type Top
- Bad: FMSound.scaledWaveTableSize is of type Top

- Bad: FMSSound.scaledIndex is of type Top
- Bad: FMSSound.normalizedModulation is of type Top
- Bad: FMSSound.scaledOffsetIndexIncr is of type Top
- Bad: FMSSound.modulation is of type Top
- Bad: FMSSound.scaledIndexIncr is of type Top
- Bad: FMSSound.count is of type Top
- Good: FWT.transform is of type { UndefinedObject Array }
- Bad: FWT.beta is of type Top
- Good: FWT.gTilde is of type { UndefinedObject Array }
- Bad: FWT.coeffs is of type Top
- Good: FWT.g is of type { UndefinedObject Array }
- Bad: FWT.nSamples is of type Top
- Bad: FWT.nLevels is of type Top
- Bad: FWT.alpha is of type Top
- Good: FWT.h is of type { UndefinedObject Array }
- Good: FWT.samples is of type { UndefinedObject Array }
- Good: FWT.hTilde is of type { UndefinedObject Array }
- Bad: GSMCodec.encodeState is of type Top
- Bad: GSMCodec.decodeState is of type Top
- Bad: LoopedSampledSound.initialCount is of type Top
- Bad: LoopedSampledSound.perceivedPitch is of type Top
- Bad: LoopedSampledSound.scaledLoopLength is of type Top
- Bad: LoopedSampledSound.lastSample is of type Top
- Bad: LoopedSampledSound.gain is of type Top
- Bad: LoopedSampledSound.scaledIndexIncr is of type Top
- Bad: LoopedSampledSound.releaseCount is of type Top
- Bad: LoopedSampledSound.firstSample is of type Top
- Bad: LoopedSampledSound.sampleCountForRelease is of type Top

- Bad: LoopedSampledSound.rightSamples is of type Top
- Bad: LoopedSampledSound.leftSamples is of type Top
- Bad: LoopedSampledSound.scaledIndex is of type Top
- Bad: LoopedSampledSound.originalSamplingRate is of type Top
- Bad: LoopedSampledSound.count is of type Top
- Bad: LoopedSampledSound.loopEnd is of type Top
- Good: MixedSound.soundDone is of type { UndefinedObject Array }
- Good: MixedSound.sounds is of type { UndefinedObject Array }
- Good: MixedSound.leftVols is of type { UndefinedObject Array }
- Good: MixedSound.rightVols is of type { UndefinedObject Array }
- Bad: PitchEnvelope.centerPitch is of type Top
- Bad: PluckedSound.initialCount is of type Top
- Good: PluckedSound.ring is of type { UndefinedObject SoundBuffer }
- Bad: PluckedSound.scaledIndexLimit is of type Top
- Bad: PluckedSound.scaledIndex is of type Top
- Bad: PluckedSound.scaledIndexIncr is of type Top
- Bad: PluckedSound.count is of type Top
- Good: RandomEnvelope.rand is of type { Random UndefinedObject }
- Good: RandomEnvelope.highLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.lowLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.delta is of type { UndefinedObject Float }
- Bad: RepeatingSound.iteration is of type Top
- Bad: RepeatingSound.iterationCount is of type Top
- Bad: RepeatingSound.sound is of type Top
- Bad: RepeatingSound.samplesPerIteration is of type Top
- Bad: RestSound.initialCount is of type Top
- Bad: RestSound.count is of type Top
- Good: ReverbSound.tapGains is of type { UndefinedObject Bitmap }

- Good: ReverbSound.bufferSize is of type { Bitmap LargeNegativeInteger LargePositiveInteger UndefinedObject SmallInteger }
- Good: ReverbSound.rightBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.leftBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.tapCount is of type { UndefinedObject SmallInteger }
- Good: ReverbSound.tapDelays is of type { UndefinedObject Bitmap }
- Bad: ReverbSound.bufferIndex is of type Top
- Good: ReverbSound.sound is of type UndefinedObject
- Good: SampledInstrument.sustainedSoft is of type { UndefinedObject Array }
- Good: SampledInstrument.staccatoSoft is of type { UndefinedObject Array }
- Good: SampledInstrument.staccatoLoud is of type { UndefinedObject Array }
- Good: SampledInstrument.sustainedThreshold is of type { UndefinedObject Float }
- Bad: SampledInstrument.sustainedLoud is of type Top
- Good: SampledInstrument.loudThreshold is of type { UndefinedObject Float }
- Bad: SampledSound.initialCount is of type Top
- Bad: SampledSound.samples is of type Top
- Bad: SampledSound.scaledIncrement is of type Top
- Bad: SampledSound.scaledIndex is of type Top
- Bad: SampledSound.indexHighBits is of type Top
- Bad: SampledSound.samplesSize is of type Top
- Bad: SampledSound.originalSamplingRate is of type Top
- Bad: SampledSound.count is of type Top
- Good: SequentialSound.sounds is of type { UndefinedObject Array }

- Good: SequentialSound.currentIndex is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: Sonogram.lastX is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: Sonogram.pixValMap is of type { UndefinedObject Bitmap }
- Good: Sonogram.maxVal is of type { UndefinedObject Float }
- Good: Sonogram.minVal is of type { UndefinedObject Float }
- Good: Sonogram.scrollDelta is of type { UndefinedObject SmallInteger }
- Good: Sonogram.columnForm is of type { Form UndefinedObject }
- Bad: SoundInputStream.mutex is of type Top
- Bad: SoundInputStream.bufferSize is of type Top
- Good: SoundRecorder.currentBuffer is of type { UndefinedObject SoundBuffer }
- Bad: SoundRecorder.recordProcess is of type Top
- Good: SoundRecorder.codec is of type { GSMCodec UndefinedObject }
- Good: SoundRecorder.desiredSampleRate is of type { UndefinedObject Float }
- Bad: SoundRecorder.nextIndex is of type Top
- Good: SoundRecorder.meteringBuffer is of type { UndefinedObject SoundBuffer }
- Bad: SoundRecorder.meterLevel is of type Top
- Good: SoundRecorder.stereo is of type { False UndefinedObject }
- Good: SoundRecorder.recordLevel is of type { UndefinedObject Float }
- Good: SoundRecorder.soundPlaying is of type { SampledSound SequentialSound UndefinedObject ChatRecorder SoundInputStream SoundRecorder }
- Good: SoundRecorder.recordedBuffers is of type { Array UndefinedObject OrderedCollection }
- Good: SoundRecorder.paused is of type { True UndefinedObject False }
- Bad: SoundRecorder.samplingRate is of type Top

- Good: SoundRecorder.recordedSound is of type { SampledSound SequentialSound UndefinedObject ChatRecorder SoundInputStream SoundRecorder }
- Good: SoundRecorder.bufferAvailableSema is of type { Semaphore UndefinedObject }
- Bad: VolumeEnvelope.mSecsForChange is of type { Magnitude++ UndefinedObject }
- Bad: VolumeEnvelope.targetVol is of type Top
- Good: VolumeEnvelope.currentVol is of type UndefinedObject
- Bad: WaveletCodec.alpha is of type Top
- Bad: WaveletCodec.beta is of type Top
- Good: WaveletCodec.fwt is of type { FWT UndefinedObject }
- Bad: WaveletCodec.samplesPerFrame is of type Top
- Bad: WaveletCodec.nLevels is of type Top
- Bad: TestInterfaceBase.duration is of type Top
- Bad: TestInterfaceBase.classPattern is of type Top
- Bad: TestInterfaceBase.result is of type Top
- Bad: TestInterfaceBase.selectorPattern is of type Top
- Good: TestModel.failureList is of type { UndefinedObject OrderedCollection }
- Good: TestModel.patternHistory is of type { UndefinedObject OrderedCollection }
- Good: TestModel.errorList is of type { UndefinedObject OrderedCollection }
- Bad: TestModel.summaryText is of type { Boolean++ B3DPrimitiveRasterizerData B3DTexture2Array Integer PointArray ByteArray CompiledApplescript ArrayedCollection SoundBuffer ExternalAddress ShortIntegerArray KlattFrame B3DMaterialColor GraphicSymbol B3DVector3 FlippyArray2 WeakArray Pixmap WordArray B3DVector2Array B3DIndexedQuad B3DVector3Array DescType B3DPrimitiveVertexArray B3DRotation B3DIndexedTriangleArray WordArrayForSegment B3DIndexedQuadArray String B3DPrimitiveLight LargePositiveInteger ComponentInstance StandardSourceFileArray B3DIndexedTriangle FloatArray B3DColor4 OnceOnlyOrderedCollection TranslatedMethod }

DirectoryEntry Array2D B3DFloatArray AEDesc Symbol RunArray
 B3DInplaceArray Text Array B3DMaterial B3DRotationArray
 ApplescriptInstance MappedCollection B3DColor4Array Interval Heap
 UrlArgumentList SourceFileArray B3DLightAttenuation
 ShortPointArray B3DVector4 B3DVector2 SequenceableCollection
 MacExternalData OrderedCollection B3DExponentTable
 B3DViewingFrustum IntegerArray ShortRunArray SortedCollection
 Bitmap LinkedList B3DMatrix4x4 Semaphore TextLineInterval
 LargeNegativeInteger CompiledMethod OSAID UndefinedObject
 SmallInteger }

- Bad: TestModel.summaryTextM is of type { PluggableTextMorph++ PluggableTextView UndefinedObject }
- Good: TestModel.summaryTextV is of type { PluggableTextView UndefinedObject }
- Good: TestModel.updateColorSelector is of type { UndefinedObject #updateColorM #updateColorV }
- Good: TestModel.patternTextV is of type { PluggableTextView UndefinedObject }
- Bad: TestModel.patternTextM is of type { PluggableTextMorph++ PluggableTextView UndefinedObject }
- Bad: TestModel.detailsText is of type Top
- Bad: BitBltSimulation.sy is of type Top
- Bad: BitBltSimulation.halfToneBase is of type Top
- Good: BitBltSimulation.cmBlueShift is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBltSimulation.destWidth is of type Top
- Bad: BitBltSimulation.destX is of type Top
- Bad: BitBltSimulation.width is of type Top
- Bad: BitBltSimulation.scanString is of type Top
- Bad: BitBltSimulation.sourceBits is of type Top
- Bad: BitBltSimulation.scanStop is of type Top
- Bad: BitBltSimulation.dy is of type Top
- Good: BitBltSimulation.warpBitShiftTable is of type { CArrayAccessor UndefinedObject }

- Bad: BitBltSimulation.destPixSize is of type Top
- Bad: BitBltSimulation.pixPerWord is of type Top
- Good: BitBltSimulation.ditherValues16 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.cmRedMask is of type Top
- Bad: BitBltSimulation.warpSrcMask is of type Top
- Bad: BitBltSimulation.dstBitShift is of type Top
- Bad: BitBltSimulation.destIndex is of type Top
- Bad: BitBltSimulation.sourceIndex is of type Top
- Bad: BitBltSimulation.clipX is of type Top
- Good: BitBltSimulation.hDir is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.nWords is of type Top
- Bad: BitBltSimulation.clipHeight is of type Top
- Bad: BitBltSimulation.bitBltOop is of type Top
- Bad: BitBltSimulation.preload is of type Top
- Bad: BitBltSimulation.opTable is of type Top
- Bad: BitBltSimulation.sourceForm is of type Top
- Bad: BitBltSimulation.warpAlignMask is of type Top
- Bad: BitBltSimulation.skew is of type Top
- Good: BitBltSimulation.cmDeltaBits is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: BitBltSimulation.ditherMatrix4x4 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.sourceY is of type Top
- Bad: BitBltSimulation.scanStart is of type Top
- Good: BitBltSimulation.cmGreenShift is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBltSimulation.destBits is of type Top
- Bad: BitBltSimulation.destPitch is of type Top

- Bad: BitBltSimulation.height is of type Top
- Bad: BitBltSimulation.sourcePitch is of type Top
- Bad: BitBltSimulation.destY is of type Top
- Bad: BitBltSimulation.affectedL is of type Top
- Good: BitBltSimulation.maskTable is of type { UndefinedObject Array }
- Good: BitBltSimulation.scanDisplayFlag is of type { True UndefinedObject False }
- Bad: BitBltSimulation.mask1 is of type Top
- Bad: BitBltSimulation.destDelta is of type Top
- Good: BitBltSimulation.noHalftone is of type { True UndefinedObject False }
- Bad: BitBltSimulation.clipWidth is of type Top
- Bad: BitBltSimulation.destForm is of type Top
- Bad: BitBltSimulation.sx is of type Top
- Bad: BitBltSimulation.clipY is of type Top
- Bad: BitBltSimulation.scanRightX is of type Top
- Bad: BitBltSimulation.cmBlueMask is of type Top
- Bad: BitBltSimulation.halftoneHeight is of type Top
- Bad: BitBltSimulation.affectedT is of type Top
- Bad: BitBltSimulation.sourcePixSize is of type Top
- Good: BitBltSimulation.cmRedShift is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: BitBltSimulation.noSource is of type { True UndefinedObject False }
- Bad: BitBltSimulation.dx is of type Top
- Bad: BitBltSimulation.destMask is of type Top
- Bad: BitBltSimulation.affectedB is of type Top
- Bad: BitBltSimulation.cmGreenMask is of type Top
- Good: BitBltSimulation.hasSurfaceLock is of type { True UndefinedObject False }

- Bad: BitBltSimulation.stopCode is of type Top
- Bad: BitBltSimulation.combinationRule is of type Top
- Bad: BitBltSimulation.bitCount is of type Top
- Good: BitBltSimulation.vDir is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.destHeight is of type Top
- Good: BitBltSimulation.cmBitsPerColor is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.bbH is of type Top
- Bad: BitBltSimulation.bbW is of type Top
- Bad: BitBltSimulation.srcWidth is of type Top
- Bad: BitBltSimulation.affectedR is of type Top
- Good: BitBltSimulation.ditherThresholds16 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.sourceDelta is of type Top
- Good: BitBltSimulation.warpSrcShift is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBltSimulation.halfToneForm is of type Top
- Bad: BitBltSimulation.mask2 is of type Top
- Bad: BitBltSimulation.scanXTable is of type Top
- Bad: BitBltSimulation.scanStopArray is of type Top
- Bad: BitBltSimulation.sourceAlpha is of type Top
- Bad: BitBltSimulation.colorMap is of type Top
- Good: BitBltSimulation.warpAlignShift is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBltSimulation.sourceX is of type Top
- Bad: BitBltSimulation.srcBitShift is of type Top
- Bad: BitBltSimulation.srcHeight is of type Top
- Bad: Interpreter.activeContext is of type Top
- Bad: Interpreter.nextWakeupTick is of type Top

- Bad: Interpreter.localIP is of type Top
- Bad: Interpreter.localHomeContext is of type Top
- Good: Interpreter.methodCache is of type { UndefinedObject Array }
- Bad: Interpreter.interruptKeycode is of type Top
- Good: Interpreter.semaphoresToSignalCountA is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: Interpreter.interruptCheckCounterFeedBackReset is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: Interpreter.interpreterVersion is of type UndefinedObject
- Good: Interpreter.obsoleteNamedPrimitiveTable is of type { CArrayAccessor UndefinedObject }
- Good: Interpreter.interpreterProxy is of type { UndefinedObject InterpreterSimulator InterpreterSimulatorMSB InterpreterSimulatorLSB }
- Bad: Interpreter.receiver is of type Top
- Bad: Interpreter.stackPointer is of type Top
- Bad: Interpreter.receiverClass is of type Top
- Good: Interpreter.obsoleteIndexedPrimitiveTable is of type { CArrayAccessor UndefinedObject }
- Bad: Interpreter.successFlag is of type Top
- Good: Interpreter.compilerHooks is of type UndefinedObject
- Bad: Interpreter.fullScreenFlag is of type { Interpreter InterpreterSimulator InterpreterSimulatorLSB UndefinedObject InterpreterSimulatorMSB }
- Bad: Interpreter.primitiveIndex is of type Top
- Good: Interpreter.semaphoresToSignalB is of type { UndefinedObject Array }
- Bad: Interpreter.compilerInitialized is of type Top
- Bad: Interpreter.localSP is of type Top
- Bad: Interpreter.instructionPointer is of type Top

- Good: Interpreter.semaphoresUseBufferA is of type { True UndefinedObject False }
- Good: Interpreter.deferDisplayUpdates is of type { True UndefinedObject False }
- Bad: Interpreter.theHomeContext is of type Top
- Bad: Interpreter.extraVMMemory is of type Top
- Bad: Interpreter.method is of type Top
- Good: Interpreter.pendingFinalizationSignals is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: Interpreter.newMethod is of type Top
- Good: Interpreter.semaphoresToSignalA is of type { UndefinedObject Array }
- Bad: Interpreter.methodClass is of type Top
- Bad: Interpreter.newNativeMethod is of type Top
- Good: Interpreter.atCache is of type { UndefinedObject Array }
- Bad: Interpreter.argumentCount is of type Top
- Bad: Interpreter.currentBytecode is of type Top
- Good: Interpreter.interruptPending is of type { False UndefinedObject }
- Good: Interpreter.interruptChecksEveryNms is of type { UndefinedObject SmallInteger }
- Bad: Interpreter.nextPollTick is of type Top
- Bad: Interpreter.lkupClass is of type Top
- Good: Interpreter.reclaimableContextCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: Interpreter.savedWindowSize is of type Top
- Bad: Interpreter.lastTick is of type Top
- Good: Interpreter.semaphoresToSignalCountB is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: Interpreter.messageSelector is of type Top

- Bad: Interpreter.showSurfaceFn is of type Top
- Good: InterpreterSimulator.myBitBlt is of type { False UndefinedObject BitBltSimulator }
- Good: InterpreterSimulator.traceOn is of type { UndefinedObject True }
- Bad: InterpreterSimulator.imageName is of type Top
- Good: InterpreterSimulator.pluginList is of type { UndefinedObject Array }
- Good: InterpreterSimulator.sendCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: InterpreterSimulator.displayForm is of type { Form UndefinedObject }
- Good: InterpreterSimulator.mappedPluginEntries is of type { UndefinedObject Array }
- Good: InterpreterSimulator.filesOpen is of type { UndefinedObject OrderedCollection }
- Good: InterpreterSimulator.byteCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.signalLowSpace is of type { True UndefinedObject False }
- Bad: ObjectMemory.tenuringThreshold is of type Top
- Bad: ObjectMemory.lastHash is of type Top
- Bad: ObjectMemory.statIncrGCMSecs is of type Top
- Good: ObjectMemory.remapBuffer is of type { UndefinedObject Array }
- Bad: ObjectMemory.trueObj is of type Top
- Bad: ObjectMemory.statFullGCMSecs is of type Top
- Bad: ObjectMemory.freeLargeContexts is of type Top
- Bad: ObjectMemory.lowSpaceThreshold is of type Top
- Bad: ObjectMemory.allocationsBetweenGCs is of type Top
- Good: ObjectMemory.interruptCheckCounter is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ObjectMemory.freeContexts is of type Top

- Bad: ObjectMemory.compStart is of type Top
- Bad: ObjectMemory.youngStart is of type Top
- Bad: ObjectMemory.compEnd is of type Top
- Bad: ObjectMemory.totalObjectFoundAtStartup is of type Top
- Bad: ObjectMemory.memoryLimit is of type Top
- Bad: ObjectMemory.endOfMemory is of type Top
- Bad: ObjectMemory.specialObjectsOop is of type Top
- Good: ObjectMemory.statFullGCs is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.statTenures is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ObjectMemory.nilObj is of type Top
- Bad: ObjectMemory.child is of type Top
- Bad: ObjectMemory.fwdTableLast is of type Top
- Bad: ObjectMemory.fwdTableNext is of type Top
- Good: ObjectMemory.rootTableCount is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.allocationCount is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ObjectMemory.falseObj is of type Top
- Good: ObjectMemory.remapBufferCount is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ObjectMemory.parentField is of type Top
- Bad: ObjectMemory.field is of type Top
- Good: ObjectMemory.memory is of type { Interpreter UndefinedObject
InterpreterSimulatorMSB InterpreterSimulatorLSB Bitmap
InterpreterSimulator }
- Bad: ObjectMemory.freeBlock is of type Top
- Good: ObjectMemory.statRootTableOverflows is of type {
UndefinedObject LargePositiveInteger SmallInteger
LargeNegativeInteger }

- Good: ObjectMemory.rootTable is of type { UndefinedObject Array }
- Good: ObjectMemory.statIncrGCs is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.displayBits is of type { UndefinedObject SmallInteger }
- Bad: SystemMonitor.vmParameters is of type Top
- Bad: SystemMonitor.gcHighWaterMark is of type Top
- Bad: SystemMonitor.baselineSkip is of type Top
- Bad: SystemMonitor.prevAllocCount is of type Top
- Bad: SystemMonitor.prevDeltaIncrGC is of type Top
- Bad: SystemMonitor.prevMcMiss is of type Top
- Good: SystemMonitor.window is of type { UndefinedObject Rectangle }
- Bad: SystemMonitor.prevDeltaFullGC is of type Top
- Bad: SystemMonitor.prevFullGC is of type Top
- Good: SystemMonitor.valSelectors is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIncrGC is of type Top
- Bad: SystemMonitor.prevMsClock is of type Top
- Good: SystemMonitor.maxValues is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevAllocRate is of type Top
- Bad: SystemMonitor.gcLowWaterMark is of type Top
- Good: SystemMonitor.labels is of type { UndefinedObject Array }
- Good: SystemMonitor.minValues is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIcHit is of type Top
- Bad: SystemMonitor.prevMcHit is of type Top
- Good: SystemTracer.hashGenerator is of type { Random UndefinedObject }
- Bad: SystemTracer.maxOop is of type Top
- Good: SystemTracer.map is of type UndefinedObject
- Good: SystemTracer.initialProcess is of type UndefinedObject

- Good: SystemTracer.oopMap is of type { UndefinedObject Array }
- Bad: SystemTracer.specialObjects is of type Top
- Good: SystemTracer.file is of type { CrLfFileStream UndefinedObject }
- Good: SystemTracer.cleaningUp is of type { False UndefinedObject }
- Good: SystemTracer.writeDict is of type { UndefinedObject Dictionary }
- Good: SystemTracer.imageHeaderSize is of type { UndefinedObject SmallInteger }
- Good: SystemTracer.compactClasses is of type { UndefinedObject Array }
- Good: SystemTracer.replacementClasses is of type { UndefinedObject Dictionary }
- Good: ChineseCheckerPiece.myBoard is of type { ChineseCheckers UndefinedObject }
- Bad: ChineseCheckerPiece.boardLoc is of type Top
- Good: ChineseCheckers.movePhase is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ChineseCheckers.board is of type { UndefinedObject Array }
- Good: ChineseCheckers.plannedMovePhase is of type UndefinedObject
- Good: ChineseCheckers.sixDeltas is of type { UndefinedObject Array }
- Bad: ChineseCheckers.plannedMove is of type Top
- Bad: ChineseCheckers.whoseMove is of type Top
- Good: ChineseCheckers.teams is of type { UndefinedObject Array }
- Good: ChineseCheckers.colors is of type { UndefinedObject Array }
- Good: ChineseCheckers.homes is of type { UndefinedObject Array }
- Good: ChineseCheckers.animateMoves is of type { True UndefinedObject False }
- Good: ChineseCheckers.pathMorphs is of type { UndefinedObject OrderedCollection }
- Good: ChineseCheckers.autoPlay is of type { UndefinedObject Array }
- Good: CipherPanel.originalMorphs is of type { UndefinedObject Array }

- Good: CipherPanel.decodingMorphs is of type { UndefinedObject Array }
- Good: CipherPanel.quote is of type { UndefinedObject String Character }
- Good: CipherPanel.originalText is of type UndefinedObject
- Good: CrosticPanel.crosticPanel is of type UndefinedObject
- Good: CrosticPanel.cluesCol2 is of type { AlignmentMorph UndefinedObject }
- Bad: CrosticPanel.quote is of type Top
- Good: CrosticPanel.answers is of type { UndefinedObject OrderedCollection }
- Good: CrosticPanel.clues is of type { UndefinedObject OrderedCollection }
- Good: CrosticPanel.cluesPanel is of type { AlignmentMorph UndefinedObject }
- Good: CrosticPanel.quotePanel is of type { CrosticQuotePanel UndefinedObject }
- Good: CrosticQuotePanel.cluesPanel is of type { CrosticPanel UndefinedObject }
- Good: FreeCell.lastGameLost is of type UndefinedObject
- Good: FreeCell.cardsRemainingDisplay is of type { LedMorph UndefinedObject }
- Good: FreeCell.gameNumberDisplay is of type { LedMorph UndefinedObject }
- Good: FreeCell.state is of type { UndefinedObject #sameGame #pickGame #won #newGame #lost }
- Good: FreeCell.myFillStyle is of type { UndefinedObject GradientFillStyle }
- Good: FreeCell.elapsedTimeDisplay is of type { UndefinedObject LedTimerMorph }
- Good: FreeCell.board is of type { FreeCellBoard UndefinedObject }
- Good: FreeCell.autoMoveRecursionCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }

- Bad: FreeCellBoard.target is of type Top
- Bad: FreeCellBoard.actionSelector is of type Top
- Good: FreeCellBoard.stacks is of type { UndefinedObject Array }
- Good: FreeCellBoard.freeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.homeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.cardDeck is of type { PlayingCardDeck UndefinedObject }
- Good: FreeCellBoard.lastCardDeck is of type UndefinedObject
- Good: FreeCellStatistics.streakLosses is of type { UndefinedObject LargeNegativeInteger SmallInteger LargePositiveInteger }
- Bad: FreeCellStatistics.lastGameWon is of type Top
- Bad: FreeCellStatistics.lastGameLost is of type Top
- Good: FreeCellStatistics.currentCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.currentType is of type { UndefinedObject #wins #losses }
- Good: FreeCellStatistics.statsMorph is of type { TextMorph UndefinedObject }
- Good: FreeCellStatistics.window is of type UndefinedObject
- Good: FreeCellStatistics.sessionLosses is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.lossesWithReplay is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.sessionWins is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.totalWins is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.streakWins is of type { UndefinedObject LargeNegativeInteger SmallInteger LargePositiveInteger }
- Good: FreeCellStatistics.totalLosses is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.winsWithReplay is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }

- Bad: LedDigitMorph.digit is of type Top
- Good: LedDigitMorph.highlighted is of type { True UndefinedObject False }
- Good: LedMorph.digits is of type { UndefinedObject SmallInteger }
- Bad: LedMorph.flash is of type Top
- Good: LedMorph.flashing is of type { True UndefinedObject False }
- Bad: LedMorph.value is of type Top
- Good: LedTimerMorph.counting is of type { True UndefinedObject False }
- Bad: LedTimerMorph.startSeconds is of type Top
- Good: PlayingCard.cardNo is of type { UndefinedObject LargeNegativeInteger SmallInteger LargePositiveInteger }
- Bad: PlayingCard.suitNo is of type Top
- Good: PlayingCard.suit is of type UndefinedObject
- Good: PlayingCard.cardForm is of type { Form UndefinedObject }
- Bad: PlayingCardDeck.target is of type Top
- Bad: PlayingCardDeck.seed is of type Top
- Good: PlayingCardDeck.acceptCardSelector is of type { PlayingCardDeck UndefinedObject #acceptCard:onStack: #acceptSingleCard:on: }
- Good: PlayingCardDeck.cardDraggedSelector is of type { PlayingCardDeck UndefinedObject #dragCard:fromHome: #dragCard:fromStack: }
- Good: PlayingCardDeck.stackingOrder is of type { UndefinedObject #descending #ascending }
- Good: PlayingCardDeck.cardDroppedSelector is of type { PlayingCardDeck UndefinedObject #cardMoved #cardMovedHome }
- Good: PlayingCardDeck.cardDoubleClickSelector is of type { PlayingCardDeck UndefinedObject #doubleClickInStack:OnCard: }
- Good: PlayingCardDeck.stackingPolicy is of type { UndefinedObject #stagger #single #altStraight #straight }
- Good: PlayingCardDeck.emptyDropPolicy is of type { UndefinedObject #inOrder #any }

- Good: PlayingCardDeck.layout is of type { UndefinedObject #stagger #pile #grid }
- Good: PlayingCardMorph.suitNumber is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: PlayingCardMorph.cardNumber is of type { UndefinedObject LargeNegativeInteger SmallInteger LargePositiveInteger }
- Good: SameGame.scoreDisplay is of type { LedMorph UndefinedObject }
- Good: SameGame.board is of type { UndefinedObject SameGameBoard }
- Good: SameGame.selectionDisplay is of type { LedMorph UndefinedObject }
- Bad: SameGame.helpText is of type { PluggableTextMorph++ StringHolderView++ UndefinedObject }
- Good: SameGameBoard.palette is of type { UndefinedObject OrderedCollection }
- Bad: SameGameBoard.target is of type Top
- Bad: SameGameBoard.columns is of type Top
- Bad: SameGameBoard.actionSelector is of type Top
- Good: SameGameBoard.selectionColor is of type UndefinedObject
- Good: SameGameBoard.flash is of type { True UndefinedObject False }
- Good: SameGameBoard.arguments is of type { UndefinedObject Array }
- Bad: SameGameBoard.rows is of type Top
- Bad: SameGameBoard.protoTile is of type Top
- Bad: SameGameBoard.flashColor is of type Top
- Good: SameGameBoard.selection is of type UndefinedObject
- Bad: SameGameTile.oldSwitchState is of type Top
- Bad: SameGameTile.switchState is of type Top
- Good: SameGameTile.disabled is of type { True UndefinedObject False }
- Good: Tetris.scoreDisplay is of type { LedMorph UndefinedObject }
- Good: Tetris.board is of type { UndefinedObject TetrisBoard }

- Bad: TetrisBlock.shapeInfo is of type Top
- Good: TetrisBlock.board is of type { UndefinedObject TetrisBoard }
- Bad: TetrisBlock.angle is of type Top
- Bad: TetrisBlock.baseCellNumber is of type Top
- Good: TetrisBoard.game is of type { UndefinedObject Tetris }
- Good: TetrisBoard.gameOver is of type { True UndefinedObject False }
- Bad: TetrisBoard.score is of type Top
- Good: TetrisBoard.paused is of type { True UndefinedObject False }
- Good: TetrisBoard.delay is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: TetrisBoard.currentBlock is of type { TetrisBlock UndefinedObject }
- Good: WordGameLetterMorph.predecessor is of type { WordGameLetterMorph UndefinedObject }
- Good: WordGameLetterMorph.lineMorph is of type { UndefinedObject PolygonMorph }
- Good: WordGameLetterMorph.style is of type { UndefinedObject #underlined #boxed #plain }
- Good: WordGameLetterMorph.letterMorph is of type { StringMorph UndefinedObject }
- Bad: WordGameLetterMorph.letter is of type Top
- Good: WordGameLetterMorph.originalLetter is of type UndefinedObject
- Good: WordGameLetterMorph.successor is of type { WordGameLetterMorph UndefinedObject }
- Bad: WordGameLetterMorph.indexInQuote is of type Top
- Good: WordGameLetterMorph.linkedLetters is of type UndefinedObject
- Good: WordGamePanelMorph.letterMorphs is of type { Array UndefinedObject OrderedCollection }
- Good: WordGamePanelMorph.haveTypedHere is of type { True UndefinedObject False }
- Bad: Browser.classOrganizer is of type Top

- Bad: Browser.systemOrganizer is of type Top
- Bad: Browser.messageListIndex is of type Top
- Bad: Browser.messageCategoryListIndex is of type Top
- Bad: Browser.editSelection is of type Top
- Bad: Browser.metaClassOrganizer is of type Top
- Bad: Browser.systemCategoryListIndex is of type Top
- Bad: Browser.metaClassIndicated is of type Top
- Bad: Browser.classListIndex is of type Top
- Bad: ChangedMessageSet.changeSet is of type Top
- Bad: HierarchyBrowser.centralClass is of type Top
- Bad: HierarchyBrowser.classList is of type Top
- Bad: MessageSet.messageList is of type Top
- Bad: MessageSet.autoSelectString is of type Top
- Bad: PackageBrowser.package is of type Top
- Bad: PackageBrowser.packageListIndex is of type Top
- Good: PackageBrowser.packageList is of type UndefinedObject
- Good: ProtocolBrowser.selectedClass is of type UndefinedObject
- Bad: ProtocolBrowser.selectedSelector is of type Top
- Bad: SelectorBrowser.classListIndex is of type Top
- Bad: SelectorBrowser.classList is of type Top
- Bad: SelectorBrowser.selectorIndex is of type Top
- Bad: SelectorBrowser.selectorList is of type Top

4.7 Threshold of 2500

- Bad: PDA.recurringEvents is of type Top
- Good: PDA.peopleList is of type { ArrayedCollection++
UndefinedObject }
- Bad: PDA.date is of type Top
- Good: PDA.dateButtonPressed is of type UndefinedObject

- Bad: PDA.allEvents is of type Top
- Bad: PDA.category is of type Top
- Bad: PDA.currentItem is of type Top
- Good: PDA.scheduleList is of type { ArrayedCollection++ UndefinedObject }
- Good: PDA.categoryListIndex is of type UndefinedObject
- Bad: PDA.allPeople is of type Top
- Bad: PDA.scheduleListIndex is of type Top
- Bad: PDA.allToDoItems is of type Top
- Bad: PDA.allNotes is of type Top
- Bad: PDA.notesListIndex is of type Top
- Good: PDA.currentItemSelection is of type UndefinedObject
- Good: PDA.categoryList is of type UndefinedObject
- Good: PDA.todoList is of type { ArrayedCollection++ UndefinedObject }
- Bad: PDA.todoListIndex is of type Top
- Bad: PDA.peopleListIndex is of type Top
- Good: PDA.notesList is of type { CompiledMethod WordArrayForSegment KlattFrame OSAID FloatArray PointArray B3DRotationArray ComponentInstance TranslatedMethod Array2D ShortRunArray ShortPointArray ShortIntegerArray B3DVector2 B3DMatrix4x4 Pixmap Array B3DViewingFrustum ExternalAddress B3DIndexedTriangleArray WeakArray B3DInplaceArray B3DVector3 B3DColor4 B3DPrimitiveLight RunArray Symbol MacExternalData FlippyArray2 CompiledApplescript ByteArray AEDesc UndefinedObject IntegerArray B3DTexture2Array B3DRotation SoundBuffer String B3DFloatArray B3DColor4Array Text B3DMaterialColor ApplescriptInstance WordArray DescType B3DPrimitiveVertexArray B3DExponentTable B3DLightAttenuation B3DVector2Array ArrayedCollection B3DVector3Array DirectoryEntry B3DMaterial B3DIndexedQuadArray Bitmap B3DVector4 }
- Good: PDA.currentItemText is of type UndefinedObject
- Bad: PDA.userCategories is of type Top

- Good: PDA.viewDescriptionOnly is of type { True UndefinedObject False }
- Bad: PDAChoiceMorph.backgroundColor is of type Top
- Bad: PDAClockMorph.backgroundColor is of type Top
- Bad: PDAEvent.time is of type Top
- Bad: PDAEvent.date is of type Top
- Bad: PDAEvent.duration is of type Top
- Good: PDAEvent.alarm is of type UndefinedObject
- Bad: PDAPerson.name is of type Top
- Good: PDAPerson.address is of type UndefinedObject
- Good: PDAPerson.phone is of type { String UndefinedObject }
- Good: PDAPerson.email is of type { String UndefinedObject }
- Bad: PDARecord.description is of type Top
- Bad: PDARecord.key is of type Top
- Good: PDARecord.otherFields is of type { UndefinedObject Dictionary }
- Good: PDARecurringEvent.recurrence is of type { UndefinedObject #nthWeekdayOfMonthEachYear #dayOfMonth #dayOfWeek #dateOfYear }
- Bad: PDARecurringEvent.firstDate is of type Top
- Bad: PDARecurringEvent.lastDate is of type Top
- Good: PDAToDoItem.deadline is of type UndefinedObject
- Bad: PDAToDoItem.result is of type Top
- Bad: PDAToDoItem.dayDone is of type Top
- Bad: PDAToDoItem.dayPosted is of type Top
- Bad: PDAToDoItem.priority is of type Top
- Bad: IRCChannelInfo.name is of type Top
- Bad: IRCChannelInfo.topic is of type Top
- Good: IRCChannelInfo.subscribers is of type { IdentitySet UndefinedObject }
- Good: IRCChannelInfo.members is of type { Set UndefinedObject }

- Good: IRCChannelInfo.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCChannelListBrowser.channelIndex is of type Top
- Bad: IRCChannelListBrowser.channelList is of type Top
- Good: IRCChannelListBrowser.sortCriterion is of type { UndefinedObject #name }
- Good: IRCChannelListBrowser.connection is of type { IRCConnection UndefinedObject }
- Good: IRCChannelObserver.chatText is of type { Text UndefinedObject }
- Good: IRCChannelObserver.channelName is of type UndefinedObject
- Bad: IRCChannelObserver.channel is of type Top
- Good: IRCChannelObserver.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCChannelSummary.name is of type Top
- Bad: IRCChannelSummary.topic is of type Top
- Bad: IRCChannelSummary.numUsers is of type Top
- Good: IRCChannelUsersBrowser.channel is of type { UndefinedObject IRCChannelInfo }
- Good: IRCChannelUsersBrowser.userList is of type { UndefinedObject Array }
- Bad: IRCChannelUsersBrowser.userIndex is of type Top
- Good: IRCConnection.directMessageSubscribers is of type { IdentitySet UndefinedObject }
- Good: IRCConnection.channelListBeingBuilt is of type { UndefinedObject OrderedCollection }
- Good: IRCConnection.protocolMessagesToSend is of type { UndefinedObject OrderedCollection }
- Bad: IRCConnection.sendBuffer is of type Top
- Bad: IRCConnection.server is of type Top
- Good: IRCConnection.motdBeingBuilt is of type { UndefinedObject WriteStream }

