JFT-145-1-GUI.SRM

30-September-94

SOFTWARE REFERENCE MANUAL

FOR THE

GRAPHICAL USER INTERFACE (GUI)

OF THE

ADA DISTRIBUTED INTERACTIVE SIMULATION (ADIS) SUPPORT SYSTEM

CONTRACT NO. N00421-92-D-0028

CDRL SEQUENCE NO: A009

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What is the ADIS GUI?tc "What is the ADIS GUI?"\l 1§

The ADIS GUI provides the DIS Gateway (DG) and the Ordnance Server (OS) with graphical user interfaces which are consistent and easy to use. These graphical user interfaces are written using the X Window System version X11R5 with Motif 1.2.

What is needed to use the ADIS GUI?tc "What is needed to use the ADIS GUI?"\l 2§

The ADIS GUI was developed on a Silicon Graphics Indigo R4000 running IRIX 5.2. The ADIS GUI code compiles using Verdix Ada Compiler 6.2.1 and the X Window System version X11R5 with Motif 1.2. Therefore, this documentation assumes you have a working knowledge of Ada, the X Window System, and Motif. Three separate ADIS GUI executables exist, one each for the DG Server, the DG Client, and the OS. The DG Server GUI (XDGS) allows the user to configure and control the DG Server. The DG Client GUI (XDGC) allows the user to configure and control the DG Client. The OS GUI (XOS) allows the user to configure and control the OS.

What do you need to know to use the ADIS GUI?tc "What do you need to know to use the ADIS GUI?"\l 2§

A working knowledge of graphical user interfaces is necessary to use the ADIS GUIs. In particular, the user must understand the basics of using an application whose interface is based on the X Window System.

How does the ADIS GUI work?tc "How does the ADIS GUI work?"\l 1§

The user may open or save configuration files by selecting the appropriate option from the “File” menu. You can quit the ADIS GUI application by selecting the “Quit” menu item from the “File” menu.

XDG_Servertc "XDG Server"\l 2§

The user may shut down the DG Server and quit the XDG_Server GUI application by selecting the “Shutdown Server” menu item from the “File” menu.

The “XDG Server” menu contains three items: “Set Parameters,” “Monitors,” and “Error Notices.”

When the user selects the “Set Parameters” menu item from the “XDG Server” menu, the “XDG Server Set Parameters” window is displayed. A list of buttons on the left side of this window allows the user to select groups of parameters that may be changed. When one of these buttons is pressed, a panel of data entry fields and option menus (as appropriate for the parameters being displayed) appears on the right side of this window. When the mouse cursor is positioned over any data entry field or option menu, help for that item will be displayed in the field labeled “Help”: at the bottom of the screen. Typing a new value into a data entry field or selecting an item from an option menu will change that value in the DG Server when the “Apply” button is pressed. Pressing the button labeled “Apply” at the bottom right of the window will send the values of all changed parameters to the DG Server. Pressing the button labeled “Cancel” at the bottom left of the window will abort all changes (the fields will hold their values) and close this window.

When the user selects the “Monitors” menu item from the “XDG Server” menu, the “XDG

Server Monitors" window is displayed. The setup of this window is very similar to that of the "XDG Server Set Parameters" window described above, except that the data displayed may not be edited; it is for viewing only.

When the user selects the "Error Notices" menu item from the "XDG Server" menu, the "XDG Server Error Notices Monitor" window is displayed. This window displays all DG Server errors with the time of the occurrence of each error. The user can scroll back to see previous errors, and the display will automatically display new errors as they occur.

XDG_Clienttc "XDG Client"\l 2§

The operation of the XDG_Client GUI application is nearly identical to that of the XDG_Server GUI application. Please refer to the section describing the operation of the XDG_Client GUI application above and note the following exceptions.

The XDG_Client GUI application does not contain the option "Shutdown Server" under the "File" menu. The "XDG Client Set Parameters" window of the XDG_Client GUI application contains different panels than that of the XDG_Server GUI application, but they operate identically.

XOStc "XOS"\l 2§

The operation of the XOS GUI application is nearly identical to that of the XDG_Server GUI application. Please refer to the section describing the operation of the XDG_Client GUI application above, with the following exceptions.

The XOS GUI application XDG_Client GUI application contains several windows used to set parameters. These include "XOS Set Simulation Parameters," "XOS Set Ordnance Parameters," and "XOS Set General Parameters." The windows of the XOS GUI application used to set parameters contain different panels than the "Set Parameters" window of the XDG_Server GUI application, but they operate identically, with one major exception. The "XOS Set Ordnance Parameters" window contains two new buttons at the bottom center of the window, labeled "Previous" and "Next." The buttons allow the user to navigate through the munitions list and to display and edit parameters for all munitions in the munitions list.

