



CHAPTER 3

Customizing Wizards with Cisco Prime Network Activation Wizard Builder

The following topics provide detailed information about customizing Network Activation wizard metadata files using the Cisco Prime Network Activation Wizard Builder (Network AWB). Topics include:

- [Cisco Prime Network Activation Wizard Builder Overview, page 3-1](#)
- [Cisco Prime Network Activation Wizard Builder GUI, page 3-2](#)
- [Using Cisco Prime Network Activation Wizard Builder to Create and Customize Wizards, page 3-6](#)
- [Wizard Validation Messages, page 3-20](#)

Cisco Prime Network Activation Wizard Builder Overview

Network AWB facilitates Network Activation wizard design and customization. The Network AWB GUI allows you to design or modify wizard metadata files without having to directly edit the metadata file XML using a text or XML editor.

Network AWB is used in two different ways:

- **Customize wizard files**—You can use Network AWB to download existing wizard metadata files, perform edits, then upload them back to the server. Network AWB automatically updates the wizard pages and activation files.
- **Create new wizards**—You can create a new wizard for an existing or new workflow. Network AWB displays the workflow attributes and tracks the assigned and unassigned attributes as you create the new wizard pages.



Note

To access Network AWB, you must have administrator or configurator level privileges.

Network AWB allows you to define the following wizard elements:

- **Wizard screens**—You can define the screens included in the wizard and indicate the workflow attributes that appear on each screen.
- **Attributes**—For workflow attributes, you can define:
 - Attribute display name. This is the field name displayed in the wizard that represents the workflow attribute.
 - Attribute type

- Initialization sequence
 - Whether the attribute is required
 - Validation sequence
 - Tooltip text.
 - Example
 - Shown with disabled
 - Hidden
- Wizard Loops—You can define wizard loops, including number of times the operator will loop through a set of wizard screens. This can be all wizard screens, or a subset of screens. You can also indicate whether the loop is required.
 - Attribute Groups—You can define attribute groups and the conditions that cause attribute groups to appear in the wizard. For example, you define groups based on the device selected by the operator, or based on other wizard selections.
 - XML Preview—The Network AWB XML preview allows you to view the pages and activation XML file text.
 - Wizard validation—You can run the Network AWB wizard validation to verify the wizard is correctly defined before uploading to the gateway.
 - Upload and Download—After validating the new or customized wizard, you can use Network AWB to upload the wizard to the Prime Network gateway and then view the wizard in Prime Network Vision. Conversely, you can use Network AWB to download wizards from the gateway, perform edits, then upload the wizard to the gateway.
 - Saving and exporting files—Network AWB allows you to save the existing Network AWB in its proprietary format to a local directory, or you can export the pages and activation files to a local directory in XML format.

Cisco Prime Network Activation Wizard Builder GUI

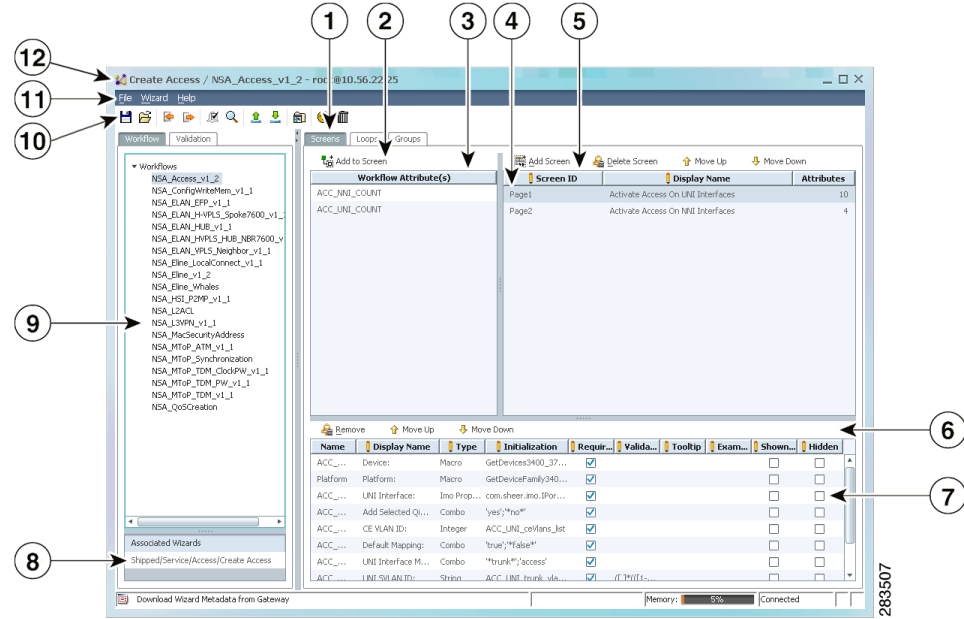
The Network AWB window ([Figure 3-1](#)) is comprised of several menus, a toolbar, multiple window panels, and several tabs:

- Window Title—If a wizard is loaded in the Network AWB session, the window title displays the wizard name and the workflow to which it applies.
- Menu and toolbar—Used to perform Network AWB actions. See [Table 3-1 on page 3-5](#) for a list of actions available from the Network AWB menus and toolbar.
- Workflows—When you start a Network AWB session, it automatically retrieves workflows that are on the gateway and displays them in this area. Right-clicking a workflow displays a Create New Wizard action. This action loads the workflow attributes in the Unassigned Workflow Attributes area. You can create a new wizard for the workflow and assign the unassigned attributes to wizard screens.
- Associated Wizards—Displays the wizards associated to the workflow.
- Screens tab—The tab where you define or customize the wizard screens. (Wizard screens are referred to as pages in the wizard metadata.) The Screens tab is divided into three areas:
 - Workflow Attributes—Displays workflow attributes that are not assigned to any wizard screen. Selecting an unassigned attribute and clicking **Add to Screen** adds the unassigned attribute to the current screen,

- Screens—Displays the wizard screens, display name, and number of attributes. Screen actions—Add Screen, Delete Screen, Move Up, Move Down—allow you to manage the screens.
- Attributes—Lists the attributes assigned to individual wizard screens and allow you define the attribute behavior within the wizard, including attribute display name, the attribute type, initialization, validation, tooltip, and other attribute parameters.

Figure 3-1 shows the main window for the E-LAN VPLS Hub wizard. The wizard has two pages, and one unassigned attribute.