- Good: IRCCConnection.protocolMessageSubscribers is of type { IdentitySet UndefinedObject }
- Bad: IRCCConnection.motd is of type Top
- Bad: IRCCConnection.port is of type Top
- Good: IRCCConnection.recieveBuffer is of type { String UndefinedObject }
- Good: IRCCConnection.socket is of type { Socket UndefinedObject }
- Bad: IRCCConnection.userName is of type Top
- Bad: IRCCConnection.nick is of type Top
- Good: IRCCConnection.channelList is of type { UndefinedObject Array }
- Good: IRCCConnection.subscribedChannels is of type { UndefinedObject Dictionary }
- Bad: IRCCConnection.fullName is of type Top
- Good: IRCCConnection.messagesProcessed is of type { UndefinedObject SmallInteger }
- Good: IRCCConnection.consoleText is of type { Text UndefinedObject }
- Good: IRCDirectMessagesObserver.chatText is of type { Text UndefinedObject }
- Bad: IRCDirectMessagesObserver.talkingTo is of type Top
- Good: IRCDirectMessagesObserver.connection is of type { IRCCConnection UndefinedObject }
- Bad: IRCMessage.text is of type Top
- Bad: IRCMessage.sender is of type { B3DTexture2Array B3DPrimitiveRasterizerData Integer PointArray CompiledApplescript ByteArray ArrayedCollection SoundBuffer ExternalAddress ShortIntegerArray KlattFrame B3DMaterialColor GraphicSymbol B3DVector3 FlippyArray2 WeakArray Pixmap WordArray B3DVector2Array B3DIndexedQuad B3DVector3Array DescType B3DPrimitiveVertexArray B3DRotation B3DIndexedTriangleArray WordArrayForSegment B3DIndexedQuadArray String B3DPrimitiveLight LargePositiveInteger ComponentInstance StandardSourceFileArray B3DIndexedTriangle FloatArray B3DColor4 OnceOnlyOrderedCollection TranslatedMethod DirectoryEntry Array2D B3DFloatArray AEDesc Symbol RunArray B3DInplaceArray Text Array B3DMaterial B3DRotationArray ApplescriptInstance MappedCollection }

B3DColor4Array Interval Heap UrlArgumentList SourceFileArray
 B3DLightAttenuation ShortPointArray B3DVector4 B3DVector2
 SequenceableCollection MacExternalData OrderedCollection
 B3DExponentTable B3DViewingFrustum IntegerArray ShortRunArray
 SortedCollection Bitmap LinkedList B3DMatrix4x4 Semaphore
 TextLineInterval LargeNegativeInteger CompiledMethod OSAID
 UndefinedObject SmallInteger }

- Bad: IRCMessage.recipient is of type Top
- Good: IRCMessagePattern.sender is of type UndefinedObject
- Good: IRCMessagePattern.recipient is of type UndefinedObject
- Good: IRCMessageSet.messages is of type UndefinedObject
- Bad: IRCMorph.userName is of type Top
- Bad: IRCMorph.nick is of type Top
- Bad: IRCMorph.server is of type Top
- Good: IRCMorph.connection is of type { IRCConnection
UndefinedObject }
- Bad: IRCMorph.fullName is of type Top
- Good: IRCMorph.messageCollections is of type UndefinedObject
- Bad: IRCMorph.consoleText is of type Top
- Bad: IRCMorph.port is of type Top
- Bad: IRCProtocolMessage.arguments is of type Top
- Good: IRCProtocolMessage.command is of type { UndefinedObject
String Character }
- Bad: IRCProtocolMessage.prefix is of type Top
- Good: IRCRecipientFilter.recipient is of type UndefinedObject
- Good: CategoriesFile.categories is of type { UndefinedObject Dictionary
}
- Bad: Celeste.currentMessages is of type Top
- Good: Celeste.customFilterBlock is of type { UndefinedObject Compiler
}
- Bad: Celeste.status is of type Top
- Bad: Celeste.userPassword is of type Top

- Bad: Celeste.currentMsgID is of type Top
- Bad: Celeste.mailDB is of type Top
- Bad: Celeste.currentCategory is of type Top
- Bad: Celeste.lastCategory is of type Top
- Good: Celeste.lastCategoryList is of type UndefinedObject
- Good: Celeste.dateFilter is of type UndefinedObject
- Good: Celeste.currentTOC is of type { Array UndefinedObject OrderedCollection }
- Bad: Celeste.fromFilter is of type Top
- Good: Celeste.formatMessages is of type UndefinedObject
- Good: Celeste.lastCategoryMenu is of type UndefinedObject
- Bad: Celeste.messageTextView is of type { PluggableTextMorph++ PluggableListMorph++ PluggableListView++ SimpleHierarchicalListMorph++ PluggableTextView UndefinedObject }
- Bad: Celeste.subjectFilter is of type Top
- Bad: CelesteComposition.textEditor is of type { PluggableTextMorph++ FormMenuController PluggableButtonController Controller ProjectController UndefinedObject FormEditor PluggableListControllerOfMany PluggableTextView PluggableListController FillInTheBlankController StandardSystemController ListController MorphWorldController NoController BitEditor ParagraphEditor ScreenController ReadOnlyTextController ModalController StringHolderController DeferredActionStandardSystemController PluggableTextController }
- Bad: CelesteComposition.celeste is of type Top
- Bad: CelesteComposition.messageText is of type Top
- Good: CelesteComposition.morphicWindow is of type { AlignmentMorphBob1 UndefinedObject SystemWindow }
- Good: CelesteComposition.mvcWindow is of type { StandardSystemView UndefinedObject }
- Good: CelesteComposition.attachmentSeparator is of type UndefinedObject
- Good: FancyCelesteComposition.theLinkToInclude is of type UndefinedObject

- Bad: FancyCelesteComposition.to is of type Top
- Good: FancyCelesteComposition.subject is of type { String
UndefinedObject }
- Good: FancyCelesteComposition.textFields is of type { UndefinedObject
Array }
- Good: IndexFile.msgDictionary is of type { PluggableDictionary
UndefinedObject }
- Good: IndexFile.logfile is of type { UndefinedObject StandardFileStream
}
- Good: IndexFile.timeSortedEntries is of type { UndefinedObject
SortedCollection }
- Bad: IndexFileEntry.time is of type Top
- Bad: IndexFileEntry.msgID is of type Top
- Bad: IndexFileEntry.messageFile is of type Top
- Bad: IndexFileEntry.cc is of type Top
- Bad: IndexFileEntry.tocLineCache is of type Top
- Bad: IndexFileEntry.location is of type Top
- Bad: IndexFileEntry.to is of type Top
- Bad: IndexFileEntry.textLength is of type Top
- Bad: IndexFileEntry.subject is of type Top
- Bad: IndexFileEntry.from is of type Top
- Good: MIMEHeaderValue.mainValue is of type { UndefinedObject
String Character }
- Good: MIMEHeaderValue.parameters is of type { UndefinedObject
Dictionary }
- Bad: MIMEPart.content is of type { SequenceableCollection++
Integer++ UndefinedObject B3DIndexedQuad
B3DPrimitiveRasterizerData B3DIndexedTriangle }
- Good: MIMEPart.parts is of type { Array UndefinedObject
OrderedCollection }
- Bad: MIMEPart.separator is of type Top
- Bad: MIMEPart.text is of type Top

- Good: MIMEPart.fields is of type { UndefinedObject Dictionary }
- Bad: MailDB.rootFilename is of type Top
- Bad: MailDB.indexFile is of type Top
- Bad: MailDB.messageFile is of type Top
- Bad: MailDB.categoriesFile is of type Top
- Bad: MailDBFile.filename is of type Top
- Bad: MailMessage.time is of type Top
- Bad: MailMessage.separator is of type Top
- Bad: MailMessage.cc is of type Top
- Good: MailMessage.body is of type { UndefinedObject MIMEDocument }
- Bad: MailMessage.to is of type Top
- Bad: MailMessage.text is of type Top
- Good: MailMessage.subject is of type { String UndefinedObject }
- Good: MailMessage.fields is of type { UndefinedObject Dictionary }
- Good: MailMessage.from is of type { String UndefinedObject }
- Good: MailMessage.parts is of type { Array UndefinedObject OrderedCollection }
- Bad: MailNotifier.lastConnectTime is of type Top
- Bad: MailNotifier.messageCount is of type { Integer++ Point++ Rectangle++ UndefinedObject Float }
- Good: MailNotifier.password is of type UndefinedObject
- Good: MailNotifier.socket is of type { UndefinedObject POPSocket }
- Good: MessageFile.file is of type { CrLfFileStream UndefinedObject }
- Bad: ReadNewsInboxFile.currentNewsgroup is of type Top
- Good: ReadNewsInboxFile.msgBuffer is of type { UndefinedObject WriteStream }
- Bad: TextMessageLink.message is of type Top
- Bad: RBAssignmentNode.variable is of type Top
- Bad: RBAssignmentNode.assignment is of type Top

- Bad: RBAssignmentNode.value is of type Top
- Good: RBBlockNode.colons is of type { UndefinedObject
OrderedCollection }
- Bad: RBBlockNode.bar is of type Top
- Bad: RBBlockNode.right is of type Top
- Bad: RBBlockNode.left is of type Top
- Bad: RBBlockNode.body is of type Top
- Bad: RBBlockNode.arguments is of type Top
- Bad: RBCascadeNode.messages is of type Top
- Good: RBCascadeNode.semicolons is of type { UndefinedObject
OrderedCollection }
- Good: RBFormatter.codeStream is of type { UndefinedObject
WriteStream }
- Bad: RBFormatter.lineStart is of type Top
- Bad: RBFormatter.firstLineLength is of type Top
- Good: RBFormatter.tabs is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: RBLiteralNode.token is of type Top
- Bad: RBMessageNode.arguments is of type Top
- Bad: RBMessageNode.receiver is of type Top
- Bad: RBMessageNode.selector is of type Top
- Bad: RBMessageNode.selectorParts is of type Top
- Good: RBMethodNode.tags is of type { UndefinedObject
OrderedCollection }
- Bad: RBMethodNode.selector is of type Top
- Bad: RBMethodNode.selectorParts is of type Top
- Bad: RBMethodNode.body is of type Top
- Bad: RBMethodNode.source is of type Top
- Bad: RBMethodNode.arguments is of type Top
- Bad: RBOptimizedNode.body is of type Top

- Bad: RBOptimizedNode.right is of type Top
- Bad: RBOptimizedNode.left is of type Top
- Good: RParser.scanner is of type { RScanner UndefinedObject }
- Bad: RParser.tags is of type Object++
- Bad: RParser.source is of type Top
- Good: RParser.emptyStatements is of type { True UndefinedObject False }
- Good: RParser.currentToken is of type { RShortAssignmentToken RBOptimizedToken UndefinedObject RToken RPatternBlockToken RScanner RBLiteralToken RAssignmentToken RKeywordToken RBinarySelectorToken RIdentifierToken RSpecialCharacterToken }
- Good: RParser.negatedNumbers is of type { True UndefinedObject False }
- Good: RParser.errorBlock is of type { UndefinedObject a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType }
- Good: RParser.nextToken is of type { Boolean++ RShortAssignmentToken RBOptimizedToken UndefinedObject RToken RPatternBlockToken RScanner RBLiteralToken RAssignmentToken RKeywordToken RBinarySelectorToken RIdentifierToken RSpecialCharacterToken }
- Good: RPatternMessageNode.isCascadeList is of type { True UndefinedObject False }
- Good: RPatternMessageNode.isList is of type { True UndefinedObject False }
- Good: RPatternMethodNode.isList is of type { True UndefinedObject False }
- Good: RPatternVariableNode.recurseInto is of type { True UndefinedObject False }
- Good: RPatternVariableNode.isLiteral is of type { True UndefinedObject False }
- Good: RPatternVariableNode.isStatement is of type { True UndefinedObject False }
- Good: RPatternVariableNode.isAnything is of type { True UndefinedObject False }

- Good: RBPatternVariableNode.isList is of type { True UndefinedObject False }
- Bad: RBProgramNode.parent is of type Top
- Good: RBProgramNode.comments is of type { UndefinedObject Array OrderedCollection SortedCollection }
- Bad: RBReturnNode.return is of type Top
- Bad: RBReturnNode.value is of type Top
- Bad: RBSequenceNode.rightBar is of type Top
- Good: RBSequenceNode.periods is of type { UndefinedObject OrderedCollection }
- Bad: RBSequenceNode.temporaries is of type Top
- Bad: RBSequenceNode.statements is of type Top
- Bad: RBSequenceNode.leftBar is of type Top
- Good: RBValueNode.parentheses is of type { UndefinedObject OrderedCollection }
- Bad: RBVariableNode.token is of type Top
- Bad: ADPCMCodec.index is of type Top
- Good: ADPCMCodec.indexTable is of type { Array UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.deltaSignMask is of type Top
- Bad: ADPCMCodec.bitPosition is of type Top
- Bad: ADPCMCodec.encodedBytes is of type Top
- Good: ADPCMCodec.stepSizeTable is of type { Array UndefinedObject SoundBuffer }
- Good: ADPCMCodec.sampleIndex is of type { SmallInteger LargeNegativeInteger LargePositiveInteger UndefinedObject Array }
- Good: ADPCMCodec.rightSamples is of type { UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.byteIndex is of type Top
- Good: ADPCMCodec.frameSizeMask is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }

- Bad: ADPCMCodec.bitsPerSample is of type Top
- Bad: ADPCMCodec.predicted is of type Top
- Bad: ADPCMCodec.deltaValueHighBit is of type Top
- Bad: ADPCMCodec.deltaValueMask is of type Top
- Bad: ADPCMCodec.currentByte is of type Top
- Bad: ADPCMCodec.samples is of type Top
- Good: AIFFFileReader.channelData is of type { UndefinedObject Array }
- Bad: AIFFFileReader.frameCount is of type Top
- Bad: AIFFFileReader.isLooped is of type Top
- Bad: AIFFFileReader.gain is of type Top
- Good: AIFFFileReader.in is of type { UndefinedObject ReadStream CrLfFileStream }
- Bad: AIFFFileReader.fileType is of type Top
- Bad: AIFFFileReader.pitch is of type Top
- Bad: AIFFFileReader.markers is of type Top
- Good: AIFFFileReader.channelCount is of type { UndefinedObject SmallInteger }
- Bad: AIFFFileReader.bitsPerSample is of type Top
- Good: AIFFFileReader.mergeIfStereo is of type { True UndefinedObject False }
- Good: AIFFFileReader.skipDataChunk is of type { True UndefinedObject False }
- Bad: AIFFFileReader.samplingRate is of type Top
- Bad: AbstractSound.envelopes is of type Top
- Bad: AbstractSound.mSecsSinceStart is of type Top
- Bad: AbstractSound.scaledVolLimit is of type Top
- Bad: AbstractSound.scaledVol is of type Top
- Bad: AbstractSound.samplesUntilNextControl is of type Top
- Bad: AbstractSound.scaledVolIncr is of type Top

- Bad: CompressedSoundData.perceivedPitch is of type Top
- Bad: CompressedSoundData.codecName is of type Top
- Good: CompressedSoundData.channels is of type { UndefinedObject Array }
- Bad: CompressedSoundData.gain is of type Top
- Bad: CompressedSoundData.firstSample is of type Top
- Bad: CompressedSoundData.soundClassName is of type Top
- Bad: CompressedSoundData.cachedSound is of type { WaveletCodec MuLawCodec ADPCMCodec SoundCodec UndefinedObject LoopedSampledSound GSMCodec SampledSound }
- Bad: CompressedSoundData.loopLength is of type Top
- Bad: CompressedSoundData.samplingRate is of type Top
- Bad: CompressedSoundData.loopEnd is of type Top
- Bad: Envelope.target is of type Top
- Bad: Envelope.scale is of type Top
- Good: Envelope.updateSelector is of type { UndefinedObject #pitch: #modulation: #ratio: }
- Bad: Envelope.loopEndMsecs is of type { Magnitude++ UndefinedObject }
- Bad: Envelope.endMsecs is of type Top
- Bad: Envelope.currValue is of type Top
- Bad: Envelope.loopStartIndex is of type Top
- Bad: Envelope.valueIncr is of type Top
- Good: Envelope.noChangesDuringLoop is of type { True UndefinedObject False }
- Bad: Envelope.nextRecomputeTime is of type Top
- Bad: Envelope.loopEndIndex is of type Top
- Bad: Envelope.loopMsecs is of type Top
- Bad: Envelope.loopStartMsecs is of type Top
- Bad: Envelope.decayScale is of type Top

- Bad: Envelope.points is of type Top
- Bad: Envelope.lastValue is of type Top
- Bad: FFT.permTable is of type { SequenceableCollection++ Integer++ UndefinedObject B3DIndexedQuad B3DPrimitiveRasterizerData B3DIndexedTriangle }
- Bad: FFT.nu is of type Top
- Bad: FFT.n is of type Top
- Bad: FFT.sinTable is of type Top
- Good: FFT.imagData is of type { Array UndefinedObject FloatArray }
- Good: FFT.window is of type { UndefinedObject FloatArray }
- Bad: FFT.realData is of type Top
- Bad: FMSound.initialCount is of type Top
- Bad: FMSound.multiplier is of type Top
- Bad: FMSound.scaledOffsetIndex is of type Top
- Bad: FMSound.waveTable is of type Top
- Bad: FMSound.scaledWaveTableSize is of type Top
- Bad: FMSound.scaledIndex is of type Top
- Bad: FMSound.normalizedModulation is of type Top
- Bad: FMSound.scaledOffsetIndexIncr is of type Top
- Bad: FMSound.modulation is of type Top
- Good: FMSound.scaledIndexIncr is of type UndefinedObject
- Bad: FMSound.count is of type Top
- Good: FWT.transform is of type { UndefinedObject Array }
- Bad: FWT.beta is of type Top
- Good: FWT.gTilde is of type { UndefinedObject Array }
- Good: FWT.coeffs is of type { UndefinedObject Array }
- Good: FWT.g is of type { UndefinedObject Array }
- Bad: FWT.nSamples is of type Top
- Bad: FWT.nLevels is of type Top

- Bad: FWT.alpha is of type Top
- Good: FWT.h is of type { UndefinedObject Array }
- Good: FWT.samples is of type { UndefinedObject Array }
- Good: FWT.hTilde is of type { UndefinedObject Array }
- Bad: GSMCodec.encodeState is of type Top
- Bad: GSMCodec.decodeState is of type Top
- Bad: LoopedSampledSound.initialCount is of type Top
- Bad: LoopedSampledSound.perceivedPitch is of type Top
- Bad: LoopedSampledSound.scaledLoopLength is of type Top
- Bad: LoopedSampledSound.lastSample is of type Top
- Good: LoopedSampledSound.gain is of type { UndefinedObject Float }
- Bad: LoopedSampledSound.scaledIndexIncr is of type Top
- Bad: LoopedSampledSound.releaseCount is of type Top
- Bad: LoopedSampledSound.firstSample is of type Top
- Bad: LoopedSampledSound.sampleCountForRelease is of type Top
- Bad: LoopedSampledSound.rightSamples is of type Top
- Bad: LoopedSampledSound.leftSamples is of type Top
- Bad: LoopedSampledSound.scaledIndex is of type Top
- Bad: LoopedSampledSound.originalSamplingRate is of type Top
- Bad: LoopedSampledSound.count is of type Top
- Bad: LoopedSampledSound.loopEnd is of type Top
- Good: MixedSound.soundDone is of type { UndefinedObject Array }
- Good: MixedSound.sounds is of type { UndefinedObject Array }
- Good: MixedSound.leftVols is of type { UndefinedObject Array }
- Bad: MixedSound.rightVols is of type Top
- Bad: PitchEnvelope.centerPitch is of type Top
- Bad: PluckedSound.initialCount is of type Top
- Bad: PluckedSound.ring is of type Top

- Bad: PluckedSound.scaledIndexLimit is of type { Number++ UndefinedObject }
- Bad: PluckedSound.scaledIndex is of type Top
- Bad: PluckedSound.scaledIndexIncr is of type Top
- Bad: PluckedSound.count is of type Top
- Good: RandomEnvelope.rand is of type { Random UndefinedObject }
- Good: RandomEnvelope.highLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.lowLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.delta is of type { UndefinedObject Float }
- Bad: RepeatingSound.iteration is of type Top
- Bad: RepeatingSound.iterationCount is of type Top
- Bad: RepeatingSound.sound is of type Top
- Bad: RepeatingSound.samplesPerIteration is of type Top
- Bad: RestSound.initialCount is of type Top
- Bad: RestSound.count is of type Top
- Good: ReverbSound.tapGains is of type { UndefinedObject Bitmap }
- Good: ReverbSound.bufferSize is of type { Bitmap LargeNegativeInteger LargePositiveInteger UndefinedObject SmallInteger }
- Good: ReverbSound.rightBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.leftBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.tapCount is of type { UndefinedObject SmallInteger }
- Good: ReverbSound.tapDelays is of type { UndefinedObject Bitmap }
- Bad: ReverbSound.bufferIndex is of type Top
- Good: ReverbSound.sound is of type UndefinedObject
- Good: SampledInstrument.sustainedSoft is of type { UndefinedObject Array }
- Good: SampledInstrument.staccatoSoft is of type { UndefinedObject Array }

- Good: SampledInstrument.staccatoLoud is of type { UndefinedObject Array }
- Good: SampledInstrument.sustainedThreshold is of type { UndefinedObject Float }
- Good: SampledInstrument.sustainedLoud is of type { UndefinedObject Array }
- Good: SampledInstrument.loudThreshold is of type { UndefinedObject Float }
- Bad: SampledSound.initialCount is of type Top
- Bad: SampledSound.samples is of type Top
- Bad: SampledSound.scaledIncrement is of type Top
- Bad: SampledSound.scaledIndex is of type Top
- Bad: SampledSound.indexHighBits is of type Top
- Bad: SampledSound.samplesSize is of type Top
- Bad: SampledSound.originalSamplingRate is of type Top
- Bad: SampledSound.count is of type Top
- Good: SequentialSound.sounds is of type { UndefinedObject Array }
- Good: SequentialSound.currentIndex is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: Sonogram.lastX is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: Sonogram.pixValMap is of type { UndefinedObject Bitmap }
- Good: Sonogram.maxVal is of type { UndefinedObject Float }
- Good: Sonogram.minVal is of type { UndefinedObject Float }
- Good: Sonogram.scrollDelta is of type { UndefinedObject SmallInteger }
- Good: Sonogram.columnForm is of type { Form UndefinedObject }
- Bad: SoundInputStream.mutex is of type Top
- Bad: SoundInputStream.bufferSize is of type Top
- Good: SoundRecorder.currentBuffer is of type { UndefinedObject SoundBuffer }
- Bad: SoundRecorder.recordProcess is of type Top

- Good: SoundRecorder.codec is of type { GSMCodec UndefinedObject }
- Good: SoundRecorder.desiredSampleRate is of type { UndefinedObject Float }
- Bad: SoundRecorder.nextIndex is of type Top
- Good: SoundRecorder.meteringBuffer is of type { UndefinedObject SoundBuffer }
- Bad: SoundRecorder.meterLevel is of type Top
- Good: SoundRecorder.stereo is of type { False UndefinedObject }
- Good: SoundRecorder.recordLevel is of type { UndefinedObject Float }
- Good: SoundRecorder.soundPlaying is of type { SampledSound SequentialSound UndefinedObject ChatRecorder SoundInputStream SoundRecorder }
- Good: SoundRecorder.recordedBuffers is of type { Array UndefinedObject OrderedCollection }
- Good: SoundRecorder.paused is of type { True UndefinedObject False }
- Bad: SoundRecorder.samplingRate is of type Top
- Good: SoundRecorder.recordedSound is of type { SampledSound SequentialSound UndefinedObject ChatRecorder SoundInputStream SoundRecorder }
- Good: SoundRecorder.bufferAvailableSema is of type { Semaphore UndefinedObject }
- Bad: VolumeEnvelope.mSecsForChange is of type { Magnitude++ UndefinedObject }
- Bad: VolumeEnvelope.targetVol is of type Top
- Good: VolumeEnvelope.currentVol is of type UndefinedObject
- Bad: WaveletCodec.alpha is of type Top
- Bad: WaveletCodec.beta is of type Top
- Good: WaveletCodec.fwt is of type { FWT UndefinedObject }
- Bad: WaveletCodec.samplesPerFrame is of type Top
- Bad: WaveletCodec.nLevels is of type { Integer++ SequenceableCollection++ B3DIndexedQuad B3DPrimitiveRasterizerData B3DIndexedTriangle ScrollingToolHolder UndefinedObject }

- Bad: TestInterfaceBase.duration is of type Top
- Bad: TestInterfaceBase.classPattern is of type Top
- Bad: TestInterfaceBase.result is of type Top
- Bad: TestInterfaceBase.selectorPattern is of type Top
- Good: TestModel.failureList is of type { UndefinedObject
OrderedCollection }
- Good: TestModel.patternHistory is of type { UndefinedObject
OrderedCollection }
- Good: TestModel.errorList is of type { UndefinedObject
OrderedCollection }
- Bad: TestModel.summaryText is of type { Boolean++ String
UndefinedObject }
- Bad: TestModel.summaryTextM is of type { PluggableTextMorph++
PluggableTextView UndefinedObject }
- Good: TestModel.summaryTextV is of type { PluggableTextView
UndefinedObject }
- Good: TestModel.updateColorSelector is of type { UndefinedObject
#updateColorM #updateColorV }
- Good: TestModel.patternTextV is of type { PluggableTextView
UndefinedObject }
- Bad: TestModel.patternTextM is of type { PluggableTextMorph++
PluggableTextView UndefinedObject }
- Bad: TestModel.detailsText is of type Top
- Bad: Browser.classOrganizer is of type Top
- Bad: Browser.systemOrganizer is of type Top
- Bad: Browser.messageListIndex is of type Top
- Bad: Browser.messageCategoryListIndex is of type Top
- Good: Browser.editSelection is of type { Boolean++ UndefinedObject
#hierarchy #editClass #editComment #none #editMessageCategories
#newClass #editMessage #newMessage #editSystemCategories
#byteCodes }
- Bad: Browser.metaClassOrganizer is of type Top
- Bad: Browser.systemCategoryListIndex is of type Top

- Bad: Browser.metaClassIndicated is of type Top
- Bad: Browser.classListIndex is of type Top
- Bad: ChangedMessageSet.changeSet is of type Top
- Bad: HierarchyBrowser.centralClass is of type Top
- Bad: HierarchyBrowser.classList is of type Top
- Bad: MessageSet.messageList is of type Top
- Bad: MessageSet.autoSelectString is of type Top
- Bad: PackageBrowser.package is of type Top
- Bad: PackageBrowser.packageListIndex is of type Top
- Good: PackageBrowser.packageList is of type UndefinedObject
- Good: ProtocolBrowser.selectedClass is of type UndefinedObject
- Bad: ProtocolBrowser.selectedSelector is of type Top
- Bad: SelectorBrowser.classListIndex is of type Top
- Bad: SelectorBrowser.classList is of type Top
- Bad: SelectorBrowser.selectorIndex is of type Top
- Bad: SelectorBrowser.selectorList is of type Top
- Good: ChineseCheckerPiece.myBoard is of type { ChineseCheckers
UndefinedObject }
- Bad: ChineseCheckerPiece.boardLoc is of type Top
- Good: ChineseCheckers.movePhase is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ChineseCheckers.board is of type { UndefinedObject Array }
- Good: ChineseCheckers.plannedMovePhase is of type UndefinedObject
- Good: ChineseCheckers.sixDeltas is of type { UndefinedObject Array }
- Bad: ChineseCheckers.plannedMove is of type Top
- Bad: ChineseCheckers.whoseMove is of type Top
- Good: ChineseCheckers.teams is of type { UndefinedObject Array }
- Good: ChineseCheckers.colors is of type { UndefinedObject Array }
- Good: ChineseCheckers.homes is of type { UndefinedObject Array }

- Good: ChineseCheckers.animateMoves is of type { True
UndefinedObject False }
- Good: ChineseCheckers.pathMorphs is of type { UndefinedObject
OrderedCollection }
- Good: ChineseCheckers.autoPlay is of type { UndefinedObject Array }
- Good: CipherPanel.originalMorphs is of type { UndefinedObject Array }
- Good: CipherPanel.decodingMorphs is of type { UndefinedObject Array
}
- Good: CipherPanel.quote is of type { UndefinedObject String Character
}
- Good: CipherPanel.originalText is of type UndefinedObject
- Good: CrosticPanel.crosticPanel is of type UndefinedObject
- Good: CrosticPanel.cluesCol2 is of type { AlignmentMorph
UndefinedObject }
- Bad: CrosticPanel.quote is of type Top
- Good: CrosticPanel.answers is of type { UndefinedObject
OrderedCollection }
- Good: CrosticPanel.clues is of type { UndefinedObject
OrderedCollection }
- Good: CrosticPanel.cluesPanel is of type { AlignmentMorph
UndefinedObject }
- Good: CrosticPanel.quotePanel is of type { CrosticQuotePanel
UndefinedObject }
- Good: CrosticQuotePanel.cluesPanel is of type { CrosticPanel
UndefinedObject }
- Good: FreeCell.lastGameLost is of type UndefinedObject
- Good: FreeCell.cardsRemainingDisplay is of type { LedMorph
UndefinedObject }
- Good: FreeCell.gameNumberDisplay is of type { LedMorph
UndefinedObject }
- Good: FreeCell.state is of type { UndefinedObject #sameGame
#pickGame #won #newGame #lost }
- Good: FreeCell.myFillStyle is of type { UndefinedObject
GradientFillStyle }

- Good: FreeCell.elapsedTimeDisplay is of type { UndefinedObject LedTimerMorph }
- Good: FreeCell.board is of type { FreeCellBoard UndefinedObject }
- Good: FreeCell.autoMoveRecursionCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: FreeCellBoard.target is of type Top
- Bad: FreeCellBoard.actionSelector is of type Top
- Good: FreeCellBoard.stacks is of type { UndefinedObject Array }
- Good: FreeCellBoard.freeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.homeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.cardDeck is of type { PlayingCardDeck UndefinedObject }
- Good: FreeCellBoard.lastCardDeck is of type UndefinedObject
- Good: FreeCellStatistics.streakLosses is of type { UndefinedObject LargeNegativeInteger SmallInteger LargePositiveInteger }
- Bad: FreeCellStatistics.lastGameWon is of type Top
- Bad: FreeCellStatistics.lastGameLost is of type Top
- Good: FreeCellStatistics.currentCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.currentType is of type { UndefinedObject #losses #wins }
- Good: FreeCellStatistics.statsMorph is of type { TextMorph UndefinedObject }
- Good: FreeCellStatistics.window is of type UndefinedObject
- Good: FreeCellStatistics.sessionLosses is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.lossesWithReplay is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.sessionWins is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.totalWins is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }

- Good: FreeCellStatistics.streakWins is of type { UndefinedObject LargeNegativeInteger SmallInteger LargePositiveInteger }
- Good: FreeCellStatistics.totalLosses is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.winsWithReplay is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: LedDigitMorph.digit is of type Top
- Good: LedDigitMorph.highlighted is of type { True UndefinedObject False }
- Good: LedMorph.digits is of type { UndefinedObject SmallInteger }
- Bad: LedMorph.flash is of type Top
- Good: LedMorph.flashing is of type { True UndefinedObject False }
- Bad: LedMorph.value is of type Top
- Good: LedTimerMorph.counting is of type { True UndefinedObject False }
- Bad: LedTimerMorph.startSeconds is of type Top
- Good: PlayingCard.cardNo is of type { UndefinedObject LargeNegativeInteger SmallInteger LargePositiveInteger }
- Bad: PlayingCard.suitNo is of type Top
- Good: PlayingCard.suit is of type UndefinedObject
- Good: PlayingCard.cardForm is of type { Form UndefinedObject }
- Bad: PlayingCardDeck.target is of type Top
- Bad: PlayingCardDeck.seed is of type Top
- Good: PlayingCardDeck.acceptCardSelector is of type { PlayingCardDeck UndefinedObject #acceptCard:onStack: #acceptSingleCard:on: }
- Good: PlayingCardDeck.cardDraggedSelector is of type { PlayingCardDeck UndefinedObject #dragCard:fromHome: #dragCard:fromStack: }
- Good: PlayingCardDeck.stackingOrder is of type { UndefinedObject #descending #ascending }
- Good: PlayingCardDeck.cardDroppedSelector is of type { PlayingCardDeck UndefinedObject #cardMoved #cardMovedHome }

- Good: `PlayingCardDeck.cardDoubleClickSelector` is of type { `PlayingCardDeck` `UndefinedObject` `#doubleClickInStack:OnCard:` }
- Good: `PlayingCardDeck.stackingPolicy` is of type { `UndefinedObject` `#stagger` `#single` `#altStraight` `#straight` }
- Good: `PlayingCardDeck.emptyDropPolicy` is of type { `UndefinedObject` `#inOrder` `#any` }
- Good: `PlayingCardDeck.layout` is of type { `UndefinedObject` `#stagger` `#pile` `#grid` }
- Good: `PlayingCardMorph.suitNumber` is of type { `UndefinedObject` `LargePositiveInteger` `SmallInteger` `LargeNegativeInteger` }
- Good: `PlayingCardMorph.cardNumber` is of type { `UndefinedObject` `LargeNegativeInteger` `SmallInteger` `LargePositiveInteger` }
- Good: `SameGame.scoreDisplay` is of type { `LedMorph` `UndefinedObject` }
- Good: `SameGame.board` is of type { `UndefinedObject` `SameGameBoard` }
- Good: `SameGame.selectionDisplay` is of type { `LedMorph` `UndefinedObject` }
- Bad: `SameGame.helpText` is of type { `PluggableTextMorph++` `StringHolderView++` `UndefinedObject` }
- Good: `SameGameBoard.palette` is of type { `UndefinedObject` `OrderedCollection` }
- Bad: `SameGameBoard.target` is of type `Top`
- Bad: `SameGameBoard.columns` is of type `Top`
- Bad: `SameGameBoard.actionSelector` is of type `Top`
- Good: `SameGameBoard.selectionColor` is of type `UndefinedObject`
- Good: `SameGameBoard.flash` is of type { `True` `UndefinedObject` `False` }
- Good: `SameGameBoard.arguments` is of type { `UndefinedObject` `Array` }
- Bad: `SameGameBoard.rows` is of type `Top`
- Bad: `SameGameBoard.protoTile` is of type `Top`
- Bad: `SameGameBoard.flashColor` is of type `Top`
- Good: `SameGameBoard.selection` is of type `UndefinedObject`

- Bad: SameGameTile.oldSwitchState is of type Top
- Bad: SameGameTile.switchState is of type Top
- Good: SameGameTile.disabled is of type { True UndefinedObject False }
- Good: Tetris.scoreDisplay is of type { LedMorph UndefinedObject }
- Good: Tetris.board is of type { UndefinedObject TetrisBoard }
- Bad: TetrisBlock.shapeInfo is of type Top
- Good: TetrisBlock.board is of type { UndefinedObject TetrisBoard }
- Bad: TetrisBlock.angle is of type Top
- Bad: TetrisBlock.baseCellNumber is of type Top
- Good: TetrisBoard.game is of type { UndefinedObject Tetris }
- Good: TetrisBoard.gameOver is of type { True UndefinedObject False }
- Bad: TetrisBoard.score is of type Top
- Good: TetrisBoard.paused is of type { True UndefinedObject False }
- Good: TetrisBoard.delay is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: TetrisBoard.currentBlock is of type { TetrisBlock UndefinedObject }
- Good: WordGameLetterMorph.predecessor is of type { WordGameLetterMorph UndefinedObject }
- Good: WordGameLetterMorph.lineMorph is of type { UndefinedObject PolygonMorph }
- Good: WordGameLetterMorph.style is of type { UndefinedObject #underlined #boxed #plain }
- Good: WordGameLetterMorph.letterMorph is of type { StringMorph UndefinedObject }
- Bad: WordGameLetterMorph.letter is of type Top
- Good: WordGameLetterMorph.originalLetter is of type UndefinedObject
- Good: WordGameLetterMorph.successor is of type { WordGameLetterMorph UndefinedObject }
- Bad: WordGameLetterMorph.indexInQuote is of type Top
- Good: WordGameLetterMorph.linkedLetters is of type UndefinedObject