Special Featurestc "Special Features"\l 2§

The ADIS GUI attempts to prevent the user from entering invalid values in the input data fields by restricting the input to fit the appropriate type. For example, the user can only enter valid integers in an integer data field.

Each data field of the ADIS GUI displays context sensitive help in a special "Help" field at the bottom of each window whenever the mouse cursor is positioned over the data field.

How do you bring up the ADIS GUI?tc "How do you bring up the ADIS GUI?"\l 2§

The XDG Server GUI is executed by typing "XDG_Server" at the command prompt, assuming that the user is in the directory in which the XDG_Server application is located.

The XDG Client GUI is automatically executed by the DG; the user does not manually execute the XDG Client GUI application.

The XOS GUI is automatically executed by the OS; the user does not manually execute the XOS GUI application.

How do you configure the ADIS GUI?tc "How do you configure the ADIS GUI?"\l 2§

Please refer to the DG SRM and the OS SRM for information on how to configure the

appropriate ADIS GUI.

How do you control the ADIS GUI?tc "How do you control the ADIS GUI?"\l 2§

Please refer to the above section entitled “How does the ADIS GUI work?” to learn how to control the ADIS GUI.

What does each unit in the ADIS GUI do?tc "What does each unit in the ADIS GUI do?"\l 1§

Below is a break down of the ADIS GUIs into their respective packages and units. The package name (with the filename of its spec and body, and with the purpose of the package) is given first. The “(_)” indicates a spec and body both exist; the spec filename uses an underscore and the body does not. In the event that only a spec or body exists, its filename will be listed with or without the underscore as appropriate. Following the package information, the filename of each unit within the package, as well as its purpose, is included.

Utilities

Utilities(_).ada

The Utilities package holds frequently used, general-purpose, units. These units perform conversions and other manipulations on strings and simple data types.

Min

Utilities.ada

This function returns the minimum of the two passed values.

Max

Utilities.ada

This function returns the maximum of the two passed values.

String_To_Float_String

Utilities_String_To_Float_String.ada

This procedure converts the string passed in and ensures that is in a properly formatted float format.

String_To_Integer_String

Utilities_String_To_Integer_String.ada

This procedure converts the string passed in and ensures that is in a properly formatted integer format.

String_To_Hexadecimal_String

Utilities_String_To_Hexadecimal_String.ada

This procedure converts the string passed in and ensures that it is in a properly formatted hexadecimal format.

String_To_Binary_String

Utilities_String_To_Binary_String.ada

This procedure converts the string passed in and ensures that it is in a properly formatted binary format.

Length_Of_String

Utilities_Length_Of_String.ada

This procedure returns the number of characters in the passed string until the character ASCII.NUL is reached. This is useful since strings are null-terminated in X.

Get_Integer_From_Text

Utilities_Get_Integer_From_Text.ada

This procedure returns the integer equivalent of the passed text. A BOOLEAN True is returned in Success if the procedure can extract an integer, and False is returned if it fails (i.e., the text string is null, empty, or contains an invalid integer string.)

Get_Float_From_Text

Utilities_Get_Float_From_Text.ada

This procedure returns the float equivalent of the passed text. A BOOLEAN True is returned in Success if the procedure can extract a float, and False is returned if it fails (i.e., the text string is null, empty, or contains an invalid float string.)

Get_Hexadecimal_From_Text

Utilities_Get_Hexadecimal_From_Text.ada

This procedure returns the integer equivalent of the passed hexadecimal string text. A BOOLEAN True is returned in Success if the procedure can extract an integer, and False is returned if it fails (i.e., the text string is null, empty, or contains an invalid hexadecimal string.)

Get_Binary_From_Text

Utilities_Get_Binary_From_Text.ada

This procedure returns the integer equivalent of the passed binary string text. A BOOLEAN True is returned in Success if the procedure can extract an integer, and False is returned if it fails (i.e., the text string is null, empty, or contains an invalid binary string.)

Integer_To_String

Utilities_Integer_To_String.ada

This procedure converts the passed INTEGER into its string equivalent, returning it in the passed STRING parameter.

Float_To_String

Utilities_Float_To_String.ada

This procedure converts the passed FLOAT into its string equivalent, returning it in the passed STRING parameter.

Hexadecimal_To_String

Utilities_Hexadecimal_To_String.ada

This procedure converts the passed INTEGER into its hexadecimal string equivalent, returning it in the passed STRING parameter.

