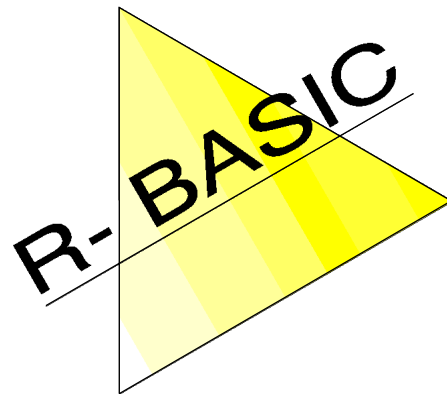


R-BASIC

The Simple PC/GEOS Programming Language
Einfach unter PC/GEOS programmieren



Quick Reference

• Objects •

International Version

Version 1.0

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.



Quick-Referenz • Objekte

Diese Referenz enthält alle R-BASIC Objektklassen, ihre Instance-Variablen und UI-Hints sowie alle dafür definierten Konstanten. Zusätzlich finden PC/GEOS-SDK Programmierer Informationen, welche PC/GEOS-SDK-Funktion zur Realisierung dieser verwendet wurde.



Quick Reference • Objects

This reference contains all R-BASIC object classes, its instance variables, UI hints and all constants defined to use with these. Additionally, PC/GEOS-SDK programmers may be interested to know which PC/GEOS-SDK equivalent the R-BASIC features have.

Table of Contents

GenericClass & VisualClass Basic Tree Features	4
GenericClass & VisualClass Other Common Features	4
GenericClass Basic Features	5
GenericClass Geometrie-Management	5
Input Handling - Keyboard, Focus, Target, Mouse	7
Application Class	9
BitmapContent Class	9
Button Class	10
Canvas Class	10
ColorSelector Class	11
Dialog Class	11
Display Class	12
DisplayControl Class	12
DisplayGroup Class	13
DocumentGuardian Class	13
DynamicList Class	14
FileSelector Class	15
GenContent Class	16
Group Class	16
Image Class	16
InputLine Class	17
LargeText Class	17
Memo Class	17
Menu Class	19
Number Class	19
Option Class	20
OptionGroup Class	20
PageSizeControl Class	21
Primary Class	21
PrintControl Class	22
RadioButton Class	23
RadioButtonGroup Class	23
View Class	24
ViewControl Class.....	25
VisGroup Class	26
VisContent Class	27
VisObj Class	28
VisText Class	29

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

(Leerseite)

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

GenericClass & VisualClass Basic Tree Features

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
Children	MSG_GEN_ADD_CHILD MSG_VIS_~
parent	MSG_GEN_FIND_CHILD_AT_POSITION MSG_VIS_~
	MSG_GEN_FIND_PARENT MSG_VIS_~
	MSG_GEN_ADD_CHILD MSG_VIS_~
	MSG_GEN_REMOVE_CHILD MSG_VIS_~
numChildren	MSG_GEN_COUNT_CHILDREN MSG_VIS_~
FindChild	MSG_GEN_FIND_CHILD MSG_VIS_~

GenericClass & VisualClass Other Common Features

BASIC UI/Code Statement	SDK HINT's, ATTR's or instance variables
Class\$	not available in PC/GEOS-SDK
ClpCopy	MSG_META_COPY
ClpPaste	MSG_META_PASTE
ClpTestPaste	not available in PC/GEOS-SDK
ClpTestCopy	not available in PC/GEOS-SDK
privData	not available in PC/GEOS-SDK
CustomHandler	not available in PC/GEOS-SDK
CustomAction	not available in PC/GEOS-SDK
CustomApply	not available in PC/GEOS-SDK
<u>Size and position</u>	
xSize	VI_bounds.R_right - VI_bounds.R_left
ySize	VI_bounds.R_bottom - VI_bounds.R_top
xPosition	VI_bounds.R_left
yPosition	VI_bound.R_top
<u>Backdoor functions</u>	
ObjAddHint	MSG_META_ADD_VAR_DATA
ObjRemoveHint	MSG_META_DELETE_VAR_DATA

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

GenericClass Basic Features

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
Caption\$	Gl_visMoniker (Text Moniker)
CaptionImage	Gl_visMoniker (GString Moniker)
CaptionPicture	Gl_visMoniker (GString Moniker)
CaptionGString	Gl_visMoniker (GString Moniker)
CaptionIcon	Gl_visMoniker (GString Moniker from Icon)
TOOL_ICON	1
TINY_ICON	1 (synonymus for TOOL_ICON)
SMALL_ICON	2
BIG_ICON	3
GRAY_ICON	4
RGB_ICON.	5
justifyCaption	
J_TOP	HINT_PLACE_MONIKER_ABOVE
J_LEFT	HINT_PLACE_MONIKER_TO_LEFT
J_RIGHT	HINT_PLACE_MONIKER_TO_RIGHT
J_CENTER	HINT_CENTER_MONIKER
kbdSearchPath	Gl_attrs = GA_SEARCH_PATH
kbdShortcut	MSG_GEN_SET_KBD_ACCELERATOR
	MSG_GEN_GET_KBD_ACCELERATOR
KSM_SHIFT	KS_SHIFT
KSM_CTRL	KS_CTRL
KSM_ALT	KS_ALT
KSM_PHYSICAL	KS_PHYSICAL
readOnly	Gl_attrs = GA_READ_ONLY
enabled	Gl_states = GS_ENABLED
fullyEnabled	MSG_GEN_CHECK_IF_FULLY_ENABLED
visible	Gl_states = GS_USABLE
fullyVisible	MSG_GEN_CHECK_IF_FULLY_USABLE
helpFile\$	ATTR_GEN_HELP_FILE
helpContext\$	ATTR_GEN_HELP_CONTEXT

GenericClass Geometrie-Management

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>Arranging Objects</u>	
orientChildren	
ORIENT_HORIZONTALLY	HINT_ORIENT_CHILDREN_HORIZONTALLY
ORIENT_VERTICLLY	HINT_ORIENT_CHILDREN_VERTICALLY
ORIENT_SAME_AS_PARENT	HINT_SAME_ORIENTATION_AS_PARENT
ORIENT_ON_LARGER_DIMENSION	HINT_ORIENT_CHILDREN_ALONG_LARGER_DIMENSION
justifyChildren	
J_BOTTOM	HINT_BOTTOM_JUSTIFY_CHILDREN
J_LEFT	HINT_LEFT_JUSTIFY_CHILDREN
J_RIGHT	HINT_RIGHT_JUSTIFY_CHILDREN
J_TOP	HINT_TOP_JUSTIFY_CHILDREN
J_FULL_H	HINT_FULL_JUSTIFY_CHILDREN_HORIZONTALLY
J_FULL_V	HINT_FULL_JUSTIFY_CHILDREN_VERTICALLY
J_FULL	wirkt wie H + V
J_CENTER_H	HINT_CENTER_CHILDREN_HORIZONTALLY
J_CENTER_V	HINT_CENTER_CHILDREN_VERTICALLY
J_CENTER	wirkt wie H + V
J_CENTER_ON_CAPTION	HINT_CENTER_CHILDREN_ON_MONIKERS
J_CENTER_ON_CAPTION_LEFT	HINT_LEFT_JUSTIFY_MONIKERS + HINT_CENTER_CHILDREN_ON_MONIKERS

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

DivideHeightEqually DivideWidthEqually	HINT_DIVIDE_HEIGHT_EQUALLY HINT_DIVIDE_WIDTH_EQUALLY
childSpacing IncludeEndsInChildSpacing MinimizeChildSpacing	HINT_CUSTOM_CHILD_SPACING HINT_INCLUDE_ENDS_IN_CHILD_SPACING HINT_MINIMIZE_CHILD_SPACING
wrapAfterChild	HINT_ALLOW_CHILDREN_TO_WRAP HINT_WRAP_AFTER_CHILD_COUNT
Object Sizing	
ExpandWidth ExpandHeight NoWiderThanChildren NoHigerThanChildren	HINT_EXPAND_WIDTH_TO_FIT_PARENT HINT_EXPAND_HEIGHT_TO_FIT_PARENT HINT_NO_WIDER_THAN_CHILDREN_REQUIRE HINT_NO_TALLER_THAN_CHILDREN_REQUIRE
initialSize minimumSize maximumSize fixedSize	HINT_INITIAL_SIZE HINT_MINIMUM_SIZE HINT_MAXIMUM_SIZE HINT_FIXED_SIZE
ST_PIXELS ST_LINES_OF_TEXT old name: ST_TEXT_LINES ST_AVG_CHAR_WIDTH ST_MAX_CHAR_WIDTH ST_PCT_OF_SCREEN_WIDTH ST_PCT_OF_SCREEN_HEIGHT	SST_PIXELS SST_LINES_OF_TEXT SST_LINES_OF_TEXT SST_AVG_CHAR_WIDTHS SST_WIDE_CHAR_WIDTHS SST_PCT_OF_FIELD_WIDTH SST_PCT_OF_FIELD_HEIGHT
Object Placement	
placeObject MENU_BAR REPLY_BAR TITLE_BAR_LEFT TITLE_BAR_RIGHT For View objects only:	0 = nothing special HINT_SEEK_MENU_BAR HINT_SEEK_REPLY_BAR HINT_SEEK_TITLE_BAR_LEFT HINT_SEEK_TITLE_BAR_RIGHT HINT_SEEK_X_SCROLLER_AREA HINT_SEEK_Y_SCROLLER_AREA HINT_SEEK_LEFT_OF_VIEW HINT_SEEK_TOP_OF_VIEW HINT_SEEK_RIGHT_OF_VIEW HINT_SEEK_BOTTOM_OF_VIEW
fixedPosition	ATTR_GEN_POSITION
Special Drawing	
DrawInBox MakeReplyBar MakeToolBox	HINT_DRAW_IN_BOX HINT_MAKE_REPLY_BAR HINT_TOOLBOX
bgColor tColor	HINT_GADGET_BACKGROUND_COLORS HINT_GADGET_TEXT_COLOR
NoSeparatorLine	HINT_SAME_CATEGORY_AS_PARENT
RaisedFrame RF_LEFT RF_TOP RF_RIGHT RF_BOTTOM	HINT_RAISED_FRAME GRFI_LEFT = 0x8000 GRFI_TOP = 0x2000 GRFI_RIGHT = 0x1000 GRFI_BOTTOM = 0x4000
Window-Hints and Methods	
SizeWindowAsDesired NoTitleBar NoSysMenu WindowNotMovable	HINT_SIZE_WINDOW_AS_DESIRED HINT_WINDOW_NO_TITLE_BAR HINT_WINDOW_NO_SYS_MENU HINT_NOT_MOVABLE