- Good: WordGamePanelMorph.letterMorphs is of type { Array UndefinedObject OrderedCollection }
- Good: WordGamePanelMorph.haveTypedHere is of type { True UndefinedObject False }
- Bad: BitBltSimulation.sy is of type Top
- Bad: BitBltSimulation.halfToneBase is of type Top
- Good: BitBltSimulation.cmBlueShift is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBltSimulation.destWidth is of type Top
- Bad: BitBltSimulation.destX is of type Top
- Bad: BitBltSimulation.width is of type Top
- Bad: BitBltSimulation.scanString is of type Top
- Bad: BitBltSimulation.sourceBits is of type Top
- Bad: BitBltSimulation.scanStop is of type Top
- Bad: BitBltSimulation.dy is of type Top
- Good: BitBltSimulation.warpBitShiftTable is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.destPixSize is of type Top
- Bad: BitBltSimulation.pixPerWord is of type Top
- Good: BitBltSimulation.ditherValues16 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.cmRedMask is of type Top
- Bad: BitBltSimulation.warpSrcMask is of type Top
- Bad: BitBltSimulation.dstBitShift is of type Top
- Bad: BitBltSimulation.destIndex is of type Top
- Bad: BitBltSimulation.sourceIndex is of type Top
- Bad: BitBltSimulation.clipX is of type Top
- Good: BitBltSimulation.hDir is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.nWords is of type Top

- Bad: BitBltSimulation.clipHeight is of type Top
- Bad: BitBltSimulation.bitBltOop is of type Top
- Bad: BitBltSimulation.preload is of type Top
- Bad: BitBltSimulation.opTable is of type Top
- Bad: BitBltSimulation.sourceForm is of type Top
- Bad: BitBltSimulation.warpAlignMask is of type Top
- Bad: BitBltSimulation.skew is of type Top
- Good: BitBltSimulation.cmDeltaBits is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: BitBltSimulation.ditherMatrix4x4 is of type { CArrayAccessor
UndefinedObject }
- Bad: BitBltSimulation.sourceY is of type Top
- Bad: BitBltSimulation.scanStart is of type Top
- Good: BitBltSimulation.cmGreenShift is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBltSimulation.destBits is of type Top
- Bad: BitBltSimulation.destPitch is of type Top
- Bad: BitBltSimulation.height is of type Top
- Bad: BitBltSimulation.sourcePitch is of type Top
- Bad: BitBltSimulation.destY is of type Top
- Bad: BitBltSimulation.affectedL is of type Top
- Good: BitBltSimulation.maskTable is of type { UndefinedObject Array }
- Good: BitBltSimulation.scanDisplayFlag is of type { True
UndefinedObject False }
- Bad: BitBltSimulation.mask1 is of type Top
- Bad: BitBltSimulation.destDelta is of type Top
- Good: BitBltSimulation.noHalftone is of type { True UndefinedObject
False }
- Bad: BitBltSimulation.clipWidth is of type Top
- Bad: BitBltSimulation.destForm is of type Top

- Bad: BitBltSimulation.sx is of type Top
- Bad: BitBltSimulation.clipY is of type Top
- Bad: BitBltSimulation.scanRightX is of type Top
- Bad: BitBltSimulation.cmBlueMask is of type Top
- Bad: BitBltSimulation.halfToneHeight is of type Top
- Bad: BitBltSimulation.affectedT is of type Top
- Bad: BitBltSimulation.sourcePixSize is of type Top
- Good: BitBltSimulation.cmRedShift is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: BitBltSimulation.noSource is of type { True UndefinedObject False }
- Bad: BitBltSimulation.dx is of type Top
- Bad: BitBltSimulation.destMask is of type Top
- Bad: BitBltSimulation.affectedB is of type Top
- Bad: BitBltSimulation.cmGreenMask is of type Top
- Good: BitBltSimulation.hasSurfaceLock is of type { True UndefinedObject False }
- Bad: BitBltSimulation.stopCode is of type Top
- Bad: BitBltSimulation.combinationRule is of type Top
- Bad: BitBltSimulation.bitCount is of type Top
- Good: BitBltSimulation.vDir is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.destHeight is of type Top
- Good: BitBltSimulation.cmBitsPerColor is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.bbH is of type Top
- Bad: BitBltSimulation.bbW is of type Top
- Bad: BitBltSimulation.srcWidth is of type Top
- Bad: BitBltSimulation.affectedR is of type Top

- Good: BitBltSimulation.ditherThresholds16 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.sourceDelta is of type Top
- Good: BitBltSimulation.warpSrcShift is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBltSimulation.halfToneForm is of type Top
- Bad: BitBltSimulation.mask2 is of type Top
- Bad: BitBltSimulation.scanXTable is of type Top
- Bad: BitBltSimulation.scanStopArray is of type Top
- Bad: BitBltSimulation.sourceAlpha is of type Top
- Bad: BitBltSimulation.colorMap is of type Top
- Good: BitBltSimulation.warpAlignShift is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBltSimulation.sourceX is of type Top
- Bad: BitBltSimulation.srcBitShift is of type Top
- Bad: BitBltSimulation.srcHeight is of type Top
- Bad: Interpreter.activeContext is of type Top
- Bad: Interpreter.nextWakeupTick is of type Top
- Bad: Interpreter.localIP is of type Top
- Bad: Interpreter.localHomeContext is of type Top
- Good: Interpreter.methodCache is of type { UndefinedObject Array }
- Bad: Interpreter.interruptKeycode is of type Top
- Good: Interpreter.semaphoresToSignalCountA is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: Interpreter.interruptCheckCounterFeedBackReset is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: Interpreter.interpreterVersion is of type UndefinedObject
- Good: Interpreter.obsoleteNamedPrimitiveTable is of type { CArrayAccessor UndefinedObject }

- Good: Interpreter.interpreterProxy is of type { UndefinedObject InterpreterSimulator InterpreterSimulatorMSB InterpreterSimulatorLSB }
- Bad: Interpreter.receiver is of type Top
- Bad: Interpreter.stackPointer is of type Top
- Bad: Interpreter.receiverClass is of type Top
- Good: Interpreter.obsoleteIndexedPrimitiveTable is of type { CArrayAccessor UndefinedObject }
- Bad: Interpreter.successFlag is of type Top
- Good: Interpreter.compilerHooks is of type UndefinedObject
- Bad: Interpreter.fullScreenFlag is of type { Interpreter InterpreterSimulator InterpreterSimulatorLSB UndefinedObject InterpreterSimulatorMSB }
- Bad: Interpreter.primitiveIndex is of type Top
- Good: Interpreter.semaphoresToSignalB is of type { UndefinedObject Array }
- Bad: Interpreter.compilerInitialized is of type Top
- Bad: Interpreter.localSP is of type Top
- Bad: Interpreter.instructionPointer is of type Top
- Good: Interpreter.semaphoresUseBufferA is of type { True UndefinedObject False }
- Good: Interpreter.deferDisplayUpdates is of type { True UndefinedObject False }
- Bad: Interpreter.theHomeContext is of type Top
- Bad: Interpreter.extraVMMemory is of type Top
- Bad: Interpreter.method is of type { UndefinedObject InterpreterSimulatorMSB Bitmap InterpreterSimulator Interpreter LargeNegativeInteger InterpreterSimulatorLSB SmallInteger LargePositiveInteger }
- Good: Interpreter.pendingFinalizationSignals is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: Interpreter.newMethod is of type Top

- Good: Interpreter.semaphoresToSignalA is of type { UndefinedObject Array }
- Bad: Interpreter.methodClass is of type Top
- Bad: Interpreter.newNativeMethod is of type Top
- Good: Interpreter.atCache is of type { UndefinedObject Array }
- Bad: Interpreter.argumentCount is of type Top
- Bad: Interpreter.currentBytecode is of type Top
- Good: Interpreter.interruptPending is of type { False UndefinedObject }
- Good: Interpreter.interruptChecksEveryNms is of type { UndefinedObject SmallInteger }
- Bad: Interpreter.nextPollTick is of type Top
- Bad: Interpreter.lkupClass is of type Top
- Good: Interpreter.reclaimableContextCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: Interpreter.savedWindowSize is of type Top
- Bad: Interpreter.lastTick is of type Top
- Good: Interpreter.semaphoresToSignalCountB is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: Interpreter.messageSelector is of type Top
- Bad: Interpreter.showSurfaceFn is of type Top
- Good: InterpreterSimulator.myBitBlit is of type { False UndefinedObject BitBlitSimulator }
- Good: InterpreterSimulator.traceOn is of type { UndefinedObject True }
- Bad: InterpreterSimulator.imageName is of type Top
- Bad: InterpreterSimulator.pluginList is of type Top
- Good: InterpreterSimulator.sendCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: InterpreterSimulator.displayForm is of type { Form UndefinedObject }

- Good: InterpreterSimulator.mappedPluginEntries is of type { UndefinedObject Array }
- Good: InterpreterSimulator.filesOpen is of type { UndefinedObject OrderedCollection }
- Good: InterpreterSimulator.byteCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.signalLowSpace is of type { True UndefinedObject False }
- Bad: ObjectMemory.tenuringThreshold is of type Top
- Bad: ObjectMemory.lastHash is of type Top
- Bad: ObjectMemory.statIncrGCMSecs is of type Top
- Good: ObjectMemory.remapBuffer is of type { UndefinedObject Array }
- Bad: ObjectMemory.trueObj is of type Top
- Bad: ObjectMemory.statFullGCMSecs is of type Top
- Bad: ObjectMemory.freeLargeContexts is of type Top
- Bad: ObjectMemory.lowSpaceThreshold is of type Top
- Bad: ObjectMemory.allocationsBetweenGCs is of type Top
- Good: ObjectMemory.interruptCheckCounter is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ObjectMemory.freeContexts is of type Top
- Bad: ObjectMemory.compStart is of type Top
- Bad: ObjectMemory.youngStart is of type Top
- Bad: ObjectMemory.compEnd is of type Top
- Bad: ObjectMemory.totalObjectFoundAtStartup is of type Top
- Bad: ObjectMemory.memoryLimit is of type Top
- Bad: ObjectMemory.endOfMemory is of type Top
- Bad: ObjectMemory.specialObjectsOop is of type Top
- Good: ObjectMemory.statFullGCs is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }

- Good: ObjectMemory.statTenures is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.nilObj is of type UndefinedObject
- Bad: ObjectMemory.child is of type Top
- Bad: ObjectMemory.fwdTableLast is of type Top
- Bad: ObjectMemory.fwdTableNext is of type Top
- Good: ObjectMemory.rootTableCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.allocationCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.falseObj is of type UndefinedObject
- Good: ObjectMemory.remapBufferCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ObjectMemory.parentField is of type Top
- Bad: ObjectMemory.field is of type Top
- Good: ObjectMemory.memory is of type { Interpreter UndefinedObject InterpreterSimulatorMSB InterpreterSimulatorLSB Bitmap InterpreterSimulator }
- Bad: ObjectMemory.freeBlock is of type Top
- Good: ObjectMemory.statRootTableOverflows is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.rootTable is of type { UndefinedObject Array }
- Good: ObjectMemory.statIncrGCs is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.displayBits is of type { UndefinedObject SmallInteger }
- Bad: SystemMonitor.vmParameters is of type Top
- Bad: SystemMonitor.gcHighWaterMark is of type Top
- Bad: SystemMonitor.baselineSkip is of type Top
- Bad: SystemMonitor.prevAllocCount is of type Top
- Bad: SystemMonitor.prevDeltaIncrGC is of type Top

- Bad: SystemMonitor.prevMcMiss is of type Top
- Good: SystemMonitor.window is of type { UndefinedObject Rectangle }
- Bad: SystemMonitor.prevDeltaFullGC is of type Top
- Bad: SystemMonitor.prevFullGC is of type Top
- Good: SystemMonitor.valSelectors is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIncrGC is of type Top
- Bad: SystemMonitor.prevMsClock is of type Top
- Good: SystemMonitor.maxValues is of type { UndefinedObject Array }
- Good: SystemMonitor.prevAllocRate is of type { UndefinedObject SmallInteger }
- Bad: SystemMonitor.gcLowWaterMark is of type Top
- Good: SystemMonitor.labels is of type { UndefinedObject Array }
- Good: SystemMonitor.minValues is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIcHit is of type Top
- Bad: SystemMonitor.prevMcHit is of type Top
- Good: SystemTracer.hashGenerator is of type { Random UndefinedObject }
- Bad: SystemTracer.maxOop is of type Top
- Good: SystemTracer.map is of type UndefinedObject
- Good: SystemTracer.initialProcess is of type UndefinedObject
- Good: SystemTracer.oopMap is of type { UndefinedObject Array }
- Bad: SystemTracer.specialObjects is of type Top
- Good: SystemTracer.file is of type { CrLfFileStream UndefinedObject }
- Good: SystemTracer.cleaningUp is of type { False UndefinedObject }
- Good: SystemTracer.writeDict is of type { UndefinedObject Dictionary }
- Good: SystemTracer.imageHeaderSize is of type { UndefinedObject SmallInteger }
- Good: SystemTracer.compactClasses is of type { UndefinedObject Array }
- Good: SystemTracer.replacementClasses is of type { UndefinedObject Dictionary }

4.8 Threshold of 3000

- Good: ChineseCheckerPiece.myBoard is of type { ChineseCheckers UndefinedObject }
- Bad: ChineseCheckerPiece.boardLoc is of type Top
- Good: ChineseCheckers.movePhase is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ChineseCheckers.board is of type Top
- Good: ChineseCheckers.plannedMovePhase is of type UndefinedObject
- Good: ChineseCheckers.sixDeltas is of type { UndefinedObject Array }
- Bad: ChineseCheckers.plannedMove is of type Top
- Bad: ChineseCheckers.whoseMove is of type Top
- Good: ChineseCheckers.teams is of type { UndefinedObject Array }
- Good: ChineseCheckers.colors is of type { UndefinedObject Array }
- Good: ChineseCheckers.homes is of type { UndefinedObject Array }
- Good: ChineseCheckers.animateMoves is of type { True UndefinedObject False }
- Good: ChineseCheckers.pathMorphs is of type { UndefinedObject OrderedCollection }
- Good: ChineseCheckers.autoPlay is of type { UndefinedObject Array }
- Good: CipherPanel.originalMorphs is of type { UndefinedObject Array }
- Good: CipherPanel.decodingMorphs is of type { UndefinedObject Array }
- Good: CipherPanel.quote is of type { UndefinedObject String Character }
- Good: CipherPanel.originalText is of type UndefinedObject
- Good: CrosticPanel.crosticPanel is of type UndefinedObject
- Good: CrosticPanel.cluesCol2 is of type { AlignmentMorph UndefinedObject }
- Bad: CrosticPanel.quote is of type Top
- Good: CrosticPanel.answers is of type { UndefinedObject OrderedCollection }

- Good: CrosticPanel.clues is of type { UndefinedObject OrderedCollection }
- Good: CrosticPanel.cluesPanel is of type { AlignmentMorph UndefinedObject }
- Good: CrosticPanel.quotePanel is of type { CrosticQuotePanel UndefinedObject }
- Good: CrosticQuotePanel.cluesPanel is of type { CrosticPanel UndefinedObject }
- Good: FreeCell.lastGameLost is of type UndefinedObject
- Good: FreeCell.cardsRemainingDisplay is of type { LedMorph UndefinedObject }
- Good: FreeCell.gameNumberDisplay is of type { LedMorph UndefinedObject }
- Good: FreeCell.state is of type { UndefinedObject #sameGame #pickGame #won #newGame #lost }
- Good: FreeCell.myFillStyle is of type { UndefinedObject GradientFillStyle }
- Good: FreeCell.elapsedTimeDisplay is of type { UndefinedObject LedTimerMorph }
- Good: FreeCell.board is of type { FreeCellBoard UndefinedObject }
- Good: FreeCell.autoMoveRecursionCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: FreeCellBoard.target is of type Top
- Bad: FreeCellBoard.actionSelector is of type Top
- Good: FreeCellBoard.stacks is of type { UndefinedObject Array }
- Good: FreeCellBoard.freeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.homeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.cardDeck is of type { PlayingCardDeck UndefinedObject }
- Good: FreeCellBoard.lastCardDeck is of type UndefinedObject
- Good: FreeCellStatistics.streakLosses is of type { UndefinedObject LargeNegativeInteger SmallInteger LargePositiveInteger }
- Bad: FreeCellStatistics.lastGameWon is of type Top

- Bad: FreeCellStatistics.lastGameLost is of type Top
- Good: FreeCellStatistics.currentCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.currentType is of type { UndefinedObject #wins #losses }
- Good: FreeCellStatistics.statsMorph is of type { TextMorph UndefinedObject }
- Good: FreeCellStatistics.window is of type UndefinedObject
- Good: FreeCellStatistics.sessionLosses is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.lossesWithReplay is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.sessionWins is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.totalWins is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.streakWins is of type { UndefinedObject LargeNegativeInteger SmallInteger LargePositiveInteger }
- Good: FreeCellStatistics.totalLosses is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.winsWithReplay is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: LedDigitMorph.digit is of type Top
- Good: LedDigitMorph.highlighted is of type { True UndefinedObject False }
- Good: LedMorph.digits is of type { UndefinedObject SmallInteger }
- Bad: LedMorph.flash is of type Top
- Good: LedMorph.flashing is of type { True UndefinedObject False }
- Bad: LedMorph.value is of type Top
- Good: LedTimerMorph.counting is of type { True UndefinedObject False }
- Bad: LedTimerMorph.startSeconds is of type Top

- Good: `PlayingCard.cardNo` is of type { `UndefinedObject` `LargeNegativeInteger` `SmallInteger` `LargePositiveInteger` }
- Bad: `PlayingCard.suitNo` is of type `Top`
- Good: `PlayingCard.suit` is of type `UndefinedObject`
- Good: `PlayingCard.cardForm` is of type { `Form` `UndefinedObject` }
- Bad: `PlayingCardDeck.target` is of type `Top`
- Bad: `PlayingCardDeck.seed` is of type `Top`
- Good: `PlayingCardDeck.acceptCardSelector` is of type { `PlayingCardDeck` `UndefinedObject` `#acceptCard:onStack:` `#acceptSingleCard:on:` }
- Good: `PlayingCardDeck.cardDraggedSelector` is of type { `PlayingCardDeck` `UndefinedObject` `#dragCard:fromHome:` `#dragCard:fromStack:` }
- Good: `PlayingCardDeck.stackingOrder` is of type { `UndefinedObject` `#descending` `#ascending` }
- Good: `PlayingCardDeck.cardDroppedSelector` is of type { `PlayingCardDeck` `UndefinedObject` `#cardMoved` `#cardMovedHome` }
- Good: `PlayingCardDeck.cardDoubleClickSelector` is of type { `PlayingCardDeck` `UndefinedObject` `#doubleClickInStack:OnCard:` }
- Good: `PlayingCardDeck.stackingPolicy` is of type { `UndefinedObject` `#stagger` `#straight` `#altStraight` `#single` }
- Good: `PlayingCardDeck.emptyDropPolicy` is of type { `UndefinedObject` `#inOrder` `#any` }
- Good: `PlayingCardDeck.layout` is of type { `UndefinedObject` `#stagger` `#pile` `#grid` }
- Good: `PlayingCardMorph.suitNumber` is of type { `UndefinedObject` `LargePositiveInteger` `SmallInteger` `LargeNegativeInteger` }
- Good: `PlayingCardMorph.cardNumber` is of type { `UndefinedObject` `LargeNegativeInteger` `SmallInteger` `LargePositiveInteger` }
- Good: `SameGame.scoreDisplay` is of type { `LedMorph` `UndefinedObject` }
- Good: `SameGame.board` is of type { `UndefinedObject` `SameGameBoard` }

- Good: SameGame.selectionDisplay is of type { LedMorph UndefinedObject }
- Bad: SameGame.helpText is of type { PluggableTextMorph++ StringHolderView++ UndefinedObject }
- Good: SameGameBoard.palette is of type { UndefinedObject OrderedCollection }
- Bad: SameGameBoard.target is of type Top
- Bad: SameGameBoard.columns is of type Top
- Bad: SameGameBoard.actionSelector is of type Top
- Good: SameGameBoard.selectionColor is of type UndefinedObject
- Good: SameGameBoard.flash is of type { True UndefinedObject False }
- Good: SameGameBoard.arguments is of type { UndefinedObject Array }
- Bad: SameGameBoard.rows is of type Top
- Bad: SameGameBoard.protoTile is of type Top
- Bad: SameGameBoard.flashColor is of type Top
- Good: SameGameBoard.selection is of type UndefinedObject
- Bad: SameGameTile.oldSwitchState is of type Top
- Bad: SameGameTile.switchState is of type Top
- Good: SameGameTile.disabled is of type { True UndefinedObject False }
- Good: Tetris.scoreDisplay is of type { LedMorph UndefinedObject }
- Good: Tetris.board is of type { UndefinedObject TetrisBoard }
- Bad: TetrisBlock.shapeInfo is of type Top
- Good: TetrisBlock.board is of type { UndefinedObject TetrisBoard }
- Bad: TetrisBlock.angle is of type Top
- Bad: TetrisBlock.baseCellNumber is of type Top
- Good: TetrisBoard.game is of type { UndefinedObject Tetris }
- Good: TetrisBoard.gameOver is of type { True UndefinedObject False }
- Bad: TetrisBoard.score is of type Top
- Good: TetrisBoard.paused is of type { True UndefinedObject False }

- Good: TetrisBoard.delay is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: TetrisBoard.currentBlock is of type { TetrisBlock UndefinedObject }
- Good: WordGameLetterMorph.predecessor is of type { WordGameLetterMorph UndefinedObject }
- Good: WordGameLetterMorph.lineMorph is of type { UndefinedObject PolygonMorph }
- Good: WordGameLetterMorph.style is of type { UndefinedObject #underlined #boxed #plain }
- Good: WordGameLetterMorph.letterMorph is of type { StringMorph UndefinedObject }
- Bad: WordGameLetterMorph.letter is of type Top
- Good: WordGameLetterMorph.originalLetter is of type UndefinedObject
- Good: WordGameLetterMorph.successor is of type { WordGameLetterMorph UndefinedObject }
- Bad: WordGameLetterMorph.indexInQuote is of type Top
- Good: WordGameLetterMorph.linkedLetters is of type UndefinedObject
- Good: WordGamePanelMorph.letterMorphs is of type { Array UndefinedObject OrderedCollection }
- Good: WordGamePanelMorph.haveTypedHere is of type { True UndefinedObject False }
- Bad: PDA.recurringEvents is of type Top
- Good: PDA.peopleList is of type { ArrayedCollection++ UndefinedObject }
- Bad: PDA.date is of type Top
- Good: PDA.dateButtonPressed is of type UndefinedObject
- Bad: PDA.allEvents is of type Top
- Bad: PDA.category is of type Top
- Bad: PDA.currentItem is of type Top
- Good: PDA.scheduleList is of type { ArrayedCollection++ UndefinedObject }

- Good: PDA.categoryListIndex is of type UndefinedObject
- Bad: PDA.allPeople is of type Top
- Bad: PDA.scheduleListIndex is of type Top
- Bad: PDA.allToDoItems is of type Top
- Bad: PDA.allNotes is of type Top
- Bad: PDA.notesListIndex is of type Top
- Good: PDA.currentItemSelection is of type UndefinedObject
- Good: PDA.categoryList is of type UndefinedObject
- Good: PDA.todoList is of type { ArrayedCollection++
UndefinedObject }
- Bad: PDA.todoListIndex is of type Top
- Bad: PDA.peopleListIndex is of type Top
- Good: PDA.notesList is of type { ArrayedCollection++
UndefinedObject }
- Good: PDA.currentItemText is of type UndefinedObject
- Bad: PDA.userCategories is of type Top
- Good: PDA.viewDescriptionOnly is of type { True UndefinedObject
False }
- Bad: PDAChoiceMorph.backgroundColor is of type Top
- Bad: PDAClockMorph.backgroundColor is of type Top
- Bad: PDAAEvent.time is of type Top
- Bad: PDAAEvent.date is of type Top
- Bad: PDAAEvent.duration is of type Top
- Good: PDAAEvent.alarm is of type UndefinedObject
- Bad: PDAPerson.name is of type Top
- Good: PDAPerson.address is of type UndefinedObject
- Good: PDAPerson.phone is of type { String UndefinedObject }
- Good: PDAPerson.email is of type { String UndefinedObject }
- Bad: PDARecord.description is of type Top

- Bad: PDARecord.key is of type Top
- Good: PDARecord.otherFields is of type { UndefinedObject Dictionary }
- Good: PDARecurringEvent.recurrence is of type { UndefinedObject #nthWeekdayOfMonthEachYear #dayOfWeek #dayOfMonth #dateOfYear }
- Bad: PDARecurringEvent.firstDate is of type Top
- Bad: PDARecurringEvent.lastDate is of type Top
- Good: PDAToDoItem.deadline is of type UndefinedObject
- Bad: PDAToDoItem.result is of type Top
- Bad: PDAToDoItem.dayDone is of type Top
- Bad: PDAToDoItem.dayPosted is of type Top
- Bad: PDAToDoItem.priority is of type Top
- Bad: IRCChannelInfo.name is of type Top
- Bad: IRCChannelInfo.topic is of type Top
- Good: IRCChannelInfo.subscribers is of type { IdentitySet UndefinedObject }
- Good: IRCChannelInfo.members is of type { Set UndefinedObject }
- Good: IRCChannelInfo.connection is of type { IRCConnection UndefinedObject }
- Good: IRCChannelListBrowser.channelIndex is of type { UndefinedObject SmallInteger }
- Good: IRCChannelListBrowser.channelList is of type { Array UndefinedObject SortedCollection }
- Good: IRCChannelListBrowser.sortCriterion is of type { UndefinedObject #name }
- Good: IRCChannelListBrowser.connection is of type { IRCConnection UndefinedObject }
- Good: IRCChannelObserver.chatText is of type { Text UndefinedObject }
- Good: IRCChannelObserver.channelName is of type UndefinedObject
- Good: IRCChannelObserver.channel is of type UndefinedObject

- Good: IRCChannelObserver.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCChannelSummary.name is of type Top
- Bad: IRCChannelSummary.topic is of type Top
- Bad: IRCChannelSummary.numUsers is of type Top
- Good: IRCChannelUsersBrowser.channel is of type { UndefinedObject IRCChannelInfo }
- Good: IRCChannelUsersBrowser.userList is of type { UndefinedObject Array }
- Bad: IRCChannelUsersBrowser.userIndex is of type Top
- Good: IRCConnection.directMessageSubscribers is of type { IdentitySet UndefinedObject }
- Good: IRCConnection.channelListBeingBuilt is of type { UndefinedObject OrderedCollection }
- Good: IRCConnection.protocolMessagesToSend is of type { UndefinedObject OrderedCollection }
- Bad: IRCConnection.sendBuffer is of type Top
- Bad: IRCConnection.server is of type Top
- Good: IRCConnection.motdBeingBuilt is of type { UndefinedObject WriteStream }
- Good: IRCConnection.protocolMessageSubscribers is of type { IdentitySet UndefinedObject }
- Bad: IRCConnection.motd is of type { SequenceableCollection++ Integer++ UndefinedObject B3DIndexedQuad B3DPrimitiveRasterizerData B3DIndexedTriangle }
- Bad: IRCConnection.port is of type Top
- Good: IRCConnection.recieveBuffer is of type { String UndefinedObject }
- Good: IRCConnection.socket is of type { Socket UndefinedObject }
- Bad: IRCConnection.userName is of type Top
- Bad: IRCConnection.nick is of type Top
- Good: IRCConnection.channelList is of type { UndefinedObject Array }

- Good: IRCConnection.subscribedChannels is of type { UndefinedObject Dictionary }
- Bad: IRCConnection.fullName is of type Top
- Good: IRCConnection.messagesProcessed is of type { UndefinedObject SmallInteger }
- Good: IRCConnection.consoleText is of type { Text UndefinedObject }
- Bad: IRCDirectMessagesObserver.chatText is of type Top
- Bad: IRCDirectMessagesObserver.talkingTo is of type Top
- Good: IRCDirectMessagesObserver.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCMessage.text is of type Top
- Bad: IRCMessage.sender is of type { B3DTexture2Array B3DPrimitiveRasterizerData Integer PointArray CompiledApplescript ByteArray ArrayedCollection SoundBuffer ExternalAddress ShortIntegerArray KlattFrame B3DMaterialColor GraphicSymbol B3DVector3 FlippyArray2 WeakArray Pixmap WordArray B3DVector2Array B3DIndexedQuad B3DVector3Array DescType B3DPrimitiveVertexArray B3DRotation B3DIndexedTriangleArray WordArrayForSegment B3DIndexedQuadArray String B3DPrimitiveLight LargePositiveInteger ComponentInstance StandardSourceFileArray B3DIndexedTriangle FloatArray B3DColor4 OnceOnlyOrderedCollection TranslatedMethod DirectoryEntry Array2D B3DFloatArray AEDesc RunArray Symbol B3DInplaceArray Text Array B3DMaterial B3DRotationArray ApplescriptInstance MappedCollection B3DColor4Array Interval Heap UrlArgumentList SourceFileArray B3DLightAttenuation ShortPointArray B3DVector4 B3DVector2 SequenceableCollection MacExternalData OrderedCollection B3DExponentTable B3DViewingFrustum IntegerArray ShortRunArray SortedCollection Bitmap LinkedList B3DMatrix4x4 Semaphore TextLineInterval LargeNegativeInteger CompiledMethod OSAID UndefinedObject SmallInteger }
- Bad: IRCMessage.recipient is of type Top
- Good: IRCMessagePattern.sender is of type UndefinedObject
- Good: IRCMessagePattern.recipient is of type UndefinedObject
- Good: IRCMessageSet.messages is of type UndefinedObject
- Bad: IRCMorph.userName is of type Top
- Bad: IRCMorph.nick is of type Top

- Bad: IRCMorph.server is of type Top
- Good: IRCMorph.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCMorph.fullName is of type Top
- Good: IRCMorph.messageCollections is of type UndefinedObject
- Good: IRCMorph.consoleText is of type { Text UndefinedObject }
- Bad: IRCMorph.port is of type Top
- Bad: IRCProtocolMessage.arguments is of type Top
- Good: IRCProtocolMessage.command is of type { UndefinedObject String Character }
- Bad: IRCProtocolMessage.prefix is of type { B3DTexture2Array B3DPrimitiveRasterizerData Integer PointArray CompiledApplescript ByteArray ArrayedCollection SoundBuffer ExternalAddress ShortIntegerArray KlattFrame B3DMaterialColor GraphicSymbol B3DVector3 FlippyArray2 WeakArray Pixmap WordArray B3DVector2Array B3DIndexedQuad B3DVector3Array DescType B3DPrimitiveVertexArray B3DRotation B3DIndexedTriangleArray WordArrayForSegment B3DIndexedQuadArray String B3DPrimitiveLight LargePositiveInteger ComponentInstance StandardSourceFileArray B3DIndexedTriangle FloatArray B3DColor4 OnceOnlyOrderedCollection TranslatedMethod DirectoryEntry Array2D B3DFloatArray AEDesc Symbol RunArray B3DInplaceArray Text Array B3DMaterial B3DRotationArray ApplescriptInstance MappedCollection B3DColor4Array Interval Heap UrlArgumentList SourceFileArray B3DLightAttenuation ShortPointArray B3DVector4 B3DVector2 SequenceableCollection MacExternalData OrderedCollection B3DExponentTable B3DViewingFrustum IntegerArray ShortRunArray SortedCollection Bitmap LinkedList B3DMatrix4x4 Semaphore TextLineInterval LargeNegativeInteger CompiledMethod OSAID UndefinedObject SmallInteger }
- Good: IRCRecipientFilter.recipient is of type UndefinedObject
- Good: CategoriesFile.categories is of type { UndefinedObject Dictionary }
- Bad: Celeste.currentMessages is of type Top
- Good: Celeste.customFilterBlock is of type { UndefinedObject Compiler }
- Bad: Celeste.status is of type Top

- Bad: Celeste.userPassword is of type Top
- Bad: Celeste.currentMsgID is of type Top
- Bad: Celeste.mailDB is of type Top
- Bad: Celeste.currentCategory is of type Top
- Bad: Celeste.lastCategory is of type Top
- Bad: Celeste.lastCategoryList is of type Top
- Good: Celeste.dateFilter is of type UndefinedObject
- Good: Celeste.currentTOC is of type { Array UndefinedObject
OrderedCollection }
- Bad: Celeste.fromFilter is of type Top
- Good: Celeste.formatMessages is of type UndefinedObject
- Good: Celeste.lastCategoryMenu is of type { CustomMenu
UndefinedObject }
- Bad: Celeste.messageTextView is of type { PluggableTextMorph++
PluggableListMorph++ PluggableListView++
SimpleHierarchicalListMorph++ PluggableTextView UndefinedObject }
- Bad: Celeste.subjectFilter is of type Top
- Bad: CelesteComposition.textEditor is of type Top
- Bad: CelesteComposition.celeste is of type Top
- Bad: CelesteComposition.messageText is of type Top
- Good: CelesteComposition.morphicWindow is of type {
AlignmentMorphBob1 UndefinedObject SystemWindow }
- Good: CelesteComposition.mvcWindow is of type {
StandardSystemView UndefinedObject }
- Good: CelesteComposition.attachmentSeparator is of type
UndefinedObject
- Good: FancyCelesteComposition.theLinkToInclude is of type { String
UndefinedObject }
- Bad: FancyCelesteComposition.to is of type Top
- Bad: FancyCelesteComposition.subject is of type Top
- Good: FancyCelesteComposition.textFields is of type { UndefinedObject
Array }

- Good: IndexFile.msgDictionary is of type { PluggableDictionary
UndefinedObject }
- Good: IndexFile.logfile is of type { UndefinedObject StandardFileStream
}
- Good: IndexFile.timeSortedEntries is of type { UndefinedObject
SortedCollection }
- Bad: IndexFileEntry.time is of type Top
- Bad: IndexFileEntry.msgID is of type Top
- Bad: IndexFileEntry.messageFile is of type Top
- Bad: IndexFileEntry.cc is of type Top
- Bad: IndexFileEntry.tocLineCache is of type Top
- Bad: IndexFileEntry.location is of type Top
- Bad: IndexFileEntry.to is of type Top
- Bad: IndexFileEntry.textLength is of type Top
- Bad: IndexFileEntry.subject is of type Top
- Bad: IndexFileEntry.from is of type Top
- Good: MIMEHeaderValue.mainValue is of type { UndefinedObject
String Character }
- Good: MIMEHeaderValue.parameters is of type { UndefinedObject
Dictionary }
- Bad: MIMEPart.content is of type Top
- Good: MIMEPart.parts is of type { Array UndefinedObject
OrderedCollection }
- Bad: MIMEPart.separator is of type Top
- Bad: MIMEPart.text is of type Top
- Good: MIMEPart.fields is of type { UndefinedObject Dictionary }
- Good: MailDB.rootFilename is of type { String UndefinedObject }
- Bad: MailDB.indexFile is of type Top
- Bad: MailDB.messageFile is of type Top
- Bad: MailDB.categoriesFile is of type Top

- Bad: MailDBFile.filename is of type Top
- Bad: MailMessage.time is of type Top
- Bad: MailMessage.separator is of type Top
- Bad: MailMessage.cc is of type Top
- Bad: MailMessage.body is of type Top
- Bad: MailMessage.to is of type Top
- Bad: MailMessage.text is of type Top
- Bad: MailMessage.subject is of type Top
- Good: MailMessage.fields is of type { UndefinedObject Dictionary }
- Bad: MailMessage.from is of type Top
- Good: MailMessage.parts is of type { Array UndefinedObject OrderedCollection }
- Bad: MailNotifier.lastConnectTime is of type Top
- Bad: MailNotifier.messageCount is of type Top
- Good: MailNotifier.password is of type UndefinedObject
- Good: MailNotifier.socket is of type { UndefinedObject POPSocket }
- Good: MessageFile.file is of type { CrLfFileStream UndefinedObject }
- Bad: ReadNewsInboxFile.currentNewsgroup is of type Top
- Good: ReadNewsInboxFile.msgBuffer is of type { UndefinedObject WriteStream }
- Bad: TextMessageLink.message is of type Top
- Bad: RBAssignmentNode.variable is of type Top
- Bad: RBAssignmentNode.assignment is of type Top
- Bad: RBAssignmentNode.value is of type Top
- Good: RBBlockNode.colons is of type { UndefinedObject OrderedCollection }
- Bad: RBBlockNode.bar is of type Top
- Bad: RBBlockNode.right is of type Top
- Bad: RBBlockNode.left is of type Top

- Bad: RBBlockNode.body is of type Top
- Bad: RBBlockNode.arguments is of type Top
- Bad: RBCascadeNode.messages is of type Top
- Good: RBCascadeNode.semicolons is of type { UndefinedObject OrderedCollection }
- Good: RBFormatter.codeStream is of type { UndefinedObject WriteStream }
- Bad: RBFormatter.lineStart is of type Top
- Bad: RBFormatter.firstLineLength is of type Top
- Good: RBFormatter.tabs is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: RBLiteralNode.token is of type Top
- Bad: RBMessageNode.arguments is of type Top
- Bad: RBMessageNode.receiver is of type Top
- Bad: RBMessageNode.selector is of type Top
- Bad: RBMessageNode.selectorParts is of type Top
- Bad: RBMethodNode.tags is of type Top
- Bad: RBMethodNode.selector is of type Top
- Bad: RBMethodNode.selectorParts is of type Top
- Bad: RBMethodNode.body is of type Top
- Bad: RBMethodNode.source is of type Top
- Bad: RBMethodNode.arguments is of type Top
- Bad: RBOptimizedNode.body is of type Top
- Bad: RBOptimizedNode.right is of type Top
- Bad: RBOptimizedNode.left is of type Top
- Good: RBParser.scanner is of type { RBScanner UndefinedObject }
- Bad: RBParser.tags is of type Object++
- Bad: RBParser.source is of type Top
- Good: RBParser.emptyStatements is of type { True UndefinedObject False }