Binary_To_String

Utilities_Binary_To_String.ada

This procedure converts the passed INTEGER into its binary string equivalent, returning it in the passed STRING parameter.

Strip_Spaces

Utilities_Strip_Spaces.ada

This procedure strips all leading and trailing spaces from the passed string. The non-space portions of the string are moved forward to replace any leading spaces, and trailing spaces are replaced with ASCII.NUL characters.

Time_To_String

Utilities_Time_To_String.ada

This procedure converts a variable of type Calendar.TIME into its STRING equivalent, with the hours, minutes, and seconds padded with zeroes.

Motif_Utilities

Motif_Utilities(_).ada

The Motif_Utilities package holds frequently used Motif and X related units. These units perform such functions as creating common widgets, getting widget ancestors, setting common widget resources, getting formatted data from text widgets, restricting text widget input to match integer and float types, prompting/informing the user, building menu items and menus, and installing and updating ActiveHelp.

Create_Label

Motif_Utilities.ada

This function creates a label with the passed label parented to the passed parent.

Create_Pushbutton

Motif_Utilities.ada

This function creates a pushbutton with the passed label parented to the passed parent.

Create_Togglebutton

Motif_Utilities.ada

This function creates a togglebutton with the passed label parented to the passed parent.

Get_Shell

Motif_Utilities.ada

This function returns the first shell parent of the passed widget.

Get_Topshell

Motif_Utilities.ada

This function returns the first WMshell parent of the passed widget.

Display_Message

Motif_Utilities.ada

This procedure creates a dialog displaying the passed message, with the passed title. Pressing the dialog's only button unmanages it.

Set_Cursor

Motif_Utilities.ada

This procedure sets the cursor of the window of the passed widget to the passed cursor id.

Set_Labelstring

Motif_Utilities.ada

This procedure sets the labelString resource of the passed widget to the passed string.

Get_Labelstring

Motif_Utilities.ada

This function returns the label string of the passed widget as a text string.

Make_Color

Motif_Utilities.ada

This function returns the pixel colormap entry associated with the color color_name in the widget parent, allocating it if necessary. The returned value Pixel can be used to set the XmNbackground and XmNforeground widget resources.

Prompt_User

Motif_Utilities.ada

This function presents the user with a prompt and allows you to choose one of up to three choices (from input parameters). The chosen response's mnemonic is returned.

Build_Menu

Motif_Utilities.ada

This function builds a menu based on the passed array of MENU_ITEM_REC variables, parented to the passed widget parent. The array of MENU_ITEM_REC variables defines the menu type (standard menu, option menu, or popup menu) as well as all menu items and their attributes.

Build_Menu_Item

Motif_Utilities.ada

This function assembles a MENU_ITEM_REC from a list of parameters. This is an optional convenience function. The created MENU_ITEM_REC variable can then be used to construct an array of MENU_ITEM_REC variables for use in the call to Build_Menu (see above).

Install_Active_Help

Motif_Utilities_Install_Active_Help.ada

This procedure installs active help for the specified widget. This requires that a text field be dedicated to the purpose of displaying the ActiveHelp messages.

Update_Help_Field_EH

Motif_Utilities_Update_Help_Field_EH.ada

This event handler updates the text widget passed into Help_Text_Widget with the string held in the User_Data field of the callback's parent widget. It is automatically installed by the call to Install_Active_Help.

Install_Text_Restrictions

Motif_Utilities_Install_Text_Restrictions.ada

This unit installs textfield callbacks which restrict the passed textfield widget to only accept as valid input text matching the passed criteria.

Install_Text_Restrictions_With_Integer_Range

Motif_Utilities_Install_Text_Restrictions_With_Integer_Range.ada

This unit installs textfield callbacks which restrict the passed text widget to only accept as valid input text matching the passed criteria, including a range of valid integer values.

Install_Text_Restrictions_With_Float_Range

Motif_Utilities_Install_Text_Restrictions_With_Float_Range

This unit installs textfield callbacks which restrict the passed text widget to only accept as valid input text matching the passed criteria, including a range of valid float values.

Get_Integer_From_Text_Widget

Motif_Utilities_Get_Integer_From_Text_Widget.ada
This procedure returns the integer equivalent of the text contained in the passed text widget, via the passed parameter Return_Integer. A BOOLEAN True is returned in Success if the procedure can extract an integer, and False is returned if it fails (i.e., the text widget is null, empty, or contains an invalid integer string.)

Get_Float_From_Text_Widget

Motif_Utilities_Get_Float_From_Text_Widget.ada
This procedure returns the float equivalent of the text contained in the passed text widget, via the passed parameter Return_Float. A BOOLEAN True is returned in Success if the procedure can extract a float, and False is returned if it fails (i.e., the text widget is null, empty, or contains an invalid float string.)