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

PositionWindowAtMouse	HINT_POSITION_WINDOW_AT_MOUSE
WindowPositionFromParent	HINT_POSITION_WINDOW_AT_RATIO_OF_PARENT
WindowSizeFromParent	HINT_WINDOW_AS_RATIO_OF_PARENT
WindowSizeFromScreen	HINT_WINDOW_AS_RATIO_OF_FIELD
ExtendWindowToBottomRight	HINT_EXTEND_WINDOW_TO_BOTTOM_RIGHT
ExtendWindowNearBottomRight	HINT_EXTEND_WINDOW_NEAR_BOTTOM_RIGHT
StaggerWindow	HINT_WINDOW_STAGGER_WINDOW
CenterWindow	HINT_WINDOW_CENTER_WINDOW
TileWindow	HINT_WINDOW_TILE_WINDOW
WindowNoConstraints	HINT_WINDOW_NO_CONSTRAINTS
BringToTop	MSG_GEN_BRING_TO_TOP
LowerToBottom	MSG_GEN_LOWER_TO_BOTTOM
MoveWin	MSG_GEN_SET_WIN_POSITION
ResizeWin	MSG_GEN_SET_WIN_SIZE
<u>Apply related</u>	
Apply	MSG_GEN_APPLY
ApplyEvenIfNotModified	ATTR_GEN_SEND_APPLY_MSG_ON_APPLY_EVEN_IF_NOT_ENABLED
ApplyEvenIfNotEnabled	ATTR_GEN_SEND_APPLY_MSG_ON_APPLY_EVEN_IF_NOT_MODIFIED
MakeDelayedApply	ATTR_GEN_PROPERTY
<u>Input related</u>	
defaultFocus	HINT_DEFAULT_FOCUS
defaultTarget	HINT_DEFAULT_TARGET
targetable	GI_attrs: GA_TARGETABLE

Input Handling - Keyboard, Focus, Target, Mouse

Specified object classes only

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>Keyboard Handling</u>	
Related object classes:	Application, InputLine, Memo, View, VisContent, BitmapContent, VisObj
Handler Type: KeyboardAction	
OnKeyPressed	MSG_META_KBD_CHAR
KF_FIRST_PRESS	CF_FIRST_PRESS
KF_REPEAT_PRESS	CF_REPEAT_PRESS
KF_RELEASE	CF_RELEASE
KF_STATE_KEY	CF_STATE_KEY
KF_EXTENDED	CF_EXTENDED
KS_RSHIFT	SS_RSHIFT
KS_LSHIFT	SS_LSHIFT
KS_RCTRL	SS_RCTRL
KS_LCTRL	SS_LCTRL
KS_RALT	SS_RALT
KS_LALT	SS_LALT
KS_SCROLL_LOCK	TS_SCROLLLOCK
KS_NUM_LOCK	TS_NUMLOCK
KS_CAPS_LOCK	TS_CAPSLOCK
inputFlags	(not supported by PC/GEOS-SDK)

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

IF_IGNORE_FIRST_PRESS	1	
IF_IGNORE_REPEAT_PRESS	2	
IF_IGNORE_RELEASE	4	
IF_IGNORE_ANY_KEY	7	(7 = 1 + 2 + 4)
IF_FILTER_GENERATED_EVENTS	8	
IF_HANDLER_NO_FIRST_PRESS	16	
IF_HANDLER_NO_REPEAT_PRESS	32	
IF_HANDLER_NO_RELEASE	64	
IF_HANDLER_GENERATED_EVENTS	128	
IF_DONT_MAP_NUM_PAD	256	
IF_MAPPED_NUM_PAD_EXT_BIT	512	
KbdEvent (Method)	send MSG_META_KBD_CHAR with scan code = 0 to object	
KbdEventWithScanCode	send MSG_META_KBD_CHAR to object	
Related object classes:	All generic and visual class object classes	
Focus and Target		
Related object classes:	Application, Primary, Dialog, Menu (Focus only), InputLine, Memo, View, VisContent, BitmapContent, Display, DisplayGroup, VisObj	
Handler Type: FocusAction		
OnFocusChanged	MSG_META_GAINED_FOCUS_EXCL MSG_META_LOST_FOCUS_EXCL	
Handler Type: TargetAction		
OnTargetChanged	MSG_META_GAINED_TARGET_EXCL MSG_META_LOST_TARGET_EXCL	
Mouse Handling		
Related object classes:	View, BitmapContent, VisContent, VisObj, Canvas, Image	
Handler Type: MouseAction		
OnMouseButton	see ME_constants	
OnMouseMove	see ME_constants	
OnMouseOver	see ME_constants	
sendMouseEvents		
ME_LEFT_DOWN	1	MSG_META_START_SELECT
ME_LEFT_UP	2	MSG_META_END_SELECT
ME_LEFT_DOUBLE	4	MSG_META_START_SELECT
ME_LEFT_HOLD	8	MSG_META_DRAG_SELECT
ME_RIGHT_DOWN	16	MSG_META_START_MOVE_COPY
ME_RIGHT_UP	32	MSG_META_END_MOVE_COPY
ME_RIGHT_DOUBLE	64	MSG_META_START_SELECT
ME_RIGHT_HOLD	128	MSG_META_DRAG_MOVE_COPY
ME_MOVE	256	MSG_META_MOUSE_PTR
ME_ENTER	512	MSG_META_MOUSE_PTR
		For Contents: MSG_META_RAW_UNIV_ENTER
ME_LEAVE	1024	MSG_META_MSG_META_MOUSE_PTR
		For Contents: MSG_META_RAW_UNIV_LEAVE
REPLACE_BITS	0	
SET_BITS	1	
CLEAR_BITS	2	
GrabMouse (Method)	MSG_VIS_GRAB_MOUSE	
ReleaseMouse (Method)	MSG_VIS_RELEASE_MOUSE	
TestInside (Method)	not supported by the PC/GEOS-SDK	
TestInsideAC (Method)	not supported by the PC/GEOS-SDK	

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

Application Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>Application-Class</u>	GenApplicationClass some of ths functions are implemented by GenProcessClass
AppToken DocToken ExtraToken LongName\$ userNotes\$ crNote\$	MSG_GEN_PROCESS_INSTALL_TOKEN MSG_GEN_PROCESS_INSTALL_TOKEN MSG_GEN_PROCESS_INSTALL_TOKEN longname statement in gp file (patched to launcher) usernotes statement in gp file (patched to launcher) LINKFLAGS -N statement in local.mk (patched to launcher)
ActionHandlers SystemAction OnClipChange	ClipboardAddToNotificationList MSG_META_CLIPBOARD_NOTIFY_NORMAL_TRANSFER_ITEM_CHANGED
OnInit OnStartup OnExit OnConnection AF_FOR_PRINT AF_RESTORE AF_DATA_FILE AF_SHUTDOWN	MSG_GEN_PROCESS_OPEN_APPLICATION MSG_GEN_PROCESS_OPEN_APPLICATION MSG_GEN_PROCESS_CLOSE_APPLIACTION MSG_META_IACP_NEW_CONNECTION AppLaunchBlock->ALF_LaunchFlags: ALF_LAUNCHED_FOR PRINTING ONLY attachFlags: AAF_RESTOREING_FROM_STATE attachFlags: AAF_DATA_FILE_PASSED MSG_GEN_APPLICATION_GET_STATE returns AS_QUIT_DETACHING not set in CLOSE_APPLIACTION
Other Action Handlers OnKeyPressed OnFocusChanged OnTargetChanged	see "Input Handling" see "Input Handling" see "Input Handling"
Methods MarkBusy MarkNotBusy HoldUpInput ResumeInput IgnoreInput AcceptInput	MSG_GEN_APPLIACTION_MARK_BUSY MSG_GEN_APPLIACTION_MARK_NOT_BUSY MSG_GEN_APPLIACTION_HOLD_UP_INPUT MSG_GEN_APPLIACTION_RESUME_INPUT MSG_GEN_APPLIACTION_IGNORE_INPUT MSG_GEN_APPLIACTION_ACCEPT_INPUT