- Good: `RBParser.currentToken` is of type { `RBShortAssignmentToken` `RBOptimizedToken` `UndefinedObject` `RBToken` `RBPatternBlockToken` `RBScanner` `RBLiteralToken` `RBAssignmentToken` `RBKeywordToken` `RBBinarySelectorToken` `RBIentifierToken` `RBSpecialCharacterToken` }
- Good: `RBParser.negatedNumbers` is of type { `True` `UndefinedObject` `False` }
- Good: `RBParser.errorBlock` is of type { `UndefinedObject` `a BlockType` `a BlockType` `a BlockType` `a BlockType` `a BlockType` `a BlockType` `a BlockType` `a BlockType` `a BlockType` `a BlockType` }
- Bad: `RBParser.nextToken` is of type `Top`
- Good: `RBPatternMessageNode.isCascadeList` is of type { `True` `UndefinedObject` `False` }
- Good: `RBPatternMessageNode.isList` is of type { `True` `UndefinedObject` `False` }
- Good: `RBPatternMethodNode.isList` is of type { `True` `UndefinedObject` `False` }
- Good: `RBPatternVariableNode.recurseInto` is of type { `True` `UndefinedObject` `False` }
- Good: `RBPatternVariableNode.isLiteral` is of type { `True` `UndefinedObject` `False` }
- Good: `RBPatternVariableNode.isStatement` is of type { `True` `UndefinedObject` `False` }
- Good: `RBPatternVariableNode.isAnything` is of type { `True` `UndefinedObject` `False` }
- Good: `RBPatternVariableNode.isList` is of type { `True` `UndefinedObject` `False` }
- Bad: `RBProgramNode.parent` is of type `Top`
- Bad: `RBProgramNode.comments` is of type `Top`
- Bad: `RBReturnNode.return` is of type `Top`
- Bad: `RBReturnNode.value` is of type `Top`
- Bad: `RBSequenceNode.rightBar` is of type `Top`
- Good: `RBSequenceNode.periods` is of type { `UndefinedObject` `OrderedCollection` }

- Bad: RBSequenceNode.temporaries is of type Top
- Bad: RBSequenceNode.statements is of type Top
- Bad: RBSequenceNode.leftBar is of type Top
- Good: RBValueNode.parentheses is of type { UndefinedObject OrderedCollection }
- Bad: RBVariableNode.token is of type Top
- Bad: ADPCMCodec.index is of type Top
- Good: ADPCMCodec.indexTable is of type { Array UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.deltaSignMask is of type Top
- Bad: ADPCMCodec.bitPosition is of type Top
- Bad: ADPCMCodec.encodedBytes is of type Top
- Good: ADPCMCodec.stepSizeTable is of type { Array UndefinedObject SoundBuffer }
- Good: ADPCMCodec.sampleIndex is of type { SmallInteger LargeNegativeInteger LargePositiveInteger UndefinedObject Array }
- Good: ADPCMCodec.rightSamples is of type { UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.byteIndex is of type Top
- Good: ADPCMCodec.frameSizeMask is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ADPCMCodec.bitsPerSample is of type Top
- Bad: ADPCMCodec.predicted is of type Top
- Bad: ADPCMCodec.deltaValueHighBit is of type Top
- Bad: ADPCMCodec.deltaValueMask is of type Top
- Bad: ADPCMCodec.currentByte is of type Top
- Bad: ADPCMCodec.samples is of type Top
- Good: AIFFFileReader.channelData is of type { UndefinedObject Array }
- Bad: AIFFFileReader.frameCount is of type Top
- Bad: AIFFFileReader.isLooped is of type Top

- Bad: AIFFFileReader.gain is of type Top
- Bad: AIFFFileReader.in is of type { StandardFileStream
HtmlFileStream SwikiPseudoFileStream RemoteFileStream ReadStream
CrLfFileStream UndefinedObject }
- Bad: AIFFFileReader.fileType is of type Top
- Bad: AIFFFileReader.pitch is of type Top
- Good: AIFFFileReader.markers is of type { UndefinedObject Array }
- Bad: AIFFFileReader.channelCount is of type Top
- Bad: AIFFFileReader.bitsPerSample is of type Top
- Good: AIFFFileReader.mergelfStereo is of type { True UndefinedObject
False }
- Good: AIFFFileReader.skipDataChunk is of type { True
UndefinedObject False }
- Bad: AIFFFileReader.samplingRate is of type { Number++
UndefinedObject }
- Bad: AbstractSound.envelopes is of type Top
- Bad: AbstractSound.mSecsSinceStart is of type Top
- Bad: AbstractSound.scaledVolLimit is of type Top
- Bad: AbstractSound.scaledVol is of type Top
- Bad: AbstractSound.samplesUntilNextControl is of type Top
- Bad: AbstractSound.scaledVolIncr is of type Top
- Good: CompressedSoundData.perceivedPitch is of type {
UndefinedObject Float }
- Bad: CompressedSoundData.codecName is of type Top
- Good: CompressedSoundData.channels is of type { UndefinedObject
Array }
- Bad: CompressedSoundData.gain is of type Top
- Bad: CompressedSoundData.firstSample is of type Top
- Bad: CompressedSoundData.soundClassName is of type Top
- Bad: CompressedSoundData.cachedSound is of type { WaveletCodec
MuLawCodec ADPCMCodec SoundCodec UndefinedObject
LoopedSampledSound GSMCodec SampledSound }

- Bad: CompressedSoundData.loopLength is of type Top
- Bad: CompressedSoundData.samplingRate is of type Top
- Bad: CompressedSoundData.loopEnd is of type Top
- Bad: Envelope.target is of type Top
- Bad: Envelope.scale is of type Top
- Good: Envelope.updateSelector is of type { UndefinedObject #pitch: #modulation: #ratio: }
- Bad: Envelope.loopEndMsecs is of type { Magnitude++ UndefinedObject }
- Bad: Envelope.endMsecs is of type Top
- Bad: Envelope.currValue is of type Top
- Bad: Envelope.loopStartIndex is of type Top
- Bad: Envelope.valueIncr is of type Top
- Good: Envelope.noChangesDuringLoop is of type { True UndefinedObject False }
- Bad: Envelope.nextRecomputeTime is of type Top
- Bad: Envelope.loopEndIndex is of type Top
- Bad: Envelope.loopMsecs is of type Top
- Bad: Envelope.loopStartMsecs is of type Top
- Bad: Envelope.decayScale is of type Top
- Bad: Envelope.points is of type Top
- Bad: Envelope.lastValue is of type Top
- Bad: FFT.permTable is of type { SequenceableCollection++ Integer++ UndefinedObject B3DIndexedQuad B3DPrimitiveRasterizerData B3DIndexedTriangle }
- Bad: FFT.nu is of type Top
- Bad: FFT.n is of type Top
- Good: FFT.sinTable is of type { Array UndefinedObject FloatArray }
- Good: FFT.imagData is of type { Array UndefinedObject FloatArray }
- Good: FFT.window is of type { UndefinedObject FloatArray }

- Good: FFT.realData is of type { Array UndefinedObject FloatArray }
- Bad: FMSound.initialCount is of type Top
- Bad: FMSound.multiplier is of type Top
- Bad: FMSound.scaledOffsetIndex is of type Top
- Bad: FMSound.waveTable is of type Top
- Bad: FMSound.scaledWaveTableSize is of type Top
- Bad: FMSound.scaledIndex is of type Top
- Bad: FMSound.normalizedModulation is of type Top
- Bad: FMSound.scaledOffsetIndexIncr is of type Top
- Bad: FMSound.modulation is of type Top
- Bad: FMSound.scaledIndexIncr is of type Top
- Bad: FMSound.count is of type Top
- Good: FWT.transform is of type { UndefinedObject Array }
- Bad: FWT.beta is of type Top
- Good: FWT.gTilde is of type { UndefinedObject Array }
- Good: FWT.coeffs is of type { UndefinedObject Array }
- Good: FWT.g is of type { UndefinedObject Array }
- Bad: FWT.nSamples is of type Top
- Bad: FWT.nLevels is of type Top
- Bad: FWT.alpha is of type Top
- Good: FWT.h is of type { UndefinedObject Array }
- Good: FWT.samples is of type { UndefinedObject Array }
- Good: FWT.hTilde is of type { UndefinedObject Array }
- Bad: GSMCodec.encodeState is of type Top
- Bad: GSMCodec.decodeState is of type Top
- Bad: LoopedSampledSound.initialCount is of type Top
- Bad: LoopedSampledSound.perceivedPitch is of type Top
- Bad: LoopedSampledSound.scaledLoopLength is of type Top

- Bad: LoopedSampledSound.lastSample is of type Top
- Bad: LoopedSampledSound.gain is of type Top
- Bad: LoopedSampledSound.scaledIndexIncr is of type Top
- Bad: LoopedSampledSound.releaseCount is of type Top
- Bad: LoopedSampledSound.firstSample is of type Top
- Bad: LoopedSampledSound.sampleCountForRelease is of type Top
- Bad: LoopedSampledSound.rightSamples is of type Top
- Bad: LoopedSampledSound.leftSamples is of type Top
- Bad: LoopedSampledSound.scaledIndex is of type Top
- Bad: LoopedSampledSound.originalSamplingRate is of type Top
- Bad: LoopedSampledSound.count is of type Top
- Bad: LoopedSampledSound.loopEnd is of type Top
- Good: MixedSound.soundDone is of type { UndefinedObject Array }
- Good: MixedSound.sounds is of type { UndefinedObject Array }
- Good: MixedSound.leftVols is of type { UndefinedObject Array }
- Good: MixedSound.rightVols is of type { UndefinedObject Array }
- Bad: PitchEnvelope.centerPitch is of type Top
- Bad: PluckedSound.initialCount is of type Top
- Good: PluckedSound.ring is of type { UndefinedObject SoundBuffer }
- Bad: PluckedSound.scaledIndexLimit is of type Top
- Bad: PluckedSound.scaledIndex is of type Top
- Bad: PluckedSound.scaledIndexIncr is of type Top
- Bad: PluckedSound.count is of type Top
- Good: RandomEnvelope.rand is of type { Random UndefinedObject }
- Good: RandomEnvelope.highLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.lowLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.delta is of type { UndefinedObject Float }
- Bad: RepeatingSound.iteration is of type Top

- Bad: RepeatingSound.iterationCount is of type Top
- Bad: RepeatingSound.sound is of type Top
- Bad: RepeatingSound.samplesPerIteration is of type Top
- Bad: RestSound.initialCount is of type Top
- Bad: RestSound.count is of type Top
- Good: ReverbSound.tapGains is of type { UndefinedObject Bitmap }
- Good: ReverbSound.bufferSize is of type { Bitmap LargeNegativeInteger LargePositiveInteger UndefinedObject SmallInteger }
- Good: ReverbSound.rightBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.leftBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.tapCount is of type { UndefinedObject SmallInteger }
- Good: ReverbSound.tapDelays is of type { UndefinedObject Bitmap }
- Bad: ReverbSound.bufferIndex is of type Top
- Good: ReverbSound.sound is of type UndefinedObject
- Good: SampledInstrument.sustainedSoft is of type { UndefinedObject Array }
- Good: SampledInstrument.staccatoSoft is of type { UndefinedObject Array }
- Good: SampledInstrument.staccatoLoud is of type { UndefinedObject Array }
- Good: SampledInstrument.sustainedThreshold is of type { UndefinedObject Float }
- Bad: SampledInstrument.sustainedLoud is of type Top
- Good: SampledInstrument.loudThreshold is of type { UndefinedObject Float }
- Bad: SampledSound.initialCount is of type Top
- Bad: SampledSound.samples is of type Top
- Bad: SampledSound.scaledIncrement is of type Top

- Bad: SampledSound.scaledIndex is of type Top
- Bad: SampledSound.indexHighBits is of type Top
- Bad: SampledSound.samplesSize is of type Top
- Bad: SampledSound.originalSamplingRate is of type Top
- Bad: SampledSound.count is of type Top
- Good: SequentialSound.sounds is of type { UndefinedObject Array }
- Good: SequentialSound.currentIndex is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: Sonogram.lastX is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: Sonogram.pixValMap is of type { UndefinedObject Bitmap }
- Good: Sonogram.maxVal is of type { UndefinedObject Float }
- Good: Sonogram.minVal is of type { UndefinedObject Float }
- Good: Sonogram.scrollDelta is of type { UndefinedObject SmallInteger }
- Good: Sonogram.columnForm is of type { Form UndefinedObject }
- Bad: SoundInputStream.mutex is of type Top
- Bad: SoundInputStream.bufferSize is of type Top
- Good: SoundRecorder.currentBuffer is of type { UndefinedObject SoundBuffer }
- Bad: SoundRecorder.recordProcess is of type Top
- Good: SoundRecorder.codec is of type { GSMCodec UndefinedObject }
- Good: SoundRecorder.desiredSampleRate is of type { UndefinedObject Float }
- Bad: SoundRecorder.nextIndex is of type Top
- Good: SoundRecorder.meteringBuffer is of type { UndefinedObject SoundBuffer }
- Bad: SoundRecorder.meterLevel is of type Top
- Good: SoundRecorder.stereo is of type { False UndefinedObject }
- Good: SoundRecorder.recordLevel is of type { UndefinedObject Float }

- Good: SoundRecorder.soundPlaying is of type { SampledSound SequentialSound UndefinedObject ChatRecorder SoundInputStream SoundRecorder }
- Bad: SoundRecorder.recordedBuffers is of type Top
- Good: SoundRecorder.paused is of type { True UndefinedObject False }
- Bad: SoundRecorder.samplingRate is of type Top
- Good: SoundRecorder.recordedSound is of type { SampledSound SequentialSound UndefinedObject ChatRecorder SoundInputStream SoundRecorder }
- Good: SoundRecorder.bufferAvailableSema is of type { Semaphore UndefinedObject }
- Bad: VolumeEnvelope.mSecsForChange is of type { Magnitude++ UndefinedObject }
- Bad: VolumeEnvelope.targetVol is of type Top
- Good: VolumeEnvelope.currentVol is of type UndefinedObject
- Bad: WaveletCodec.alpha is of type Top
- Bad: WaveletCodec.beta is of type Top
- Good: WaveletCodec.fwt is of type { FWT UndefinedObject }
- Bad: WaveletCodec.samplesPerFrame is of type Top
- Bad: WaveletCodec.nLevels is of type Top
- Bad: TestInterfaceBase.duration is of type Top
- Bad: TestInterfaceBase.classPattern is of type Top
- Bad: TestInterfaceBase.result is of type Top
- Bad: TestInterfaceBase.selectorPattern is of type Top
- Good: TestModel.failureList is of type { UndefinedObject OrderedCollection }
- Good: TestModel.patternHistory is of type { UndefinedObject OrderedCollection }
- Good: TestModel.errorList is of type { UndefinedObject OrderedCollection }
- Good: TestModel.summaryText is of type { String UndefinedObject }

- Bad: TestModel.summaryTextM is of type { PluggableTextMorph++ PluggableTextView UndefinedObject }
- Good: TestModel.summaryTextV is of type { PluggableTextView UndefinedObject }
- Good: TestModel.updateColorSelector is of type { UndefinedObject #updateColorM #updateColorV }
- Good: TestModel.patternTextV is of type { PluggableTextView UndefinedObject }
- Bad: TestModel.patternTextM is of type { PluggableTextMorph++ PluggableTextView UndefinedObject }
- Bad: TestModel.detailsText is of type Top
- Bad: Browser.classOrganizer is of type Top
- Bad: Browser.systemOrganizer is of type Top
- Bad: Browser.messageListIndex is of type Top
- Bad: Browser.messageCategoryListIndex is of type Top
- Good: Browser.editSelection is of type { Boolean++ UndefinedObject #hierarchy #editClass #editComment #none #editMessageCategories #newClass #editMessage #newMessage #editSystemCategories #byteCodes }
- Bad: Browser.metaClassOrganizer is of type Top
- Bad: Browser.systemCategoryListIndex is of type Top
- Bad: Browser.metaClassIndicated is of type Top
- Bad: Browser.classListIndex is of type Top
- Bad: ChangedMessageSet.changeSet is of type Top
- Bad: HierarchyBrowser.centralClass is of type Top
- Bad: HierarchyBrowser.classList is of type Top
- Bad: MessageSet.messageList is of type Top
- Bad: MessageSet.autoSelectString is of type Top
- Bad: PackageBrowser.package is of type Top
- Bad: PackageBrowser.packageListIndex is of type Top
- Good: PackageBrowser.packageList is of type UndefinedObject

- Good: ProtocolBrowser.selectedClass is of type UndefinedObject
- Bad: ProtocolBrowser.selectedSelector is of type Top
- Bad: SelectorBrowser.classListIndex is of type Top
- Bad: SelectorBrowser.classList is of type Top
- Bad: SelectorBrowser.selectorIndex is of type Top
- Bad: SelectorBrowser.selectorList is of type Top
- Bad: BitBltSimulation.sy is of type Top
- Bad: BitBltSimulation.halfToneBase is of type Top
- Good: BitBltSimulation.cmBlueShift is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBltSimulation.destWidth is of type Top
- Bad: BitBltSimulation.destX is of type Top
- Bad: BitBltSimulation.width is of type Top
- Bad: BitBltSimulation.scanString is of type Top
- Bad: BitBltSimulation.sourceBits is of type Top
- Bad: BitBltSimulation.scanStop is of type Top
- Bad: BitBltSimulation.dy is of type Top
- Good: BitBltSimulation.warpBitShiftTable is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.destPixSize is of type Top
- Bad: BitBltSimulation.pixPerWord is of type Top
- Good: BitBltSimulation.ditherValues16 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.cmRedMask is of type Top
- Bad: BitBltSimulation.warpSrcMask is of type Top
- Bad: BitBltSimulation.dstBitShift is of type Top
- Bad: BitBltSimulation.destIndex is of type Top
- Bad: BitBltSimulation.sourceIndex is of type Top
- Bad: BitBltSimulation.clipX is of type Top

- Good: BitBltSimulation.hDir is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.nWords is of type Top
- Bad: BitBltSimulation.clipHeight is of type Top
- Bad: BitBltSimulation.bitBltOop is of type Top
- Bad: BitBltSimulation.preload is of type Top
- Bad: BitBltSimulation.opTable is of type Top
- Bad: BitBltSimulation.sourceForm is of type Top
- Bad: BitBltSimulation.warpAlignMask is of type Top
- Bad: BitBltSimulation.skew is of type Top
- Good: BitBltSimulation.cmDeltaBits is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: BitBltSimulation.ditherMatrix4x4 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.sourceY is of type Top
- Bad: BitBltSimulation.scanStart is of type Top
- Good: BitBltSimulation.cmGreenShift is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBltSimulation.destBits is of type Top
- Bad: BitBltSimulation.destPitch is of type Top
- Bad: BitBltSimulation.height is of type Top
- Bad: BitBltSimulation.sourcePitch is of type Top
- Bad: BitBltSimulation.destY is of type Top
- Bad: BitBltSimulation.affectedL is of type Top
- Good: BitBltSimulation.maskTable is of type { UndefinedObject Array }
- Good: BitBltSimulation.scanDisplayFlag is of type { True UndefinedObject False }
- Bad: BitBltSimulation.mask1 is of type Top
- Bad: BitBltSimulation.destDelta is of type Top

- Good: BitBltSimulation.noHalftone is of type { True UndefinedObject False }
- Bad: BitBltSimulation.clipWidth is of type Top
- Bad: BitBltSimulation.destForm is of type Top
- Bad: BitBltSimulation.sx is of type Top
- Bad: BitBltSimulation.clipY is of type Top
- Bad: BitBltSimulation.scanRightX is of type Top
- Bad: BitBltSimulation.cmBlueMask is of type Top
- Bad: BitBltSimulation.halftoneHeight is of type Top
- Bad: BitBltSimulation.affectedT is of type Top
- Bad: BitBltSimulation.sourcePixSize is of type Top
- Good: BitBltSimulation.cmRedShift is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: BitBltSimulation.noSource is of type { True UndefinedObject False }
- Bad: BitBltSimulation.dx is of type Top
- Bad: BitBltSimulation.destMask is of type Top
- Bad: BitBltSimulation.affectedB is of type Top
- Bad: BitBltSimulation.cmGreenMask is of type Top
- Good: BitBltSimulation.hasSurfaceLock is of type { True UndefinedObject False }
- Bad: BitBltSimulation.stopCode is of type Top
- Bad: BitBltSimulation.combinationRule is of type Top
- Bad: BitBltSimulation.bitCount is of type Top
- Good: BitBltSimulation.vDir is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.destHeight is of type Top
- Good: BitBltSimulation.cmBitsPerColor is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.bbH is of type Top

- Bad: BitBltSimulation.bbW is of type Top
- Bad: BitBltSimulation.srcWidth is of type Top
- Bad: BitBltSimulation.affectedR is of type Top
- Good: BitBltSimulation.ditherThresholds16 is of type { CArrayAccessor
UndefinedObject }
- Bad: BitBltSimulation.sourceDelta is of type Top
- Good: BitBltSimulation.warpSrcShift is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBltSimulation.halfToneForm is of type Top
- Bad: BitBltSimulation.mask2 is of type Top
- Bad: BitBltSimulation.scanXTable is of type Top
- Bad: BitBltSimulation.scanStopArray is of type Top
- Bad: BitBltSimulation.sourceAlpha is of type Top
- Bad: BitBltSimulation.colorMap is of type Top
- Good: BitBltSimulation.warpAlignShift is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBltSimulation.sourceX is of type Top
- Bad: BitBltSimulation.srcBitShift is of type Top
- Bad: BitBltSimulation.srcHeight is of type Top
- Bad: Interpreter.activeContext is of type Top
- Bad: Interpreter.nextWakeupTick is of type Top
- Bad: Interpreter.localIP is of type Top
- Bad: Interpreter.localHomeContext is of type Top
- Good: Interpreter.methodCache is of type { UndefinedObject Array }
- Bad: Interpreter.interruptKeycode is of type Top
- Good: Interpreter.semaphoresToSignalCountA is of type {
UndefinedObject LargePositiveInteger SmallInteger
LargeNegativeInteger }
- Good: Interpreter.interruptCheckCounterFeedBackReset is of type {
UndefinedObject LargePositiveInteger SmallInteger
LargeNegativeInteger }

- Good: Interpreter.interpreterVersion is of type UndefinedObject
- Good: Interpreter.obsoleteNamedPrimitiveTable is of type { CArrayAccessor UndefinedObject }
- Good: Interpreter.interpreterProxy is of type { UndefinedObject InterpreterSimulator InterpreterSimulatorMSB InterpreterSimulatorLSB }
- Bad: Interpreter.receiver is of type { UndefinedObject InterpreterSimulatorMSB Bitmap InterpreterSimulator InterpreterLargeNegativeInteger InterpreterSimulatorLSB SmallInteger LargePositiveInteger }
- Bad: Interpreter.stackPointer is of type Top
- Bad: Interpreter.receiverClass is of type Top
- Good: Interpreter.obsoleteIndexedPrimitiveTable is of type { CArrayAccessor UndefinedObject }
- Bad: Interpreter.successFlag is of type { BrowserEnvironment++ Boolean++ RBConjunctiveCondition UndefinedObject }
- Good: Interpreter.compilerHooks is of type UndefinedObject
- Bad: Interpreter.fullScreenFlag is of type { Interpreter InterpreterSimulator InterpreterSimulatorLSB UndefinedObject InterpreterSimulatorMSB }
- Bad: Interpreter.primitiveIndex is of type Top
- Good: Interpreter.semaphoresToSignalB is of type { UndefinedObject Array }
- Bad: Interpreter.compilerInitialized is of type Top
- Bad: Interpreter.localSP is of type Top
- Bad: Interpreter.instructionPointer is of type Top
- Good: Interpreter.semaphoresUseBufferA is of type { True UndefinedObject False }
- Good: Interpreter.deferDisplayUpdates is of type { True UndefinedObject False }
- Bad: Interpreter.theHomeContext is of type Top
- Bad: Interpreter.extraVMMemory is of type Top

- Bad: Interpreter.method is of type { UndefinedObject InterpreterSimulatorMSB Bitmap InterpreterSimulator Interpreter LargeNegativeInteger InterpreterSimulatorLSB SmallInteger LargePositiveInteger }
- Good: Interpreter.pendingFinalizationSignals is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: Interpreter.newMethod is of type Top
- Good: Interpreter.semaphoresToSignalA is of type { UndefinedObject Array }
- Bad: Interpreter.methodClass is of type Top
- Bad: Interpreter.newNativeMethod is of type Top
- Good: Interpreter.atCache is of type { UndefinedObject Array }
- Bad: Interpreter.argumentCount is of type Top
- Bad: Interpreter.currentBytecode is of type Top
- Good: Interpreter.interruptPending is of type { False UndefinedObject }
- Good: Interpreter.interruptChecksEveryNms is of type { UndefinedObject SmallInteger }
- Bad: Interpreter.nextPollTick is of type Top
- Bad: Interpreter.lkupClass is of type Top
- Good: Interpreter.reclaimableContextCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: Interpreter.savedWindowSize is of type Top
- Bad: Interpreter.lastTick is of type Top
- Good: Interpreter.semaphoresToSignalCountB is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: Interpreter.messageSelector is of type Top
- Bad: Interpreter.showSurfaceFn is of type Top
- Good: InterpreterSimulator.myBitBlt is of type { False UndefinedObject BitBltSimulator }
- Good: InterpreterSimulator.traceOn is of type { UndefinedObject True }

- Bad: InterpreterSimulator.imageName is of type Top
- Bad: InterpreterSimulator.pluginList is of type Top
- Good: InterpreterSimulator.sendCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: InterpreterSimulator.displayForm is of type { Form UndefinedObject }
- Good: InterpreterSimulator.mappedPluginEntries is of type { UndefinedObject Array }
- Good: InterpreterSimulator.filesOpen is of type { UndefinedObject OrderedCollection }
- Good: InterpreterSimulator.byteCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.signalLowSpace is of type { True UndefinedObject False }
- Bad: ObjectMemory.tenuringThreshold is of type Top
- Bad: ObjectMemory.lastHash is of type Top
- Bad: ObjectMemory.statIncrGCMSecs is of type Top
- Good: ObjectMemory.remapBuffer is of type { UndefinedObject Array }
- Bad: ObjectMemory.trueObj is of type Top
- Bad: ObjectMemory.statFullGCMSecs is of type Top
- Bad: ObjectMemory.freeLargeContexts is of type Top
- Bad: ObjectMemory.lowSpaceThreshold is of type Top
- Bad: ObjectMemory.allocationsBetweenGCs is of type Top
- Good: ObjectMemory.interruptCheckCounter is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ObjectMemory.freeContexts is of type Top
- Bad: ObjectMemory.compStart is of type Top
- Bad: ObjectMemory.youngStart is of type Top
- Bad: ObjectMemory.compEnd is of type Top
- Bad: ObjectMemory.totalObjectFoundAtStartup is of type Top

- Bad: ObjectMemory.memoryLimit is of type Top
- Bad: ObjectMemory.endOfMemory is of type Top
- Bad: ObjectMemory.specialObjectsOop is of type Top
- Good: ObjectMemory.statFullGCs is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.statTenures is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ObjectMemory.nilObj is of type Top
- Bad: ObjectMemory.child is of type Top
- Bad: ObjectMemory.fwdTableLast is of type Top
- Bad: ObjectMemory.fwdTableNext is of type Top
- Good: ObjectMemory.rootTableCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.allocationCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ObjectMemory.falseObj is of type { UndefinedObject InterpreterSimulatorMSB Bitmap InterpreterSimulator Interpreter LargeNegativeInteger InterpreterSimulatorLSB SmallInteger LargePositiveInteger }
- Good: ObjectMemory.remapBufferCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ObjectMemory.parentField is of type Top
- Bad: ObjectMemory.field is of type Top
- Good: ObjectMemory.memory is of type { Interpreter UndefinedObject InterpreterSimulatorMSB InterpreterSimulatorLSB Bitmap InterpreterSimulator }
- Bad: ObjectMemory.freeBlock is of type Top
- Good: ObjectMemory.statRootTableOverflows is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.rootTable is of type { UndefinedObject Array }
- Good: ObjectMemory.statIncrGCs is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }

- Good: ObjectMemory.displayBits is of type { UndefinedObject SmallInteger }
- Bad: SystemMonitor.vmParameters is of type Top
- Bad: SystemMonitor.gcHighWaterMark is of type Top
- Bad: SystemMonitor.baselineSkip is of type Top
- Bad: SystemMonitor.prevAllocCount is of type Top
- Bad: SystemMonitor.prevDeltaIncrGC is of type Top
- Bad: SystemMonitor.prevMcMiss is of type Top
- Good: SystemMonitor.window is of type { UndefinedObject Rectangle }
- Bad: SystemMonitor.prevDeltaFullGC is of type Top
- Bad: SystemMonitor.prevFullGC is of type Top
- Good: SystemMonitor.valSelectors is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIncrGC is of type Top
- Bad: SystemMonitor.prevMsClock is of type Top
- Good: SystemMonitor.maxValues is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevAllocRate is of type Top
- Bad: SystemMonitor.gcLowWaterMark is of type Top
- Good: SystemMonitor.labels is of type { UndefinedObject Array }
- Good: SystemMonitor.minValues is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIcHit is of type Top
- Bad: SystemMonitor.prevMcHit is of type Top
- Good: SystemTracer.hashGenerator is of type { Random UndefinedObject }
- Bad: SystemTracer.maxOop is of type Top
- Good: SystemTracer.map is of type UndefinedObject
- Good: SystemTracer.initialProcess is of type UndefinedObject
- Good: SystemTracer.oopMap is of type { UndefinedObject Array }
- Bad: SystemTracer.specialObjects is of type Top
- Good: SystemTracer.file is of type { CrLfFileStream UndefinedObject }

- Good: SystemTracer.cleaningUp is of type { False UndefinedObject }
- Good: SystemTracer.writeDict is of type { UndefinedObject Dictionary }
- Good: SystemTracer.imageHeaderSize is of type { UndefinedObject SmallInteger }
- Good: SystemTracer.compactClasses is of type { UndefinedObject Array }
- Good: SystemTracer.replacementClasses is of type { UndefinedObject Dictionary }

4.9 Threshold of 4000

- Bad: PDA.recurringEvents is of type Top
- Good: PDA.peopleList is of type { ArrayedCollection++ UndefinedObject }
- Bad: PDA.date is of type Top
- Good: PDA.dateButtonPressed is of type UndefinedObject
- Bad: PDA.allEvents is of type Top
- Bad: PDA.category is of type Top
- Bad: PDA.currentItem is of type Top
- Good: PDA.scheduleList is of type { ArrayedCollection++ UndefinedObject }
- Good: PDA.categoryListIndex is of type UndefinedObject
- Bad: PDA.allPeople is of type Top
- Bad: PDA.scheduleListIndex is of type Top
- Bad: PDA.allToDoItems is of type Top
- Bad: PDA.allNotes is of type Top
- Bad: PDA.notesListIndex is of type Top
- Good: PDA.currentItemSelection is of type UndefinedObject
- Good: PDA.categoryList is of type UndefinedObject
- Good: PDA.todoList is of type { ArrayedCollection++ UndefinedObject }
- Bad: PDA.todoListIndex is of type Top

- Bad: PDA.peopleListIndex is of type Top
- Good: PDA.notesList is of type { ArrayedCollection++ UndefinedObject }
- Good: PDA.currentItemText is of type UndefinedObject
- Bad: PDA.userCategories is of type Top
- Good: PDA.viewDescriptionOnly is of type { True UndefinedObject False }
- Bad: PDAChoiceMorph.backgroundColor is of type Top
- Bad: PDAClockMorph.backgroundColor is of type Top
- Bad: PDAEvent.time is of type Top
- Bad: PDAEvent.date is of type Top
- Bad: PDAEvent.duration is of type Top
- Good: PDAEvent.alarm is of type UndefinedObject
- Bad: PDAPerson.name is of type Top
- Good: PDAPerson.address is of type UndefinedObject
- Good: PDAPerson.phone is of type { String UndefinedObject }
- Good: PDAPerson.email is of type { String UndefinedObject }
- Bad: PDARecord.description is of type Top
- Bad: PDARecord.key is of type Top
- Good: PDARecord.otherFields is of type { UndefinedObject Dictionary }
- Good: PDARecurringEvent.recurrence is of type { UndefinedObject #dayOfMonth #dayOfWeek #nthWeekdayOfMonthEachYear #dateOfYear }
- Bad: PDARecurringEvent.firstDate is of type Top
- Bad: PDARecurringEvent.lastDate is of type Top
- Good: PDAToDoItem.deadline is of type UndefinedObject
- Bad: PDAToDoItem.result is of type Top
- Bad: PDAToDoItem.dayDone is of type Top
- Bad: PDAToDoItem.dayPosted is of type Top
- Bad: PDAToDoItem.priority is of type Top

- Bad: IRCChannelInfo.name is of type Top
- Bad: IRCChannelInfo.topic is of type Top
- Good: IRCChannelInfo.subscribers is of type { IdentitySet
UndefinedObject }
- Good: IRCChannelInfo.members is of type { Set UndefinedObject }
- Good: IRCChannelInfo.connection is of type { IRCConnection
UndefinedObject }
- Good: IRCChannelListBrowser.channelIndex is of type {
UndefinedObject SmallInteger }
- Good: IRCChannelListBrowser.channelList is of type { Array
UndefinedObject SortedCollection }
- Good: IRCChannelListBrowser.sortCriterion is of type {
UndefinedObject #name }
- Good: IRCChannelListBrowser.connection is of type { IRCConnection
UndefinedObject }
- Good: IRCChannelObserver.chatText is of type { Text UndefinedObject
}
- Good: IRCChannelObserver.channelName is of type UndefinedObject
- Bad: IRCChannelObserver.channel is of type Top
- Good: IRCChannelObserver.connection is of type { IRCConnection
UndefinedObject }
- Bad: IRCChannelSummary.name is of type Top
- Bad: IRCChannelSummary.topic is of type Top
- Bad: IRCChannelSummary.numUsers is of type Top
- Good: IRCChannelUsersBrowser.channel is of type { UndefinedObject
IRCChannelInfo }
- Good: IRCChannelUsersBrowser.userList is of type { UndefinedObject
Array }
- Bad: IRCChannelUsersBrowser.userIndex is of type Top
- Good: IRCConnection.directMessageSubscribers is of type { IdentitySet
UndefinedObject }
- Good: IRCConnection.channelListBeingBuilt is of type {
UndefinedObject OrderedCollection }

- Good: IRCCConnection.protocolMessagesToSend is of type { UndefinedObject OrderedCollection }
- Bad: IRCCConnection.sendBuffer is of type Top
- Bad: IRCCConnection.server is of type Top
- Good: IRCCConnection.motdBeingBuilt is of type { UndefinedObject WriteStream }
- Good: IRCCConnection.protocolMessageSubscribers is of type { IdentitySet UndefinedObject }
- Bad: IRCCConnection.motd is of type Top
- Bad: IRCCConnection.port is of type Top
- Good: IRCCConnection.recieveBuffer is of type { String UndefinedObject }
- Good: IRCCConnection.socket is of type { Socket UndefinedObject }
- Bad: IRCCConnection.userName is of type Top
- Bad: IRCCConnection.nick is of type Top
- Good: IRCCConnection.channelList is of type { UndefinedObject Array }
- Good: IRCCConnection.subscribedChannels is of type { UndefinedObject Dictionary }
- Bad: IRCCConnection.fullName is of type Top
- Good: IRCCConnection.messagesProcessed is of type { UndefinedObject SmallInteger }
- Good: IRCCConnection.consoleText is of type { Text UndefinedObject }
- Bad: IRCDirectMessagesObserver.chatText is of type Top
- Bad: IRCDirectMessagesObserver.talkingTo is of type Top
- Good: IRCDirectMessagesObserver.connection is of type { IRCCConnection UndefinedObject }
- Bad: IRCMessage.text is of type Top
- Bad: IRCMessage.sender is of type { SequenceableCollection++ Integer++ UndefinedObject B3DIndexedQuad B3DPrimitiveRasterizerData B3DIndexedTriangle }
- Bad: IRCMessage.recipient is of type Top