Get_Hexadecimal_From_Text_Widget

Motif_Utilities_Get_Hexadecimal_From_Text_Widget.ada
This procedure returns the integer equivalent of the hexadecimal text contained in the passed text widget, via the passed parameter Return_Integer. A BOOLEAN True is returned in Success if the procedure can extract an integer, and False is returned if it fails (i.e., the text widget is null, empty, or contains an invalid hexadecimal string.)

Get_Binary_From_Text_Widget

Motif_Utilities_Get_Binary_From_Text_Widget.ada
This procedure returns the integer equivalent of the binary text contained in the passed text widget, via the passed parameter Return_Integer. A BOOLEAN True is returned in Success if the procedure can extract an integer, and False is returned if it fails (i.e., the text widget is null, empty, or contains an invalid binary string.)

Set_Boolean_Value_CB

Motif_Utilities_Set_Boolean_Value_CB.ada
This procedure sets the value of the Boolean variable in the client_data parameter (named Boolean_Value here) to the value in the userData field of the activating widget.

Set_Integer_Value_CB

Motif_Utilities_Set_Integer_Value_CB.ada
This procedure sets the value of the Integer variable in the client_data parameter (named Integer_Value here) to the value in the userData field of the activating widget.

Destroy_Widget_CB

Motif_Utilities_Destroy_Widget_CB.ada
This procedure calls Xt.DestroyWidget on the Widget_To_Be_Destroyed parameter.

XmTextSetInsertionPosition

Motif_Utilities.ada
Re-imported due to bad Verdix binding.

Create_Widget

Motif_Utilities.ada
This private unit creates a widget with the passed label parented to the passed parent.

Prompt_Response

Motif_Utilities.ada
This private unit is used by the public unit Prompt_User to handle the pushbutton callbacks.

Prompt_Handle_Event

Motif_Utilities.ada

This private unit is used by the public unit Prompt_User to handle KeyRelease events.

Text_Restrict_CB

Motif_Utilities.ada

This private unit is used by the public units Install_Text_Restrictions, Install_Text-_Restrictions_With_Integer_Range, and Install_Text_Restrictions_With_Float_Range to actually perform the text validation and to veto any invalid text modifications.

XDG_Server_Main_CB

XDG_Server_Main_CB(_).ada

The XDG_Server_Main_CB package holds XDG Server units to load and save the configuration files, initialize all “set parameters” panels, and quit the XDG Server GUI.

Open_CB

XDG_Server_Main_CB_Open_CB.ada

This procedure allows the user to open an existing configuration file.

Open_Config_File_FSB_CB

XDG_Server_Main_CB_Open_Config_File_FSB_CB.ada

This procedure handles the Open FSB callbacks for opening and XDG Server configuration file.

Reinitialize_Panels_Timeout

XDG_Server_Main_CB.ada

This procedure waits for the DG Server to load the new configuration file (this happens when the config file changes flag in the interface becomes False), and then calls XDG_Server.Initialize_Set_Parms_Panels to reinitialize all Set Parameters panels.

Save_CB

XDG_Server_Main_CB_Save_CB.ada

This procedure allows the user to save the existing data in a configuration file.

Save_Config_File_FSB_CB

XDG_Server_Main_CB_Save_Config_File_FSB_CB.ada

This procedure handles the Save FSB callbacks for opening and XDG Server configuration file.

Quit_CB

XDG_Server_Main_CB_Quit_CB.ada

This procedure prompts the user to quit the application. If the user chooses to quit, the application is terminated.

XDG_Server

XDG_Server(_).ada

The XDG_Server package holds XDG Server units to create, initialize, and update all XDG Server windows and panels, to write changes from the set parameters panels to shared memory, and to create and update the ADIS DG Server GUI monitoring displays.

Create_Set_Parms_Window_CB

XDG_Server_Create_Set_Parms_Window_CB.ada

This procedure displays the XDG_Server Set Parameters window.

Create_Set_Parms_Panel_Network

XDG_Server_Create_Set_Parms_Panel_Network.ada

This procedure displays the Set Parameters Network Panel under the passed widget hierarchy.

Create_Set_Parms_Panel_Threshold

XDG_Server_Create_Set_Parms_Panel_Threshold.ada

This procedure displays the Set Parameters Threshold Panel under the passed widget hierarchy.

Create_Set_Parms_Panel_PDU_Filters

XDG_Server_Create_Set_Parms_Panel_PDU_Filters.ada

This procedure displays the Set Parameters PDU Filters Panel under the passed widget hierarchy.