BitmapContent Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>BitmapContent-Class</u>	VisContentClass
bitmapFormat BF_MASK BF_PALETTE defaultColor DefaultScreen editMask suspendDraw	not available in PC/GEOS-SDK 1 Transparent bitmap 2 Bitmap with palette not available in PC/GEOS-SDK not available in PC/GEOS-SDK not available in PC/GEOS-SDK not available in PC/GEOS-SDK
Methods GetBitmapHandle NewBitmapFromHandle CopyBitmap Redraw GetPaletteEntry SetPaletteEntry GetFullPalette SetFullPalette PokeLine PeekLine	not available in PC/GEOS-SDK not available in PC/GEOS-SDK not available in PC/GEOS-SDK not available in PC/GEOS-SDK not available in PC/GEOS-SDK not available in PC/GEOS-SDK not available in PC/GEOS-SDK not available in PC/GEOS-SDK not available in PC/GEOS-SDK not available in PC/GEOS-SDK

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

Other Action Handlers

OnFocusChanged	see "Input Handling"
OnTargetChanged	see "Input Handling"
OnKeyPressed	see "Input Handling"
OnMouseButton	see "Input Handling"
OnMouseMove	see "Input Handling"
OnMouseOver	see "Input Handling"

Button Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>Button-Class</u>	GenTriggerClass
actionData	ATTR_GEN_TRIGGER_ACTION_DATA
interactionCommand	ATTR_GEN_TRIGGER_INTERACTION_COMMAND
IC_CLOSE	IC_DISMISS 1
IC_APPLY	IC_APPLY 3
IC_RESET	IC_RESET 4
IC_OK	IC_OK 5
IC_YES	IC_YES 6
IC_NO	IC_NO 7
IC_STOP	IC_STOP 8
IC_HELP	IC_HELP 10
BringsUpWindow	HINT_TRIGGER_BRINGS_UP_WINDOW
IsDestructive	HINT_TRIGGER_DESTRUCTIVE_ACTION
unhandledEvents	No PC/GEOS-SDK equivalent
<u>ActionHandlers</u> ButtonAction	
ActionHandler	GTI_destination = process, GTI_actionMsg
<u>special ActionHandler</u>	
BringUpHelp	MSG_META_BRING_UP_HELP
<u>Methods</u>	
Activate	MSG_GEN_ACTIVATE

Canvas Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>Canvas-Class</u>	GenInteractionClass
buffered	not available in SDK
bufferedDataSize	not available in SDK
DS_TINY	0
DS_SMALL	1
DS_MEDIUM	2
DS_LARGE	3
DS_HUGE	4
defaultColor	not available in SDK
<u>ActionHandlers</u> DrawAction	
OnDraw	MSG_VIS_DRAW
<u>Methods</u>	
Dirty	MSG_VIS_REDRAW_ENTIRE_OBJECT

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

ColorSelector Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>ColorSelector-Class</u>	GenColorSelectorClass
csFeatures CSF_FILL_PATTERN CSF_DRAW_MASK CSF_RGB CSF_INDEX CSF_MORE_COLORS	ATTR_GEN_CONTROL_REQUIRE_UI CSF_FILL_PATTERN (1) CSF_DRAW_MASK (2) CSF_RGB (4) CSF_INDEX (8) CSF_MORE_COLORS (32)
csColor csIndexColor csDrawMask csDrawMaskValue csFillPattern	CSI_color CSI_color CSI_drawMask CSI_drawMask CSI_pattern
ActionHandlers ColorAction ColorChangedHandler	GCI_output = oself, MSG_META_COLORED_OBJECT_ ~SET_COLOR, ~SET_DRAW_MASK. ~SET_APTTERN

Dialog Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>Dialog-Class</u>	GenInteractionClass , GII_visibility = GIV_DIALOG
MakeResizable NoFocus isOpen	HINT_INTERACTION_MAKE_RESIZABLE HINT_INTERACTION_NO_DISTURB not available in PC/GEOS-SDK, set by messages: MSG_GEN_INTERACTION_INITIATE MSG_GEN_INTERACTION_INITIATE_NO_DISTURB MSG_GEN_GUP_INTERACTION_COMMAND(IC_CLOSE)
interactionCommand	not available in PC/GEOS-SDK, set by message MSG_GEN_GUP_INTERACTION_COMMAND()
attrs DA_HIDDEN_UNTIL_OPENED DA_BLOCKING	GII_attrs = GIA_NOT_USER_INITIATABLE GII_attrs = GIA_INITIATED_VIA_USER_DO_DIALOG + GIA_MODAL + GIA_NOT_USER_INITIATABLE
modal NON_MODAL APP_MODAL SYS_MODAL	(default) GII_attrs = GIA_MODAL GII_attrs = GIA_SYS_MODAL
dialogType DT_NORMAL DT_PROGRESS DT_COMMAND DT_NOTIFICATION DT_QUESTION DT_DELAYED_APPLY	GII_type = GIT_ORGANIZATIONAL GII_type = GIT_PROGRESS GII_type = GIT_COMMAND GII_type = GIT_NOTIFICATION GII_type = GIT_AFFIRMATION GII_type = GIT_PROPERTIES
ActionHandlers DialogAction OnOpen OnClose OnCommand	MSG_GEN_INTERACTION_INITIATE MSG_GEN_GUP_INTERACTION_COMMAND(IC_DISMISS) MSG_GEN_GUP_INTERACTION_COMMAND(<other>)

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

Other Action Handlers	
OnFocusChanged	see "Input Handling"
OnTargetChanged	see "Input Handling"
Methods	
Open	MSG_GEN_INTERACTION_INITIATE()
OpenNoDisturb	MSG_GEN_INTERACTION_INITIATE_NO_DISTURB()
Close	MSG_GEN_GUP_INTERACTION_COMMAND(IC_DISMISS)
Routines	
OpenBlockingDialog(obj)	UserDoDialog()

Display Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
Display-Class	GenDisplayClass
minimizedState	MSG_GEN_DISPLAY_GET_MINIMIZED MSG_GEN_DISPLAY_SET_MINIMIZED MSG_GEN_DISPLAY_SET_NOT_MINIMIZED
MinimizedOnStartup	HINT_DISPLAY_MINIMIZED_ON_STARTUP
NotMinimizable	HINT_DISPLAY_NOT_MINIMIZABLE
maximizedState	MSG_GEN_DISPLAY_GET_MAXIMIZED MSG_GEN_DISPLAY_SET_MAXIMIZED MSG_GEN_DISPLAY_SET_NOT_MAXIMIZED
MaximizedOnStartup	HINT_DISPLAY_MAXIMIZED_ON_STARTUP
NotMaximizable	HINT_DISPLAY_NOT_MAXIMIZABLE
NotResizable	HINT_DISPLAY_NOT_RESIZABLE
NotRestorable	HINT_DISPLAY_NOT_RESTORABLE
userDismissable	GDI_Attributes = GDA_USER_DISMISSABLE MSG_GEN_DISPLAY_SET_ATTRS MSG_GEN_DISPLAY_GET_ATTRS
ActionHandlers DialogAction	
OnClose	MSG_GEN_DISPLAY_CLOSE
Other Action Handlers	
OnFocusChanged	see "Input Handling"
OnTargetChanged	see "Input Handling"
Methods	
Close	MSG_GEN_DISPLAY_CLOSE

DisplayControl Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
DisplayControl-Class	GenDisplayControlClass
nameOnPrimaryIfMaximized	GDCII_attrs = GDCA_MAXIMIZED_NAME_ON_PRIMARY
dcFeatures	ATTR_GEN_CONTRO_REQUIRE_UI / PROHIBIT_UI
DCF_OVERLAPP_FULL	GDCF_OVERLAPPING_MAXIMIZED = 4
DCF_TILE	GDCF_TILE = 2
DCF_DISPLAY_LIST	GDCF_DISPLAY_LIST = 1

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

DisplayGroup Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
DisplayGroup-Class	GenDisplayGroupClass
fullSizedState	MSG_GEN_DISPLAY_GROUP_GET_FULL_SIZED MSG_GEN_DISPLAY_GROUP_SET_FULL_SIZED MSG_GEN_DISPLAY_GROUP_SET_OVERLAPPING MSG_META_GET_TARGET_EXCL
activeDisplay	ATTR_GEN_DISPLAY_GROUP_NO_FULL_SIZED
NoFullSizeMode	ATTR_GEN_DISPLAY_GROUP_NO_OVERLAPPING
NoOverlappingMode	HINT_DISPLAY_GROUP_TILE_HORIZONTALLY
TileHorizontally	HINT_DISPLAY_GROUP_TILE_VERTICALLY
TileVertically	HINT_DISPLAY_GROUP_SIZE_INDEPENDENTLY_OF_DISPLAYS
SizeIndependentlyOfDisplays	
Methods	
TileDisplays	MSG_GEN_DISPLAY_GROUP_TILE_DISPLAYS
SelectDisplay (n)	MSG_GEN_DISPLAY_CLOSE_SELECT_DISPLAY

DocumentGuardian Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
DocumentGuardian-Class	GenInteractionClass
ButtonHandler	not available in PC/GEOS-SDK
configData	not available in PC/GEOS-SDK
documentState	not available in PC/GEOS-SDK
DOCS_OPEN	1
DOCS_MODIFIED	2
DOCS_UNTITLED	4
DOCS_READ_ONLY	8
DOCS_EDIT_TEMPLATE	16
documentHandle	not available in PC/GEOS-SDK
documentName\$	not available in PC/GEOS-SDK
documentPath\$	not available in PC/GEOS-SDK
documentUserData	not available in PC/GEOS-SDK
SetDocumentState	not available in PC/GEOS-SDK
CreateNewDocument	not available in PC/GEOS-SDK
OpenDocument	not available in PC/GEOS-SDK
CloseDocument	not available in PC/GEOS-SDK
HandleShutdown	not available in PC/GEOS-SDK
HandleRestart	not available in PC/GEOS-SDK

All object classes, instance variables, hints and constants.