- Good: IRCMessagePattern.sender is of type UndefinedObject
- Good: IRCMessagePattern.recipient is of type UndefinedObject
- Good: IRCMessageSet.messages is of type UndefinedObject
- Bad: IRCMorph.userName is of type Top
- Bad: IRCMorph.nick is of type Top
- Bad: IRCMorph.server is of type Top
- Good: IRCMorph.connection is of type { IRCConnection UndefinedObject }
- Bad: IRCMorph.fullName is of type Top
- Good: IRCMorph.messageCollections is of type UndefinedObject
- Bad: IRCMorph.consoleText is of type Top
- Bad: IRCMorph.port is of type Top
- Bad: IRCProtocolMessage.arguments is of type Top
- Good: IRCProtocolMessage.command is of type { UndefinedObject String Character }
- Bad: IRCProtocolMessage.prefix is of type { B3DTexture2Array B3DPrimitiveRasterizerData Integer PointArray CompiledApplescript ByteArray ArrayedCollection SoundBuffer ExternalAddress ShortIntegerArray KlattFrame B3DMaterialColor GraphicSymbol B3DVector3 FlippyArray2 WeakArray Pixmap WordArray B3DVector2Array B3DIndexedQuad B3DVector3Array DescType B3DPrimitiveVertexArray B3DRotation B3DIndexedTriangleArray WordArrayForSegment B3DIndexedQuadArray String B3DPrimitiveLight LargePositiveInteger ComponentInstance StandardSourceFileArray B3DIndexedTriangle FloatArray B3DColor4 OnceOnlyOrderedCollection TranslatedMethod DirectoryEntry Array2D B3DFloatArray AEDesc RunArray Symbol B3DInplaceArray Text Array B3DMaterial B3DRotationArray ApplescriptInstance MappedCollection B3DColor4Array Interval Heap UrlArgumentList SourceFileArray B3DLightAttenuation ShortPointArray B3DVector4 B3DVector2 SequenceableCollection MacExternalData OrderedCollection B3DExponentTable B3DViewingFrustum IntegerArray ShortRunArray SortedCollection Bitmap LinkedList B3DMatrix4x4 Semaphore TextLineInterval LargeNegativeInteger CompiledMethod OSAID UndefinedObject SmallInteger }
- Good: IRCRecipientFilter.recipient is of type UndefinedObject

- Good: CategoriesFile.categories is of type { UndefinedObject Dictionary }
- Bad: Celeste.currentMessages is of type Top
- Good: Celeste.customFilterBlock is of type { UndefinedObject Compiler }
- Bad: Celeste.status is of type Top
- Bad: Celeste.userPassword is of type Top
- Bad: Celeste.currentMsgID is of type Top
- Bad: Celeste.mailDB is of type Top
- Bad: Celeste.currentCategory is of type Top
- Bad: Celeste.lastCategory is of type Top
- Good: Celeste.lastCategoryList is of type UndefinedObject
- Good: Celeste.dateFilter is of type UndefinedObject
- Good: Celeste.currentTOC is of type { Array UndefinedObject OrderedCollection }
- Bad: Celeste.fromFilter is of type Top
- Good: Celeste.formatMessages is of type UndefinedObject
- Good: Celeste.lastCategoryMenu is of type UndefinedObject
- Bad: Celeste.messageTextView is of type { PluggableTextMorph++ PluggableListMorph++ PluggableListView++ SimpleHierarchicalListMorph++ PluggableTextView UndefinedObject }
- Bad: Celeste.subjectFilter is of type Top
- Bad: CelesteComposition.textEditor is of type Top
- Bad: CelesteComposition.celeste is of type Top
- Bad: CelesteComposition.messageText is of type Top
- Good: CelesteComposition.morphicWindow is of type { AlignmentMorphBob1 UndefinedObject SystemWindow }
- Good: CelesteComposition.mvcWindow is of type { StandardSystemView UndefinedObject }
- Good: CelesteComposition.attachmentSeparator is of type UndefinedObject

- Good: FancyCelesteComposition.theLinkToInclude is of type { String UndefinedObject }
- Bad: FancyCelesteComposition.to is of type Top
- Bad: FancyCelesteComposition.subject is of type Top
- Good: FancyCelesteComposition.textFields is of type { UndefinedObject Array }
- Good: IndexFile.msgDictionary is of type { PluggableDictionary UndefinedObject }
- Good: IndexFile.logfile is of type { UndefinedObject StandardFileStream }
- Good: IndexFile.timeSortedEntries is of type { UndefinedObject SortedCollection }
- Bad: IndexFileEntry.time is of type Top
- Bad: IndexFileEntry.msgID is of type Top
- Bad: IndexFileEntry.messageFile is of type Top
- Bad: IndexFileEntry.cc is of type Top
- Bad: IndexFileEntry.tocLineCache is of type { B3DTexture2Array B3DPrimitiveRasterizerData Integer PointArray CompiledApplescript ByteArray ArrayedCollection SoundBuffer ExternalAddress ShortIntegerArray KlattFrame B3DMaterialColor GraphicSymbol B3DVector3 FlippyArray2 WeakArray Pixmap WordArray B3DVector2Array B3DIndexedQuad B3DVector3Array DescType B3DPrimitiveVertexArray B3DRotation B3DIndexedTriangleArray WordArrayForSegment B3DIndexedQuadArray String B3DPrimitiveLight LargePositiveInteger ComponentInstance StandardSourceFileArray B3DIndexedTriangle FloatArray B3DColor4 OnceOnlyOrderedCollection TranslatedMethod DirectoryEntry Array2D B3DFloatArray AEDesc RunArray Symbol B3DInplaceArray Text Array B3DMaterial B3DRotationArray ApplescriptInstance MappedCollection B3DColor4Array Interval Heap UrlArgumentList SourceFileArray B3DLightAttenuation ShortPointArray B3DVector4 B3DVector2 SequenceableCollection MacExternalData OrderedCollection B3DExponentTable B3DViewingFrustum IntegerArray ShortRunArray SortedCollection Bitmap LinkedList B3DMatrix4x4 Semaphore TextLineInterval LargeNegativeInteger CompiledMethod OSAID UndefinedObject SmallInteger }
- Bad: IndexFileEntry.location is of type Top

- Bad: IndexFileEntry.to is of type Top
- Bad: IndexFileEntry.textLength is of type Top
- Bad: IndexFileEntry.subject is of type Top
- Bad: IndexFileEntry.from is of type Top
- Good: MIMEHeaderValue.mainValue is of type { UndefinedObject String Character }
- Good: MIMEHeaderValue.parameters is of type UndefinedObject
- Bad: MIMEPart.content is of type Top
- Good: MIMEPart.parts is of type { Array UndefinedObject OrderedCollection }
- Bad: MIMEPart.separator is of type Top
- Bad: MIMEPart.text is of type Top
- Good: MIMEPart.fields is of type { UndefinedObject Dictionary }
- Bad: MailDB.rootFilename is of type Top
- Bad: MailDB.indexFile is of type Top
- Bad: MailDB.messageFile is of type Top
- Bad: MailDB.categoriesFile is of type Top
- Bad: MailDBFile.filename is of type Top
- Good: MailMessage.time is of type { UndefinedObject SmallInteger }
- Bad: MailMessage.separator is of type Top
- Bad: MailMessage.cc is of type Top
- Good: MailMessage.body is of type { UndefinedObject MIMEDocument }
- Bad: MailMessage.to is of type Top
- Bad: MailMessage.text is of type Top
- Bad: MailMessage.subject is of type Top
- Good: MailMessage.fields is of type { UndefinedObject Dictionary }
- Bad: MailMessage.from is of type Top
- Good: MailMessage.parts is of type { Array UndefinedObject OrderedCollection }

- Bad: MailNotifier.lastConnectTime is of type Top
- Bad: MailNotifier.messageCount is of type Top
- Good: MailNotifier.password is of type UndefinedObject
- Good: MailNotifier.socket is of type { UndefinedObject POPSocket }
- Good: MessageFile.file is of type UndefinedObject
- Bad: ReadNewsInboxFile.currentNewsgroup is of type Top
- Good: ReadNewsInboxFile.msgBuffer is of type { UndefinedObject WriteStream }
- Bad: TextMessageLink.message is of type Top
- Bad: RBAssignmentNode.variable is of type Top
- Bad: RBAssignmentNode.assignment is of type Top
- Bad: RBAssignmentNode.value is of type Top
- Good: RBBlockNode.colons is of type { UndefinedObject OrderedCollection }
- Bad: RBBlockNode.bar is of type Top
- Bad: RBBlockNode.right is of type Top
- Bad: RBBlockNode.left is of type Top
- Bad: RBBlockNode.body is of type Top
- Bad: RBBlockNode.arguments is of type Top
- Bad: RBCascadeNode.messages is of type Top
- Good: RBCascadeNode.semicolons is of type { UndefinedObject OrderedCollection }
- Good: RBFormatter.codeStream is of type { UndefinedObject WriteStream }
- Bad: RBFormatter.lineStart is of type Top
- Bad: RBFormatter.firstLineLength is of type Top
- Good: RBFormatter.tabs is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: RBLiteralNode.token is of type Top
- Bad: RBMessageNode.arguments is of type Top

- Bad: RBMessageNode.receiver is of type Top
- Bad: RBMessageNode.selector is of type Top
- Bad: RBMessageNode.selectorParts is of type Top
- Bad: RBMethodNode.tags is of type Object++
- Bad: RBMethodNode.selector is of type Top
- Bad: RBMethodNode.selectorParts is of type Top
- Bad: RBMethodNode.body is of type Top
- Bad: RBMethodNode.source is of type Top
- Bad: RBMethodNode.arguments is of type Top
- Bad: RBOptimizedNode.body is of type Top
- Bad: RBOptimizedNode.right is of type Top
- Bad: RBOptimizedNode.left is of type Top
- Good: RBParser.scanner is of type { RBScanner UndefinedObject }
- Bad: RBParser.tags is of type Object++
- Bad: RBParser.source is of type Top
- Good: RBParser.emptyStatements is of type { True UndefinedObject False }
- Good: RBParser.currentToken is of type { Boolean++ RBSHORTAssignmentToken RBOptimizedToken UndefinedObject RBToken RBPatternBlockToken RBScanner RBLiteralToken RBAssignmentToken RBKeywordToken RBBinarySelectorToken RBIdentifierToken RBSpecialCharacterToken }
- Good: RBParser.negatedNumbers is of type { True UndefinedObject False }
- Good: RBParser.errorBlock is of type { UndefinedObject a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType }
- Bad: RBParser.nextToken is of type Top
- Good: RBPatternMessageNode.isCascadeList is of type { True UndefinedObject False }
- Good: RBPatternMessageNode.isList is of type { True UndefinedObject False }

- Good: RBPatternMethodNode.isList is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.recurseInto is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isLiteral is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isStatement is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isAnything is of type { True UndefinedObject False }
- Good: RBPatternVariableNode.isList is of type { True UndefinedObject False }
- Bad: RBProgramNode.parent is of type Top
- Bad: RBProgramNode.comments is of type Top
- Bad: RBReturnNode.return is of type Top
- Bad: RBReturnNode.value is of type Top
- Bad: RBSequenceNode.rightBar is of type Top
- Good: RBSequenceNode.periods is of type { UndefinedObject OrderedCollection }
- Bad: RBSequenceNode.temporaries is of type Top
- Bad: RBSequenceNode.statements is of type Top
- Bad: RBSequenceNode.leftBar is of type Top
- Good: RBValueNode.parentheses is of type { UndefinedObject OrderedCollection }
- Good: RBVariableNode.token is of type { RBShortAssignmentToken RBOptimizedToken UndefinedObject RBToken RBPatternBlockToken RBScanner RBLiteralToken RBAssignmentToken RBKeywordToken RBBinarySelectorToken RBIdentifierToken RBSpecialCharacterToken }
- Bad: ADPCMCodec.index is of type Top
- Good: ADPCMCodec.indexTable is of type { Array UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.deltaSignMask is of type Top
- Bad: ADPCMCodec.bitPosition is of type Top

- Bad: ADPCMCodec.encodedBytes is of type Top
- Good: ADPCMCodec.stepSizeTable is of type { Array UndefinedObject SoundBuffer }
- Good: ADPCMCodec.sampleIndex is of type { SmallInteger LargeNegativeInteger LargePositiveInteger UndefinedObject Array }
- Good: ADPCMCodec.rightSamples is of type { UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.byteIndex is of type Top
- Good: ADPCMCodec.frameSizeMask is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ADPCMCodec.bitsPerSample is of type Top
- Bad: ADPCMCodec.predicted is of type Top
- Bad: ADPCMCodec.deltaValueHighBit is of type Top
- Bad: ADPCMCodec.deltaValueMask is of type Top
- Bad: ADPCMCodec.currentByte is of type Top
- Bad: ADPCMCodec.samples is of type Top
- Good: AIFFFileReader.channelData is of type { UndefinedObject Array }
- Bad: AIFFFileReader.frameCount is of type Top
- Bad: AIFFFileReader.isLooped is of type Top
- Bad: AIFFFileReader.gain is of type Top
- Bad: AIFFFileReader.in is of type { RWBinaryOrTextStream++ FileStream++ ReadStream++ UndefinedObject GZipSurrogateStream DummyStream }
- Bad: AIFFFileReader.fileType is of type Top
- Bad: AIFFFileReader.pitch is of type Top
- Good: AIFFFileReader.markers is of type { UndefinedObject Array }
- Good: AIFFFileReader.channelCount is of type { UndefinedObject SmallInteger }
- Bad: AIFFFileReader.bitsPerSample is of type Top
- Good: AIFFFileReader.mergelfStereo is of type { True UndefinedObject False }

- Good: AIFFFileReader.skipDataChunk is of type { True UndefinedObject False }
- Bad: AIFFFileReader.samplingRate is of type Top
- Bad: AbstractSound.envelopes is of type Top
- Bad: AbstractSound.mSecsSinceStart is of type Top
- Bad: AbstractSound.scaledVolLimit is of type Top
- Bad: AbstractSound.scaledVol is of type Top
- Bad: AbstractSound.samplesUntilNextControl is of type Top
- Bad: AbstractSound.scaledVolIncr is of type Top
- Bad: CompressedSoundData.perceivedPitch is of type Top
- Bad: CompressedSoundData.codecName is of type Top
- Good: CompressedSoundData.channels is of type { UndefinedObject Array }
- Bad: CompressedSoundData.gain is of type Top
- Bad: CompressedSoundData.firstSample is of type Top
- Bad: CompressedSoundData.soundClassName is of type Top
- Bad: CompressedSoundData.cachedSound is of type { WaveletCodec MuLawCodec ADPCMCodec SoundCodec UndefinedObject LoopedSampledSound GSMCodec SampledSound }
- Bad: CompressedSoundData.loopLength is of type Top
- Bad: CompressedSoundData.samplingRate is of type Top
- Bad: CompressedSoundData.loopEnd is of type Top
- Bad: Envelope.target is of type Top
- Bad: Envelope.scale is of type Top
- Good: Envelope.updateSelector is of type { UndefinedObject #pitch: #modulation: #ratio: }
- Bad: Envelope.loopEndMSecs is of type Top
- Bad: Envelope.endMSecs is of type Top
- Bad: Envelope.currValue is of type Top
- Bad: Envelope.loopStartIndex is of type Top

- Bad: Envelope.valueIncr is of type Top
- Good: Envelope.noChangesDuringLoop is of type { True
UndefinedObject False }
- Bad: Envelope.nextRecomputeTime is of type Top
- Bad: Envelope.loopEndIndex is of type Top
- Bad: Envelope.loopMSecs is of type Top
- Bad: Envelope.loopStartMSecs is of type Top
- Bad: Envelope.decayScale is of type Top
- Bad: Envelope.points is of type Top
- Bad: Envelope.lastValue is of type Top
- Bad: FFT.permTable is of type Top
- Bad: FFT.nu is of type Top
- Bad: FFT.n is of type Top
- Good: FFT.sinTable is of type UndefinedObject
- Bad: FFT.imagData is of type Top
- Good: FFT.window is of type { UndefinedObject FloatArray }
- Good: FFT.realData is of type { Array UndefinedObject FloatArray }
- Bad: FMSSound.initialCount is of type Top
- Bad: FMSSound.multiplier is of type Top
- Bad: FMSSound.scaledOffsetIndex is of type Top
- Bad: FMSSound.waveTable is of type Top
- Bad: FMSSound.scaledWaveTableSize is of type Top
- Bad: FMSSound.scaledIndex is of type Top
- Bad: FMSSound.normalizedModulation is of type Top
- Bad: FMSSound.scaledOffsetIndexIncr is of type Top
- Bad: FMSSound.modulation is of type Top
- Bad: FMSSound.scaledIndexIncr is of type Top
- Bad: FMSSound.count is of type Top

- Good: FWT.transform is of type { UndefinedObject Array }
- Bad: FWT.beta is of type Top
- Good: FWT.gTilde is of type { UndefinedObject Array }
- Good: FWT.coeffs is of type { UndefinedObject Array }
- Good: FWT.g is of type { UndefinedObject Array }
- Bad: FWT.nSamples is of type Top
- Bad: FWT.nLevels is of type Top
- Bad: FWT.alpha is of type Top
- Good: FWT.h is of type { UndefinedObject Array }
- Good: FWT.samples is of type { UndefinedObject Array }
- Good: FWT.hTilde is of type { UndefinedObject Array }
- Bad: GSMCodec.encodeState is of type Top
- Bad: GSMCodec.decodeState is of type Top
- Bad: LoopedSampledSound.initialCount is of type Top
- Good: LoopedSampledSound.perceivedPitch is of type { UndefinedObject Float }
- Bad: LoopedSampledSound.scaledLoopLength is of type Top
- Bad: LoopedSampledSound.lastSample is of type Top
- Bad: LoopedSampledSound.gain is of type Top
- Bad: LoopedSampledSound.scaledIndexIncr is of type Top
- Bad: LoopedSampledSound.releaseCount is of type Top
- Bad: LoopedSampledSound.firstSample is of type Top
- Bad: LoopedSampledSound.sampleCountForRelease is of type Top
- Bad: LoopedSampledSound.rightSamples is of type Top
- Bad: LoopedSampledSound.leftSamples is of type Top
- Bad: LoopedSampledSound.scaledIndex is of type Top
- Bad: LoopedSampledSound.originalSamplingRate is of type Top
- Bad: LoopedSampledSound.count is of type Top

- Bad: LoopedSampledSound.loopEnd is of type Top
- Good: MixedSound.soundDone is of type { UndefinedObject Array }
- Good: MixedSound.sounds is of type { UndefinedObject Array }
- Good: MixedSound.leftVols is of type { UndefinedObject Array }
- Good: MixedSound.rightVols is of type { UndefinedObject Array }
- Bad: PitchEnvelope.centerPitch is of type Top
- Bad: PluckedSound.initialCount is of type Top
- Good: PluckedSound.ring is of type { UndefinedObject SoundBuffer }
- Good: PluckedSound.scaledIndexLimit is of type UndefinedObject
- Bad: PluckedSound.scaledIndex is of type Top
- Bad: PluckedSound.scaledIndexIncr is of type Top
- Bad: PluckedSound.count is of type Top
- Good: RandomEnvelope.rand is of type { Random UndefinedObject }
- Good: RandomEnvelope.highLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.lowLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.delta is of type { UndefinedObject Float }
- Bad: RepeatingSound.iteration is of type Top
- Bad: RepeatingSound.iterationCount is of type Top
- Bad: RepeatingSound.sound is of type Top
- Bad: RepeatingSound.samplesPerIteration is of type Top
- Bad: RestSound.initialCount is of type Top
- Bad: RestSound.count is of type Top
- Good: ReverbSound.tapGains is of type { UndefinedObject Bitmap }
- Good: ReverbSound.bufferSize is of type { Bitmap LargeNegativeInteger LargePositiveInteger UndefinedObject SmallInteger }
- Good: ReverbSound.rightBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.leftBuffer is of type { UndefinedObject SoundBuffer }

- Good: ReverbSound.tapCount is of type { UndefinedObject SmallInteger }
- Good: ReverbSound.tapDelays is of type { UndefinedObject Bitmap }
- Bad: ReverbSound.bufferIndex is of type Top
- Good: ReverbSound.sound is of type UndefinedObject
- Good: SampledInstrument.sustainedSoft is of type { UndefinedObject Array }
- Good: SampledInstrument.staccatoSoft is of type { UndefinedObject Array }
- Good: SampledInstrument.staccatoLoud is of type { UndefinedObject Array }
- Good: SampledInstrument.sustainedThreshold is of type { UndefinedObject Float }
- Good: SampledInstrument.sustainedLoud is of type { UndefinedObject Array }
- Good: SampledInstrument.loudThreshold is of type { UndefinedObject Float }
- Bad: SampledSound.initialCount is of type Top
- Bad: SampledSound.samples is of type Top
- Bad: SampledSound.scaledIncrement is of type Top
- Bad: SampledSound.scaledIndex is of type Top
- Bad: SampledSound.indexHighBits is of type Top
- Bad: SampledSound.samplesSize is of type Top
- Bad: SampledSound.originalSamplingRate is of type Top
- Bad: SampledSound.count is of type Top
- Good: SequentialSound.sounds is of type { UndefinedObject Array }
- Good: SequentialSound.currentIndex is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: Sonogram.lastX is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: Sonogram.pixValMap is of type { UndefinedObject Bitmap }

- Good: Sonogram.maxVal is of type { UndefinedObject Float }
- Good: Sonogram.minVal is of type { UndefinedObject Float }
- Good: Sonogram.scrollDelta is of type { UndefinedObject SmallInteger }
- Good: Sonogram.columnForm is of type { Form UndefinedObject }
- Bad: SoundInputStream.mutex is of type Top
- Bad: SoundInputStream.bufferSize is of type Top
- Good: SoundRecorder.currentBuffer is of type { UndefinedObject SoundBuffer }
- Bad: SoundRecorder.recordProcess is of type Top
- Good: SoundRecorder.codec is of type { GSMCodec UndefinedObject }
- Good: SoundRecorder.desiredSampleRate is of type { UndefinedObject Float }
- Bad: SoundRecorder.nextIndex is of type Top
- Good: SoundRecorder.meteringBuffer is of type { UndefinedObject SoundBuffer }
- Bad: SoundRecorder.meterLevel is of type Top
- Good: SoundRecorder.stereo is of type { False UndefinedObject }
- Good: SoundRecorder.recordLevel is of type { UndefinedObject Float }
- Good: SoundRecorder.soundPlaying is of type { SampledSound SequentialSound UndefinedObject ChatRecorder SoundInputStream SoundRecorder }
- Bad: SoundRecorder.recordedBuffers is of type Top
- Good: SoundRecorder.paused is of type { True UndefinedObject False }
- Bad: SoundRecorder.samplingRate is of type Top
- Good: SoundRecorder.recordedSound is of type { SampledSound SequentialSound UndefinedObject ChatRecorder SoundInputStream SoundRecorder }
- Good: SoundRecorder.bufferAvailableSema is of type { Semaphore UndefinedObject }
- Bad: VolumeEnvelope.mSecsForChange is of type Top
- Bad: VolumeEnvelope.targetVol is of type Top

- Good: VolumeEnvelope.currentVol is of type UndefinedObject
- Bad: WaveletCodec.alpha is of type Top
- Bad: WaveletCodec.beta is of type Top
- Good: WaveletCodec.fwt is of type { FWT UndefinedObject }
- Bad: WaveletCodec.samplesPerFrame is of type Top
- Bad: WaveletCodec.nLevels is of type Top
- Bad: TestInterfaceBase.duration is of type Top
- Bad: TestInterfaceBase.classPattern is of type Top
- Bad: TestInterfaceBase.result is of type Top
- Bad: TestInterfaceBase.selectorPattern is of type Top
- Good: TestModel.failureList is of type { UndefinedObject
OrderedCollection }
- Good: TestModel.patternHistory is of type { UndefinedObject
OrderedCollection }
- Good: TestModel.errorList is of type { UndefinedObject
OrderedCollection }
- Good: TestModel.summaryText is of type { String UndefinedObject }
- Bad: TestModel.summaryTextM is of type { PluggableTextMorph++
PluggableTextView UndefinedObject }
- Good: TestModel.summaryTextV is of type { PluggableTextView
UndefinedObject }
- Good: TestModel.updateColorSelector is of type { UndefinedObject
#updateColorM #updateColorV }
- Good: TestModel.patternTextV is of type { PluggableTextView
UndefinedObject }
- Bad: TestModel.patternTextM is of type { PluggableTextMorph++
PluggableTextView UndefinedObject }
- Bad: TestModel.detailsText is of type Top
- Bad: Browser.classOrganizer is of type Top
- Bad: Browser.systemOrganizer is of type Top
- Bad: Browser.messageListIndex is of type Top

- Bad: Browser.messageCategoryListIndex is of type Top
- Good: Browser.editSelection is of type { Boolean++ UndefinedObject #hierarchy #editClass #editComment #none #editMessageCategories #newClass #editMessage #newMessage #editSystemCategories #byteCodes }
- Bad: Browser.metaClassOrganizer is of type Top
- Bad: Browser.systemCategoryListIndex is of type Top
- Bad: Browser.metaClassIndicated is of type Top
- Bad: Browser.classListIndex is of type Top
- Bad: ChangedMessageSet.changeSet is of type Top
- Bad: HierarchyBrowser.centralClass is of type Top
- Bad: HierarchyBrowser.classList is of type Top
- Bad: MessageSet.messageList is of type Top
- Bad: MessageSet.autoSelectString is of type Top
- Bad: PackageBrowser.package is of type Top
- Bad: PackageBrowser.packageListIndex is of type Top
- Good: PackageBrowser.packageList is of type UndefinedObject
- Good: ProtocolBrowser.selectedClass is of type UndefinedObject
- Bad: ProtocolBrowser.selectedSelector is of type Top
- Bad: SelectorBrowser.classListIndex is of type Top
- Bad: SelectorBrowser.classList is of type Top
- Bad: SelectorBrowser.selectorIndex is of type Top
- Bad: SelectorBrowser.selectorList is of type Top
- Bad: BitBltSimulation.sy is of type Top
- Bad: BitBltSimulation.halfToneBase is of type Top
- Good: BitBltSimulation.cmBlueShift is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBltSimulation.destWidth is of type Top
- Bad: BitBltSimulation.destX is of type Top
- Bad: BitBltSimulation.width is of type Top

- Bad: BitBltSimulation.scanString is of type Top
- Bad: BitBltSimulation.sourceBits is of type Top
- Bad: BitBltSimulation.scanStop is of type Top
- Bad: BitBltSimulation.dy is of type Top
- Good: BitBltSimulation.warpBitShiftTable is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.destPixSize is of type Top
- Bad: BitBltSimulation.pixPerWord is of type Top
- Good: BitBltSimulation.ditherValues16 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.cmRedMask is of type Top
- Bad: BitBltSimulation.warpSrcMask is of type Top
- Bad: BitBltSimulation.dstBitShift is of type Top
- Bad: BitBltSimulation.destIndex is of type Top
- Bad: BitBltSimulation.sourceIndex is of type Top
- Bad: BitBltSimulation.clipX is of type Top
- Good: BitBltSimulation.hDir is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.nWords is of type Top
- Bad: BitBltSimulation.clipHeight is of type Top
- Bad: BitBltSimulation.bitBltOop is of type Top
- Bad: BitBltSimulation.preload is of type Top
- Bad: BitBltSimulation.opTable is of type Top
- Bad: BitBltSimulation.sourceForm is of type Top
- Bad: BitBltSimulation.warpAlignMask is of type Top
- Bad: BitBltSimulation.skew is of type Top
- Good: BitBltSimulation.cmDeltaBits is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: BitBltSimulation.ditherMatrix4x4 is of type { CArrayAccessor UndefinedObject }

- Bad: BitBltSimulation.sourceY is of type Top
- Bad: BitBltSimulation.scanStart is of type Top
- Good: BitBltSimulation.cmGreenShift is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBltSimulation.destBits is of type Top
- Bad: BitBltSimulation.destPitch is of type Top
- Bad: BitBltSimulation.height is of type Top
- Bad: BitBltSimulation.sourcePitch is of type Top
- Bad: BitBltSimulation.destY is of type Top
- Bad: BitBltSimulation.affectedL is of type Top
- Good: BitBltSimulation.maskTable is of type { UndefinedObject Array }
- Good: BitBltSimulation.scanDisplayFlag is of type { True UndefinedObject False }
- Bad: BitBltSimulation.mask1 is of type Top
- Bad: BitBltSimulation.destDelta is of type Top
- Good: BitBltSimulation.noHalftone is of type { True UndefinedObject False }
- Bad: BitBltSimulation.clipWidth is of type Top
- Bad: BitBltSimulation.destForm is of type Top
- Bad: BitBltSimulation.sx is of type Top
- Bad: BitBltSimulation.clipY is of type Top
- Bad: BitBltSimulation.scanRightX is of type Top
- Bad: BitBltSimulation.cmBlueMask is of type Top
- Bad: BitBltSimulation.halftoneHeight is of type Top
- Bad: BitBltSimulation.affectedT is of type Top
- Bad: BitBltSimulation.sourcePixSize is of type Top
- Good: BitBltSimulation.cmRedShift is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: BitBltSimulation.noSource is of type { True UndefinedObject False }

- Bad: BitBltSimulation.dx is of type Top
- Bad: BitBltSimulation.destMask is of type Top
- Bad: BitBltSimulation.affectedB is of type Top
- Bad: BitBltSimulation.cmGreenMask is of type Top
- Good: BitBltSimulation.hasSurfaceLock is of type { True
UndefinedObject False }
- Bad: BitBltSimulation.stopCode is of type Top
- Bad: BitBltSimulation.combinationRule is of type Top
- Bad: BitBltSimulation.bitCount is of type Top
- Good: BitBltSimulation.vDir is of type { UndefinedObject SmallInteger
}
- Bad: BitBltSimulation.destHeight is of type Top
- Good: BitBltSimulation.cmBitsPerColor is of type { UndefinedObject
SmallInteger }
- Bad: BitBltSimulation.bbH is of type Top
- Bad: BitBltSimulation.bbW is of type Top
- Bad: BitBltSimulation.srcWidth is of type Top
- Bad: BitBltSimulation.affectedR is of type Top
- Good: BitBltSimulation.ditherThresholds16 is of type { CArrayAccessor
UndefinedObject }
- Bad: BitBltSimulation.sourceDelta is of type Top
- Good: BitBltSimulation.warpSrcShift is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBltSimulation.halfToneForm is of type Top
- Bad: BitBltSimulation.mask2 is of type Top
- Bad: BitBltSimulation.scanXTable is of type Top
- Bad: BitBltSimulation.scanStopArray is of type Top
- Bad: BitBltSimulation.sourceAlpha is of type Top
- Bad: BitBltSimulation.colorMap is of type Top

- Good: BitBlitSimulation.warpAlignShift is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBlitSimulation.sourceX is of type Top
- Bad: BitBlitSimulation.srcBitShift is of type Top
- Bad: BitBlitSimulation.srcHeight is of type Top
- Bad: Interpreter.activeContext is of type Top
- Bad: Interpreter.nextWakeupTick is of type Top
- Bad: Interpreter.localIP is of type Top
- Bad: Interpreter.localHomeContext is of type Top
- Good: Interpreter.methodCache is of type { UndefinedObject Array }
- Bad: Interpreter.interruptKeycode is of type Top
- Good: Interpreter.semaphoresToSignalCountA is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: Interpreter.interruptCheckCounterFeedBackReset is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: Interpreter.interpreterVersion is of type UndefinedObject
- Good: Interpreter.obsoleteNamedPrimitiveTable is of type { CArrayAccessor UndefinedObject }
- Good: Interpreter.interpreterProxy is of type { UndefinedObject InterpreterSimulator InterpreterSimulatorMSB InterpreterSimulatorLSB }
- Bad: Interpreter.receiver is of type { UndefinedObject InterpreterSimulatorMSB Bitmap InterpreterSimulator Interpreter LargeNegativeInteger InterpreterSimulatorLSB SmallInteger LargePositiveInteger }
- Bad: Interpreter.stackPointer is of type Top
- Bad: Interpreter.receiverClass is of type Top
- Good: Interpreter.obsoleteIndexedPrimitiveTable is of type { CArrayAccessor UndefinedObject }
- Bad: Interpreter.successFlag is of type Top
- Good: Interpreter.compilerHooks is of type UndefinedObject

- Bad: Interpreter.fullScreenFlag is of type { Interpreter InterpreterSimulator InterpreterSimulatorLSB UndefinedObject InterpreterSimulatorMSB }
- Bad: Interpreter.primitiveIndex is of type Top
- Good: Interpreter.semaphoresToSignalB is of type { UndefinedObject Array }
- Bad: Interpreter.compilerInitialized is of type Top
- Bad: Interpreter.localSP is of type Top
- Bad: Interpreter.instructionPointer is of type Top
- Good: Interpreter.semaphoresUseBufferA is of type { True UndefinedObject False }
- Good: Interpreter.deferDisplayUpdates is of type { True UndefinedObject False }
- Bad: Interpreter.theHomeContext is of type Top
- Bad: Interpreter.extraVMMemory is of type Top
- Bad: Interpreter.method is of type Top
- Good: Interpreter.pendingFinalizationSignals is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: Interpreter.newMethod is of type Top
- Good: Interpreter.semaphoresToSignalA is of type { UndefinedObject Array }
- Bad: Interpreter.methodClass is of type Top
- Bad: Interpreter.newNativeMethod is of type Top
- Good: Interpreter.atCache is of type { UndefinedObject Array }
- Bad: Interpreter.argumentCount is of type Top
- Bad: Interpreter.currentBytecode is of type Top
- Good: Interpreter.interruptPending is of type { False UndefinedObject }
- Good: Interpreter.interruptChecksEveryNms is of type { UndefinedObject SmallInteger }
- Bad: Interpreter.nextPollTick is of type Top

- Bad: Interpreter.lkupClass is of type Top
- Good: Interpreter.reclaimableContextCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: Interpreter.savedWindowSize is of type Top
- Bad: Interpreter.lastTick is of type Top
- Good: Interpreter.semaphoresToSignalCountB is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: Interpreter.messageSelector is of type Top
- Bad: Interpreter.showSurfaceFn is of type Top
- Good: InterpreterSimulator.myBitBlit is of type { False UndefinedObject BitBlitSimulator }
- Good: InterpreterSimulator.traceOn is of type { UndefinedObject True }
- Bad: InterpreterSimulator.imageName is of type Top
- Bad: InterpreterSimulator.pluginList is of type Top
- Good: InterpreterSimulator.sendCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: InterpreterSimulator.displayForm is of type { Form UndefinedObject }
- Good: InterpreterSimulator.mappedPluginEntries is of type { UndefinedObject Array }
- Good: InterpreterSimulator.filesOpen is of type { UndefinedObject OrderedCollection }
- Good: InterpreterSimulator.byteCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.signalLowSpace is of type { True UndefinedObject False }
- Bad: ObjectMemory.tenuringThreshold is of type Top
- Bad: ObjectMemory.lastHash is of type Top
- Bad: ObjectMemory.statIncrGCMSecs is of type Top
- Good: ObjectMemory.remapBuffer is of type { UndefinedObject Array }

- Bad: ObjectMemory.trueObj is of type Top
- Bad: ObjectMemory.statFullGCMSecs is of type Top
- Bad: ObjectMemory.freeLargeContexts is of type Top
- Bad: ObjectMemory.lowSpaceThreshold is of type Top
- Bad: ObjectMemory.allocationsBetweenGCs is of type Top
- Good: ObjectMemory.interruptCheckCounter is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ObjectMemory.freeContexts is of type Top
- Bad: ObjectMemory.compStart is of type Top
- Bad: ObjectMemory.youngStart is of type Top
- Bad: ObjectMemory.compEnd is of type Top
- Bad: ObjectMemory.totalObjectFoundAtStartup is of type Top
- Bad: ObjectMemory.memoryLimit is of type Top
- Bad: ObjectMemory.endOfMemory is of type Top
- Bad: ObjectMemory.specialObjectsOop is of type Top
- Good: ObjectMemory.statFullGCs is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.statTenures is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.nilObj is of type UndefinedObject
- Bad: ObjectMemory.child is of type Top
- Bad: ObjectMemory.fwdTableLast is of type Top
- Bad: ObjectMemory.fwdTableNext is of type Top
- Good: ObjectMemory.rootTableCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.allocationCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ObjectMemory.falseObj is of type Top
- Good: ObjectMemory.remapBufferCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }

- Bad: ObjectMemory.parentField is of type Top
- Bad: ObjectMemory.field is of type Top
- Good: ObjectMemory.memory is of type { Interpreter UndefinedObject InterpreterSimulatorMSB InterpreterSimulatorLSB Bitmap InterpreterSimulator }
- Bad: ObjectMemory.freeBlock is of type Top
- Good: ObjectMemory.statRootTableOverflows is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.rootTable is of type { UndefinedObject Array }
- Good: ObjectMemory.statIncrGCs is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.displayBits is of type { UndefinedObject SmallInteger }
- Bad: SystemMonitor.vmParameters is of type Top
- Bad: SystemMonitor.gcHighWaterMark is of type Top
- Bad: SystemMonitor.baselineSkip is of type Top
- Bad: SystemMonitor.prevAllocCount is of type Top
- Bad: SystemMonitor.prevDeltaIncrGC is of type Top
- Bad: SystemMonitor.prevMcMiss is of type Top
- Good: SystemMonitor.window is of type { UndefinedObject Rectangle }
- Bad: SystemMonitor.prevDeltaFullGC is of type Top
- Bad: SystemMonitor.prevFullGC is of type Top
- Good: SystemMonitor.valSelectors is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIncrGC is of type Top
- Bad: SystemMonitor.prevMsClock is of type Top
- Good: SystemMonitor.maxValues is of type { UndefinedObject Array }
- Good: SystemMonitor.prevAllocRate is of type { UndefinedObject SmallInteger }
- Bad: SystemMonitor.gcLowWaterMark is of type Top
- Good: SystemMonitor.labels is of type { UndefinedObject Array }