Create_Set_Parms_Panel_Specific_Filters

XDG_Server_Create_Set_Parms_Panel_Specific_Filters.ada

This procedure displays the Set Parameters Specific Filters Panel under the passed widget hierarchy.

Create_Set_Parms_Panel_DG_Parameters

XDG_Server_Create_Set_Parms_Panel_DG_Parameters.ada

This procedure displays the Set Parameters DG Parameters Panel under the passed widget hierarchy.

Create_Set_Parms_Panel_Error

XDG_Server_Create_Set_Parms_Panel_Error.ada

This procedure displays the Set Parameters Error Parameters Panel under the passed widget hierarchy.

Create_Set_Parms_Panel_Hash

XDG_Server_Create_Set_Parms_Panel_Hash.ada

This procedure displays the Set Parameters Hash Parameters Panel under the passed widget hierarchy.

Create_Set_Parms_Panel_Exercise

XDG_Server_Create_Set_Parms_Panel_Exercise.ada

This procedure displays the Set Parameters Exercise Parameters Panel under the passed widget hierarchy.

Create_Error_Notices_Window_CB

XDG_Server_Create_Error_Notices_Window_CB.ada

This procedure displays the XDG Server Error Notices window.

Create_Monitors_Window_CB

XDG_Server_Create_Monitors_Window_CB.ada
This procedure displays the XDG Server Monitors window.

Create_Monitors_Panel_Entities

XDG_Server_Create_Monitors_Panel_Entities.ada
This procedure displays the Monitor Entities Panel under the passed widget hierarchy.

Create_Monitors_Panel_Gateway

XDG_Server_Create_Monitors_Panel_Gateway.ada
This procedure displays the Monitor Gateway Panel under the passed widget hierarchy.

Create_Monitors_Panel_Errors

XDG_Server_Create_Monitors_Panel_Errors.ada
This procedure displays the Monitor Errors Panel under the passed widget hierarchy.

Initialize_Panel_Network

XDG_Server_Initialize_Panel_Network.ada
This procedure initializes the Network Panel widgets with the values from the DG Shared Memory interface.

Initialize_Panel_Threshold

XDG_Server_Initialize_Panel_Threshold.ada
This procedure initializes the Threshold Panel widgets with the values from the DG Shared Memory interface.

Initialize_Panel_DG_Parameters

XDG_Server_Initialize_Panel_DG_Parameters.ada
This procedure initializes the DG_Parameters Panel widgets with the values from the DG Shared Memory interface.

Initialize_Panel_PDU_Filters

XDG_Server_Initialize_Panel_PDU_Filters.ada
This procedure initializes the PDU_Filters Panel widgets with the values from the DG Shared Memory interface.

Initialize_Panel_Specific_Filters

XDG_Server_Initialize_Panel_Specific_Filters.ada
This procedure initializes the Specific_Filters Panel widgets with the values from the DG Shared Memory interface.

Initialize_Panel_Error

XDG_Server_Initialize_Panel_Error.ada
This procedure initializes the Error Panel widgets with the values from the DG Shared Memory interface.

Initialize_Panel_Hash

XDG_Server_Initialize_Panel_Hash.ada
This procedure initializes the Hash Panel widgets with the values from the DG Shared Memory interface.

Initialize_Panel_Exercise

XDG_Server_Initialize_Panel_Exercise.ada
This procedure initializes the Exercise Panel widgets with the values from the DG Shared Memory interface.

Initialize_Set_Parms_Panels

XDG_Server_Initialize_Set_Parms_Panels.ada

This procedure initializes all XDG Server Set Parameters panels using values from the DG Shared Memory interface.

Update_Error_Notices

XDG_Server_Update_Error_Notices.ada

This procedure is a timeout procedure which updates the Error Notices window at an update rate specified in the XDG_Server package spec.

Update_Error_History

XDG_Server_Update_Error_History.ada

This procedure is a timeout procedure which updates the Error History window at an update rate specified in the XDG_Server package spec.

Apply_CB

XDG_Server_Apply_CB.ada

This procedure writes all changed values in all Set Parameters panels to shared memory.

Cancel_Set_Parms_CB

XDG_Server_Cancel_Set_Parms_CB.ada

This procedure closes the Set Parameters window and cancels all pending XDG Server parameter changes.

Close_Window_CB

XDG_Server_Close_Window_CB.ada

This procedure closes the window pointed to by the parameter Shell by unmanaging (not destroying) it.

