

CST-Panel Model

This section describes the CST-Panel model, which is used to create the client modify (maintenance) subprogram for a model. The model-generated specification panels run as part of a common wizard in the Construct Program Generation plug-in for Natural for Windows.

This section covers the following topics:

- Introduction
 - Parameters for the CST-Panel Model
 - User Exits for the CST-Panel Model
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Introduction

To enable a Natural Construct model for the Construct Program Generation plug-in, you must first determine how many panels will be used for the wizard and what information will be presented on each panel. In most cases, the panels will follow a one-to-one relationship with the corresponding modify server panels generated by the CST-Modify model.

The CST-Panel model generates one column of GUI controls per panel. Each column contains a label and control for editing a model specification panel. For greater flexibility, you can include additional controls within user exits. Alternately, you can create your own wizard instead of using the supplied common wizard. (In this case, you will not use the CST-Panel model.)

Note:

The CST-Panel model is only available in the Construct Program Generation plug-in for Natural for Windows. This model is not available in the Natural Construct character interface (NCSTG).

Parameters for the CST-Panel Model

Use the CST-Panel model to generate the client modify (maintenance) subprogram for your model.

After specifying the required parameters on one panel, select Next to proceed to the next panel. To generate the module, select Finish on the last specification panel.

The CST-Panel model has two specification panels:

- Standard Parameters Panel
- Additional Parameters Panel

Standard Parameters Panel

The following example shows the Standard Parameters panel for CST-Panel:

The screenshot shows a window titled "CST-PANEL - Page 1 of 2". On the left side, there is a vertical panel with the "NATURAL Construct" logo and the word "Model" below it. At the bottom of this panel is the "SOFTWARE AG" logo. The main area of the window is titled "Standard Parameters" and contains several input fields: "Module:" (empty), "System:" (containing "SYSPLCGC"), "Model PDA:" (empty with a browse button "..."), "Title:" (empty), "Description:" (a large empty text area), and "Heading:" (empty). At the bottom of the window, there are five buttons: "Help", "Cancel", "Back", "Next", and "Finish".

Use this panel to define standard parameters for your wizard, such as the name of the generated subprogram and the heading displayed at the top of the wizard panel.

The input fields on this panel are:

Field	Description
Module	<p>Name of the Natural subprogram (module) to generate.</p> <p>Module names use the following naming convention:</p> <p>WCNxxMy</p> <p>where <i>xx</i> is the unique identifier for your model and <i>y</i> is letter from A–J that identifies the maintenance panel (A for the first panel, B for the second, etc.). For more information, see Naming Conventions for Model Components.</p>
System	<p>Name of the system (by default, the name of the current library).</p> <p>The system name must be alphanumeric, not exceed 32 characters in length, and does not have to be associated with a Natural library ID. (The combination of the module name and system name is used as a key to access help information for the generated subprogram.)</p>
Model PDA	Name of the parameter data area (PDA) for your model.
Title	Title for the generated subprogram. The title identifies the subprogram for the List Generated Modules function on the Generation main menu and is used internally for program documentation.
Description	Brief description of the subprogram. The description is inserted in the banner at the beginning of the subprogram and is used internally for program documentation.
Heading	Heading displayed at the top of the generated wizard panel. For example, Standard Parameters .

Additional Parameters Panel

The following example shows **Additional Parameters** for CST-Panel:

Field	Description
Field Name	Name of a #PDA or #PDAX variable field in your model PDA or the name of a field in CU--PDA. To select the field from a list of fields in the model PDA, select Note: To use an array field, specify the index value, for example #PDAX-VIEW(5), or select an EDITAREA control.
Prompt	Text used as a label for the field. A TEXTCONSTANT Natural GUI control is generated for each control. The string is based on the value entered in this field. Only the TOGGLEBUTTON (or checkbox) control does not have an extra control generated, as this control includes its own label.
Control Type	Type of Natural GUI control to use. Select one of the following: INPUTFIELD TOGGLEBUTTON EDITAREA SELECTIONBOX
Opt	To modify the size and location attributes for GUI controls, click the ... button. The Optional Parameters window is displayed. For a description of this window, see Reset Default Size and Location Variables.

Reset Default Rectangle Y Values

You can reset and reassign the default Y-coordinate values for GUI controls. Use this option when you have customized the default Y value and want to restore the default.

▶ To reset and reassign the default Y-Coordinate values:

- Select **Reset Y**.