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>DynamicList-Class</u>	GenDynamicListClass
DynamicList is a subclass of RadioButtonGroup . It inherits all instance variables, methods and handlers from this class.	
Internally, all BASIC instance variables & Co of DynamicList class are implemented as copy of RadioButtonClass. This will look to the BASIC user, as if it is a subclass of RadioButtonClass, as it is in the PC/GEOS-SDK	
numItems direct set in UI Code write in BASIC Code read in BASIC Code	GDLI_numItems GDLI_numItems MSG_GEN_DYNAMIC_LIST_INITIALIZE() MSG_GEN_DYNAMIC_LIST_GET_NUM_ITEMS()
<u>ActionHandlers</u> ListAction	
<u>QueryHandler</u>	GDLI_queryMsg
ItemText\$ (n) ItemGString (n)	MSG_GEN_DYNAMIC_LIST_REPLACE_ITEM_TEXT() MSG_GEN_DYNAMIC_LIST_REPLACE_ITEM_MONIKER()
<u>Methods</u>	
InsertItems	MSG_GEN_DYNAMIC_LIST_ADD_ITEMS
RemoveItems	MSG_GEN_DYNAMIC_LIST_REMOVE_ITEMS
<u>Other ActionHandlers</u>	
ApplyHandler	GIGI_destination, GIGI_applyMsg
DoublePressHandler	ATTR_GEN_ITEM_GROUP_CUSTOM_DOUBLE_PRESS
StatusHandler	ATTR_GEN_ITEM_GROUP_STATUS_MSG

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

FileSelector Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
FileSelector-Class	GenFileSelectorClass
selection\$	MSG_GEN_FILE_SELECTOR_GET_SELECTION MSG_GEN_FILE_SELECTOR_SET_SELECTION
path\$	MSG_GEN_FILE_SELECTOR_GET_FULL_SELECTION_PATH MSG_GEN_FILE_SELECTOR_SET_FULL_SELECTION_PATH
fullPath\$	MSG_GEN_FILE_SELECTOR_GET_FULL_SELECTION_PATH MSG_GEN_FILE_SELECTOR_SET_FULL_SELECTION_PATH
initialPath	MSG_GEN_PATH_SET
entryFlags	MSG_GEN_FILE_SELECTOR_GET_SELECTION GFSEF_TYPE : GFSET_SUBDIR GFSET_VOLUME
FEF_SUBDIR	GFSEF_OPEN
FEF_OPEN	GFSEF_NO_ENTRIES
FEF_NO_ENTRIES	GFSEF_ERROR
FEF_ERROR	GFSEF_TEMPLATE
FEF_TEMPLATE	GFSEF_READ_ONLY
FEF_READ_ONLY	GFSEF_PARENT_DIR
FEF_PARENT	
numFilesToShow	HINT_FILE_SELECTOR_NUMBER_OF_FILES_TO_SHOW
fileListWidth	HINT_FILE_SELECTOR_FILE_LIST_WIDTH
showFilesDisabled	GFSI_attrs: FSA_SHOW_FILES_DISABLED
matchToken	ATTR_GEN_FILE_SELECTOR_TOKEN_MATCH
matchCreator	ATTR_GEN_FILE_SELECTOR_CREATOR_MATCH
matchMask\$	ATTR_GEN_FILE_SELECTOR_NAME_MATCH
matchCriteria	GFSI_fileCriteria
FMC_DIRS	FSMC_DIRS
FMC_DOS_FILES	FSMC_NON_GEOS_FILES
FMC_GEOS_EXEC	FSMC_GEOS_EXECUTABLES
FMC_GEOS_DATA	FSMC_GEOS_NON_EXECUTABLES
FMC_ALL_FILES	—
FMC_MASK_CASE_INSENSITIVE	FSMC_MASK_CASE_INSENSITIVE
FMC_USE_MASK_FOR_DIRS	FSMC_USE_MASK_FOR_DIRS
hasMatchToken	Get: ATTR_GEN_FILE_SELECTOR_TOKEN_MATCH
hasMatchCreator	Get: ATTR_GEN_FILE_SELECTOR_CREATOR_MATCH
ActionHandlers FileAction	
NotificationHandler	GFSI_destination = oself, GFSI_notificationMsg
Methods	
ClearMatchToken	Remove: ATTR_GEN_FILE_SELECTOR_TOKEN_MATCH
ClearMatchCreator	Remove: ATTR_GEN_FILE_SELECTOR_CREATOR_MATCH
Suspend	MSG_GEN_FILE_SELECTOR_SUSPEND
EndSuspend	MSG_GEN_FILE_SELECTOR_END_SUSPEND
Rescan	MSG_GEN_FILE_SELECTOR_RESCAN
UpDirectory	MSG_GEN_FILE_SELECTOR_UP_DIRECTORY,
	MSG_GEN_FILE_SELECTOR_SET_FULL_SELECTION_PATH
OpenEntry	MSG_GEN_FILE_SELECTOR_OPEN_ENTRY(currentSel)

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

GenContent Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>GenContent-Class</u>	GenContentClass
contentAttrs CA_SAME_WIDTH_AS_VIEW CA_SAME_HEIGHT_AS_VIEW CA_VIEW_DOC_BOUNDS_SET	GCI_attrs VCNA_SAME_WIDTH_AS_VIEW = 0x80 VCNA_SAME_HEIGHT_AS_VIEW = 0x40 MANUALLY VCNA_VIEW_DOC_BOUNDS_SET_MANUALLY = 0x04
KeepFocusVisible	HINT_CONTENT_KEEP_FOCUS_VISIBLE

Group Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>Group-Class</u>	GenInteractionClass , GII_visibility = GIV_SUB_GROUP
CannotBeDefault	HINT_INTERACTION_CANNOT_BE_DEFAULT

Image Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>Image-Class</u>	GenInteractionClass
ImageFile	not available in SDK
ImagePicture	not available in SDK
ImageResource	not available in SDK
numPicts	not available in SDK
pictNum	not available in SDK
imgInfo	not available in SDK
imgState	not available in SDK
IMGS_NO_IMAGE	0 No image or error
IMGS_BITMAP	1 Still picture, bitmap
IMGS_GSTRING	2 Still picture, gstring
IMGS_ANIMATION_RUNNING	3 animation, running
IMGS_ANIMATION_PAUSE	4 animation, paused
scale	not available in SDK, uses GrApplyScale
drawPos	not available in SDK, uses GrApplyTranslation
borderColor	not available in SDK
bgColor	not available in SDK
autoSize	not available in SDK
autoStart	not available in SDK
currentFrame	not available in SDK
numFrames	not available in SDK
animationTicks	not available in SDK
Methods	
AnimationStart	TimerStart()
AnimationStop	TimerStop()
AnimationNext	not available in SDK
Redraw	not available in SDK

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

InputLine Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>InputLine-Class</u>	BASIC-MemoClass (GenTextClass) GTXI_attrs = GTA_SINGLE_LINE_TEXT
no own instance variables	inherits all from MemoClass

LargeText Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>LargeText-Class</u>	VisLargeTextClass
approxSize	not available in SDK
all other instance variables	see VisText Class
Note VisText instance variables, that deal with the geometry as well as drawable , detect- able and managed are not supported	

Memo Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>Memo-Class</u>	GenTextClass
text\$	GTXI_text
maxLen	GTXI_maxLength
textLen	MSG_VIS_TEXT_GET_TEXT_SIZE()
cursorPos	read: MSG_VIS_TEXT_GET_SELECTION_RANGE
selectionEnd	write: MSG_VIS_TEXT_SELECT_RANGE_SMALL
selectionLen	read: MSG_VIS_TEXT_GET_SELECTION_RANGE
SelectedText\$	write: MSG_VIS_TEXT_SELECT_RANGE_SMALL
TextRange\$	read: MSG_VIS_TEXT_GET_SELECTION_RANGE
	write: MSG_VIS_TEXT_SELECT_RANGE_SMALL
	MSG_VIS_TEXT_GET_SELECTION_PTR
	MSG_VIS_TEXT_GET_SELECTION_PTR
fontID	ATTR_GEN_TEXT_CHAR_ATTR: VTCA_fontID
fontSize	ATTR_GEN_TEXT_CHAR_ATTR: VTCA_pointSize
textStyle	ATTR_GEN_TEXT_CHAR_ATTR: VTCA_textStyles
TS_UNDERLINE	1
TS_STRIKE_THRU	2
TS_SUBSCRIPT	4
TS_SUPERSCRIP	8
TS_ITALIC	16
TS_BOLD	32
TS_OUTLINE	64
textColor	ATTR_GEN_TEXT_CHAR_ATTR: VTCA_color
backColor	HINT_TEXT_WASH_COLOR
justifyText	ATTR_GEN_TEXT_PARA_ATTR: VTPA_attributes
lineSpacing	ATTR_GEN_TEXT_PARA_ATTR: VTPA_lineSpacing
margins	ATTR_GEN_TEXT_PARA_ATTR: VTPA_leftMargin, VTPA_rightMargin, VTPA_paraMargin
topSpace	ATTR_GEN_TEXT_PARA_ATTR: VTPA_spaceOnTop