- Good: SystemMonitor.minValues is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIcHit is of type Top
- Bad: SystemMonitor.prevMcHit is of type Top
- Good: SystemTracer.hashGenerator is of type { Random UndefinedObject }
- Bad: SystemTracer.maxOop is of type Top
- Good: SystemTracer.map is of type UndefinedObject
- Good: SystemTracer.initialProcess is of type UndefinedObject
- Good: SystemTracer.oopMap is of type { UndefinedObject Array }
- Bad: SystemTracer.specialObjects is of type Top
- Good: SystemTracer.file is of type { CrLfFileStream UndefinedObject }
- Good: SystemTracer.cleaningUp is of type { False UndefinedObject }
- Good: SystemTracer.writeDict is of type { UndefinedObject Dictionary }
- Good: SystemTracer.imageHeaderSize is of type { UndefinedObject SmallInteger }
- Good: SystemTracer.compactClasses is of type { UndefinedObject Array }
- Good: SystemTracer.replacementClasses is of type { UndefinedObject Dictionary }
- Good: ChineseCheckerPiece.myBoard is of type { ChineseCheckers UndefinedObject }
- Bad: ChineseCheckerPiece.boardLoc is of type Top
- Good: ChineseCheckers.movePhase is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ChineseCheckers.board is of type { UndefinedObject Array }
- Good: ChineseCheckers.plannedMovePhase is of type UndefinedObject
- Good: ChineseCheckers.sixDeltas is of type { UndefinedObject Array }
- Bad: ChineseCheckers.plannedMove is of type Top
- Bad: ChineseCheckers.whoseMove is of type Top
- Bad: ChineseCheckers.teams is of type Top

- Good: ChineseCheckers.colors is of type { UndefinedObject Array }
- Good: ChineseCheckers.homes is of type { UndefinedObject Array }
- Good: ChineseCheckers.animateMoves is of type { True UndefinedObject False }
- Good: ChineseCheckers.pathMorphs is of type { UndefinedObject OrderedCollection }
- Good: ChineseCheckers.autoPlay is of type { UndefinedObject Array }
- Bad: CipherPanel.originalMorphs is of type { ContextPart class++ EPSCanvas ChangeSorter FlashBoundaryShape FormHolderView B3DColor4 NebraskaNavigationMorph TTSampleStringMorph Arc GIFReadWriter IRCChannelObserver ParameterTypeGoal FillInTheBlankView UnixFileDirectory CautiousModel HtmlInput LucidVariableExpression BasicButton UnionType FillStyle AbstractVariablesRefactoring MorphicTransform AddClassRefactoring NullEncoder MorphWorldView TempoEvent B3DLightAttenuation RemoveInstanceVariableChange InlineMethodRefactoring LineSegment RBLiteralNode TelnetMachine RBSpecialCharacterToken BooklikeMorph EToyCommunicatorMorph VRMLClassNode LucidMessage Matrix2x3Plugin MacFileDirectory RemoteFileStream ReadOnlyTextController LucidRegularClassCode WonderlandActor2 AbstractHierarchicalList Set MidiPrimTester PWS LucidLocalSymbolTable LucidVariable ScriptingDomain SmallIntegerArithmeticPrimitive B3DPrimitiveEdge SubclassOfClassToRename TransferMorph B3DFillList PlayerReferenceReadout HtmlOrderedList CodeServer FlashSpriteMorph UndoColorChange FontCache POEdgeList Bezier3Segment FooPlugin2 SimpleNeverFailingPrimitive ParagraphEditor HtmlNoEmbed LedTimerMorph B3DHardwareEngine SequentialSound SketchEditorMorph UnscriptedPlayer ShortRunArray WeakArray RecentMessageSet B3DDisplayScreen WonderlandWrapperMorph RemoveMethodRefactoring VariableEnvironmentTest SlotInformation B3DMatrix4x4 ProgressMorph RBAssignmentToken TabbedPalette MVCWiWPasteUpMorph VoiceEvent NebraskaServerMorph VeryPickyMorph RBAssignmentNode EToyChatOrBadgeMorph PluggableCodeGenerator GeePrinterPage CollapsedMorph Metaclass LucidClassCode Morph AbstractClassVariableRefactoring CanvasCharacterScanner KeyboardEvent FlashThumbnailMorph Viewer FlashColorTransform WeakValueDictionary FreeTranslation LucidRespondersGoal LTLiteral TabSorterMorph TextContainer StringMorph StringSocket StandardViewer AddPoolVariableChange B3DSimulRasterizer ClassCategoryReader PrettyTextDiffBuilder MixedSound RBToken FormView ExternalType B3DVector2 B3DPrimitiveTransformer CObjectAccessor LucidInverseTypeGoal

SampledInstrument PullUpInstanceVariableRefactoring B3DViewport
 ColorPatchCanvas B3DTexture ChatPage ScorePlayer B3DPickerEngine
 GesturalEvent PostscriptCanvas FuddyDudd Array2D LTSelf
 TalkGesturalEvent FileStream AttributedTextStream Hierarchical
 MoveVariableDefinitionTest AliceCamera FancyCelesteComposition
 WonderlandEditorTabs ByteEncoder HtmlForm
 CreateAccessorsForVariableRefactoring FlattenEncoder
 ExternalFunction Pen VRMLCompositeNode LTComment
 RadioButtonSetInput B3DVector3Array UndoParentChange
 BlockSimulation ProjectView B3DEnginePart LucidLiteralExpression
 MatrixTransformMorph MIDIPianoKeyboardMorph
 RemoteControlledHandMorph B3DSceneMorph LargePositiveInteger
 ChangeList VRMLProtoNode EToyMorphsWelcomeMorph
 MorphicAlarm AddClassChange HTMLformatter StringHolderView
 ComponentInstance MultiResolutionCanvas CodecDemoMorph
 ListItemWrapper FormEditor HtmlBoldEntity B3DSimpleMeshVertex
 WonderlandUndoStack CrosticPanel WordGameLetterMorph
 Win32Point POTriangle LucidExpression PluggableListView TextDoIt
 B3DInplaceArray MimeConverter IllegalResumeAttempt GesturalVoice
 TextLink DropDownChoiceMorph TemporaryToInstanceVariableTest
 PrimitiveTestCase RBNamespace ControlManager InterpreterProxy
 LiteralDictionary LimitingLineStreamWrapper TempVariableNode
 FFITester DamageRecorder ZipWriteStream InlineMethodTest
 RBFormatter FreeCellStatistics ArrayedCollection LucidSuperExpression
 HtmlStyle ScriptableButton MethodMorph FormMenuController
 RBVariableNode PhonemeSet MailInboxFile StoreEncoder
 SymbolTablePool HtmlAnchor PositionableStream IntegerPokerPlugin
 ThumbnailMorph MethodSimulation PluggableListMorph
 AuthorizedWriteSwiki BorderedMorph WriteStream AsyncFile
 EmphasizedMenu HtmlArea ColorSeerTile RefactoryVariableChange
 InflateStream ZLibWriteStream B3DVertexClipper Workspace
 ParseTreeLintRule IdentityDictionary KeyWordNode AliceNamespace
 B3DPrimitiveClipper RBPatternVariableNode Debugger Component1
 MorphExtension AddInstanceVariableTest OSAID PluggableTextView
 Association ClassBuilder FillInTheBlank ReceiverAndSelector
 Decompiler EtoyUpdatingThreePhaseButtonMorph AddParameterTest
 SmalllintChecker SameGameTile SoundEventMorph AliceActor
 MIMEDocument HtmlFontEntity B3DFloatArray TTCompositeGlyph
 TextPlusJumpEnd TextFontReference UndoPositionChange RBParser
 HtmlParser EmbeddedServerAction GeeMailMorph
 B3DHardwareRasterizer HtmlBiggerFontEntity B3DMultiMesh
 MatrixTransform2x3 TransformationRule PinMorph MethodDictionary
 SmalltalkEnvironment WonderlandMesh AlansTextPlusMorph
 POObject UserInputEvent TGoToNode
 RenameInstanceVariableRefactoring ColorForm LucidSelfExpression
 MenuLineMorph EnvelopeEditorMorph SoundPlugin

RemoveClassRefactoring ClippingCanvas RBClassTest
 MorphicEventEncoder Phoneme ObjectViewer CosineInterpolator
 MultiuserTinyPaint B3DMaterial StrikeFont LucidKeywordMessage
 PluggableMessageCategoryListMorph B3DRotationArray
 InstantiationPrimitive LucidBlockReturnFlowGoal TextOnCurve
 ColorMap ZoomAndScrollControllerMorph MessageSet
 LucidBinaryMessage Time B3DCamera PluggableDictionary
 StandardFileStream ActiveSwikiAction MorphicModel ServerAction
 EyeMorph BackgroundMorph MouseOverMorph MorphicEvent
 FlashShapeMorph EventRecorderMorph LargeIntegersPlugin
 TextStream SelfOfMethodFlowPosition WonderlandActorViewer
 ExternalScreen LimitedWriteStream AliceScheduler
 TTFontTableDirEntry SimpleHierarchicalListMorph
 StandardSystemView PushDownClassVariableTest RBBlockReplaceRule
 DummyStream FilePluginSimulator Week FlashFileReader
 SelectorEnvironmentBrowser SocketPlugin LTCloseBracket
 ImageSegmentRootStub LTOpenBracket PianoKeyboardMorph Flipper
 ClassConeType SmallIntegerComparisonPrimitive
 ExtractMethodRefactoring RecordingControlsMorph
 CompositeTransform TranslucentColor PlayWithMe1 RBParseTreeRule
 AlwaysFailingPrimitive AcornFileDirectory RBKeywordToken DescType
 SurfacePlugin MessageAsTempNode RemoveClassVariableTest
 LiteralSimulation FunctionComponent SinglePlugServerAction LintRule
 LucidCompiler SoundInputStream IndexTabs FTPSocket ZipEncoder
 Preferences ObjectRepresentativeMorph Speaker AliceScript Notification
 ConstantPoolTest RenameMethodTest AAATIREADME
 StringReadoutTile IRCChannelUsersBrowser LucidClassVarSymbolTable
 AddParameterRefactoring EUBlock ParallelAnimation PDA
 SmartRefStream CurveMorph MouseActionIndicatorMorph
 AliceUndoAnimation SwikiPage SampledSound InterpreterPlugin
 Win32HGDIObj MoveVariableDefinitionRefactoring WonderlandActor12
 Circle HtmlStrikeEntity MorphThumbnail HierarchicalUrl
 FlashTextMorph B3DSceneObject ChineseCheckers
 CreateAccessorsForVariableTest TTFontReader HtmlTableRow
 HtmlUnderlineEntity CArrayAccessor TableLayoutProperties FMSound
 DoCommandOnceMorph B3DAmbientLight IconicButton
 WiWPasteUpMorph RBNamespaceTest IntegerArray LTThisContext
 SorterTokenMorph ProgressNotification SoundReadoutTile
 PoolVariableFlowPosition ParsedCodePoolTestCase Model FilePackage
 InstanceVariableTypeSlot RefactoringBrowserTest HtmlBlockQuote
 RandomEnvelope LintDialog SerialPlugin DECTalkReader
 HtmlTableDataItem HtmlParagraph SwikiAction
 ExtractToTemporaryTest PhonemeRecord HtmlBreak
 SoundCodecPlugin LucidFlowGoal AutoStart RBMessageNode
 PlayWithMe3 MethodNode TextPlusJumpStart LTColonWord
 StackMorph CachingMorph RenameInstanceVariableChange

BalloonRectangleMorph WonderlandStyle WonderlandActor7 FtpUrl
 Month Symbol RunArray Button HtmlUnorderedList Canvas
 WonderlandActor10 TransferMorphLineAnimation
 ThreeDSChunkDescription LTSemicolon RenderingSwikiAction
 HTTPSocket GraphMorph ScrollPane TextMorphForEditView
 SequentialAnimation MarqueeMorph VRMLStandardNode
 PaintBoxColorPicker RBlockNode SimpleSliderMorph B3DSimpleMesh
 ComponentLayout TransitionMorph ViewerFlapTab
 ObjectExplorerWrapper SimpleClientSocket TIContext
 ConnectionQueue B3DActiveEdgeTable ServerDirectory
 AddMethodRefactoring VRMLWriter SystemTracer MethodContext
 CompiledMethod Socket FWT RBCascadeNode TCaseStmtNode
 SendTypeSlot UndoAction B3DShaderPlugin HtmlOptionGroup
 HeadingMorph SpectrumAnalyzerMorph Float ExternalLibrary Phrase
 WonderlandPositionalLight EventModel
 ExtractMethodToComponentTest StandardSystemController
 LucidUnaryMessage ObjectExplorer LinearFit LoopbackStringSocket
 RenameVariableChange SymbolListTile Command UnaryFloatPrimitive
 GeeBookPageMorph InterpreterSupportCode HtmlEmbedded
 FormSetFont TextKern SameGameBoard BOBTransformationMorph
 Inspector WonderlandQuickReference BlockContext
 BinaryFloatPrimitive B3DPrimitiveLight IRCChannelSummary
 RemoveMethodTest InflatePlugin TSendNode LessHTMLformatter
 B3DPrimitiveEdgeList ComponentLikeModel ClassEnvironment
 RenameClassChange ReturnReceiverPrimitive
 LucidMethodReturnFlowGoal ChangeListForProjects X11Window
 SoundDemoMorph CharacterScanner PullUpClassVariableRefactoring
 PostscriptCharacterScanner PerformTypeSlot WeakSet MidiInputMorph
 FileDirectory DeepCopier SimpleButtonMorph ProtocolEnvironment
 EllipseMorph WonderlandActor9 PlayingCard
 WonderlandCameraMorph PluggableListViewOfMany BlockArgsNode
 LucidMessageExpression RulerMorph TestResult TextOnCurveContainer
 SmalltalkInterchangeSqueakFileManager WorldWindow
 HtmlDefinitionDefinition TransformationB2Morph PNGReadWrite
 LocalVariableTypeSlot PseudoClassOrganizer LucidDeadEndFlowGoal
 MenuItemMorph ZipEncoderNode PrintableEncoder UndoShowHide
 WonderlandVerifier CompositeVoice ProjectController UndoSizeChange
 FlashPlayerModel RenderedSwikiAction MouseButtonEvent
 RemoveInstanceVariableRefactoring HtmlHorizontalRule HiddenInput
 KlattSegmentParameter Url TestOSAPLugin LucidMethodSpecification
 LucidSendersGoal EToyFridgeMorph BufferedCanvas Win32Handle
 FastInflateStream PswikiAction LTSuper NebraskaDebug
 KlattSynthesizer CommandHistory PerfectTypeGoal ListComponent
 ExternalObject SimplerTextContainer Bag ZoomAndScrollMorph
 LucidMethodSpecificationTestCase ShortPointArray PitchEnvelope
 MoodGesturalEvent FloatTruncatedPrimitive TestCClass3

B3DPrimitiveObject NewParagraph ContextlessVariableFlowPosition
 HtmlTable MethodTypeGoal DisplayMedium ReadStream
 FillInTheBlankMorph PluggableViewByItem RefactoringWarning
 VRMLUnhandledNode VRMLScene PluginCodeLoader
 SplitClassRefactoring PluginLauncher AliceRelativeAnimation
 AbsoluteAnimation Cursor B3DIndexedQuadMesh
 UnfailingSmallIntegerArithmeticPrimitive B3DVertexRasterizer
 HtmlText StepMessage IntonationVisitor EmptyFlowPosition
 RefactoryTestDataApp HtmlFileStream ProjectViewMorph
 ParserRemovedUnusedTemps UndoVisibilityChange GSMCodec
 PushDownInstanceVariableTest Word RBStringReplaceRule
 HtmlTextEntity AlignmentMorphBob1 SentNotImplementedTestCase
 SyntaxAttribute ProgressInitiationException BasicLintRule
 RBReplaceRule PDARecurringEvent EToyTextNodeWrapper
 CompositeLintRuleTest TMethod OrientedFillStyle FlashSoundEnvelope
 LucidEmptySymbolTable HtmlHeadEntity KeyboardMorphForInput
 ScreenshotAction DisplayText LucidHopelessFlowGoal RemoteCanvas
 ColorSwatch TTPoint Quadrangle WaveletCodec FilePlugin TiTestCode
 BlockType InstanceVariableFlowPosition RBArraryNode
 B3DVector2Array TextMorphEditor UpdatingRectangleMorph
 EToySenderMorph Date LargeNegativeInteger WarpBlit
 B3DDirectionalLight F0RenderingVisitor TransformationRuleTest
 BalloonState SketchMorph TestInterpreterPlugin TabMorph
 ProjectHistory FloatArithmeticPrimitive X11GC B3DAcceleratorPlugin
 MessageSendTypeGoal Boolean KlattSegmentSet LedDigitMorph
 AddClassVariableTest RenameClassVariableChange LucidSymbolTable
 CompositeEvent FileStreamException RemoveParameterRefactoring
 CompressedSoundData RemoveClassVariableRefactoring
 UpdatingSimpleButtonMorph ExternalStructure
 RBShortAssignmentToken MultiCanvas StickySketchMorph
 AliceHierarchical VariableRefactoring PluggableTextMorph
 StandardFileMenu AtomMorph PushDownMethodTest LucidSenderSet
 PushUpInstanceVariableTest MoveMethodTest
 PluggableButtonController LiteralNode HtmlTag AlignmentMorph
 UtteranceVisitor TAssignmentNode DataStream ReadNewsInboxFile
 PointerFinder RadioButtonInput TLabeledCommentNode
 LucidReturnExpression Win32HBrush DictionaryInspector LTCaret
 HtmlFrame WorldViewModel TetrisBoard VRMLNodeSpec Clause
 InlineParameterTest Primitive UpdatingThreePhaseButtonMorph
 ViewerRow Browser FlashLineStyle ChatNotes
 ChangeMethodNameRefactoring PreferencesPanel ChangeRecord
 TParseNode BitBlit LucidPerfectFlowGoal ExternalForm
 HtmlTextualEntity PointArray FFIPugin QueueSound B3DColor4Array
 ListParagraph UndoTextureChange FreeCell MoveMethodRefactoring
 LeafNode PreDebugWindow Tetris AbstractInterpretation
 PrintComponent PluggableListMorphByItem RandomNumberTile

ProgressTargetRequestNotification InlineMethodFromComponentTest
 FloatingBookControlsMorph Sonogram BottomType
 WindowingTransformation Bitmap EToyProjectRenamerMorph
 TestModel ScriptStatusControl X11Drawable MouseMoveEvent
 PluggableTextController VariableDock Envelope PrintSpecifications
 TrashCanMorph WonderlandActor14 CartesianProductTestCase
 LargeIntegersTest AtPrimitive RefactoryChange VRMLGenericNode
 Message MailtoUrl BasicLintRuleTest ShortIntegerArray NoController
 B3DPrimitiveFace ReferenceMorph UpdatingMenuItemMorph
 HtmlDefinitionListElement URLMorph Utilities BalloonEnginePlugin
 ParseTreeEnvironment EToyGateKeeperMorph TransformationMorph
 GZipReadStream PerformPrimitive RemoteString FaceMorph
 AIFFFileReader FormCanvas AddInstanceVariableChange MacRect
 PasteUpMorph RenameClassVariableRefactoring Discussion
 PlayWithMe2 BlobMorph B3DVector4 B3DEnginePlugin LTOpenParen
 PDChoiceMorph Warning ControlChangeEvent MorphWorldController
 ExpressionFlowPosition FlashMorph CPluggableAccessor
 JPEGGHuffmanTable EToyPeerToPeer LucidScannerTestCase
 AudioChatGUI EToyProjectHistoryMorph AbstractFont ScrollBar
 MessageTally HtmlList FlowPositionTestCase POVertex TetrisBlock
 RectangleMorph VariableSimulation Win32Shell CanvasEncoder
 WordNet ClassOrganizer AuthorizedWikiAction PostscriptEncoder
 TextComponent TextAction Animation ClassType NotEnvironment
 ExternalAddress Scanner InternalThreadNavigationMorph
 WonderlandActorData IRCProtocolMessage RBProgramNode
 DumberMenuMorph AddMethodChange ProgramChangeEvent
 B3DVector3 SelectorEnvironment ListController VariableTypeGoal
 ValueHolder FlippyArray2 FlashButtonMorph TextPlusPasteUpMorph
 RBAbstractCondition TranslucentProgressMorph DualChangeSorter
 ZASMCameraMarkMorph PluginHTTPRequest HtmlFixedWidthEntity
 InlineAllSendersRefactoring PCXReadWrite IRCChannelInfo
 LucidLocalVariable AliceTextOutputWindow B3DPrimitiveVertex
 WonderlandSpotLight MailAddressTokenizer
 CommandLineLauncherExample ActorState ColorTileMorph Scamper
 InterpreterSimulatorLSB LucidInstanceVariable LTPeriod
 BitmapFillStyle PushDownInstanceVariableRefactoring GeePrinter
 BlockLintRule RBMethodName IRCMorph
 UpdatingBooleanStringMorph HaloSpec RBMethod HtmlOption View
 Switch EnvelopeLineMorph LucidParser PolygonMorph PswikiPage
 TableLayout GradientFillMorph ZipEncoderTree
 RenameClassVariableTest PluggableFileListView WordArray
 B3DClipperPlugin B3DPrimitiveVertexArray TestTMethod
 BlockValueMethodSimulation FlashDamageRecorder
 SuperedSendTypeSlot PseudoClass RemoveMethodChange
 CachingCanvas CompressedBoundaryShape MailAddressToken
 BalloonMorph LipsMorph SelectorNode UndescribedTile LinkedList

POHalfedge HtmlCommentEntity HtmlImage CategoryEnvironment
 PushDownMethodRefactoring HtmlButton WonderlandCamera
 LTAssignmentOp FXBltSimulator Color
 TemporaryToInstanceVariableRefactoring PostscriptDummyWarp
 MouseMenuController IndentingListItemMorph B3DIndexedMesh
 ScorePlayerMorph SmalltalkInterchangeFileInManager Point
 FloatTimesTwoPowerPrimitive UndoAnimation URLmap EToySystem
 TIPTestPlugin ComplexProgressIndicator RemoveClassTest
 Environment PianoRollNoteMorph B3DSTriangleMesh LTVertBar
 MovieFrameSyncMorph PaintInvokingMorph MultipleSelectionModel
 WordArrayForSegment TConstantNode
 SmalltalkInterchangeSqueakFileOutManager Win32HDC
 ZASMScriptMorph B3DMorph SoundLoopMorph
 MorphicUnknownEvent HtmlSelect TextURL PhoneticTranscriber
 TTFontDescription RBSmallDictionary
 ExtractMethodToComponentRefactoring BrowserUrl
 GraphicSymbolInstance UpdatingStringMorphWithArgument
 CodeLoader SoundTile GeeBookMorph RefactoringBrowser
 VRMLEnumerator UndoPOVChange RemoveParameterTest
 ReturnNode WeakRegistry FlashPlayerWindow LayoutFrame
 InlineTemporaryTest AssignmentSimulation FXBltSimulation
 LucidReceiverFlowGoal FishEyeMorph LucidToken RemoveClassChange
 ContextPart PluggableTest RefactoryClassChange
 ThirtyTwoBitRegister FlashJPEGDecoder HtmlAttributes
 RenamedClassSourceReader KlattFrame ScriptInstantiation
 AbstractClassVariableTest ExplicitSourceCodePool
 RequestAlternateSyntaxSetting Heap PropertyListEncoder
 MorphicModel4 ScrollingToolHolder InlineParameterRefactoring
 TextFieldMorph LucidAssignmentExpression ZLibReadStream
 ObjectScanner MacRGBColor WonderlandActor5 WonderlandActor13
 SortedCollection RenameTemporaryRefactoring TextEmphasis
 ScriptEditorMorph SymbolTableTestCase VRMLUndefinedNode
 ReferenceFinderTest AddClassTest MswUrl B3DPrimitiveRasterizer
 BooleanTile LucidTypeGoal IRCCConnection FlashMorphReader
 LucidParameter ClassDiffBuilder MovieClipStartMorph
 RefactoringManager AbstractSound ContextVariablesInspector PinSpec
 SwikiPseudoFileStream VRMLProtoClassNode BrowserEnvironment
 HtmlTextArea TransferMorphAnimation MuLawCodec VRMLUseNode
 AlertMorph FlashKeyframe CursorWithMask TReturnNode
 HtmlEntityInspector Oop CompositeRefactoryChange Text
 ExtractMethodTest Pixmap ImageSegment PluckedSound
 AlicePoolDefiner NebraskaClient RBPatternBlockToken HeadMorph
 LinkedMessageSet WonderlandMorph XBMReadWriter
 SimpleButtonDelayedMenuMorph ThisContextSimulation
 CommentNode NewHandleMorph SequenceableCollection LintRuleTest
 MailDBFile DisplayScreen SoundMorph CachedHTTPRequest

FormMenuView TestRunner ClassCommentReader Password
UnloadedSound InstructionStream WonderlandEditor
AliceAbstractAnimation AddClassVariableRefactoring
LucidPoolVariable Semaphore HtmlSubscript TextPlusMorph
LineMorph B3DVertexShader AbstractMediaEventMorph
GazeGesturalEvent LTWord ThreeDParser GZipWriteStream
Component NameStringInHalo ScaleMorph VRMLDefNode
SuperWikiServer PullUpClassVariableTest Line
SmalltalkInterchangeFileItem FontSet Win32Window
SmalllintResultEditor SoundPlayer FinderTool B3DVertexBuffer
ReturnBooleanPrimitive FileInput MailAddressParser
TestFailureErrorList NoteEvent LucidMetaClassCode
InterimSoundMorph X11Display InlineTemporaryRefactoring Presenter
NumericReadoutTile TestFailure WonderlandActorBrowser
FFITestPoint4 Player1 FlashGlyphMorph Random
RemovePoolVariableChange HttpUrl Exception ParsedCodePool
POTriangulation ParseStack Class ChooserMorph GraphicSymbol
SolidFillStyle MouseDownMorph BooleanScriptEditor
MIDISynthChannel CelesteComposition ScriptEvaluatorMorph
VariablePool WonderlandActor4 Number WonderlandScriptEditor
WonderlandActor21 MorphObjectOut WonderlandCameraControls
MethodNameEditor HtmlFormEntity RequestCurrentWorldNotification
WonderlandActor6 GZipSurrogateStream ScreeningMorph PDAEvent
TIParametersContext DialectMethodNode HtmlBody TilePadMorph
PianoRollScoreMorph DialectStream EToyGateKeeperEntry
B3DInterpolatedMesh B3DViewingFrustum TextFontChange
MonthMorph DigitalSignatureAlgorithm ConstantVariablePool
TransformMorph CompositeAnimation BrowserEnvironmentWrapper
GrafPort RBCondition RBMetaclass CompiledMethod class
FlashPlayerMorph ScriptActivationButton POSimplePolygon
WheelMorph AliceUpdateable HtmlFormatter UndefinedObject
ThreePhaseButtonMorph B3DTexture2Array NetworkTerminalMorph
WaveEditor LucidClassVariable MIDIControllerMorph Session
CanvasDecoder SmalltalkInterchangeFileManager InputSensor
WonderlandDirectionalLight B3DMaterialColor SoundRecorder
MethodParameterTypeSlot PaintBoxMorph DosFileDirectory
ParameterFlowPosition OneOnSwitch EquivalencePrimitive
FatBitsPaint RBLiteralToken HtmlTitle BraceNode WonderlandActor8
BitBltSimulator B3DPrimitiveFaceAttributes SymbolType
WeakKeyDictionary ParserTest FreeCellBoard TinyPaint
MacExternalData DeflateStream B3DRenderEngine MethodFinder
AdvancedB3DSceneMorph BalloonCanvas PackageBrowser
DSCPostscriptCanvas SecureHashAlgorithm ReadWriteStream
DefaultPrimitive Collection RWBinaryOrTextStream
PushUpMethodTest HtmlHead AliceLight B3DPrimitiveRasterizerData
FrameRateMorph TopType MethodTypeSlot PostscriptEncoderToDisk

TestSuite CompoundTileMorph CurrentProjectRefactoring TypeSlot
 BalloonBuffer HandleMorph RestSound LoopedSampledSound
 IRCChannelListBrowser NullTerminalMorph MessageSendSimulation
 B3DPrimitiveRasterizerState B3DPickerPlugin
 EToyProjectQueryMorph ExternalSemaphoreTable TStmtListNode
 HopelessTypeGoal DSCPostscriptCanvasToDisk PopUpMenu ServerFile
 DropEvent WordGamePanelMorph MagnifierMorph
 ChineseCheckerPiece SpeakerMorph ObjectMemory MouseOverHandler
 GraphicalMenu HtmlFrameSet AbstractLauncher MailDB TextLine
 FlashFileWriter TileLikeMorph Magnitude TileMessageNode Parser
 BlockCannotReturn SelectionMorph RenameInstanceVariableTest
 HTTPRequest BookPageThumbnailMorph SimpleSwitchMorph
 TTKernPair PDAClockMorph PluggableCanvas WorldState
 BlockParameterTypeGoal FlexMorph CharacterBlockScanner
 LucidSingleMessageExpression TIDefaultContext StringHolder
 BalloonLineSimulation RBOptimizedNode ExceptionAboutToReturn
 BalloonDebugEngine CharRecog TiTestSubSub Refactoring DSAPLugin
 AEDesc ExpandReferencedPoolsRefactoring PseudoMetaclass
 CardPlayer IRCMessagePattern DurationsVisitor
 AliceAbsoluteAnimation DeflatePlugin RFC2047MimeConverter
 LookupKey RBSearchRule RelativeAnimation IndexFile
 TTContourConstruction HtmlComment Interpreter
 VariableEnvironmentBrowser WonderlandScene TIContextTestCase
 EventSensor RealEstateAgent PDAMorph PartsWindow
 EToyHierarchicalTextGizmo CustomMenu RBPatterMethodNode
 CommandTilesMorph VRMLDynamicAttribute
 LucidTypeInferenceTestCase StretchyImageMorph ChatButtonMorph
 LucidBraceExpression AddInstanceVariableRefactoring RefactoringTest
 LucidGoalPool LayoutCell NetNameResolver TypePool
 MethodTempsNode B3DIndexedTriangleMesh TextAnchor
 FlashSorterMorph LucidUniversalSenderSet
 ExtraParsingAndFormattingTests CrosticQuotePanel
 PhraseWrapperMorph RBPatterBlockNode EndOfStream
 Interpolateable Wonderland CharacterSet ClockMorph
 ToggleButtonInput ObjectTracer HtmlMap B3DSpotLight InfiniteForm
 FakeClassPool HtmlHeader NetworkTerminalBorderMorph TestCClass2
 PluggableTextMorphWithModel MIMEHeaderValue
 LucidArgumentFlowGoal AmbientEvent SystemSourceCodePool
 VersionsBrowser FileExistsException WonderlandActor3 TVariableNode
 SmalllintTest TypeTestCase ReturnSimulation
 InteractiveAddMethodChange SyntaxError VRMLBaseNode
 Transcripiter RemoveClassVariableChange HtmlDocument
 LucidConstantVariable FileDoesNotExistException KidNavigationMorph
 LucidRegularSenderSet ChangeSet PluggableListControllerOfMany
 BalloonEngineSimulation FMBassoonSound UndoChangeList
 TextDiffBuilder Syllable DirectoryEntry LucidThisContextExpression

CompositeLintRule TextPrinter ApplescriptError ZoomMorph TestCase
 ProportionalLayout RBAbstractClass MappedCollection
 WonderlandStillCamera B3DCameraPerspective CipherPanel
 SourceFileArray ObjectSocket IdentityTransform HtmlToken
 RepeatingSound MessagePartNode CachedSwikiAction RNInboxFile
 FormInputSet B3DIndexedQuad SoundCodec FileUrl FlasherMorph
 LTBinaryOp StaticForm HtmlBlockEntity PluggableButtonView
 SimpleMIDIPort HtmlDefinitionList CCodeGenerator
 HtmlDefinitionTerm SquishedNameMorph EToyIncomingMessage
 PlayingCardDeck Authorizer MethodRefactoring Player3
 UniversalFlowPosition ModalSystemWindowView LTOpenBrace
 SharedQueue StoryboardBookMorph MenuMorph Scheduler
 ToggleButtonMorph ParseTreeSearcher TextColor ExternalFormRegistry
 FlowPosition ChatRecorder Unsigned MoviePlayerMorph
 B3DRasterizerPlugin FlashProgressMorph MenuItem RBIdentifierToken
 SmallIntegerDividePrimitive MovieClipEndMorph B3DLightSource
 AbstractAnimation HtmlPreformattedRegion EToyMultiChatMorph
 DisplayScanner RenameMethodRefactoring SystemOrganizer
 ReferenceStream SmalltalkInterchangeFileOutManager CharacterBlock
 DoubleClickExample UrlArgumentList CrLfFileStream DrawErrorMorph
 MouseEvent AddClassVariableChange Win32Rectangle
 ClassRepresentativeMorph VRMLNodeAttribute ExceptionTester
 ListView SystemDictionary ImageMorphWithSpotlight RBClass
 AbstractInstanceVariableRefactoring ExecutionUnit ScrollController
 B3DSimpleMeshFace PhraseTileMorph ChangedMessageSet
 FMClarinetsound Comment MIDIScore TTGlyph MultiEnvironment
 RBMethodNode FlashCharacterMorph MorphicModel3 Rectangle
 RBPatternMessageNode MessageNode MIMEPart MIDIPlugin
 VariableTypeTest ImageMorph MIDISynth EToyListenerMorph
 MessageFile Action HandMorphForReplay TestCodeGenerator
 AsyncFilePlugin TiTestSub ProtocolBrowser Player2
 PushDownClassVariableRefactoring TextAnchorPlus TextAttribute
 MIDIFileReader IRCMessageSet IntegerAsFloatPrimitive RBValueToken
 Stream MessageSend VRMLInterpolatorNode ApplescriptInstance
 RBSequenceNode Link EToyHierarchicalTextMorph SegmentScanner
 DHtmlFormatter TextSsqProjectLink GradientFillStyle PrintEncoder
 GenericUrl TextSsqPageLink BlockNode Error MessageNotUnderstood
 ExternalData CodeHolder EToyProjectDetailsMorph
 FlippyArrayPlugin2 TextLineInterval LucidMethod
 UpdatingStringMorph RBConjunctiveCondition StringHolderController
 Behavior PushUpMethodRefactoring Halt RemoveInstanceVariableTest
 SelfSimulation PDAToDoItem CornerRounder
 IRCDirectMessagesObserver CachingCodeLoader AssertionFailure
 ModalController B3DRotation EUMethod VRMLExternProtoClassNode
 HtmlListItem String RefactoryChangeManager HTTPLoader
 RefactoringError SystemQueryPhrase ClassRefactoring

BalloonEngineBase EventHandler MovieMorph HtmlEntity
 TranscriptStream RBScanner LucidClassSymbolTable
 ShadowDrawingCanvas JoystickMorph FormInput
 BookPageSorterMorph StringMorphEditor SoundSequencerMorph
 CompositionScanner OrderedCollection IndexFileEntry NullCanvas
 TwoWayScrollPane RBNegationCondition TestCClass1 PerfectTypeSlot
 FlashCodec RBReturnNode SoundBuffer InstVarRefLocator MailNotifier
 WonderlandControls ChildrenToSiblingsTest InterpreterSimulatorMSB
 B3DPositionalLight True FileList2 AbstractInstanceVariableTest FXBlit
 B3DIndexedQuadArray ProtectInstanceVariableTest
 BlockValueTypeGoal MorphicEventDecoder HopelessTypeSlot
 VariableTypeSlot MIDIInputParser B3DPrimitiveShader
 SqueakPageCache WebPageMorph MyTestNotification
 StandardScriptingSystem Foo2 RenameClassTest LiljencrantsFant
 MouseClickState WonderlandEvent OnceOnlyOrderedCollection
 DocLibrary FlashSoundInformation DisplayTextView HtmlItalicsEntity
 ParseNode WeakValueAssociation ProcessBrowser Alarm SqueakPage
 ProjectLoading AliceAlarm Dictionary LayoutProperties
 HierarchyBrowser B3DPoolDefiner FileContentsBrowser
 GraphicalDictionaryMenu RBProgramNodeVisitor LedMorph
 ProtectInstanceVariableRefactoring BitBlitSimulation MVCMenuMorph
 FlashFileStream POPSocket InspectorBrowser Compiler NebraskaServer
 MailMessage PURLmap MyResumableTestError LucidPoolSymbolTable
 LucidScanner ClassChangeRecord ReturnSmallIntegerPrimitive
 BitEditor PenPointRecorder B3DIndexedTriangleArray PhoneticEvent
 BalloonEdgeData FFTPlugin LucidParserFromRB AbstractScoreEvent
 TextMorph SyntaxMorph Array2D class TestInterfaceBase FXGrafPort
 LTCloseParen B3DScene EllipseMidpointTracer WonderlandLightSource
 DialectParser ListViewLine FFTTestPoint2 OrderedCollectionInspector
 DeferredActionStandardSystemController SystemMonitor
 PickAFileToWriteNotification JoystickTabletPlugin PDARecord
 BalloonBezierSimulation Path TTSampleFontMorph
 RendererSwikiAction VolumeEnvelope FileList ImageReadWriter
 Interval Type PluggableServerAction ExternalStructureInspector
 KlattFrameMorph RBValueNode MyTestError HtmlTokenizer
 FormEditorView ClassPrimitive VRMLStream
 LucidCascadedMessageExpression TextStyle B3DVertexTransformer
 Process HtmlMeta StringButtonMorph HtmlSmallerFontEntity
 AssignmentTileMorph IndentingListParagraphMorph
 LucidConstantSymbolTable IdentitySet BalloonEngine MenuTile
 AliceAction PhonemeRecognizerMorph LTCloseBrace VariableNode
 EUExpression EToyChatMorph InterpreterSimulator
 BinarySmallIntegerPrimitive ExtractToTemporaryRefactoring
 JPEGReadWriter MacPoint Encoder FFT Paragraph
 EToyGenericDialogMorph ObjectOut PerformMethodSimulation
 AbstractInstructionPrinter HaloMorph Character EUSimulation