Figure 3-1 Cisco Prime Network AWB Window

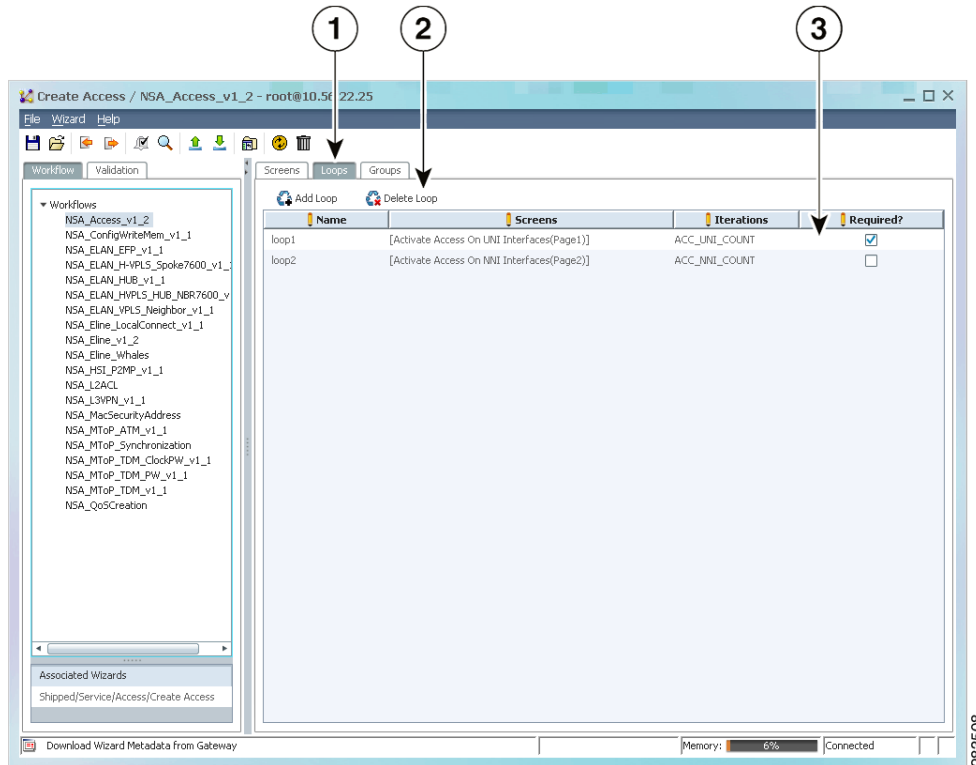


1	Screens tab where wizard screens are designed (screens are called <i>pages</i> in wizard metadata)	7	Table listing all attributes assigned to individual wizard screens (you define display name, attribute type, initialization, validation, tooltip, and so on.)
2	Add to Screen action	8	Wizards associated with the current workflow
3	Workflow attributes that are not assigned to any wizard screen	9	All available workflows on gateway (right-click a workflow to create a new wizard)
4	Screens (pages) defined in this wizard	10	AWB toolbar
5	Actions for managing wizard screens	11	AWB menu
6	Supported actions for rearranging the appearance of attributes on the screen	12	Title bar displaying name of selected wizard

Wizard Loops

Wizard loops are defined on the Prime Network AWB Loops tab. Loops are the number of times the wizard screens are presented iteratively. For example, because multiple sites can be added to Layer 3 VPNs, the Layer 3 VPN wizard uses loops to allow users to add them. [Figure 3-2](#) shows the two Layer 3 VPN wizard loops. One loop consists of three pages (Page1, Page2, and Page3), and the other contains one page (Page4). Both loops are required.

Figure 3-2 Prime Network AWB Window Loops Tab

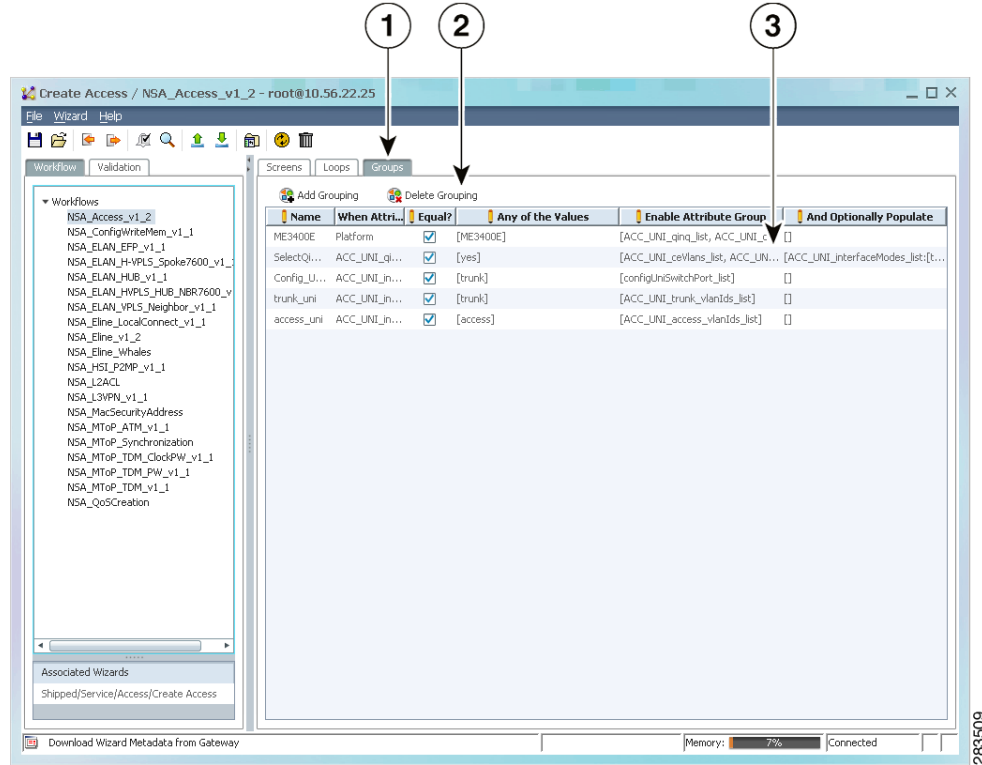


1	Loops tab	3	Loop attributes
2	Loop actions		

Wizard Attribute Groups

Attribute groups define attributes that appear based on the device platform, user entries in another attribute, or other criteria. For example, if VLAN tagging is set to None, the push, pop, and translate attributes are hidden. The VLAN tagging group is defined in the attribute grouping area. [Figure 3-3](#) shows the groups for the Multipoint EFP wizard.