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

textFilter	
TF_NONE	-
TF_NORMAL_ASCII	ATTR_GEN_TEXT_NORMAL_ASCII
TF_DOS_CHARACTER_SET	ATTR_GEN_TEXT_DOS_CHARACTER_SET
TF_ALPHA	ATTR_GEN_TEXT_ALPHA
TF_ALPHA_NUMERIC	ATTR_GEN_TEXT_ALPHA_NUMERIC
TF_DASHED_ALPHA_NUMERIC	ATTR_GEN_TEXT_DASHED_ALPHA_NUMERIC
TF_NUMERIC	ATTR_GEN_TEXT_NUMERIC
TF_SIGNED_NUMERIC	ATTR_GEN_TEXT_SIGNED_NUMERIC
TF_SIGNED_DECIMAL	ATTR_GEN_TEXT_SIGNED_DECIMAL
TF_FLOAT_DECIMAL	ATTR_GEN_TEXT_FLOAT_DECIMAL
TF_LEGAL_FILENAMES	ATTR_GEN_TEXT_LEGAL_FILENAMES
TF_LEGAL_DOS_FILENAMES	ATTR_GEN_TEXT_LEGAL_DOS_FILENAMES
TF_LEGAL_DOS_PATH	ATTR_GEN_TEXT_LEGAL_DOS_PATH
TF_LEGAL_DOS_VOLUME_NAMES	ATTR_GEN_TEXT_LEGAL_DOS_VOLUME_NAMES
TF_DATE	ATTR_GEN_TEXT_DATE
TF_TIME	ATTR_GEN_TEXT_TIME
TF_MAKE_UPPERCASE	ATTR_GEN_TEXT_MAKE_UPPERCASE
TF_ALLOW_SPACES	ATTR_GEN_TEXT_ALLOW_SPACES
TF_NO_SPACES	ATTR_GEN_TEXT_NO_SPACES
TextFrame	HINT_TEXT_FRAME
TextNoFrame	HINT_TEXT_NO_FRAME
SelectableIfRO	ATTR_GEN_TEXT_SELECTABLE
textAttrs	GTXI_attrs (GTA ...), HINT_TEXT ... ATTR_GEN_TEXT
TA_DONT_SCROLL_TO_CHANGES	GTA_DONT_SCROLL_TO_CHANGES
TA_TAIL_ORIENTED	GTA_TAIL_ORIENTED
TA_ALLOW_TEXT_OFF_END	GTA_ALLOW_TEXT_OFF_END
TA_NO_WORD_WRAPPING	GTA_NO_WORD_WRAPPING
TA_INIT_SCROLLING	GTA_INIT_SCROLLING
TA_USE_TAB_FOR_NAVIGATION	GTA_USE_TAB_FOR_NAVIGATION
TA_NEVER_SCROLLABLE	ATTR_GEN_TEXT_NEVER_MAKE_SCROLLABLE
TA_SELECT_TEXT	HINT_TEXT_SELECT_TEXT
TA_CURSOR_AT_START	HINT_TEXT_CURSOR_AT_START
TA_CURSOR_AT_END	HINT_TEXT_CURSOR_AT_END
modified	GTXI_stateFlags = 0 GTSF_MODIFIED (0x40) MSG_GEN_TEXT_SET_MODIFIED_STATE() MSG_GEN_TEXT_IS_MODIFIED()
ActionHandlers TextAction	
ApplyHandler	GTXI_destination, GTXI_applyMsg
OnModified	MSG_META_TEXT_USER_MODIFIED()
StatusHandler	ATTR_GEN_TEXT_STATUS_MSG
OnSelectionChanged	MSG_META_KBD_CHAR, MSG_META_START_SELECT, MSG_META_PTR, MSG_VIS_TEXT_SELECT_RANGE
Other Action Handlers	
OnKeyPressed	see "Input Handling"
OnFocusChanged	see "Input Handling"
OnTargetChanged	see "Input Handling"
Methods	
SendStatus	MSG_GEN_TEXT_SEND_STATUS_MSG(0)
Append	MSG_VIS_TEXT_APPEND_PTR
Insert	MSG_VIS_TEXT_SELECT_RANGE(cursorPos) + MSG_VIS_TEXT_REPLACE_SELECTION_PTR
ReplaceSelection	MSG_VIS_TEXT_REPLACE_SELECTION_PTR
DeleteSelection	MSG_VIS_TEXT_DELETE_SELECTION
DeleteRange	MSG_VIS_TEXT_SELECT_RANGE + MSG_VIS_TEXT_DELETE_SELECTION
ShowCursor	MSG_VIS_TEXT_SELECT_RANGE(cursorPos) + MSG_VIS_TEXT_SHOW_POSITION
ScrollDown	MSG_VIS_TEXT_SCROLL_PAGE_DOWN
ScrollUp	MSG_VIS_TEXT_SCROLL_PAGE_UP
Suspend	MSG_META_SUSPEND
EndSuspend	MSG_META_UNsuspend

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

<u>File related Methods</u> WriteToFile ReplaceFromFile InsertFromFile FileTextSize WriteToVMFile ReplaceFromVMFile InsertFromVMFile VMFileTextSize	File related methods are not supported in SDK
---	---

Menu Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>Menu-Class</u>	GenInteractionClass , GII_visibility = GIV_POPUP
<u>Other Action Handlers</u> OnFocusChanged	see "Input Handling"

Number Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>Number-Class</u>	GenValueClass
value minVal maxVal incVal	GVLI_value GVLI_minimum GVLI_maximum GVLI_increment
modified	GVLI_stateFlags = 0 GVSF_MODIFIED
displayFormat DF_INTEGER DF_DECIMAL DF_POINTS DF_INCHES DF_CENTIMETERS DF_MILLIMETERS DF_PICAS DF_EUR_POINT DF_CICEROS DF_POINTS_OR_MILLIMETERS DF_INCHES_OR_CENTIMETERS	GVLI_displayFormat GVDF_INTEGER (0) GVDF_DECIMAL (1) GVDF_POINTS (2) GVDF_INCHES (3) GVDF_CENTIMETERS (4) GVDF_MILLIMETERS (5) GVDF_PICAS (6) GVDF_EUR_POINTS (7) GVDF_CICEROS (8) GVDF_POINTS_OR_MILLIMETERS (9) GVDF_INCHES_OR_CENTIMETERS (10)
decimal	ATTR_GEN_VALUE_DECIMAL_PLACES
NavigateToNextFieldOnReturn	HINT_VALUE_NAVIGATE_TO_NEXT_FIELD_ON_RETURN_PRESS
look LOOK_NORMAL LOOK_NOT_DIGITALLY_EDITABLE LOOK_NOT_INCREMENTABLE LOOK_X_SLIDER LOOK_Y_SLIDER	no special hints HINT_VALUE_NOT_DIGITALLY_EDITABLE HINT_VALUE_NOT_INCREMENTABLE HINT_VALUE_ANALOG_DISPLAY + HINT_VALUE_ORIENT_HORIZONTALLY HINT_VALUE_ANALOG_DISPLAY + HINT_VALUE_ORIENT_VERTICALLY

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

Customize Sliders SliderNoDigitalDisplay SliderShowMinMax sliderShowIntervals	HINT_VALUE_NO_DIGITAL_DISPLAY HINT_VALUE_SHOW_MIN_AND_MAX HINT_VALUE_DISPLAY_INTERVALS
ActionHandlers NumberAction ApplyHandler StatusHandler	GVLI_destination=process, GVLI_applyMsg ATTR_GEN_VALUE_STATUS_MSG
Methods Increment Decrement SendStatus	MSG_GEN_VALUE_INCREMENT MSG_GEN_VALUE_DECREMENT MSG_GEN_VALUE_SEND_STATUS_MSG(0)

Option Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>Option-Class</u> identifier	GenBooleanClass GBI_identifier

OptionGroup Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>OptionGroup-Class</u> selection isSelected modified isModified look LOOK_NORMAL LOOK_SCROLLABLE LOOK_MINIMIZE_SIZE LOOK_TOOLBOX ActionHandlers ListAction ApplyHandler StatusHandler Methods SendStatus MakeVisible	GBGI_selectedBooleans MSG_GEN_BOOLEAN_GROUP_IS_BOOLEAN_SELECTED GBGI_modifiedBooleans MSG_GEN_BOOLEAN_GROUP_IS_BOOLEAN_MODIFIED no special hints HINT_BOOLEAN_GROUP_SCROLLABLE HINT_BOOLEAN_GROUP_MINIMIZE_SIZE HINT_BOOLEAN_GROUP_TOOLBOX_STYLE GBGI_destination, GBGI_applyMsg ATTR_GEN_BOOLEAN_GROUP_STATUS_MSG MSG_GEN_BOOLEAN_GROUP_SEND_STATUS_MSG(0) MSG_GEN_BOOLEAN_GROUP_MAKE_BOOLEAN_VISIBLE