XDG_Client_Main_CB

XDG_Client_Main_CB(_).ada

The XDG_Client_Main_CB package holds XDG Client units to load and save the configuration files, initialize all “set parameters” panels, and quit the XDG Client GUI.

Open_CB

XDG_Client_Main_CB_Open_CB.ada

This procedure allows the user to open an existing configuration file.

Open_Config_File_FSB_CB

XDG_Client_Main_CB_Open_Config_File_FSB_CB.ada

This procedure handles the Open FSB callbacks for opening and XDG Client configuration file.

Reinitialize_Panels_Timeout

XDG_Client_Main_CB.ada

This procedure waits for the DG Client to load the new configuration file (this happens when the config file changes flag in the interface becomes False) and then calls XDG_Client.Initialize_Set_Parms_Panels to reinitialize all Set Parameters panels.

Save_CB

XDG_Client_Main_CB_Save_CB.ada

This procedure allows the user to save the existing data in a configuration file.

Save_Config_File_FSB_CB

XDG_Client_Main_CB_Save_Config_File_FSB_CB.ada
This procedure handles the Save FSB callbacks for opening and XDG Client configuration file.

Quit_CB

XDG_Client_Main_CB_Quit_CB.ada
This procedure prompts the user to quit the application. If the user chooses to quit, the application is terminated.

XDG_Client

XDG_Client(_).ada
The XDG_Client package holds XDG Client units to create, initialize, and update all XDG Client windows and panels, to write changes from the set parameters panels to shared memory, and to create and update the ADIS DG Client GUI monitoring displays.

Create_Set_Parms_Window_CB

XDG_Client_Create_Set_Parms_Window_CB.ada
This procedure displays the XDG_Client Set Parameters window.

Create_Set_Parms_Panel_DG_Parameters

XDG_Client_Create_Set_Parms_Panel_DG_Parameters.ada
This procedure displays the Set Parameters DG Parameters Panel under the passed widget hierarchy.

Create_Set_Parms_Panel_Error

XDG_Client_Create_Set_Parms_Panel_Error.ada
This procedure displays the Set Parameters Error Parameters Panel under the passed widget hierarchy.

Create_Set_Parms_Panel_Hash

XDG_Client_Create_Set_Parms_Panel_Hash.ada
This procedure displays the Set Parameters Hash Parameters Panel under the passed widget hierarchy.

Create_Set_Parms_Panel_Exercise

XDG_Client_Create_Set_Parms_Panel_Exercise.ada
This procedure displays the Set Parameters Exercise Parameters Panel under the passed widget hierarchy.

Create_Set_Parms_Panel_Synchronization

XDG_Client_Create_Set_Parms_Panel_Synchronization.ada
This procedure displays the Set Parameters Synchronization Parameters Panel under the passed widget hierarchy.

Create_Error_Notices_Window_CB

XDG_Client_Create_Error_Notices_Window_CB.ada
This procedure displays the XDG Client Error Notices window.

Create_Monitors_Window_CB

XDG_Client_Create_Monitors_Window_CB.ada
This procedure displays the XDG Monitors window.

Create_Monitors_Panel_Entities

XDG_Client_Create_Monitors_Panel_Entities.ada
This procedure displays the Monitor Entities Panel under the passed widget hierarchy.

Create_Monitors_Panel_Gateway

XDG_Client_Create_Monitors_Panel_Gateway.ada

This procedure displays the Monitor Gateway Panel under the passed widget hierarchy.

Create_Monitors_Panel_Errors

XDG_Client_Create_Monitors_Panel_Errors.ada

This procedure displays the Monitor Errors Panel under the passed widget hierarchy.

Initialize_Panel_DG_Parameters

XDG_Client_Initialize_Panel_DG_Parameters.ada

This procedure initializes the DG_Parameters Panel widgets with the values from the DG Shared Memory interface.

Initialize_Panel_Error

XDG_Client_Initialize_Panel_Error.ada

This procedure initializes the Error Panel widgets with the values from the DG Shared Memory interface.

Initialize_Panel_Hash

XDG_Client_Initialize_Panel_Hash.ada

This procedure initializes the Hash Panel widgets with the values from the DG Shared Memory interface.

Initialize_Panel_Exercise

XDG_Client_Initialize_Panel_Exercise.ada

This procedure initializes the Exercise Panel widgets with the values from the DG Shared Memory interface.

Initialize_Panel_Synchronization

XDG_Client_Initialize_Panel_Synchronization.ada

This procedure initializes the Synchronization Panel widgets with the values from the DG Shared Memory interface.

Initialize_Set_Parms_Panels

XDG_Client_Initialize_Set_Parms_Panels.ada

This procedure initializes all XDG Client Set Parameters panels using values from the DG Shared Memory interface.