DecompilerConstructor FlashStreamingSound ViewerEntry
 EmbeddedWorldBorderMorph ADPCMCodec JPEGColorComponent
 InstructionPrinter RemoteHandMorph DiskProxy DisplayObject
 BalloonFillData FlashMorphingMorph IRCRecipientFilter EUVariable
 PhoneticRule VRMLWonderlandBuilder PluggableFileList ProtoObject
 B3DTransformerPlugin ZASMStepsMorph AddMethodTest
 MouseSensorMorph StarMorph KeyboardBuffer EToyTextNode
 PDAPerson SmallintContext SystemWindowWithButton Voice
 B3DExponentTable WonderlandStillCameraMorph DisplayTransform
 QuotedPrintableMimeConverter FloatComparisonPrimitive Object
 B3DScanner LucidBlockExpression HtmlSpecialEntity
 InlineMethodFromComponentRefactoring FlapTab Celeste False
 SameGame PitchBendEvent SMTPSocket
 OnceOnlyOrderedCollectionTestCase BrowserEnvironmentTest
 PluggableListController TileMorph LocalVariableFlowPosition
 MethodHolder ScreenController WonderlandActor
 Base64MimeConverter AuthorizedServerAction IRCMessage
 FormInspectView MHMailInboxFile LucidParserTestCase
 PluggableListMorphOfMany ProjectEntryNotification ExternalTexture
 VRMLNamedNode StandardFileMenuResult Note TextOnCurvePS
 WireMorph Fraction MethodChangeRecord SelectionMenu
 ProjectViewOpenNotification PseudoContext HtmlTableHeader
 TheWorldMenu RenameTemporaryTest AcceptableCleanTextMorph
 WonderlandAmbientLight PopUpChoiceMorph HtmlSuperscript
 B3DGeometry TimeProfileBrowser HtmlFontChangeEntity
 UndoByStopping KlattVoice VariableEnvironment PHORreader
 InterpolatingImageMorph RBOptimizedToken InfoStringMorph
 ColorPickerMorph ExternalLibraryFunction Slider B3DPrimitiveEngine
 ParseTreeRewriter ClassToRename UndoRotationChange
 FileDirectoryWrapper LucidStackSimulation FlashKeyframes
 InteractiveAddClassChange Controller NewWorldWindow
 ColorSystemView PlayingCardMorph WatchMorph
 KlattSynthesizerPlugin ClassDescription AssignmentNode UserScript
 ChildrenToSiblingsRefactoring InlineAllMethodTest
 PluggableButtonMorph WeakKeyAssociation FloatArrayPlugin
 SmallInteger ByteArray CompiledApplescript FormButtonCache
 BouncingAtomsMorph WeekMorph Form WonderlandActor1
 CategoryViewer SelectorBrowser ReverbSound B3DVertexBufferPlugin
 RenameClassRefactoring DownloadingImageMorph UnionFlowPosition
 StandardSourceFileArray B3DIndexedTriangle FloatArray
 ProjectNavigationMorph Spline AliceScene TranslatedMethod Project
 FillInTheBlankController ClassEnvironmentBrowser TextIndent
 Bezier2Segment MorphicModel2 BalloonSolidFillSimulation
 LayoutPolicy PerformTypeGoal Array WonderlandActor11 AliceWorld
 Player B3DBox AndEnvironment SystemWindow TextInput
 CascadeNode ExceptionSet VRMLNodeParser TextMessageLink

MacPixPatPtr ProcessorScheduler RefactoryTyper
 ThreadNavigationMorph LucidSelfOfMethodFlowGoal LTWordColon
 CategoriesFile B3DNullRasterizer B3DSceneExplorerMorph Applescript
 RBReadBeforeWrittenTester ArbitraryObjectSocket Integer
 ReferenceFinder HandMorph MorphicEventDispatcher TestTest
 WonderlandReaction SourceCodePool LucidGoal
 RBBinarySelectorToken PortugueseLexiconServer PluggableSet
 ZeroDivide KlattSegment SelectionInput GeePrinterDialogMorph
 CurveFitter BookMorph Delay FooLintRuleTest SerialPort }

- Good: CipherPanel.decodingMorpha is of type { UndefinedObject Array }
- Good: CipherPanel.quote is of type { UndefinedObject String Character }
- Good: CipherPanel.originalText is of type UndefinedObject
- Good: CrosticPanel.crosticPanel is of type UndefinedObject
- Good: CrosticPanel.cluesCol2 is of type { AlignmentMorph UndefinedObject }
- Bad: CrosticPanel.quote is of type Top
- Good: CrosticPanel.answers is of type { UndefinedObject OrderedCollection }
- Good: CrosticPanel.clues is of type { UndefinedObject OrderedCollection }
- Good: CrosticPanel.cluesPanel is of type { AlignmentMorph UndefinedObject }
- Good: CrosticPanel.quotePanel is of type { CrosticQuotePanel UndefinedObject }
- Good: CrosticQuotePanel.cluesPanel is of type { CrosticPanel UndefinedObject }
- Good: FreeCell.lastGameLost is of type UndefinedObject
- Good: FreeCell.cardsRemainingDisplay is of type { LedMorph UndefinedObject }
- Good: FreeCell.gameNumberDisplay is of type { LedMorph UndefinedObject }
- Good: FreeCell.state is of type { UndefinedObject #sameGame #pickGame #won #newGame #lost }

- Good: FreeCell.myFillStyle is of type { UndefinedObject GradientFillStyle }
- Good: FreeCell.elapsedTimeDisplay is of type { UndefinedObject LedTimerMorph }
- Good: FreeCell.board is of type { FreeCellBoard UndefinedObject }
- Good: FreeCell.autoMoveRecursionCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: FreeCellBoard.target is of type Top
- Bad: FreeCellBoard.actionSelector is of type Top
- Good: FreeCellBoard.stacks is of type { UndefinedObject Array }
- Good: FreeCellBoard.freeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.homeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.cardDeck is of type { PlayingCardDeck UndefinedObject }
- Good: FreeCellBoard.lastCardDeck is of type UndefinedObject
- Good: FreeCellStatistics.streakLosses is of type { UndefinedObject LargeNegativeInteger SmallInteger LargePositiveInteger }
- Bad: FreeCellStatistics.lastGameWon is of type Top
- Bad: FreeCellStatistics.lastGameLost is of type Top
- Good: FreeCellStatistics.currentCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.currentType is of type { UndefinedObject #losses #wins }
- Good: FreeCellStatistics.statsMorph is of type { TextMorph UndefinedObject }
- Good: FreeCellStatistics.window is of type UndefinedObject
- Good: FreeCellStatistics.sessionLosses is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.lossesWithReplay is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.sessionWins is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }

- Good: FreeCellStatistics.totalWins is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.streakWins is of type { UndefinedObject LargeNegativeInteger SmallInteger LargePositiveInteger }
- Good: FreeCellStatistics.totalLosses is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.winsWithReplay is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: LedDigitMorph.digit is of type Top
- Good: LedDigitMorph.highlighted is of type { True UndefinedObject False }
- Good: LedMorph.digits is of type { UndefinedObject SmallInteger }
- Bad: LedMorph.flash is of type Top
- Good: LedMorph.flashing is of type { True UndefinedObject False }
- Bad: LedMorph.value is of type Top
- Good: LedTimerMorph.counting is of type { True UndefinedObject False }
- Bad: LedTimerMorph.startSeconds is of type Top
- Good: PlayingCard.cardNo is of type { UndefinedObject LargeNegativeInteger SmallInteger LargePositiveInteger }
- Bad: PlayingCard.suitNo is of type Top
- Good: PlayingCard.suit is of type UndefinedObject
- Good: PlayingCard.cardForm is of type { Form UndefinedObject }
- Bad: PlayingCardDeck.target is of type Top
- Bad: PlayingCardDeck.seed is of type Top
- Good: PlayingCardDeck.acceptCardSelector is of type { PlayingCardDeck UndefinedObject #acceptCard:onStack: #acceptSingleCard:on: }
- Good: PlayingCardDeck.cardDraggedSelector is of type { PlayingCardDeck UndefinedObject #dragCard:fromHome: #dragCard:fromStack: }
- Good: PlayingCardDeck.stackingOrder is of type { UndefinedObject #descending #ascending }

- Good: `PlayingCardDeck.cardDroppedSelector` is of type { `PlayingCardDeck` `UndefinedObject` `#cardMoved` `#cardMovedHome` }
- Good: `PlayingCardDeck.cardDoubleClickSelector` is of type { `PlayingCardDeck` `UndefinedObject` `#doubleClickInStack:OnCard:` }
- Good: `PlayingCardDeck.stackingPolicy` is of type { `UndefinedObject` `#stagger` `#single` `#altStraight` `#straight` }
- Good: `PlayingCardDeck.emptyDropPolicy` is of type { `UndefinedObject` `#inOrder` `#any` }
- Good: `PlayingCardDeck.layout` is of type { `UndefinedObject` `#stagger` `#pile` `#grid` }
- Good: `PlayingCardMorph.suitNumber` is of type { `UndefinedObject` `LargePositiveInteger` `SmallInteger` `LargeNegativeInteger` }
- Good: `PlayingCardMorph.cardNumber` is of type { `UndefinedObject` `LargeNegativeInteger` `SmallInteger` `LargePositiveInteger` }
- Good: `SameGame.scoreDisplay` is of type { `LedMorph` `UndefinedObject` }
- Good: `SameGame.board` is of type { `UndefinedObject` `SameGameBoard` }
- Good: `SameGame.selectionDisplay` is of type { `LedMorph` `UndefinedObject` }
- Bad: `SameGame.helpText` is of type { `StringHolderView++` `PluggableTextMorph++` `UndefinedObject` }
- Good: `SameGameBoard.palette` is of type { `UndefinedObject` `OrderedCollection` }
- Bad: `SameGameBoard.target` is of type `Top`
- Bad: `SameGameBoard.columns` is of type `Top`
- Bad: `SameGameBoard.actionSelector` is of type `Top`
- Good: `SameGameBoard.selectionColor` is of type `UndefinedObject`
- Good: `SameGameBoard.flash` is of type { `True` `UndefinedObject` `False` }
- Good: `SameGameBoard.arguments` is of type { `UndefinedObject` `Array` }
- Bad: `SameGameBoard.rows` is of type `Top`
- Bad: `SameGameBoard.protoTile` is of type `Top`
- Bad: `SameGameBoard.flashColor` is of type `Top`

- Good: SameGameBoard.selection is of type UndefinedObject
- Bad: SameGameTile.oldSwitchState is of type Top
- Bad: SameGameTile.switchState is of type Top
- Good: SameGameTile.disabled is of type { True UndefinedObject False }
- Good: Tetris.scoreDisplay is of type { LedMorph UndefinedObject }
- Good: Tetris.board is of type { UndefinedObject TetrisBoard }
- Bad: TetrisBlock.shapeInfo is of type Top
- Good: TetrisBlock.board is of type { UndefinedObject TetrisBoard }
- Bad: TetrisBlock.angle is of type Top
- Bad: TetrisBlock.baseCellNumber is of type Top
- Good: TetrisBoard.game is of type { UndefinedObject Tetris }
- Good: TetrisBoard.gameOver is of type { True UndefinedObject False }
- Good: TetrisBoard.score is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: TetrisBoard.paused is of type { True UndefinedObject False }
- Good: TetrisBoard.delay is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: TetrisBoard.currentBlock is of type { TetrisBlock UndefinedObject }
- Good: WordGameLetterMorph.predecessor is of type { WordGameLetterMorph UndefinedObject }
- Good: WordGameLetterMorph.lineMorph is of type { UndefinedObject PolygonMorph }
- Good: WordGameLetterMorph.style is of type { UndefinedObject #underlined #boxed #plain }
- Good: WordGameLetterMorph.letterMorph is of type { StringMorph UndefinedObject }
- Bad: WordGameLetterMorph.letter is of type Top
- Good: WordGameLetterMorph.originalLetter is of type UndefinedObject
- Good: WordGameLetterMorph.successor is of type { WordGameLetterMorph UndefinedObject }

- Bad: WordGameLetterMorph.indexInQuote is of type Top
- Good: WordGameLetterMorph.linkedLetters is of type UndefinedObject
- Good: WordGamePanelMorph.letterMorphs is of type { Array
UndefinedObject OrderedCollection }
- Good: WordGamePanelMorph.haveTypedHere is of type { True
UndefinedObject False }

4.10 Threshold of 5000

- Good: ChineseCheckerPiece.myBoard is of type { ChineseCheckers
UndefinedObject }
- Bad: ChineseCheckerPiece.boardLoc is of type Top
- Good: ChineseCheckers.movePhase is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ChineseCheckers.board is of type { UndefinedObject Array }
- Good: ChineseCheckers.plannedMovePhase is of type UndefinedObject
- Good: ChineseCheckers.sixDeltas is of type { UndefinedObject Array }
- Bad: ChineseCheckers.plannedMove is of type Top
- Bad: ChineseCheckers.whoseMove is of type Top
- Bad: ChineseCheckers.teams is of type Top
- Good: ChineseCheckers.colors is of type { UndefinedObject Array }
- Good: ChineseCheckers.homes is of type { UndefinedObject Array }
- Good: ChineseCheckers.animateMoves is of type { True
UndefinedObject False }
- Good: ChineseCheckers.pathMorphs is of type { UndefinedObject
OrderedCollection }
- Good: ChineseCheckers.autoPlay is of type { UndefinedObject Array }
- Good: CipherPanel.originalMorphs is of type { UndefinedObject Array }
- Good: CipherPanel.decodingMorphs is of type { UndefinedObject Array
}
- Good: CipherPanel.quote is of type { UndefinedObject String Character
}
- Good: CipherPanel.originalText is of type UndefinedObject

- Good: CrosticPanel.crosticPanel is of type UndefinedObject
- Good: CrosticPanel.cluesCol2 is of type { AlignmentMorph UndefinedObject }
- Bad: CrosticPanel.quote is of type Top
- Good: CrosticPanel.answers is of type { UndefinedObject OrderedCollection }
- Good: CrosticPanel.clues is of type { UndefinedObject OrderedCollection }
- Good: CrosticPanel.cluesPanel is of type { AlignmentMorph UndefinedObject }
- Good: CrosticPanel.quotePanel is of type { CrosticQuotePanel UndefinedObject }
- Good: CrosticQuotePanel.cluesPanel is of type { CrosticPanel UndefinedObject }
- Good: FreeCell.lastGameLost is of type UndefinedObject
- Good: FreeCell.cardsRemainingDisplay is of type { LedMorph UndefinedObject }
- Good: FreeCell.gameNumberDisplay is of type { LedMorph UndefinedObject }
- Good: FreeCell.state is of type { UndefinedObject #sameGame #pickGame #won #newGame #lost }
- Good: FreeCell.myFillStyle is of type { UndefinedObject GradientFillStyle }
- Good: FreeCell.elapsedTimeDisplay is of type { UndefinedObject LedTimerMorph }
- Good: FreeCell.board is of type { FreeCellBoard UndefinedObject }
- Good: FreeCell.autoMoveRecursionCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: FreeCellBoard.target is of type Top
- Bad: FreeCellBoard.actionSelector is of type { UndefinedObject #try #mutedForTrack:put: #rotateClockWise #stepStillDown:with: #goToPageMorph:fromBookmark: #selection #volumeForChannel:put: #quit #playV2 #chooseFrom:categoryItem: #destroyScript #nextProject #quitWonderland #boardAction: #makeTile #saveSession #quitSqueak #value #setLoopStart #startPlaying

#forward #debug #playLoop #closeBoxHit #doCancel
 #nextOwnerPage #trim #moreCommands #maybeEmptyTrash
 #infoFor:inViewer: #chooseTriggerFrom: #toggleWhetherShowingTiles
 #durMod:onOff: #emitRest #makePianoRoll #jump10 #acceptSort
 #back #startNebraskaClient #chooseAndRevertToVersion #runScript:
 #fullScreenOff #buildChord: #goToNextCardInStack #showMenu
 #atChannel:from:selectInstrument: #nextYear #toggleFlapsSuppressed
 #stepForward #togglePartsBinStatus #playNextMessage
 #stopUp:with: #browseRecentSubmissions #goToRelativePosition:
 #setLoopEnd #gotoAnother #tabSelected #playV1 #invokeMenu
 #editCustomHalos #goUp:with: #rotateY:
 #atTrack:from:selectInstrument: #deleteNotes #displayHistory
 #pausedUp:with: #pickGame #setLogRate: #acceptAnnotationsFrom:
 #writeTape #dismiss #visitStartPage #shrink #startAudioChat
 #previous #cancelSort #previousOwnerPage #newProject
 #stepBackward #tileClickedAt:newSelection: #overallVolume:
 #addPhoneme #makeSoundMorph #replaceToolsFlap #rewind
 #toggleStatus #explainFlaps #getNewerVersionIfAvailable
 #openPreferencesInspector #moveRight #returnToPreviousProject
 #addFovAngle: #doOK #toggleFullView #stopEverything #cancel
 #addYesNoToHand #jumpToProject #saySomething #start #playAll
 #upArrowHit #stopRecognizing #moveLeft #chooseFrom:soundItem:
 #rotateAntiClockWise #record #addDolly: #advanceToNextProject
 #duration:onOff: #toggleDiff #chooseFrom:envelopeItem: #newGame
 #drawNicest #editAnnotations #toggleDeferred #quitNebraska
 #rotateX: #stopSound #dropAllTheWay #play #offerScriptorMenu
 #playTestNote #button #panForTrack:put: #statistics #doPreview
 #forgetIt #mutedForChannel:put: #startTelemorphic #stopPlaying
 #volumeForTrack:put: #scrollTime: #toggleFull #updateFromServer
 #firstPage #undo #collapseOrExpand #lastPage #addCategoryViewer
 #downArrowHit #sendNow #toggle #rotateZ: #playAfterCursor
 #delete #drawFastest #ok #doExpand #tellAFriend #recordLevel:
 #goToPreviousCardInStack #tickingUp:with: #reset #submit
 #chooseTrigger #repeat: #sameGame #writeTape: #publishProject
 #togglePreference: #checkOnAFriend #resumePlaying #makeMovie
 #okay #installHaloTheme: #connect #readTape #previousYear
 #loopFrames: #panForChannel:put: #previousPage #show
 #playBeforeCursor #nextPage #exitTheSequence
 #brush:action:nib:evt: #startChat #saveInstrument #tryMe #playV3
 #previousProject #shareThisWorld #proceed #accept #fullScreenOn
 #toggleShowDocumentation #setDate:fromButton:down:
 #fileOutChanges #disableReverb: #setOneCycle #drawMedium #next
 #newSliderValue: #tool:action:cursor:evt: #offerWindowMenu #pause
 #playTest #doNewPainting #positionInScore: #playback
 #findAProject #newHead #help #toggleOnOff #windowColorHelp
 #doPrint #articulation:onOff: #flash #bufferNebraska #stop

#toggleChoice: #hint #startRecognizing #chooseCategory #reload
#help: }

- Good: FreeCellBoard.stacks is of type { UndefinedObject Array }
- Good: FreeCellBoard.freeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.homeCells is of type { UndefinedObject Array }
- Good: FreeCellBoard.cardDeck is of type { PlayingCardDeck
UndefinedObject }
- Good: FreeCellBoard.lastCardDeck is of type UndefinedObject
- Good: FreeCellStatistics.streakLosses is of type { UndefinedObject
LargeNegativeInteger SmallInteger LargePositiveInteger }
- Bad: FreeCellStatistics.lastGameWon is of type Top
- Bad: FreeCellStatistics.lastGameLost is of type Top
- Good: FreeCellStatistics.currentCount is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.currentType is of type { UndefinedObject
#wins #losses }
- Good: FreeCellStatistics.statsMorph is of type { TextMorph
UndefinedObject }
- Good: FreeCellStatistics.window is of type UndefinedObject
- Good: FreeCellStatistics.sessionLosses is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.lossesWithReplay is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.sessionWins is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.totalWins is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.streakWins is of type { UndefinedObject
LargeNegativeInteger SmallInteger LargePositiveInteger }
- Good: FreeCellStatistics.totalLosses is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: FreeCellStatistics.winsWithReplay is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }

- Bad: LedDigitMorph.digit is of type Top
- Good: LedDigitMorph.highlighted is of type { True UndefinedObject False }
- Good: LedMorph.digits is of type { UndefinedObject SmallInteger }
- Bad: LedMorph.flash is of type Top
- Good: LedMorph.flashing is of type { True UndefinedObject False }
- Bad: LedMorph.value is of type Top
- Good: LedTimerMorph.counting is of type { True UndefinedObject False }
- Bad: LedTimerMorph.startSeconds is of type Top
- Good: PlayingCard.cardNo is of type { UndefinedObject LargeNegativeInteger SmallInteger LargePositiveInteger }
- Bad: PlayingCard.suitNo is of type Top
- Good: PlayingCard.suit is of type UndefinedObject
- Good: PlayingCard.cardForm is of type { Form UndefinedObject }
- Bad: PlayingCardDeck.target is of type Top
- Bad: PlayingCardDeck.seed is of type Top
- Good: PlayingCardDeck.acceptCardSelector is of type { PlayingCardDeck UndefinedObject #acceptCard:onStack: #acceptSingleCard:on: }
- Good: PlayingCardDeck.cardDraggedSelector is of type { PlayingCardDeck UndefinedObject #dragCard:fromHome: #dragCard:fromStack: }
- Good: PlayingCardDeck.stackingOrder is of type { UndefinedObject #descending #ascending }
- Good: PlayingCardDeck.cardDroppedSelector is of type { PlayingCardDeck UndefinedObject #cardMoved #cardMovedHome }
- Good: PlayingCardDeck.cardDoubleClickSelector is of type { PlayingCardDeck UndefinedObject #doubleClickInStack:OnCard: }
- Good: PlayingCardDeck.stackingPolicy is of type { UndefinedObject #stagger #straight #altStraight #single }
- Good: PlayingCardDeck.emptyDropPolicy is of type { UndefinedObject #inOrder #any }

- Good: PlayingCardDeck.layout is of type { UndefinedObject #stagger #pile #grid }
- Good: PlayingCardMorph.suitNumber is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: PlayingCardMorph.cardNumber is of type { UndefinedObject LargeNegativeInteger SmallInteger LargePositiveInteger }
- Good: SameGame.scoreDisplay is of type { LedMorph UndefinedObject }
- Good: SameGame.board is of type { UndefinedObject SameGameBoard }
- Good: SameGame.selectionDisplay is of type { LedMorph UndefinedObject }
- Bad: SameGame.helpText is of type { StringHolderView++ PluggableTextMorph++ UndefinedObject }
- Good: SameGameBoard.palette is of type { UndefinedObject OrderedCollection }
- Bad: SameGameBoard.target is of type Top
- Bad: SameGameBoard.columns is of type Top
- Good: SameGameBoard.actionSelector is of type { UndefinedObject Symbol }
- Good: SameGameBoard.selectionColor is of type UndefinedObject
- Good: SameGameBoard.flash is of type { True UndefinedObject False }
- Good: SameGameBoard.arguments is of type { UndefinedObject Array }
- Bad: SameGameBoard.rows is of type Top
- Bad: SameGameBoard.protoTile is of type Top
- Bad: SameGameBoard.flashColor is of type Top
- Good: SameGameBoard.selection is of type UndefinedObject
- Bad: SameGameTile.oldSwitchState is of type Top
- Bad: SameGameTile.switchState is of type Top
- Good: SameGameTile.disabled is of type { True UndefinedObject False }
- Good: Tetris.scoreDisplay is of type { LedMorph UndefinedObject }

- Good: Tetris.board is of type { UndefinedObject TetrisBoard }
- Bad: TetrisBlock.shapeInfo is of type Top
- Good: TetrisBlock.board is of type { UndefinedObject TetrisBoard }
- Bad: TetrisBlock.angle is of type Top
- Bad: TetrisBlock.baseCellNumber is of type Top
- Good: TetrisBoard.game is of type { UndefinedObject Tetris }
- Good: TetrisBoard.gameOver is of type { True UndefinedObject False }
- Bad: TetrisBoard.score is of type Top
- Good: TetrisBoard.paused is of type { True UndefinedObject False }
- Good: TetrisBoard.delay is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: TetrisBoard.currentBlock is of type { TetrisBlock UndefinedObject }
- Good: WordGameLetterMorph.predecessor is of type { WordGameLetterMorph UndefinedObject }
- Good: WordGameLetterMorph.lineMorph is of type { UndefinedObject PolygonMorph }
- Good: WordGameLetterMorph.style is of type { UndefinedObject #plain #boxed #underlined }
- Good: WordGameLetterMorph.letterMorph is of type { StringMorph UndefinedObject }
- Bad: WordGameLetterMorph.letter is of type Top
- Good: WordGameLetterMorph.originalLetter is of type UndefinedObject
- Good: WordGameLetterMorph.successor is of type { WordGameLetterMorph UndefinedObject }
- Bad: WordGameLetterMorph.indexInQuote is of type Top
- Good: WordGameLetterMorph.linkedLetters is of type UndefinedObject
- Good: WordGamePanelMorph.letterMorphs is of type { Array UndefinedObject OrderedCollection }
- Good: WordGamePanelMorph.haveTypedHere is of type { True UndefinedObject False }

- Bad: PDA.recurringEvents is of type Top
- Good: PDA.peopleList is of type { CompiledMethod
WordArrayForSegment KlattFrame OSAID FloatArray PointArray
B3DRotationArray ComponentInstance TranslatedMethod Array2D
ShortRunArray ShortPointArray ShortIntegerArray B3DVector2
B3DMatrix4x4 Pixmap Array B3DViewingFrustum ExternalAddress
B3DIndexedTriangleArray WeakArray B3DInplaceArray ByteArray
B3DColor4 B3DPrimitiveLight Symbol RunArray MacExternalData
FlippyArray2 CompiledApplescript B3DVector3 AEDesc
UndefinedObject IntegerArray B3DTexture2Array B3DRotation
SoundBuffer String B3DFloatArray B3DColor4Array Text
B3DMaterialColor WordArray ApplescriptInstance DescType
B3DPrimitiveVertexArray B3DExponentTable B3DLightAttenuation
B3DVector2Array ArrayedCollection B3DVector3Array DirectoryEntry
B3DMaterial B3DIndexedQuadArray Bitmap B3DVector4 }
- Bad: PDA.date is of type Top
- Good: PDA.dateButtonPressed is of type UndefinedObject
- Bad: PDA.allEvents is of type Top
- Bad: PDA.category is of type Top
- Bad: PDA.currentItem is of type Top
- Good: PDA.scheduleList is of type { ArrayedCollection++
UndefinedObject }
- Good: PDA.categoryListIndex is of type UndefinedObject
- Bad: PDA.allPeople is of type Top
- Bad: PDA.scheduleListIndex is of type Top
- Bad: PDA.allToDoItems is of type Top
- Bad: PDA.allNotes is of type Top
- Bad: PDA.notesListIndex is of type Top
- Good: PDA.currentItemSelection is of type UndefinedObject
- Good: PDA.categoryList is of type UndefinedObject
- Good: PDA.todoList is of type { CompiledMethod
WordArrayForSegment KlattFrame OSAID FloatArray PointArray
B3DRotationArray ComponentInstance TranslatedMethod Array2D
ShortRunArray ShortPointArray ShortIntegerArray B3DVector2
B3DMatrix4x4 Pixmap Array B3DViewingFrustum ExternalAddress

B3DIndexedTriangleArray WeakArray B3DInplaceArray B3DVector3
 B3DColor4 B3DPrimitiveLight Symbol RunArray MacExternalData
 ByteArray CompiledApplescript FlippyArray2 AEDesc UndefinedObject
 IntegerArray B3DTexture2Array B3DRotation SoundBuffer String
 B3DFloatArray B3DColor4Array Text B3DMaterialColor WordArray
 ApplescriptInstance DescType B3DPrimitiveVertexArray
 B3DExponentTable B3DVector2Array B3DLightAttenuation
 ArrayedCollection B3DVector3Array DirectoryEntry B3DMaterial
 B3DIndexedQuadArray Bitmap B3DVector4 }

- Bad: PDA.todoListIndex is of type Top
- Bad: PDA.peopleListIndex is of type Top
- Good: PDA.notesList is of type { ArrayedCollection++
UndefinedObject }
- Good: PDA.currentItemText is of type UndefinedObject
- Bad: PDA.userCategories is of type Top
- Good: PDA.viewDescriptionOnly is of type { True UndefinedObject
False }
- Bad: PDAChoiceMorph.backgroundColor is of type Top
- Bad: PDAClockMorph.backgroundColor is of type Top
- Bad: PDAAEvent.time is of type Top
- Bad: PDAAEvent.date is of type Top
- Bad: PDAAEvent.duration is of type Top
- Good: PDAAEvent.alarm is of type UndefinedObject
- Bad: PDAPerson.name is of type Top
- Good: PDAPerson.address is of type UndefinedObject
- Good: PDAPerson.phone is of type { String UndefinedObject }
- Good: PDAPerson.email is of type { String UndefinedObject }
- Bad: PDARecord.description is of type Top
- Bad: PDARecord.key is of type Top
- Good: PDARecord.otherFields is of type { UndefinedObject Dictionary }
- Good: PDARecurringEvent.recurrence is of type { UndefinedObject
#nthWeekdayOfMonthEachYear #dayOfWeek #dayOfMonth
#dateOfYear }

- Bad: PDARecurringEvent.firstDate is of type Top
- Bad: PDARecurringEvent.lastDate is of type Top
- Good: PDAToDoItem.deadline is of type UndefinedObject
- Bad: PDAToDoItem.result is of type Top
- Bad: PDAToDoItem.dayDone is of type Top
- Bad: PDAToDoItem.dayPosted is of type Top
- Bad: PDAToDoItem.priority is of type Top
- Bad: IRCChannelInfo.name is of type Top
- Bad: IRCChannelInfo.topic is of type Top
- Good: IRCChannelInfo.subscribers is of type { IdentitySet
UndefinedObject }
- Good: IRCChannelInfo.members is of type { Set UndefinedObject }
- Good: IRCChannelInfo.connection is of type { IRCConnection
UndefinedObject }
- Good: IRCChannelListBrowser.channelIndex is of type {
UndefinedObject SmallInteger }
- Good: IRCChannelListBrowser.channelList is of type { Array
UndefinedObject SortedCollection }
- Good: IRCChannelListBrowser.sortCriterion is of type {
UndefinedObject #name }
- Good: IRCChannelListBrowser.connection is of type { IRCConnection
UndefinedObject }
- Good: IRCChannelObserver.chatText is of type { Text UndefinedObject
}
- Good: IRCChannelObserver.channelName is of type UndefinedObject
- Good: IRCChannelObserver.channel is of type UndefinedObject
- Good: IRCChannelObserver.connection is of type { IRCConnection
UndefinedObject }
- Bad: IRCChannelSummary.name is of type Top
- Bad: IRCChannelSummary.topic is of type Top
- Bad: IRCChannelSummary.numUsers is of type Top

- Good: IRCChannelUsersBrowser.channel is of type { UndefinedObject IRCChannelInfo }
- Good: IRCChannelUsersBrowser.userList is of type { UndefinedObject Array }
- Bad: IRCChannelUsersBrowser.userIndex is of type Top
- Good: IRCConnection.directMessageSubscribers is of type { IdentitySet UndefinedObject }
- Good: IRCConnection.channelListBeingBuilt is of type { UndefinedObject OrderedCollection }
- Good: IRCConnection.protocolMessagesToSend is of type { UndefinedObject OrderedCollection }
- Bad: IRCConnection.sendBuffer is of type Top
- Bad: IRCConnection.server is of type Top
- Good: IRCConnection.motdBeingBuilt is of type { UndefinedObject WriteStream }
- Good: IRCConnection.protocolMessageSubscribers is of type { IdentitySet UndefinedObject }
- Bad: IRCConnection.motd is of type { B3DTexture2Array B3DPrimitiveRasterizerData Integer PointArray CompiledApplescript ByteArray ArrayedCollection SoundBuffer ExternalAddress ShortIntegerArray KlattFrame B3DMaterialColor GraphicSymbol B3DVector3 FlippyArray2 WeakArray Pixmap WordArray B3DVector2Array B3DIndexedQuad B3DVector3Array DescType B3DPrimitiveVertexArray B3DRotation B3DIndexedTriangleArray WordArrayForSegment B3DIndexedQuadArray String B3DPrimitiveLight LargePositiveInteger ComponentInstance StandardSourceFileArray B3DIndexedTriangle FloatArray B3DColor4 OnceOnlyOrderedCollection TranslatedMethod DirectoryEntry Array2D B3DFloatArray AEDesc RunArray Symbol B3DInplaceArray Text Array B3DMaterial B3DRotationArray ApplescriptInstance MappedCollection B3DColor4Array Interval Heap UrlArgumentList SourceFileArray B3DLightAttenuation ShortPointArray B3DVector4 B3DVector2 SequenceableCollection MacExternalData OrderedCollection B3DExponentTable B3DViewingFrustum IntegerArray ShortRunArray SortedCollection Bitmap LinkedList B3DMatrix4x4 Semaphore TextLineInterval LargeNegativeInteger CompiledMethod OSAID UndefinedObject SmallInteger }
- Bad: IRCConnection.port is of type Top

- Good: IRCCConnection.recieveBuffer is of type { String UndefinedObject }
- Good: IRCCConnection.socket is of type { Socket UndefinedObject }
- Bad: IRCCConnection.userName is of type Top
- Bad: IRCCConnection.nick is of type Top
- Good: IRCCConnection.channelList is of type { UndefinedObject Array }
- Good: IRCCConnection.subscribedChannels is of type { UndefinedObject Dictionary }
- Bad: IRCCConnection.fullName is of type Top
- Good: IRCCConnection.messagesProcessed is of type { UndefinedObject SmallInteger }
- Good: IRCCConnection.consoleText is of type { Text UndefinedObject }
- Good: IRCDirectMessagesObserver.chatText is of type { Text UndefinedObject }
- Bad: IRCDirectMessagesObserver.talkingTo is of type Top
- Good: IRCDirectMessagesObserver.connection is of type { IRCCConnection UndefinedObject }
- Bad: IRCMessage.text is of type Top
- Good: IRCMessage.sender is of type UndefinedObject
- Bad: IRCMessage.recipient is of type Top
- Good: IRCMessagePattern.sender is of type UndefinedObject
- Good: IRCMessagePattern.recipient is of type UndefinedObject
- Good: IRCMessageSet.messages is of type UndefinedObject
- Bad: IRCMorph.userName is of type Top
- Bad: IRCMorph.nick is of type Top
- Bad: IRCMorph.server is of type Top
- Good: IRCMorph.connection is of type { IRCCConnection UndefinedObject }
- Bad: IRCMorph.fullName is of type Top
- Good: IRCMorph.messageCollections is of type UndefinedObject

- Good: IRCMorph.consoleText is of type { Text UndefinedObject }
- Bad: IRCMorph.port is of type Top
- Bad: IRCProtocolMessage.arguments is of type Top
- Good: IRCProtocolMessage.command is of type { UndefinedObject String Character }
- Good: IRCProtocolMessage.prefix is of type UndefinedObject
- Good: IRCRecipientFilter.recipient is of type UndefinedObject
- Good: CategoriesFile.categories is of type { UndefinedObject Dictionary }
- Bad: Celeste.currentMessages is of type Top
- Good: Celeste.customFilterBlock is of type { UndefinedObject Compiler }
- Bad: Celeste.status is of type Top
- Bad: Celeste.userPassword is of type Top
- Bad: Celeste.currentMsgID is of type Top
- Bad: Celeste.mailDB is of type Top
- Bad: Celeste.currentCategory is of type Top
- Bad: Celeste.lastCategory is of type Top
- Good: Celeste.lastCategoryList is of type UndefinedObject
- Good: Celeste.dateFilter is of type UndefinedObject
- Bad: Celeste.currentTOC is of type Top
- Bad: Celeste.fromFilter is of type Top
- Good: Celeste.formatMessages is of type UndefinedObject
- Good: Celeste.lastCategoryMenu is of type UndefinedObject
- Bad: Celeste.messageTextView is of type { PluggableListView++ PluggableListMorph++ SimpleHierarchicalListMorph++ PluggableTextMorph++ PluggableTextView UndefinedObject }
- Bad: Celeste.subjectFilter is of type Top