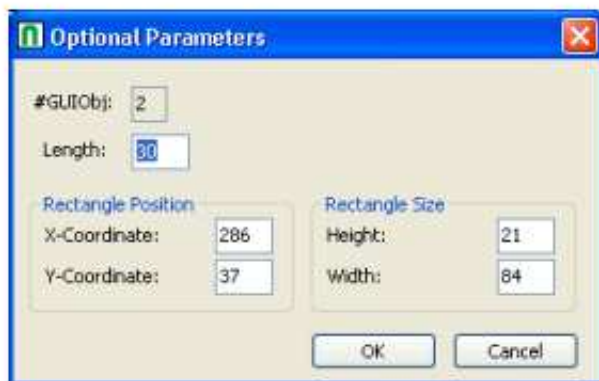
Reset Default Size and Location Variables

You can customize the size and location-related attributes for GUI controls.

▶ To customize the size and location-related attributes:

1. Select **Reset Defaults**.

The **Optional Parameters** window is displayed. For example:



- Change the current size and location-related attributes.

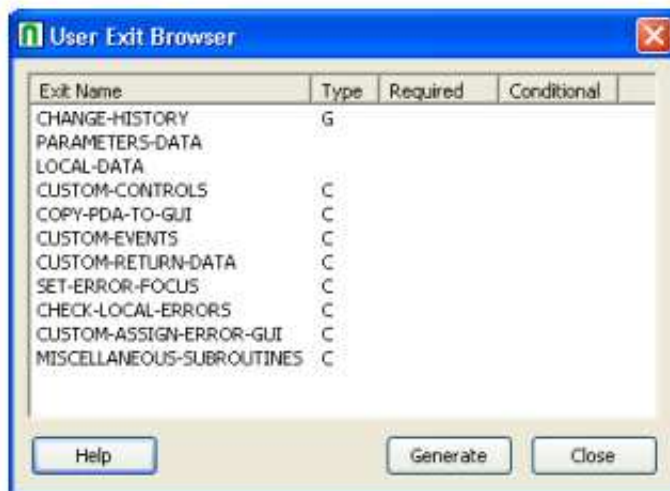
The input fields in this window are:

Field	Description
#GUIObj	Identifier for the current GUI object.
Length	Maximum number of characters that can be entered as input for the specified GUI control. This field applies to EDITAREA and INPUTFIELD controls only.
X-Coordinate	X coordinate value for the GUI control.
Y-Coordinate	Y coordinate value for the GUI control. Note: The generated TEXTCONSTANT control is derived from the X-Coordinate and Y-Coordinate values. These values identify the location of the GUI control in pixels from the top, left corner of the configurable area of the panel.
Height	Height of the GUI control in pixels.
Width	Width of the GUI control in pixels.

- Select **OK**.

User Exits for the CST-Panel Model

The following example shows the User Exit Browser panel for the CST-Panel model:



This section describes the model-specific user exits on this panel. For information about the common user exits on this panel, see *Supplied User Exits*. For information about using the User Exit editor, see *User Exit Editor, Natural Construct Generation*.

Note:

For more information about the model-specific user exits, see the examples and notes in the sample code generated for each exit.

The model-specific user exits for CST-Panel are:

- CHECK-LOCAL-ERRORS
- COPY-PDA-TO-GUI
- CUSTOM-ASSIGN-ERROR-GUI
- CUSTOM-CONTROLS
- CUSTOM-EVENTS
- CUSTOM-RETURN-DATA
- SET-ERROR-FOCUS

CHECK-LOCAL-ERRORS

Use this exit to check for local validation errors on wizard panels. Local errors are detected when the user selects **Finish**, but before the model's validation subprogram is called. If a local validation error occurs, the error is displayed to the user and **Next** or **Finish** becomes inactive.

Note:

Local validations do not occur when the user selects **Previous**.

COPY-PDA-TO-GUI

Use this exit to copy additional fields from the model PDA to GUI controls.

CUSTOM-ASSIGN-ERROR-GUI

Use this exit in combination with the SET-ERROR-FOCUS exit to set focus to custom GUI controls when a validation error is detected.

CUSTOM-CONTROLS

Use this exit to add additional GUI controls to your wizard panel. For each new control, note the number of the last GUIOBJ (GUI object) used by the last generated control and increment by 1.

CUSTOM-EVENTS

Use this exit to handle events for custom GUI controls on the wizard panel. For example, you can use this exit to add a button to the wizard panel and write code to respond to a click event. When a user selects the button, a window is invoked to display additional lookup data.

CUSTOM-RETURN-DATA

Use this exit to copy any additional GUI control values to the model PDA or CU--PDA data areas.

SET-ERROR-FOCUS

Use this exit in combination with the CUSTOM-ASSIGN-ERROR-GUI exit to set focus to custom GUI controls when a validation error is detected.