Update_Error_Notices

XDG_Client_Update_Error_Notices.ada

This procedure is a timeout procedure which updates the Error Notices window at an update rate specified in the XDG_Client package spec.

Update_Error_History

XDG_Client_Update_Error_History.ada

This procedure is a timeout procedure which updates the Error History window at an update rate specified in the XDG_Client package spec.

Apply_CB

XDG_Client_Apply_CB.ada

This procedure writes all changed values in all Set Parameters panels to shared memory.

Cancel_Set_Parms_CB

XDG_Client_Cancel_Set_Parms_CB.ada

This procedure closes the Set Parameters window and cancels all pending XDG Client parameter changes.

Close_Window_CB

XDG_Client_Close_Window_CB.ada

This procedure closes the window pointed to by the parameter Shell by unmanaging (not

destroying) it.

XOS_Main_CB

XOS_Main_CB(_).ada

The XOS_Main_CB package holds XOS units to load and save the configuration files, initialize all "set parameters" panels, and quit the XOS GUI.

Open_CB

XOS_Main_CB_Open_CB.ada

This procedure allows the user to open an existing configuration

Open_Config_File_FSB_CB

XOS_Main_CB_Open_Config_File_FSB_CB.ada

This procedure handles the Open FSB callbacks for opening an XOS configuration file.

Reinitialize_Panels_Timeout

XOS_Main_CB.ada

This procedure waits for the OS to load the new configuration file (this happens when the config file changes flag in the interface becomes False), and then calls XOS.Initialize_Set_Parms_Panels to reinitialize all Set Parameters panels.

Save_CB

XOS_Main_CB_Save_CB.ada

This procedure allows the user to save the existing data in a configuration file.

Save_Config_File_FSB_CB

XOS_Main_CB_Save_Config_File_FSB_CB.ada

This procedure handles the Save FSB callbacks for saving an XOS configuration file.

Quit_CB

XOS_Main_CB_Quit_CB.ada

This procedure prompts the user to quit the application. If the user chooses to quit, the application is terminated.

XOS

XOS(_).ada

The XOS package holds XOS units to create, initialize, and update all XOS windows and panels, to write changes from the set parameters panels to shared memory, and to create and update the ADIS XOS GUI monitoring displays.

Create_Ord_Parms_Window_CB

XOS_Create_Ord_Parms_Window_CB.ada

This procedure displays the XOS Set Ordnance Parameters window.

Create_Ord_Panel_Aero

XOS_Create_Ord_Panel_Aero.ada

This procedure displays the Ordnance Aerodynamics Parameters Panel under the passed widget hierarchy.

Create_Ord_Panel_Term

XOS_Create_Ord_Panel_Term.ada

This procedure displays the Ordnance Termination Parameters Panel under the passed widget hierarchy.

Create_Ord_Panel_Gen

XOS_Create_Ord_Panel_Gen.ada

This procedure displays the Ordnance General Parameters Panel under the passed widget hierarchy.

Create_Ord_Panel_Entity

XOS_Create_Ord_Panel_Entity.ada

This procedure displays the Ordnance Entity Parameters Panel under the passed widget hierarchy.

Create_Ord_Panel_Emitter

XOS_Create_Ord_Panel_Emitter.ada

This procedure displays the Ordnance Emitter Parameters Panel under the passed widget hierarchy.

Create_Sim_Parms_Window_CB

XOS_Create_Sim_Parms_Window_CB.ada

This procedure displays the XOS Set Simulation Parameters window.

Create_Sim_Panel_Sim

XOS_Create_Sim_Panel_Sim.ada

This procedure displays the Simulation Parameters Panel under the passed widget hierarchy.

Create_Other_Parms_Window_CB

XOS_Create_Other_Parms_Window_CB.ada

This procedure displays the XOS Set Other Parameters window.

Create_Other_Panel_Error

XOS_Create_Other_Panel_Error.ada

This procedure displays the Other Error Parameters Panel under the passed widget hierarchy.

Create_Error_Notices_Window_CB

XOS_Create_Error_Notices_Window_CB.ada

This procedure displays the XOS Error Notices window.

Create_Monitors_Window_CB

XOS_Create_Monitors_Window_CB.ada

This procedure displays the XOS Monitors window.

Create_Monitors_Panel_Errors

XOS_Create_Monitors_Panel_Errors.ada

This procedure displays the Monitor Errors Panel under the passed widget hierarchy.