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

PageSizeControl Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>PageSizeControl-Class</u>	GenPageSizeControl PCZI_attrs = PCZA_ACT_LIKE_GADGET PZCA_INITIALIZE
pscFeatures PSCF_MARGINS PSCF_CUSTOM_SIZE PSCF_LAYOUT PSCF_SIZE_LIST PSCF_PAGE_TYPE PSC_DEFAULT_FEATURES	ATTR_GEN_CONTRO_REQUIRE_UI / PROHIBIT_UI PSIZECF_MARGINS = 16 PSIZECF_CUSTOM_SIZE = 8 PSIZECF_LAYOUT = 4 PSIZECF_SIZE_LIST = 2 PSIZECF_PAGE_TYPE = 1 = 15 ' margins are off by default
pageSize PS_WIDTH PS_HEIGHT	PZCI_width, PZCI_height 4 5
pageMargins PS_LEFT_MARGIN PS_TOP_MARGIN PS_RIGHT_MARGIN PS_BOTTOM_MARGIN	PZCI_margins 0 1 2 3
pageLayout PL_PAPER PL_PAPER_LANDSCAPE PL_ENVELOPE PL_LABEL	PZCI_layout 0 8 2 4
Methods: ShowDialog	MSG_GEN_INTERACTION_INITIATE

Primary Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>Primary-Class</u>	GenPrimaryClass
BreakButton FileMenuChildren Caption2\$ PrimaryFullScreen NoFileMenu NoExpressMenu PrimaryNoHelpButton	No PC/GEOS-SDK equivalent. No PC/GEOS-SDK equivalent. MSG_GEN_PRIMARY_GET/SET_LONG_TERM_MONIKER HINT_PRIMARY_FULL_SCREEN HINT_PRIMARY_NO_FILE_MENU HINT_PRIMARY_NO_EXPRESS_MENU HINT_PRIMARY_NO_HELP_BUTTON
Other Action Handlers OnFocusChanged OnTargetChanged	see "Input Handling" see "Input Handling"

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

PrintControl Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>PrintControl-Class</u>	GenPrintControlClass PCI_output = oself PCI_docNameOutput = oself
pcAttrs PCA_NO_PRINTER_CONTROLS PCA_SEE_IF_DOC_WILL_FIT PCA_MARK_APP_BUSY PCA_VERIFY_PRINT PCA_SHOW_PROGRESS PCA_PROGRESS_PERCENT PCA_PROGRESS_PAGE PCA_FORCE_ROTATION PCA_COPY_CONTROLS PCA_PAGE_CONTROLS PCA_QUALITY_CONTROLS PCA_USES_DIALOG_BOX PCA_GRAPHICS_MODE PCA_TEXT_MODE PC_DEFAULT_ATTRS	PCI_attrs PCA_NO_PRINTER_CONTROLS = &h8000 PCA_SEE_IF_DOC_WILL_FIT = &h4000 PCA_MARK_APP_BUSY = &h2000 PCA_VERIFY_PRINT = &h1000 PCA_SHOW_PROGRESS = &h800 PCA_PROGRESS_PERCENT = &h400 PCA_PROGRESS_PAGE = &h200 PCA_FORCE_ROTATION = &h100 PCA_COPY_CONTROLS = &h80 PCA_PAGE_CONTROLS = &h40 PCA_QUALITY_CONTROLS = &h20 PCA_USES_DIALOG_BOX = &h10 PCA_GRAPHICS_MODE = &h8 PCA_TEXT_MODE = &h4 = 0x48FC
pcAppUI	ATTR_PRINT_CONTROL_APP_UI
pcDocSize PS_WIDTH PS_HEIGHT	PCI_docSizeInfo.PSR_width, ~.PSR_height 4 5
pcDocMargins PS_LEFT_MARGIN PS_TOP_MARGIN PS_RIGHT_MARGIN PS_BOTTOM_MARGIN	PCI_docSizeInfo.PSR_margins 0 1 2 3
pcLayout PL_PAPER PL_PAPER_LANDSCAPE PL_ENVELOPE PL_LABEL	PCI_docSizeInfo.PSR_layout 0 8 2 4
pcPaperSizeInfo PS_-constants	MSG_PRINT_CONTROL_GET_PAPER_SIZE_INFO see above
totalPageRange	PCI_startPage, PCI_endPage
userPageRange	PCI_startUserPage, PCI_endUserPage
printJobName\$	not available in PC/GEOS-SDK
printMode	MSG_PRINT_CONTROL_GET_PRINT_MODE
Action Handles DrawAction	
OnPrint	MSG_PRINT_START_PRINTING
OnVerifyPrint	MSG_PRINT_CONTROL_VERIFY_PRINT_REQUEST
Methods	
InitiatePrint	MSG_PRINT_CONTROL_INITIATE_PRINT
PrintingCompleted	MSG_PRINT_CONTROL_PRINTING_COMPLETED
PrintingCancelled	MSG_PRINT_CONTROL_PRINT(ING_CANCELLED
PrintingVerified	MSG_PRINT_CONTROL_VERIFY_COMPLETED
ReportProgress RPT_PAGE PRT_PERCENT	MSG_PRINT_CONTROL_REPORT_PROGRESS 0 2
ReportProgressText	MSG_PRINT_CONTROL_REPORT_PROGRESS
PrintNewPage	GrNewPage()

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

RadioButton Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
RadioButton-Class	GenItemClass
identifier	GII_identifier

RadioButtonGroup Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
RadioButtonGroup-Class	GenItemGroupClass
behavior LB_EXCLUSIVE LB_EXCLUSIVE_NONE LB_EXTENDED_SELECTION LB_NON_EXCLUSIVE	GIGI_behaviorType GIGBT_EXCLUSIVE (0) GIGBT_EXCLUSIVE_NONE (1) GIGBT_EXTENDED_SELECTION (2) GIGBT_NON_EXCLUSIVE (3)
selection NONE_SELECTED	GIGI_selection 0xFFFF (GIGS_NONE)
isSelected	MSG_GEN_ITEM_GROUP_IS_ITEM_SELECTED
numSelections	GIGI_numSelections
modified	GIGI_stateFlags = 0 GIGSF_MODIFIED
ModifiedOnRedundantSelection ATTR_GEN_ITEM_GROUP_SET_MODIFIED_ON_REDUNDANT_SELECTION	
ActionHandlers ListAction ApplyHandler DoublePressHandler StatusHandler	GIGI_destination GIGI_applyMsg ATTR_GEN_ITEM_GROUP_CUSTOM_DOUBLE_PRESS ATTR_GEN_ITEM_GROUP_STATUS_MSG
DisplayCurrentSelection look LOOK_NORMAL LOOK_SCROLLABLE LOOK_MINIMIZE_SIZE LOOK_TOOLBOX LOOK_TABS_TOP LOOK_TABS_LEFT LOOK_TABS_RIGHT LOOK_TABS_BOTTOM	HINT_ITEM_GROUP_DISPLAY_CURRENT_SELECTION no special hints HINT_ITEM_GROUP_SCROLLABLE HINT_ITEM_GROUP_MINIMIZE_SIZE HINT_ITEM_GROUP_TOOLBOX_STYLE Combinations of HINT_ITEM_GROUP_TAB_STYLE with HINT_ORIENT_CHILDREN_HORIZONTALLY/VERTICALLY HINT_EXPAND_WIDTH/HEIGHT_TO_FIT_PARENT HINT_RIGHT/BOTTOM_JUSTIFY_CHILDREN
DontCenterTabbedChildren	HINT_ITEM_GROUP_DONT_CENTER_TABBED_CHIDREN
Methods SendStatus MakeVisible SelectItem	MSG_GEN_ITEM_GROUP_SEND_STATUS_MSG(0) MSG_GEN_ITEM_GROUP_MAKE_ITEM_VISIBLE MSG_GEN_ITEM_GROUP_SET_ITEM_STATE