- Bad: CelesteComposition.textEditor is of type {
PluggableTextMorph++ FormMenuController
PluggableButtonController Controller ProjectController
UndefinedObject FormEditor PluggableListControllerOfMany
PluggableTextView PluggableListController FillInTheBlankController
StandardSystemController ListController MorphWorldController
NoController ParagraphEditor BitEditor ScreenController
ReadOnlyTextController ModalController StringHolderController
DeferredActionStandardSystemController PluggableTextController }
- Bad: CelesteComposition.celeste is of type Top
- Bad: CelesteComposition.messageText is of type Top
- Good: CelesteComposition.morphicWindow is of type {
AlignmentMorphBob1 UndefinedObject SystemWindow }
- Good: CelesteComposition.mvcWindow is of type {
StandardSystemView UndefinedObject }
- Good: CelesteComposition.attachmentSeparator is of type
UndefinedObject
- Good: FancyCelesteComposition.theLinkToInclude is of type { String
UndefinedObject }
- Bad: FancyCelesteComposition.to is of type Top
- Bad: FancyCelesteComposition.subject is of type Top
- Good: FancyCelesteComposition.textFields is of type { UndefinedObject
Array }
- Good: IndexFile.msgDictionary is of type { PluggableDictionary
UndefinedObject }
- Good: IndexFile.logfile is of type { UndefinedObject StandardFileStream
}
- Good: IndexFile.timeSortedEntries is of type { UndefinedObject
SortedCollection }
- Bad: IndexFileEntry.time is of type Top
- Bad: IndexFileEntry.msgID is of type Top
- Bad: IndexFileEntry.messageFile is of type Top
- Bad: IndexFileEntry.cc is of type Top

- Bad: IndexFileEntry.tocLineCache is of type { B3DTexture2Array B3DPrimitiveRasterizerData Integer PointArray CompiledApplescript ByteArray ArrayedCollection SoundBuffer ExternalAddress ShortIntegerArray KlattFrame B3DMaterialColor GraphicSymbol B3DVector3 FlippyArray2 WeakArray Pixmap WordArray B3DVector2Array B3DIndexedQuad B3DVector3Array DescType B3DPrimitiveVertexArray B3DRotation B3DIndexedTriangleArray WordArrayForSegment B3DIndexedQuadArray String B3DPrimitiveLight LargePositiveInteger ComponentInstance StandardSourceFileArray B3DIndexedTriangle FloatArray B3DColor4 OnceOnlyOrderedCollection TranslatedMethod DirectoryEntry Array2D B3DFloatArray AEDesc RunArray Symbol B3DInplaceArray Text Array B3DMaterial B3DRotationArray ApplescriptInstance MappedCollection B3DColor4Array Interval Heap UrlArgumentList SourceFileArray B3DLightAttenuation ShortPointArray B3DVector4 B3DVector2 SequenceableCollection MacExternalData OrderedCollection B3DExponentTable B3DViewingFrustum IntegerArray ShortRunArray SortedCollection Bitmap LinkedList B3DMatrix4x4 Semaphore TextLineInterval LargeNegativeInteger CompiledMethod OSAID UndefinedObject SmallInteger }
- Bad: IndexFileEntry.location is of type Top
- Bad: IndexFileEntry.to is of type Top
- Bad: IndexFileEntry.textLength is of type Top
- Bad: IndexFileEntry.subject is of type Top
- Bad: IndexFileEntry.from is of type Top
- Good: MIMEHeaderValue.mainValue is of type { UndefinedObject String Character }
- Bad: MIMEHeaderValue.parameters is of type Top
- Bad: MIMEPart.content is of type { SequenceableCollection++ Integer++ UndefinedObject B3DIndexedQuad B3DPrimitiveRasterizerData B3DIndexedTriangle }
- Good: MIMEPart.parts is of type { Array UndefinedObject OrderedCollection }
- Bad: MIMEPart.separator is of type Top
- Bad: MIMEPart.text is of type Top
- Good: MIMEPart.fields is of type { UndefinedObject Dictionary }
- Good: MailDB.rootFilename is of type { String UndefinedObject }

- Bad: MailDB.indexFile is of type Top
- Bad: MailDB.messageFile is of type Top
- Bad: MailDB.categoriesFile is of type Top
- Bad: MailDBFile.filename is of type Top
- Good: MailMessage.time is of type { UndefinedObject SmallInteger }
- Bad: MailMessage.separator is of type Top
- Bad: MailMessage.cc is of type Top
- Good: MailMessage.body is of type { UndefinedObject MIMEDocument }
- Bad: MailMessage.to is of type Top
- Bad: MailMessage.text is of type Top
- Bad: MailMessage.subject is of type Top
- Good: MailMessage.fields is of type { UndefinedObject Dictionary }
- Bad: MailMessage.from is of type Top
- Good: MailMessage.parts is of type { Array UndefinedObject OrderedCollection }
- Bad: MailNotifier.lastConnectTime is of type Top
- Bad: MailNotifier.messageCount is of type Top
- Good: MailNotifier.password is of type UndefinedObject
- Good: MailNotifier.socket is of type { UndefinedObject POPSocket }
- Good: MessageFile.file is of type { CrLfFileStream UndefinedObject }
- Bad: ReadNewsInboxFile.currentNewsgroup is of type Top
- Good: ReadNewsInboxFile.msgBuffer is of type { UndefinedObject WriteStream }
- Bad: TextMessageLink.message is of type Top
- Bad: RBAssignmentNode.variable is of type Top
- Bad: RBAssignmentNode.assignment is of type Top
- Bad: RBAssignmentNode.value is of type Top
- Good: RBBlockNode.colons is of type { UndefinedObject OrderedCollection }

- Bad: RBlockNode.bar is of type Top
- Bad: RBlockNode.right is of type Top
- Bad: RBlockNode.left is of type Top
- Bad: RBlockNode.body is of type Top
- Bad: RBlockNode.arguments is of type Top
- Bad: RCascadeNode.messages is of type Top
- Good: RCascadeNode.semicolons is of type { UndefinedObject
OrderedCollection }
- Good: RBFormatter.codeStream is of type { UndefinedObject
WriteStream }
- Bad: RBFormatter.lineStart is of type Top
- Bad: RBFormatter.firstLineLength is of type Top
- Good: RBFormatter.tabs is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: RBLiteralNode.token is of type Top
- Bad: RBMessageNode.arguments is of type Top
- Bad: RBMessageNode.receiver is of type Top
- Bad: RBMessageNode.selector is of type Top
- Bad: RBMessageNode.selectorParts is of type Top
- Good: RBMethodNode.tags is of type { UndefinedObject
OrderedCollection }
- Bad: RBMethodNode.selector is of type Top
- Bad: RBMethodNode.selectorParts is of type Top
- Bad: RBMethodNode.body is of type Top
- Bad: RBMethodNode.source is of type Top
- Bad: RBMethodNode.arguments is of type Top
- Bad: RBOptimizedNode.body is of type Top
- Bad: RBOptimizedNode.right is of type Top
- Bad: RBOptimizedNode.left is of type Top
- Good: RBParser.scanner is of type { RBScanner UndefinedObject }

- Bad: `RBParser.tags` is of type `Object++`
- Bad: `RBParser.source` is of type `Top`
- Good: `RBParser.emptyStatements` is of type `{ True UndefinedObject False }`
- Good: `RBParser.currentToken` is of type `{ RBShortAssignmentToken RBOptimizedToken UndefinedObject RBToken RBPatternBlockToken RBScanner RBLiteralToken RBAssignmentToken RBKeywordToken RBBinarySelectorToken RBIdentifierToken RBSpecialCharacterToken }`
- Good: `RBParser.negatedNumbers` is of type `{ True UndefinedObject False }`
- Good: `RBParser.errorBlock` is of type `{ UndefinedObject a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType a BlockType }`
- Good: `RBParser.nextToken` is of type `{ RBShortAssignmentToken RBOptimizedToken UndefinedObject RBToken RBPatternBlockToken RBScanner RBLiteralToken RBAssignmentToken RBKeywordToken RBBinarySelectorToken RBIdentifierToken RBSpecialCharacterToken }`
- Good: `RBPatternMessageNode.isCascadeList` is of type `{ True UndefinedObject False }`
- Good: `RBPatternMessageNode.isList` is of type `{ True UndefinedObject False }`
- Good: `RBPatternMethodNode.isList` is of type `{ True UndefinedObject False }`
- Good: `RBPatternVariableNode.recurseInto` is of type `{ True UndefinedObject False }`
- Good: `RBPatternVariableNode.isLiteral` is of type `{ True UndefinedObject False }`
- Good: `RBPatternVariableNode.isStatement` is of type `{ True UndefinedObject False }`
- Good: `RBPatternVariableNode.isAnything` is of type `{ True UndefinedObject False }`
- Good: `RBPatternVariableNode.isList` is of type `{ True UndefinedObject False }`
- Bad: `RBProgramNode.parent` is of type `Top`

- Bad: RBProgramNode.comments is of type Top
- Bad: RBReturnNode.return is of type Top
- Bad: RBReturnNode.value is of type Top
- Bad: RBSequenceNode.rightBar is of type Top
- Good: RBSequenceNode.periods is of type { UndefinedObject OrderedCollection }
- Bad: RBSequenceNode.temporaries is of type Top
- Bad: RBSequenceNode.statements is of type Top
- Bad: RBSequenceNode.leftBar is of type Top
- Good: RBValueNode.parentheses is of type { UndefinedObject OrderedCollection }
- Good: RBVariableNode.token is of type { RBIdentifierToken UndefinedObject }
- Bad: ADPCMCodec.index is of type Top
- Good: ADPCMCodec.indexTable is of type { Array UndefinedObject SoundBuffer }
- Bad: ADPCMCodec.deltaSignMask is of type Top
- Bad: ADPCMCodec.bitPosition is of type Top
- Bad: ADPCMCodec.encodedBytes is of type Top
- Good: ADPCMCodec.stepSizeTable is of type { Array UndefinedObject SoundBuffer }
- Good: ADPCMCodec.sampleIndex is of type { SmallInteger LargeNegativeInteger LargePositiveInteger UndefinedObject Array }
- Good: ADPCMCodec.rightSamples is of type { UndefinedObject SoundBuffer }
- Good: ADPCMCodec.byteIndex is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ADPCMCodec.frameSizeMask is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ADPCMCodec.bitsPerSample is of type Top
- Bad: ADPCMCodec.predicted is of type Top

- Bad: ADPCMCodec.deltaValueHighBit is of type Top
- Bad: ADPCMCodec.deltaValueMask is of type Top
- Bad: ADPCMCodec.currentByte is of type Top
- Bad: ADPCMCodec.samples is of type Top
- Good: AIFFFileReader.channelData is of type { UndefinedObject Array }
- Bad: AIFFFileReader.frameCount is of type Top
- Bad: AIFFFileReader.isLooped is of type Top
- Bad: AIFFFileReader.gain is of type Top
- Bad: AIFFFileReader.in is of type Top
- Bad: AIFFFileReader.fileType is of type Top
- Bad: AIFFFileReader.pitch is of type Top
- Bad: AIFFFileReader.markers is of type Top
- Bad: AIFFFileReader.channelCount is of type Top
- Good: AIFFFileReader.bitsPerSample is of type { UndefinedObject SmallInteger }
- Good: AIFFFileReader.mergelfStereo is of type { True UndefinedObject False }
- Good: AIFFFileReader.skipDataChunk is of type { True UndefinedObject False }
- Bad: AIFFFileReader.samplingRate is of type Top
- Bad: AbstractSound.envelopes is of type Top
- Bad: AbstractSound.mSecsSinceStart is of type Top
- Bad: AbstractSound.scaledVolLimit is of type Top
- Bad: AbstractSound.scaledVol is of type Top
- Bad: AbstractSound.samplesUntilNextControl is of type Top
- Bad: AbstractSound.scaledVolIncr is of type Top
- Bad: CompressedSoundData.perceivedPitch is of type Top
- Bad: CompressedSoundData.codecName is of type Top

- Good: CompressedSoundData.channels is of type { UndefinedObject Array }
- Bad: CompressedSoundData.gain is of type Top
- Bad: CompressedSoundData.firstSample is of type Top
- Bad: CompressedSoundData.soundClassName is of type Top
- Bad: CompressedSoundData.cachedSound is of type { WaveletCodec MuLawCodec ADPCMCodec SoundCodec UndefinedObject LoopedSampledSound GSMCodec SampledSound }
- Bad: CompressedSoundData.loopLength is of type Top
- Bad: CompressedSoundData.samplingRate is of type Top
- Bad: CompressedSoundData.loopEnd is of type Top
- Bad: Envelope.target is of type Top
- Bad: Envelope.scale is of type Top
- Good: Envelope.updateSelector is of type { UndefinedObject #pitch: #modulation: #ratio: }
- Bad: Envelope.loopEndMsecs is of type { Magnitude++ UndefinedObject }
- Bad: Envelope.endMsecs is of type Top
- Bad: Envelope.currValue is of type Top
- Bad: Envelope.loopStartIndex is of type Top
- Bad: Envelope.valueIncr is of type Top
- Good: Envelope.noChangesDuringLoop is of type { True UndefinedObject False }
- Bad: Envelope.nextRecomputeTime is of type Top
- Bad: Envelope.loopEndIndex is of type Top
- Bad: Envelope.loopMsecs is of type Top
- Bad: Envelope.loopStartMsecs is of type Top
- Bad: Envelope.decayScale is of type Top
- Bad: Envelope.points is of type Top
- Bad: Envelope.lastValue is of type Top

- Bad: FFT.permTable is of type { SequenceableCollection++ Integer++ UndefinedObject B3DIndexedQuad B3DPrimitiveRasterizerData B3DIndexedTriangle }
- Bad: FFT.nu is of type Top
- Bad: FFT.n is of type Top
- Good: FFT.sinTable is of type { Array UndefinedObject FloatArray }
- Good: FFT.imagData is of type { Array UndefinedObject FloatArray }
- Good: FFT.window is of type { UndefinedObject FloatArray }
- Good: FFT.realData is of type { Array UndefinedObject FloatArray }
- Bad: FMSound.initialCount is of type Top
- Bad: FMSound.multiplier is of type Top
- Bad: FMSound.scaledOffsetIndex is of type Top
- Bad: FMSound.waveTable is of type Top
- Bad: FMSound.scaledWaveTableSize is of type Top
- Bad: FMSound.scaledIndex is of type Top
- Bad: FMSound.normalizedModulation is of type Top
- Bad: FMSound.scaledOffsetIndexIncr is of type Top
- Bad: FMSound.modulation is of type Top
- Bad: FMSound.scaledIndexIncr is of type Top
- Bad: FMSound.count is of type Top
- Good: FWT.transform is of type { UndefinedObject Array }
- Bad: FWT.beta is of type Top
- Good: FWT.gTilde is of type { UndefinedObject Array }
- Good: FWT.coeffs is of type { UndefinedObject Array }
- Good: FWT.g is of type { UndefinedObject Array }
- Bad: FWT.nSamples is of type Top
- Bad: FWT.nLevels is of type Top
- Bad: FWT.alpha is of type Top
- Good: FWT.h is of type { UndefinedObject Array }

- Good: FWT.samples is of type { UndefinedObject Array }
- Good: FWT.hTilde is of type { UndefinedObject Array }
- Bad: GSMCodec.encodeState is of type Top
- Bad: GSMCodec.decodeState is of type Top
- Bad: LoopedSampledSound.initialCount is of type Top
- Good: LoopedSampledSound.perceivedPitch is of type { UndefinedObject Float }
- Bad: LoopedSampledSound.scaledLoopLength is of type Top
- Bad: LoopedSampledSound.lastSample is of type Top
- Bad: LoopedSampledSound.gain is of type Top
- Bad: LoopedSampledSound.scaledIndexIncr is of type Top
- Bad: LoopedSampledSound.releaseCount is of type Top
- Bad: LoopedSampledSound.firstSample is of type Top
- Bad: LoopedSampledSound.sampleCountForRelease is of type Top
- Bad: LoopedSampledSound.rightSamples is of type Top
- Bad: LoopedSampledSound.leftSamples is of type Top
- Bad: LoopedSampledSound.scaledIndex is of type Top
- Bad: LoopedSampledSound.originalSamplingRate is of type Top
- Bad: LoopedSampledSound.count is of type Top
- Bad: LoopedSampledSound.loopEnd is of type Top
- Good: MixedSound.soundDone is of type { UndefinedObject Array }
- Good: MixedSound.sounds is of type { UndefinedObject Array }
- Good: MixedSound.leftVols is of type { UndefinedObject Array }
- Good: MixedSound.rightVols is of type { UndefinedObject Array }
- Bad: PitchEnvelope.centerPitch is of type Top
- Bad: PluckedSound.initialCount is of type Top
- Bad: PluckedSound.ring is of type Top
- Good: PluckedSound.scaledIndexLimit is of type UndefinedObject

- Bad: PluckedSound.scaledIndex is of type Top
- Bad: PluckedSound.scaledIndexIncr is of type Top
- Bad: PluckedSound.count is of type Top
- Good: RandomEnvelope.rand is of type { Random UndefinedObject }
- Good: RandomEnvelope.highLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.lowLimit is of type { UndefinedObject Float }
- Good: RandomEnvelope.delta is of type { UndefinedObject Float }
- Bad: RepeatingSound.iteration is of type Top
- Bad: RepeatingSound.iterationCount is of type Top
- Bad: RepeatingSound.sound is of type Top
- Bad: RepeatingSound.samplesPerIteration is of type Top
- Bad: RestSound.initialCount is of type Top
- Bad: RestSound.count is of type Top
- Good: ReverbSound.tapGains is of type { UndefinedObject Bitmap }
- Good: ReverbSound.bufferSize is of type { Bitmap LargeNegativeInteger LargePositiveInteger UndefinedObject SmallInteger }
- Good: ReverbSound.rightBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.leftBuffer is of type { UndefinedObject SoundBuffer }
- Good: ReverbSound.tapCount is of type { UndefinedObject SmallInteger }
- Good: ReverbSound.tapDelays is of type { UndefinedObject Bitmap }
- Bad: ReverbSound.bufferIndex is of type Top
- Good: ReverbSound.sound is of type UndefinedObject
- Good: SampledInstrument.sustainedSoft is of type { UndefinedObject Array }
- Bad: SampledInstrument.staccatoSoft is of type Top
- Good: SampledInstrument.staccatoLoud is of type { UndefinedObject Array }

- Good: SampledInstrument.sustainedThreshold is of type { UndefinedObject Float }
- Good: SampledInstrument.sustainedLoud is of type { UndefinedObject Array }
- Good: SampledInstrument.loudThreshold is of type { UndefinedObject Float }
- Bad: SampledSound.initialCount is of type Top
- Bad: SampledSound.samples is of type Top
- Bad: SampledSound.scaledIncrement is of type Top
- Bad: SampledSound.scaledIndex is of type Top
- Bad: SampledSound.indexHighBits is of type Top
- Bad: SampledSound.samplesSize is of type Top
- Bad: SampledSound.originalSamplingRate is of type Top
- Bad: SampledSound.count is of type Top
- Good: SequentialSound.sounds is of type { UndefinedObject Array }
- Good: SequentialSound.currentIndex is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: Sonogram.lastX is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: Sonogram.pixValMap is of type { UndefinedObject Bitmap }
- Good: Sonogram.maxVal is of type { UndefinedObject Float }
- Good: Sonogram.minVal is of type { UndefinedObject Float }
- Good: Sonogram.scrollDelta is of type { UndefinedObject SmallInteger }
- Good: Sonogram.columnForm is of type { Form UndefinedObject }
- Bad: SoundInputStream.mutex is of type Top
- Bad: SoundInputStream.bufferSize is of type Top
- Good: SoundRecorder.currentBuffer is of type { UndefinedObject SoundBuffer }
- Bad: SoundRecorder.recordProcess is of type Top
- Good: SoundRecorder.codec is of type { GSMCodec UndefinedObject }

- Good: SoundRecorder.desiredSampleRate is of type { UndefinedObject Float }
- Bad: SoundRecorder.nextIndex is of type Top
- Good: SoundRecorder.meteringBuffer is of type { UndefinedObject SoundBuffer }
- Bad: SoundRecorder.meterLevel is of type Top
- Good: SoundRecorder.stereo is of type { False UndefinedObject }
- Good: SoundRecorder.recordLevel is of type { UndefinedObject Float }
- Good: SoundRecorder.soundPlaying is of type { SampledSound SequentialSound UndefinedObject ChatRecorder SoundInputStream SoundRecorder }
- Bad: SoundRecorder.recordedBuffers is of type Top
- Good: SoundRecorder.paused is of type { True UndefinedObject False }
- Bad: SoundRecorder.samplingRate is of type Top
- Good: SoundRecorder.recordedSound is of type { SampledSound SequentialSound UndefinedObject ChatRecorder SoundInputStream SoundRecorder }
- Good: SoundRecorder.bufferAvailableSema is of type { Semaphore UndefinedObject }
- Bad: VolumeEnvelope.mSecsForChange is of type { Magnitude++ UndefinedObject }
- Bad: VolumeEnvelope.targetVol is of type Top
- Good: VolumeEnvelope.currentVol is of type UndefinedObject
- Bad: WaveletCodec.alpha is of type Top
- Bad: WaveletCodec.beta is of type Top
- Good: WaveletCodec.fwt is of type { FWT UndefinedObject }
- Bad: WaveletCodec.samplesPerFrame is of type Top
- Bad: WaveletCodec.nLevels is of type Top
- Bad: TestInterfaceBase.duration is of type Top
- Bad: TestInterfaceBase.classPattern is of type { SequenceableCollection++ Integer++ Boolean++ UndefinedObject B3DIndexedQuad B3DPrimitiveRasterizerData B3DIndexedTriangle }

- Bad: TestInterfaceBase.result is of type Top
- Bad: TestInterfaceBase.selectorPattern is of type Top
- Good: TestModel.failureList is of type { UndefinedObject
OrderedCollection }
- Good: TestModel.patternHistory is of type { UndefinedObject
OrderedCollection }
- Good: TestModel.errorList is of type { UndefinedObject
OrderedCollection }
- Good: TestModel.summaryText is of type { String UndefinedObject }
- Bad: TestModel.summaryTextM is of type { PluggableTextMorph++
PluggableTextView UndefinedObject }
- Good: TestModel.summaryTextV is of type { PluggableTextView
UndefinedObject }
- Good: TestModel.updateColorSelector is of type { UndefinedObject
#updateColorM #updateColorV }
- Good: TestModel.patternTextV is of type { PluggableTextView
UndefinedObject }
- Bad: TestModel.patternTextM is of type { PluggableTextMorph++
PluggableTextView UndefinedObject }
- Bad: TestModel.detailsText is of type Top
- Bad: BitBltSimulation.sy is of type Top
- Bad: BitBltSimulation.halfToneBase is of type Top
- Good: BitBltSimulation.cmBlueShift is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBltSimulation.destWidth is of type Top
- Bad: BitBltSimulation.destX is of type Top
- Bad: BitBltSimulation.width is of type Top
- Bad: BitBltSimulation.scanString is of type Top
- Bad: BitBltSimulation.sourceBits is of type Top
- Bad: BitBltSimulation.scanStop is of type Top
- Bad: BitBltSimulation.dy is of type Top

- Good: BitBltSimulation.warpBitShiftTable is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.destPixSize is of type Top
- Bad: BitBltSimulation.pixPerWord is of type Top
- Good: BitBltSimulation.ditherValues16 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.cmRedMask is of type Top
- Bad: BitBltSimulation.warpSrcMask is of type Top
- Bad: BitBltSimulation.dstBitShift is of type Top
- Bad: BitBltSimulation.destIndex is of type Top
- Bad: BitBltSimulation.sourceIndex is of type Top
- Bad: BitBltSimulation.clipX is of type Top
- Good: BitBltSimulation.hDir is of type { UndefinedObject SmallInteger }
- Bad: BitBltSimulation.nWords is of type Top
- Bad: BitBltSimulation.clipHeight is of type Top
- Bad: BitBltSimulation.bitBltOop is of type Top
- Bad: BitBltSimulation.preload is of type Top
- Bad: BitBltSimulation.opTable is of type Top
- Bad: BitBltSimulation.sourceForm is of type Top
- Bad: BitBltSimulation.warpAlignMask is of type Top
- Bad: BitBltSimulation.skew is of type Top
- Good: BitBltSimulation.cmDeltaBits is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: BitBltSimulation.ditherMatrix4x4 is of type { CArrayAccessor UndefinedObject }
- Bad: BitBltSimulation.sourceY is of type Top
- Bad: BitBltSimulation.scanStart is of type Top
- Good: BitBltSimulation.cmGreenShift is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }

- Bad: BitBltSimulation.destBits is of type Top
- Bad: BitBltSimulation.destPitch is of type Top
- Bad: BitBltSimulation.height is of type Top
- Bad: BitBltSimulation.sourcePitch is of type Top
- Bad: BitBltSimulation.destY is of type Top
- Bad: BitBltSimulation.affectedL is of type Top
- Good: BitBltSimulation.maskTable is of type { UndefinedObject Array }
- Good: BitBltSimulation.scanDisplayFlag is of type { True UndefinedObject False }
- Bad: BitBltSimulation.mask1 is of type Top
- Bad: BitBltSimulation.destDelta is of type Top
- Good: BitBltSimulation.noHalftone is of type { True UndefinedObject False }
- Bad: BitBltSimulation.clipWidth is of type Top
- Bad: BitBltSimulation.destForm is of type Top
- Bad: BitBltSimulation.sx is of type Top
- Bad: BitBltSimulation.clipY is of type Top
- Bad: BitBltSimulation.scanRightX is of type Top
- Good: BitBltSimulation.cmBlueMask is of type { Boolean LargeNegativeInteger UndefinedObject SmallInteger Integer class LargePositiveInteger }
- Bad: BitBltSimulation.halftoneHeight is of type Top
- Bad: BitBltSimulation.affectedT is of type Top
- Bad: BitBltSimulation.sourcePixSize is of type Top
- Good: BitBltSimulation.cmRedShift is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: BitBltSimulation.noSource is of type { True UndefinedObject False }
- Bad: BitBltSimulation.dx is of type Top
- Bad: BitBltSimulation.destMask is of type Top

- Bad: BitBltSimulation.affectedB is of type Top
- Bad: BitBltSimulation.cmGreenMask is of type Top
- Good: BitBltSimulation.hasSurfaceLock is of type { True
UndefinedObject False }
- Bad: BitBltSimulation.stopCode is of type Top
- Bad: BitBltSimulation.combinationRule is of type Top
- Bad: BitBltSimulation.bitCount is of type Top
- Good: BitBltSimulation.vDir is of type { UndefinedObject SmallInteger
}
- Bad: BitBltSimulation.destHeight is of type Top
- Good: BitBltSimulation.cmBitsPerColor is of type { UndefinedObject
SmallInteger }
- Bad: BitBltSimulation.bbH is of type Top
- Bad: BitBltSimulation.bbW is of type Top
- Bad: BitBltSimulation.srcWidth is of type Top
- Bad: BitBltSimulation.affectedR is of type Top
- Good: BitBltSimulation.ditherThresholds16 is of type { CArrayAccessor
UndefinedObject }
- Bad: BitBltSimulation.sourceDelta is of type Top
- Good: BitBltSimulation.warpSrcShift is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBltSimulation.halfToneForm is of type Top
- Bad: BitBltSimulation.mask2 is of type Top
- Bad: BitBltSimulation.scanXTable is of type Top
- Bad: BitBltSimulation.scanStopArray is of type Top
- Bad: BitBltSimulation.sourceAlpha is of type Top
- Bad: BitBltSimulation.colorMap is of type Top
- Good: BitBltSimulation.warpAlignShift is of type { UndefinedObject
LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: BitBltSimulation.sourceX is of type Top

- Bad: BitBltSimulation.srcBitShift is of type Top
- Bad: BitBltSimulation.srcHeight is of type Top
- Bad: Interpreter.activeContext is of type Top
- Bad: Interpreter.nextWakeupTick is of type Top
- Bad: Interpreter.localIP is of type Top
- Bad: Interpreter.localHomeContext is of type Top
- Good: Interpreter.methodCache is of type { UndefinedObject Array }
- Bad: Interpreter.interruptKeycode is of type Top
- Good: Interpreter.semaphoresToSignalCountA is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: Interpreter.interruptCheckCounterFeedBackReset is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: Interpreter.interpreterVersion is of type UndefinedObject
- Good: Interpreter.obsoleteNamedPrimitiveTable is of type { CArrayAccessor UndefinedObject }
- Good: Interpreter.interpreterProxy is of type { UndefinedObject InterpreterSimulator InterpreterSimulatorMSB InterpreterSimulatorLSB }
- Bad: Interpreter.receiver is of type Top
- Bad: Interpreter.stackPointer is of type Top
- Bad: Interpreter.receiverClass is of type Top
- Good: Interpreter.obsoleteIndexedPrimitiveTable is of type { CArrayAccessor UndefinedObject }
- Bad: Interpreter.successFlag is of type Top
- Good: Interpreter.compilerHooks is of type UndefinedObject
- Bad: Interpreter.fullScreenFlag is of type { Interpreter InterpreterSimulator InterpreterSimulatorLSB UndefinedObject InterpreterSimulatorMSB }
- Bad: Interpreter.primitiveIndex is of type Top
- Good: Interpreter.semaphoresToSignalB is of type { UndefinedObject Array }

- Bad: Interpreter.compilerInitialized is of type Top
- Bad: Interpreter.localSP is of type Top
- Bad: Interpreter.instructionPointer is of type Top
- Good: Interpreter.semaphoresUseBufferA is of type { True
UndefinedObject False }
- Good: Interpreter.deferDisplayUpdates is of type { True
UndefinedObject False }
- Bad: Interpreter.theHomeContext is of type Top
- Bad: Interpreter.extraVMMemory is of type Top
- Bad: Interpreter.method is of type Top
- Good: Interpreter.pendingFinalizationSignals is of type {
UndefinedObject LargePositiveInteger SmallInteger
LargeNegativeInteger }
- Bad: Interpreter.newMethod is of type Top
- Good: Interpreter.semaphoresToSignalA is of type { UndefinedObject
Array }
- Bad: Interpreter.methodClass is of type Top
- Bad: Interpreter.newNativeMethod is of type Top
- Good: Interpreter.atCache is of type { UndefinedObject Array }
- Bad: Interpreter.argumentCount is of type Top
- Bad: Interpreter.currentBytecode is of type Top
- Good: Interpreter.interruptPending is of type { False UndefinedObject }
- Good: Interpreter.interruptChecksEveryNms is of type {
UndefinedObject SmallInteger }
- Bad: Interpreter.nextPollTick is of type Top
- Bad: Interpreter.lkupClass is of type Top
- Good: Interpreter.reclaimableContextCount is of type {
UndefinedObject LargePositiveInteger SmallInteger
LargeNegativeInteger }
- Bad: Interpreter.savedWindowSize is of type Top
- Bad: Interpreter.lastTick is of type Top

- Good: Interpreter.semaphoresToSignalCountB is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: Interpreter.messageSelector is of type { LargePositiveInteger InterpreterSimulatorMSB Bitmap InterpreterSimulator Interpreter LargeNegativeInteger InterpreterSimulatorLSB SmallInteger UndefinedObject }
- Bad: Interpreter.showSurfaceFn is of type Top
- Good: InterpreterSimulator.myBitBlt is of type { False UndefinedObject BitBltSimulator }
- Good: InterpreterSimulator.traceOn is of type { UndefinedObject True }
- Bad: InterpreterSimulator.imageName is of type Top
- Bad: InterpreterSimulator.pluginList is of type Top
- Good: InterpreterSimulator.sendCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: InterpreterSimulator.displayForm is of type { Form UndefinedObject }
- Good: InterpreterSimulator.mappedPluginEntries is of type { UndefinedObject Array }
- Good: InterpreterSimulator.filesOpen is of type { UndefinedObject OrderedCollection }
- Good: InterpreterSimulator.byteCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.signalLowSpace is of type { True UndefinedObject False }
- Bad: ObjectMemory.tenuringThreshold is of type Top
- Bad: ObjectMemory.lastHash is of type Top
- Bad: ObjectMemory.statIncrGCMSecs is of type Top
- Good: ObjectMemory.remapBuffer is of type { UndefinedObject Array }
- Bad: ObjectMemory.trueObj is of type Top
- Bad: ObjectMemory.statFullGCMSecs is of type Top
- Bad: ObjectMemory.freeLargeContexts is of type Top
- Bad: ObjectMemory.lowSpaceThreshold is of type Top

- Bad: ObjectMemory.allocationsBetweenGCs is of type Top
- Good: ObjectMemory.interruptCheckCounter is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ObjectMemory.freeContexts is of type Top
- Bad: ObjectMemory.compStart is of type Top
- Bad: ObjectMemory.youngStart is of type Top
- Bad: ObjectMemory.compEnd is of type Top
- Bad: ObjectMemory.totalObjectFoundAtStartup is of type Top
- Bad: ObjectMemory.memoryLimit is of type Top
- Bad: ObjectMemory.endOfMemory is of type Top
- Bad: ObjectMemory.specialObjectsOop is of type Top
- Good: ObjectMemory.statFullGCs is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.statTenures is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ObjectMemory.nilObj is of type Top
- Bad: ObjectMemory.child is of type Top
- Bad: ObjectMemory.fwdTableLast is of type Top
- Bad: ObjectMemory.fwdTableNext is of type Top
- Good: ObjectMemory.rootTableCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.allocationCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ObjectMemory.falseObj is of type Top
- Good: ObjectMemory.remapBufferCount is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Bad: ObjectMemory.parentField is of type Top
- Bad: ObjectMemory.field is of type Top
- Good: ObjectMemory.memory is of type { Interpreter UndefinedObject InterpreterSimulatorMSB InterpreterSimulatorLSB Bitmap InterpreterSimulator }

- Bad: ObjectMemory.freeBlock is of type Top
- Good: ObjectMemory.statRootTableOverflows is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.rootTable is of type { UndefinedObject Array }
- Good: ObjectMemory.statIncrGCs is of type { UndefinedObject LargePositiveInteger SmallInteger LargeNegativeInteger }
- Good: ObjectMemory.displayBits is of type { UndefinedObject SmallInteger }
- Bad: SystemMonitor.vmParameters is of type Top
- Bad: SystemMonitor.gcHighWaterMark is of type Top
- Bad: SystemMonitor.baselineSkip is of type Top
- Bad: SystemMonitor.prevAllocCount is of type Top
- Bad: SystemMonitor.prevDeltaIncrGC is of type Top
- Bad: SystemMonitor.prevMcMiss is of type Top
- Good: SystemMonitor.window is of type UndefinedObject
- Bad: SystemMonitor.prevDeltaFullGC is of type Top
- Bad: SystemMonitor.prevFullGC is of type Top
- Good: SystemMonitor.valSelectors is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIncrGC is of type Top
- Bad: SystemMonitor.prevMsClock is of type Top
- Good: SystemMonitor.maxValues is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevAllocRate is of type Top
- Bad: SystemMonitor.gcLowWaterMark is of type Top
- Good: SystemMonitor.labels is of type { UndefinedObject Array }
- Good: SystemMonitor.minValues is of type { UndefinedObject Array }
- Bad: SystemMonitor.prevIcHit is of type Top
- Bad: SystemMonitor.prevMcHit is of type Top
- Good: SystemTracer.hashGenerator is of type { Random UndefinedObject }

- Bad: SystemTracer.maxOop is of type Top
- Good: SystemTracer.map is of type UndefinedObject
- Good: SystemTracer.initialProcess is of type UndefinedObject
- Good: SystemTracer.oopMap is of type { UndefinedObject Array }
- Bad: SystemTracer.specialObjects is of type Top
- Good: SystemTracer.file is of type { CrLfFileStream UndefinedObject }
- Good: SystemTracer.cleaningUp is of type { False UndefinedObject }
- Good: SystemTracer.writeDict is of type { UndefinedObject Dictionary }
- Good: SystemTracer.imageHeaderSize is of type { UndefinedObject SmallInteger }
- Good: SystemTracer.compactClasses is of type { UndefinedObject Array }
- Good: SystemTracer.replacementClasses is of type { UndefinedObject Dictionary }
- Bad: Browser.classOrganizer is of type Top
- Bad: Browser.systemOrganizer is of type Top
- Bad: Browser.messageListIndex is of type Top
- Bad: Browser.messageCategoryListIndex is of type Top
- Good: Browser.editSelection is of type { Boolean++ UndefinedObject #hierarchy #editClass #editComment #none #editMessageCategories #newClass #editMessage #newMessage #editSystemCategories #byteCodes }
- Bad: Browser.metaClassOrganizer is of type Top
- Bad: Browser.systemCategoryListIndex is of type Top
- Bad: Browser.metaClassIndicated is of type Top
- Bad: Browser.classListIndex is of type Top
- Bad: ChangedMessageSet.changeSet is of type Top
- Bad: HierarchyBrowser.centralClass is of type Top
- Bad: HierarchyBrowser.classList is of type Top
- Bad: MessageSet.messageList is of type Top

- Bad: MessageSet.autoSelectString is of type Top
- Bad: PackageBrowser.package is of type Top
- Bad: PackageBrowser.packageListIndex is of type Top
- Good: PackageBrowser.packageList is of type UndefinedObject
- Good: ProtocolBrowser.selectedClass is of type UndefinedObject
- Bad: ProtocolBrowser.selectedSelector is of type Top
- Bad: SelectorBrowser.classListIndex is of type Top
- Bad: SelectorBrowser.classList is of type Top
- Bad: SelectorBrowser.selectorIndex is of type Top
- Bad: SelectorBrowser.selectorList is of type Top