Initialize_Sim_Panel_Sim

XOS_Initialize_Sim_Panel_Sim.ada

This procedure initializes the Simulation Panel widgets with the values from the OS Shared Memory interface.

Initialize_Ord_Panel_Aero

XOS_Initialize_Ord_Panel_Aero.ada

This procedure initializes the Ordnance Aerodynamic Panel widgets with the values from the OS Shared Memory interface.

Initialize_Ord_Panel_Gen

XOS_Initialize_Ord_Panel_Gen.ada

This procedure initializes the Ordnance General Panel widgets with the values from the OS Shared Memory interface.

Initialize_Ord_Panel_Term

XOS_Initialize_Ord_Panel_Term.ada

This procedure initializes the Ordnance Termination Panel widgets with the values from the OS Shared Memory interface.

Initialize_Ord_Panel_Entity

XOS_Initialize_Ord_Panel_Entity.ada

This procedure initializes the Ordnance Entity Panel widgets with the values from the OS Shared Memory interface.

Initialize_Ord_Panel_Emitter

XOS_Initialize_Ord_Panel_Emitter.ada

This procedure initializes the Ordnance Emitter Panel widgets with the values from the OS Shared Memory interface.

Initialize_Other_Panel_Error

XOS_Initialize_Other_Panel_Error.ada

This procedure initializes the Other Error Panel widgets with the values from the OS Shared Memory interface.

Initialize_Ord_Parms_Panels

XOS_Initialize_Ord_Parms_Panels.ada

This procedure initializes the Ordnance panels by calling their respective Initialize functions.

Initialize_Sim_Parms_Panels

XOS_Initialize_Sim_Parms_Panels.ada

This procedure initializes the Simulation panels by calling their respective Initialize functions.

Initialize_Other_Parms_Panels

XOS_Initialize_Other_Parms_Panels.ada

This procedure initializes the Other panels by calling their respective Initialize functions.

Update_Error_Notices

XOS_Update_Error_Notices.ada

This procedure is a timeout procedure which updates the Error Notices window at an update rate specified in the XOS package spec.

Update_Error_History

XOS_Update_Error_History.ada

This procedure is a timeout procedure which updates the Error History window at an update rate specified in the XOS package spec.

Sim_Apply_CB

XOS_Sim_Apply_CB.ada

This procedure writes all changed values in all Set Simulation Parameters panels to shared memory.

Ord_Apply_CB

XOS_Ord_Apply_CB.ada

This procedure writes all changed values in all Set Ordnance Parameters panels to shared memory.

Ord_Previous_CB

XOS_Ord_Previous_CB.ada

This procedure instructs the OS to place the data for the previous munition in the list in shared memory.

Ord_Next_CB

XOS_Ord_Next_CB.ada

This procedure instructs the OS to place the data for the next munition in the list in shared memory.

Ord_Update_Previous_Next_Buttons

XOS_Ord_Update_Previous_Next_Buttons.ada

This procedure updates the Previous and Next buttons on the Ordnance Parameters window based on OS_GUI.Interface.Ordnance_Display.Top_Of_List and OS_GUI.Interface.Ordnance_Display.End_Of_List.

Ord_Apply_CB

XOS_Ord_Apply_CB.ada

This procedure writes all changed values in all Set Ordnance Parameters panels to shared memory.

Other_Apply_CB

XOS_Other_Apply_CB.ada

This procedure writes all changed values in all Set Other Parameters panels to shared memory.

Text_Country_CB

XOS_Text_Country_CB.ada

This procedure reads the integer out of the parent textfield widget and places the equivalent country name (from DIS_Types.A_COUNTRY_ID) into the label widget whose widget ID is passed in as the client data.

Sim_World_Coord_CB

XOS_Sim_World_Coord_CB.ada

This procedure reads the values out of the standard database origin coordinate fields (in Geodetic coordinates), converts these into world coordinates (AKA, Geocentric coordinates), and places these new values into the appropriate labels in the XOS Simulation Parameters panel.

Close_Window_CB

XOS_Close_Window_CB.ada

This procedure closes the window pointed to by the parameter Shell.

Cancel_Ord_Parms_Window_CB

XOS_Cancel_Ord_Parms_Window_CB.ada

This procedure closes the Ordnance Parameters window and cancels all pending XDG Server parameter changes.

Cancel_Sim_Parms_Window_CB

XOS_Cancel_Sim_Parms_Window_CB.ada

This procedure closes the Sim Parameters window and cancels all pending XDG Server parameter changes.

Cancel_Other_Parms_Window_CB

XOS_Cancel_Other_Parms_Window_CB.ada

This procedure closes the Other Parameters window and cancels all pending XDG Server parameter changes.