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

View Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>View-Class</u>	GenViewClass
<u>Basic Configuration</u>	
Content	GVI_content
contentSize	GVI_docBounds
Redraw	MSG_GEN_VIEW_REDRAW_CONTENT()
viewAttrs	GVI_attrs
VA_CONTROLLED	GVA_CONTROLLED
VA_GENERIC_CONTENTS	GVA_GENERIC_CONTENTS
VA_DRAG_SCROLLING	GVA_DRAG_SCROLLING
VA_NO_WIN_FRAME	GVA_NO_WIN_FRAME
VA_SAME_COLOR_AS_PARENT_WIN	GVA_SAME_COLOR_AS_PARENT_WIN
VA_VIEW_FOLLOWS_CONTENT_GEOMETRY	GVA_VIEW_FOLLOWS_CONTENT_GEOMETRY
VA_SCALE_TO_FIT	GVA_SCALE_TO_FIT
VA_ADJUST_FOR_ASPECT_RATIO	GVA_ADJUST_FOR_ASPECT_RATIO
	Note: The GVI_attrs not listed here are either not available or are available using other instance variables
<u>Geometry</u>	
hControl	GVI_horizAttrs
vControl	GVI_vertAttrs
HVC_SCROLLABLE	GVDA_SCROLLABLE
HVC_TAIL_ORIENTED	GVDA_TAIL_ORIENTED
HVC_NO_SCROLLBAR	GVDA_DONT_DISPLAY_SCROLLBAR
HVC_NO_LARGER_THAN_CONTENT	GVDA_NO_LARGER_THAN_CONTENT
HVC_NO_SMALLER_THAN_CONTENT	GVDA_NO_SMALLER_THAN_CONTENT
HVC_KEEP_ASPECT_RATIO	GVDA_KEEP_ASPECT_RATIO
viewColor	GVI_color
HideScrollersWhenNotScrollable	HINT_VIEW_REMOVE_SCROLLERS_WHEN_NOT_SCROLLABLE
<u>Scaling and Scrolling</u>	
scale	GVI_scaleFactor
scaleToFitOptions	
SFO_PAGE_SIZE	ATTR_GEN_VIEW_PAGE_SIZE
SFO_BASED_ON_X	ATTR_GEN_VIEW_SCALE_TO_FIT_BASED_ON_X
SFO_BOTH_DIMENSIONS	ATTR_GEN_VIEW_SCALE_TO_FIT_BOTH_DIMENSIONS
origin	GVI_origin
GetVisibleRect	MSG_GEN_VIEW_GET_VISIBLE_RECT(RectDWord *rect)
ScrollToOffset xOffs, yOffs	MSG_GEN_VIEW_SCROLL
ScrollCmd cmd [, param]	
SC_TOP	MSG_GEN_VIEW_SCROLL_TOP()
SC_PAGE_UP	MSG_GEN_VIEW_SCROLL_PAGE_UP()
SC_UP	MSG_GEN_VIEW_SCROLL_UP()
SC_SET_Y_ORIGIN yOrigin	MSG_GEN_VIEW_SCROLL_SET_Y_ORIGIN(sdword yOrigin)
SC_DOWN	MSG_GEN_VIEW_SCROLL_DOWN()
SC_PAGE_DOWN	MSG_GEN_VIEW_SCROLL_PAGE_DOWN()
SC_BOTTOM	MSG_GEN_VIEW_SCROLL_BOTTOM()
SC_LEFT_EDGE	MSG_GEN_VIEW_SCROLL_LEFT_EDGE()
SC_PAGE_LEFT	MSG_GEN_VIEW_SCROLL_PAGE_LEFT()
SC_LEFT	MSG_GEN_VIEW_SCROLL_LEFT()
SC_SET_X_ORIGIN xOrigin	MSG_GEN_VIEW_SCROLL_SET_X_ORIGIN(sdword xOrigin)
SC_RIGHT	MSG_GEN_VIEW_SCROLL_RIGHT()
SC_PAGE_RIGHT	MSG_GEN_VIEW_SCROLL_PAGE_RIGHT()
SC_RIGHT_EDGE	MSG_GEN_VIEW_SCROLL_RIGHT_EDGE()
viewIncrement	GVI_increment
DoNotWinScroll	ATTR_GEN_VIEW_DO_NOT_WIN_SCROLL

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

suspendUpdate TRUE: FALSE: InitiateDragScroll SetDragBounds ImmediateDragUpdates DelayedDragUpdates	MSG_GEN_VIEW_SUSPEND_UPDATE() MSG_GEN_VIEW_UNSPEND_UPDATE() MSG_GEN_VIEW_INITIATE_DRAG_SCROLL() MSG_GEN_VIEW_SET_DRAG_BOUNDS HINT_VIEW_IMMEDIATE_DRAG_UPDATES HINT_VIEW_DELAYED_DRAG_UPDATES
<u>Change Pointer Image</u> SetPointerImage ClearPointerImage	MSG_GEN_VIEW_SET_PTR_IMAGE (...) MSG_GEN_VIEW_SET_PTR_IMAGE (0)
<u>Other Features</u> hLink vLink inputOptions VIO_DONT_SEND_MOUSE_EVENTS VIO_DONT_SEND_KBD_RELEASES focusable holdsLargeText <u>Children of a View</u>	GVI_horizLink GVI_vertLink GVI_attrs: GVA_DONT_SEND_PTR_EVENTS GVI_attrs: GVA_DONT_SEND_KBD_RELEASES GVI_attrs: GVA_FOCUSABLE not available in SDK placeObject, set for the child 16 = HINT_SEEK_X_SCROLLER_AREA 32 = HINT_SEEK_Y_SCROLLER_AREA 64 = HINT_SEEK_LEFT_OF_VIEW 128 = HINT_SEEK_TOP_OF_VIEW 256 = HINT_SEEK_RIGHT_OF_VIEW 512 = HINT_SEEK_BOTTOM_OF_VIEW
<u>Other Action Handlers</u> OnFocusChanged OnTargetChanged OnKeyPressed OnMouseButton OnMouseMove OnMouseOver	see "Input Handling" see "Input Handling" see "Input Handling" see "Input Handling" see "Input Handling" see "Input Handling"

ViewControl Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>ViewControl</u> vcFeatures VCF_MAIN_100 VCF_MAIN_SCALE_TO_FIT VCF_ZOOM_IN VCF_ZOOM_OUT VCF_REDUCE VCF_100 VCF_ENLARGE VCF_BIG_ENLARGE VCF_SCALE_TO_FIT VCF_ADJUST_ASPECT_RATIO VCF_APPLY_TO_ALL VCF_SHOW_HORIZONTAL VCF_SHOW_VERTICAL VCF_CUSTOM_SCALE VCF_REDRAW	<u>GenViewControlClass</u> ATTR_GEN_CONTROL_FEATURES GVCF_MAIN_100 = 0x4000 GVCF_MAIN_SCALE_TO_FIT = 0x2000 GVCF_ZOOM_IN = 0x1000 GVCF_ZOOM_OUT = 0x0800 GVCF_REDUCE = 0x0400 GVCF_100 = 0x0200 GVCF_ENLARGE = 0x0100 GVCF_BIG_ENLARGE = 0x0080 GVCF_SCALE_TO_FIT = 0x0040 GVCF_ADJUST_ASPECT_RATIO = 0x0020 GVCF_APPLY_TO_ALL = 0x0010 GVCF_SHOW_HORIZONTAL = 0x0008 GVCF_SHOW_VERTICAL = 0x0004 GVCF_CUSTOM_SCALE = 0x0002 GVCF_REDRAW = 0x0001

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

vcAttrs	GVCi_attrs
VCA_ADJUST_ASPECT_RATIO	GVCA_ADJUST_ASPECT_RATIO = 0x8000
VCA_APPLY_TO_ALL	GVCA_APPLY_TO_ALL = 0x4000
VCA_SHOW_HORIZONTAL	GVCA_SHOW_HORIZONTAL = 0x2000
VCA_SHOW_VERTICAL	GVCA_SHOW_VERTICAL = 0x1000
vcMinZoom	GVCi_minZoom (default: 25)
vcMaxZoom	GVCi_maxZoom (default: 400)
vcScale	GVCi_scale = 100
targetView	-
ScaleView100	-
ScaleViewToFit	-
ZoomInView	MSG_GVC_ZOOM_IN
ZoomOutView	MSG_GVC_ZOOM_OUT
RedrawView	MSG_GVC_REDRAW
ScrollLeftView	MSG_GVC_PAGE_LEFT
ScrollRightView	MSG_GVC_PAGE_RIGHT
ScrollUpView	MSG_GVC_PAGE_UP
ScrollDownView	MSG_GVC_PAGE_DOWN

VisGroup Class (VisContent and VisObj Common Features)

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>Drawing to Screen</u>	
buffered	not available in SDK
bufferedDataSize	not available in SDK
DS_TINY	0
DS_SMALL	1
DS_MEDIUM	2
DS_LARGE	3
DS_HUGE	4
defaultColor	not available in SDK
clipDrawing	GrSetClipRect()
<u>Drawing Related Methods</u>	
Dirty	MSG_VIS_REDRAW_ENTIRE_OBJECT
Redraw	MSG_VIS_REDRAW_ENTIRE_OBJECT
<u>ActionHandlers</u> DrawAction	
OnDraw	MSG_VIS_DRAW
<u>Managing Size and Position</u>	
customManageChildren	VCI_geoAttrs: VCGA_CUSTOM_MANAGE_CHILDREN
visPosition	VI_bounds
visSize	VI_bounds
visSizeOptions	MSG_VIS_RECALC_SIZE
VSO_AUTO_SIZE	0
VSO_VARIABLE_SIZE	1
VSO_FIXED_SIZE	2
VSO_FIXED_WIDTH	3
VSO_FIXED_HEIGHT	4
visSizeFlags	VCI_geoDimensionAttrs
VSF_EXPAND_WIDTH	32
VSF_DIVIDE_WIDTH_EQUALLY	16
VSF_EXPAND_HEIGHT	2
VSF_DIVIDE_HEIGHT_EQUALLY	1
visMinimumSize	MSG_VIS_COMP_GET_MINIMUM_SIZE VCI_geoAttrs: VCGA_HAS_MINIMUM_SIZE
visOrientVertically	VCI_geoAttrs: VCGA_ORIENT_CHILDRN_VERTICALLY
visChildJustification	VCI_geoDimensionAttrs

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

visChildSpacing visSpacingIncludeEnds visMargins	MSG_VIS_COMP_GET_CHILD_SPACING VCI_geoAttrs: VCGA_INCLUDE_ENDS_IN_CHILD_SPACING MSG_VIS_COMP_GET_MARGINS
visWarpCount allowChildrenToWrap	MSG_VIS_COMP_GET_WRAP_COUNT VCI_geoAttrs: VCGA_ALLOW_CHILDREN_TO_WRAP
<u>Other Action Handlers</u> OnFocusChanged OnTargetChanged OnKeyPressed OnMouseButton OnMouseMove OnMouseOver	see "Input Handling" see "Input Handling" see "Input Handling" see "Input Handling" see "Input Handling" see "Input Handling"
<u>Methods</u> MarkInvalid	MSG_VIS_MARK_INVALID(VOF_GEOMETRY_INVALID VOF_IMAGE_INVALID, VUM_NOW);
<u>SDK Programmers Support</u> MarkInvalid2	MSG_VIS_MARK_INVALID(visOptFlags, updateMode);
visClassAttrs visCompGeoAttrs visCompDimensionAttrs	VI_attrs VCI_geoAttrs VCI_geoDimensionAttrs