Figure 3-3 Prime Network AWB Window Groups Tab



1	Groups tab	3	Group attributes
2	Group actions		

Prime Network AWB Menus and Toolbar Commands

Table 3-1 lists the commands available from the Prime Network AWB window menus and toolbar:

Table 3-1 Prime Network AWB Menus and Commands












Menu	Command	Tool	Action
File	Open		Opens an existing Prime Network AWB file.
	Save		Saves the current Prime Network AWB file to a local directory. The file can only be opened with Network AWB.
	Save as	—	Saves the current Prime Network AWB file to a particular file.
	Export		Saves (exports) the Prime Network AWB wizard as its component pages and activation files to a local directory. The files can then be opened in a text or XML editor.

Table 3-1 Prime Network AWB Menus and Commands (continued)

Menu	Command	Tool	Action
	Import		Opens a wizard pages and activation file set in Prime Network AWB.
	Exit	—	Closes the Prime Network AWB session.
Wizard	Upload to Gateway		Uploads the wizard pages and activation files in the current Prime Network AWB session to the gateway.
	Download to Gateway		Downloads the wizard pages and activation files to Prime Network AWB.
	Sync with Workflow		Used to identify differences between the currently-loaded wizard and its workflow. The function is useful when a workflow contains updates that are not reflected in the wizard. The action identifies the differences and allows you to update the wizard.
	Validate Wizard		Validates the wizard definition.
	Preview XML		Displays the wizard pages and activation file metadata. See Chapter 2, “Cisco Prime Network 3.8 Activation Wizard Metadata Files.”
	Manage Wizards		Displays the Manage Wizard Directory window, where you can manage the items that appear in the activation window of Network Activation.
	Clear		Clears the wizard currently displayed in Prime Network AWB.
	Help	Activation Wizard Builder Help	—
About Activation Wizard Builder		—	Displays the Prime Network AWB information page.

Using Cisco Prime Network Activation Wizard Builder to Create and Customize Wizards

This section provides procedures for using Network AWB to create and customize Network Activation wizards. Topics include:

- [Downloading Wizards, page 3-7](#)
- [Defining Wizard Attributes, page 3-7](#)
- [Defining Wizard Loops, page 3-12](#)
- [Defining Attribute Groups, page 3-13](#)
- [Creating a New Wizard, page 3-15](#)

- [Customizing a Wizard, page 3-15](#)
- [Customizing the Wizard Activation Tree, page 3-16](#)
- [Previewing Wizard Metadata, page 3-18](#)
- [Synchronizing a Wizard with an Updated Workflow, page 3-19](#)

Downloading Wizards

To download wizards into Network AWB for customization, complete the following steps:

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- Step 1** Start Network AWB and log into the server containing the wizard you want to download.
- Step 2** From the Wizard menu, choose **Download from Gateway**.
- Step 3** In the Download Wizard Metadata from Gateway window, expand the wizard directories and choose the wizard you want to download.
- Step 4** Click **OK**.
- The wizard is downloaded to Network AWB.
-

Defining Wizard Attributes

[Table 3-2](#) lists the wizard attribute parameters that you define using Network AWB. The parameters appear on the Network AWB Screens tab. They define attributes appearance and behavior in the wizard. The parameters are defined the same way regardless of whether you are creating a new wizard or customizing an existing one.

Table 3-2 Network AWB Wizard Attribute Parameters

Parameter	Description	Modification Steps
Name	The workflow attribute name.	The workflow attribute name cannot be modified in Network AWB. To customize workflow attributes, see Customizing Cisco Prime Network Activation Workflows .
Display Name	The attribute display name in the wizard.	<ol style="list-style-type: none"> 1. Double-click the Display Name cell. 2. Type the new display name text.

Table 3-2 Network AWB Wizard Attribute Parameters (continued)

Parameter	Description	Modification Steps
Type	Defines the attribute type.	<p>Click the cell and choose one of the following types from the drop-down list.</p> <ul style="list-style-type: none"> • Boolean—A true or false attribute. • Integer—An integer attribute. • Long—A long integer attribute, that is, allows an entry up to 10 billion. • String—Allows text or numeric entries. • IP Address—An IP address attribute. • IP Subnet—An IP address subnet mask attribute. • Float—A floating decimal entry attribute. • Macro—The attribute is populated based on a macro. The macro can be one of the macros provided with Network Activation, or a macro that you develop. See the Macro Files, page 2-5. • Combo—A drop-down list of values (combo box). • IMO Property—Allows selection of an object within the Prime Network Vision GUI.
Initialization	Defines the attribute initialization sequence.	<p>The initialization option depends on the attribute type. Clicking the cell displays the following:</p> <ul style="list-style-type: none"> • Boolean, Integer, Long, String, IP Address, IP Subnet, Float—For these attribute types, a list of attributes is displayed. In general, you choose the same attribute. • Macro—Click the cell once, then click the ellipsis on the right to display the Macro Backed Initialization dialog box. Complete the fields, then click OK. For a description of Macro Backed Initialization dialog box fields, see Completing the Macro Backed Attribute Dialog Box, page 3-9. • Combo—Click the cell once, then click the ellipsis on the right to display the Combo Initialization dialog box. Complete the fields, then click OK. For a description of Combo Initialization dialog box fields, see Completing the Combo Initialization Dialog Box, page 3-10. • IMO Property—Click the cell once, then click the ellipsis on the right to display the IMO Property Initialization dialog box. Complete the fields, then click OK. For a description of IMO Property dialog box fields, see Completing the IMO Property Initialization Dialog Box, page 3-11.
Required	Indicates whether the attribute is required	Checking the check box sets the attribute to required; the operator cannot complete the wizard unless a value is entered.

Table 3-2 Network AWB Wizard Attribute Parameters (continued)

Parameter	Description	Modification Steps
Validation	Allows you to enter a regular expression to validate the operator entry.	Double-click the cell and enter the regular expression. Examples include: <ul style="list-style-type: none"> [0]*(100 [1-9][0-9] [1-9])—Indicates any value between 0 and 999 is permitted. [Vv][Ii][Rr][Tt][Uu][Aa][Ll]-[Cc][Ee][Mm]([0-9]+)/{1,}[0-9]+—Shows the specific characters and integers that are permitted.
ToolTip	Allows you to enter tooltip text for the attribute.	Double-click the cell and enter the tooltip text.
Example	Allows you to enter sample text for the attribute. You can edit this column, only if you have chosen the type String, in the Type column. The purpose of the sample text is to give operators an idea of the permissible entry format. The text appears in light gray, and is removed as soon as the operator clicks the field.	Double-click the cell and enter the example text.
Shown When Disabled	If checked, the attribute field always appears in the wizard, even if it is disabled. Normally, fields are not displayed if disabled or if they do not apply.	Check the check box.
Hidden	If checked, the attribute field is never displayed in the wizard. This parameter is useful if some attributes are never entered, or to maintain compatibility with older workflows.	Check the check box.

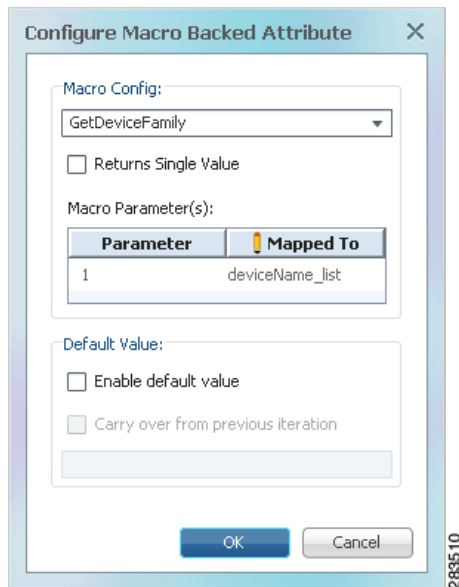
Completing the Macro Backed Attribute Dialog Box

The Macro Backed Initialization dialog box ([Figure 3-4](#)) is displayed from the Macro option in the Initialization parameter. Parameters include:

- **Macro Config**—Choose a macro from the drop-down list. The macros are populated from the macros provided with the Network Activation package, as well as any macros that you create. For information about Network Activation macros, see [Macro Files, page 2-5](#).
- **Macro Parameters**—Allows you to provision the attributes that will be used as macro inputs.
- **Returns Single Value**—If checked, the following occurs:
 - The macro always return a single value.
 - The wizard field will be a text box and not a combo box.
- **Default Value**

- Enable Default Value—If checked, the wizard field is populated with a default value defined in the Carry Over From Previous Iteration or Default Value Box fields.
- Carry Over From Previous Iteration—If wizard loops exist, checking this box initializes the attribute with the value entered in the first loop.
- Default Value Box—If Carry Over From Previous Iteration is not checked, enter the default value in the box beneath the Carry Over check box.