VisContent Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>VisContent-Class</u> <u>Drawing to Screen</u> <u>Managing Size and Position</u> <u>Mouse, Keyboard,</u> <u>Focus, Target</u> contentAttrs CA_SAME_WIDTH_AS_VIEW CA_SAME_HEIGHT_AS_VIEW CA_VIEW_DOC_BOUNDS_SET_MANUALLY holdsLargeText <u>Methods</u> CreateVisObject DestroyVisObject	VisContentClass See: "VisComp Class" See: "VisComp Class" See: "Input Handling" VCNI_attrs VCNA_SAME_WIDTH_AS_VIEW = 0x80 VCNA_SAME_HEIGHT_AS_VIEW = 0x40 VCNA_VIEW_DOC_BOUNDS_SET_MANUALLY = 0x04 not available in SDK ObjInstantiate() MSG_VIS_DESTROY

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

VisObj Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
VisObj-Class <u>Drawing to Screen</u> <u>Managing Size and Position</u> <u>Mouse, Keyboard,</u> <u>Focus, Target</u> managed drawable detectable visDataValue grabFocusOnMouseEvents grabTargetOnMouseEvents <u>Dragging Instances</u> dragGString isDragging dragPosition dragOffset <u>Dragging-Methods</u> DragStart DragMoveTo DragEnd DragAbort <u>Other Tool Methods</u> DrawFrame DrawInverse DrawHandles TestHandles <u>Other Action Handlers</u> OnFocusChanged OnTargetChanged OnKeyPressed OnMouseButton OnMouseMove OnMouseOver	VisCompClass See: "VisGroup Class" See: "VisGroup Class" See: "Input Handling" VI_attrs: VA_MANAGED VI_attrs: VA_DRAWABLE + check in MSG_VIS_DRAW VI_attrs: VA_DETECTABLE not available in SDK MSG_META_GRAB_FOCUS_EXCL() MSG_META_GRAB_TARGET_EXCL() not available in SDK not available in SDK not available in SDK not available in SDK not available in SDK not available in SDK not available in SDK not available in SDK not available in SDK not available in SDK not available in SDK not available in SDK see "Input Handling" see "Input Handling" see "Input Handling" see "Input Handling" see "Input Handling" see "Input Handling"

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

VisText Class

BASIC UI Statement	SDK HINT's, ATTR's or instance variables
<u>VisText-Class</u>	VisTextClass
text\$	MSG_VIS_TEXT_GET_ALL_PTR
textLen	MSG_VIS_TEXT_GET_TEXT_SIZE()
cursorPos	read: MSG_VIS_TEXT_GET_SELECTION_RANGE
selectionEnd	write: MSG_VIS_TEXT_SELECT_RANGE
	read: MSG_VIS_TEXT_GET_SELECTION_RANGE
selectionLen	write: MSG_VIS_TEXT_SELECT_RANGE
	read: MSG_VIS_TEXT_GET_SELECTION_RANGE
SelectedText\$	write: MSG_VIS_TEXT_SELECT_RANGE
TextRange\$	MSG_VIS_TEXT_GET_SELECTION_PTR
	MSG_VIS_TEXT_GET_SELECTION_PTR
fontID	write: MSG_VIS_TEXT_SET_FONT_ID
fontSize	read: MSG_VIS_TEXT_GET_CHAR_ATTR: VTCA_fontID
	write: MSG_VIS_TEXT_SET_POINT_SIZE
textStyle	read: MSG_VIS_TEXT_GET_CHAR_ATTR: VTCA_pointSize
	write: MSG_VIS_TEXT_SET_CHAR_ATTR:
TS_UNDERLINE	read: MSG_VIS_TEXT_GET_CHAR_ATTR: VTCA_textStyles
TS_STRIKE_THRU	1
TS_SUBSCRIPT	2
TS_SUPERSCRIPT	4
TS_ITALIC	8
TS_BOLD	16
TS_OUTLINE	32
textColor	64
	write: MSG_VIS_TEXT_SET_CHAR_ATTR:
backColor	read: MSG_VIS_TEXT_GET_CHAR_ATTR: VTCA_color
justifyText	MSG_VIS_TEXT_SET_WASH_COLOR
	write: MSG_VIS_TEXT_SET_PARA_ATTR:
lineSpacing	read: MSG_VIS_TEXT_GET_PARA_ATTR: VTPA_attributes
	write: MSG_VIS_TEXT_SET_PARA_ATTR:
margins	read: MSG_VIS_TEXT_GET_PARA_ATTR: VTPA_lineSpacing
	write: MSG_VIS_TEXT_SET_PARA_ATTR:
topSpace	read: MSG_VIS_TEXT_GET_PARA_ATTR: VTPA_leftMargin,
	VTPA_rightMargin, VTPA_paraMargin
	write: MSG_VIS_TEXT_SET_PARA_ATTR:
	read: MSG_VIS_TEXT_GET_PARA_ATTR:
	VTPA_spaceOnTop
textFilter	MSG_VIS_TEXT_SET_FILTER ... ~_GET_FILTER
TF_NONE	VTFC_NO_FILTER
TF_NORMAL_ASCII	VTFC_NORMAL_ASCII
TF_DOS_CHARACTER_SET	VTFC_DOS_CHARACTER_SET
TF_ALPHA	VTFC_ALPHA
TF_ALPHA_NUMERIC	VTFC_ALPHA_NUMERIC
TF_DASHED_ALPHA_NUMERIC	VTFC_DASHED_ALPHA_NUMERIC
TF_NUMERIC	VTFC_NUMERIC
TF_SIGNED_NUMERIC	VTFC_SIGNED_NUMERIC
TF_SIGNED_DECIMAL	VTFC_SIGNED_DECIMAL
TF_FLOAT_DECIMAL	VTFC_FLOAT_DECIMAL
TF_LEGAL_FILENAMES	VTFC_LEGAL_FILENAMES
TF_LEGAL_DOS_FILENAMES	VTFC_DOS_FILENAMES
TF_LEGAL_DOS_PATH	VTFC_DOS_PATH
TF_LEGAL_DOS_VOLUME_NAMES	VTFC_DOS_VOLUME_NAMES
TF_DATE	VTFC_DATE
TF_TIME	VTFC_TIME
TF_MAKE_UPPERCASE	VTFC_UPCASE_CHARS
TF_NO_SPACES	VTFC_NO_SPACES

R-BASIC Quick Reference • Objects

All object classes, instance variables, hints and constants.

textAttrs	MSG_VIS_TEXT_SET_FILTER ... ~_GET_FILTER TA_USE_TAB_FOR_NAVIGATION VTFC_NO_TABS
modified	read: MSG_VIS_TEXT_GET_USER_MODIFIED write: MSG_VIS_TEXT_SET_USER_MODIFIED MSG_VIS_TEXT_SET_NOT_USER_MODIFIED
<u>ActionHandlers</u> TextAction	
OnModified	MSG_META_TEXT_USER_MODIFIED()
OnSelectionChanged	MSG_META_KBD_CHAR, MSG_META_START_SELECT, MSG_META_PTR, MSG_VIS_TEXT_SELECT_RANGE For LargeText: MSG_META_LARGE_START_SELECT, MSG_META_LARGE_PTR
<u>Other Action Handlers</u>	
OnKeyPressed	see "Input Handling"
OnFocusChanged	see "Input Handling"
OnTargetChanged	see "Input Handling"
<u>Methods</u>	
Append	MSG_VIS_TEXT_APPEND_PTR
Insert	MSG_VIS_TEXT_SELECT_RANGE(cursorPos) + MSG_VIS_TEXT_REPLACE_SELECTION_PTR
ReplaceSelection	MSG_VIS_TEXT_REPLACE_SELECTION_PTR
DeleteSelection	MSG_VIS_TEXT_DELETE_SELECTION
DeleteRange	MSG_VIS_TEXT_SELECT_RANGE + MSG_VIS_TEXT_DELETE_SELECTION
ShowCursor	MSG_VIS_TEXT_SELECT_RANGE(cursorPos) + MSG_VIS_TEXT_SHOW_POSITION
Suspend	MSG_META_SUSPEND
EndSuspend	MSG_META_UNSPEND
<u>File related Methods</u>	
WriteToFile	File related methods are not supported in SDK
ReplaceFromFile	
InsertFromFile	
FileTextSize	
WriteToVMFile	
ReplaceFromVMFile	
InsertFromVMFile	
VMFileTextSize	
<u>VisClass-level instances</u>	
managed	VI_attr: VA_MANAGED
drawable	VI_attr: VA_DRAWABLE + check in MSG_VIS_DRAW
detectable	VI_attr: VA_DETECTABLE
visPosition	VI_bounds
visSize	VI_bounds
visTextFrame	not available in SDK, MSG_VIS_DRAW overwritten
visTextFrameOptions	not available in SDK, MSG_VIS_DRAW overwritten
<u>SDK Programmers Support</u>	
MarkInvalid2	MSG_VIS_MARK_INVALID(visOptFlags, updateMode);
visClassAttrs	VI_attr