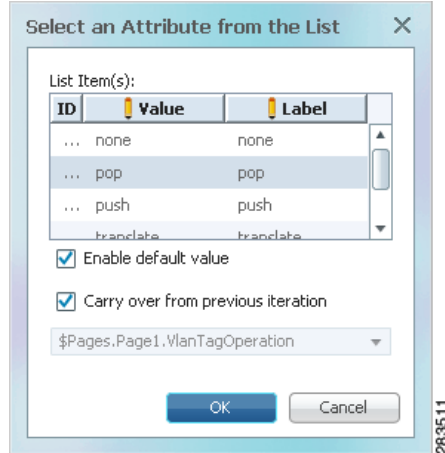
Figure 3-4 Configure Macro Backed Attribute Dialog Box



Completing the Combo Initialization Dialog Box

Figure 3-5 shows the Combo Initialization dialog box for the VLAN ID Preservation attribute. Initialization parameters include:

- ID/Value—Enter the combo ID and values.
- Default Value:
 - Default Value Box—If Carry Over From Previous Iteration is not checked, enter the default value in the box beneath the Carry Over check box.
 - Carry Over From Previous Iteration—If wizard loops exist, checking this box initializes the attribute with the value entered in the first loop.

Figure 3-5 Combo Initialization Dialog Box

Completing the IMO Property Initialization Dialog Box

Figure 3-6 shows the IMO Property Initialization dialog box. In this example, the IMO attribute is to provide the device based on the devices in the active Prime Network Vision map view. Initialization parameters include:

- IMO Type—The Prime Network Information Model Object name.
- Depth and Property Name—The IMO type property that will be retrieved. In this example, it is the device name.
- Macro Name—Choose a macro from the drop-down list. Macros are populated from the macros provided with Network Activation package, as well as any macros that you create. For information about the Network Activation macros, see [Macro Files, page 2-5](#). In this example, the macro is the Get_Devices7600 and Cisco ASR 9000 Series Routers ByMap, This macro gets all Cisco 7600 and Cisco ASR 9000 Series Routers that reside within active Prime Network Vision map of the selected user.
- Returns Single Value—If checked, the following occurs:
 - The macro always return a single value.
 - The wizard field will be a text box and not a combo box.
- Parameter Mapped To—Lists the parameter that will be provided to the macro. In this example, \$MAP\$ indicates that the macro will be limited to the devices residing within the Prime Network NetworkVision map of the selected user.
- Default Value
 - Carry Over From Previous Iteration—If wizard loops exist, checking this box initializes the attribute with the value entered in the first loop.
 - Default Value Box—If Carry Over From Previous Iteration is not checked, enter the default value in the box beneath the Carry Over check box.

Figure 3-6 IMO Property Initialization Dialog Box

Configure IMO Attribute/Macro Backe... X

IMO Type:
com.sheer.imo.IManagedElement

De... **Property Name**

1	DeviceName
---	------------

Macro Name:
GetDevices7600ByMap

Returns Single Value

Macro Parameter(s):

Parameter	Mapped To
1	\$MAP\$

Enable default value

Carry over from previous iteration

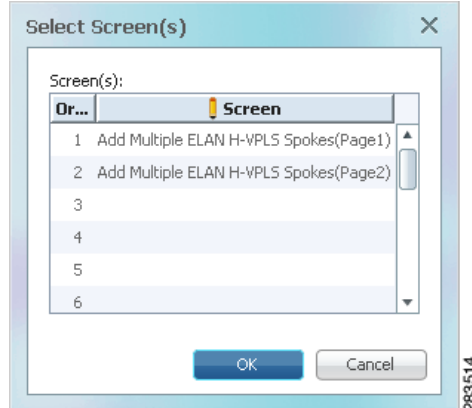
OK Cancel

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Defining Wizard Loops

Wizard loops are defined on the Network AWB Loops tab (Figure 3-2 on page 3-4). Loops cannot be defined until you define the wizard screen in the Screens tab. After you define the screens, you can define the loops by completing the following parameters:

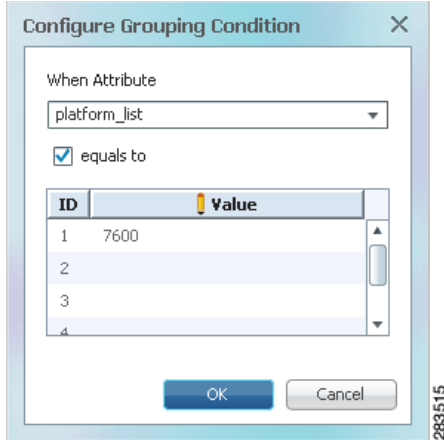
- Name—Double-click the cell and enter (or edit) the loop name.
- Screen—To define the screen that you want included in the loop:
 1. Double-click the cell, then click the ellipsis on the right side of the cell.
The Screens dialog box appears (Figure 3-7).
 2. In the Screens dialog box, choose the screens that you want in the loop from the drop-down list for each Order number. (The drop-down list displays the screens that are defined in the Screens tab.)
 3. Click **OK**.
- Iterations—Indicates the attribute that will collect the number of wizard iterations the operator completes. This value is passed to the workflow.
- Required—If checked, indicates the loop is required.

Figure 3-7 Select Screens Dialog Box

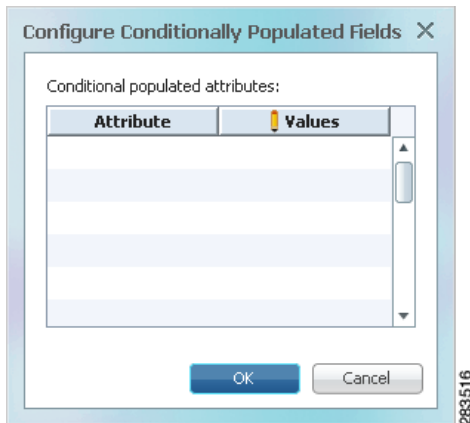
Defining Attribute Groups

Wizard groups are attributes that appear based on the values of another attribute. Wizard groups are defined on the Network AWB Groups tab (Figure 3-3 on page 3-5). Groups cannot be defined until you complete the wizard screens in the Screens tab and assign all the workflow attributes to the screens. You define the groups by completing the following parameters:

- Name—Double-click the cell and enter (or edit) the group name.
- When Field—Lists the field that is used for the conditional display. This parameter is read-only. It is defined in the Any of the Values parameter.
- Equal—Indicates whether or not the value is equal to the value set in the Any of the Values field. It is defined in the Any of the Values parameter.
- Any of the Values—Defines the parameters that will cause the field in the Name field to appear:
 1. Double-click the cell, then click the ellipsis on the right side of the cell.
The Configure Grouping Condition dialog box appears (Figure 3-8).
 2. In the Any of the Values dialog box, complete the following parameters:
 - When Field—Choose one of the attributes whose value will determine the current attribute conditional display. (The drop-down list displays the attributes that are defined in the Screens tab for the wizard screens.
 - Equal To—If checked, the attributes in the group will appear if the value is equal to the value. If unchecked, the attributes in the group will appear if the value is not equal to the value.
 - ID/Value—Enter the list of values by double-clicking the Value cell and entering the value.
 3. Click **OK**.

Figure 3-8 *Configure Grouping Condition Dialog Box*

- **Enable Field Group**—Indicates the field groups that will be enabled if the value criteria (equal to or not equal to) are met.
- **And Optionally Populate**—Allows you to populate combo attributes with a selected value if the value criteria are met. To complete this parameter:
 1. Double-click the And Optionally Populate cell, then click the underlined ellipsis [...].
The **Configure Conditionally Populated Field** dialog box appears (Figure 3-9).
 2. In the **Configure Conditionally Populated Field** dialog box, double-click the Values cell and click the underlined ellipsis.

Figure 3-9 *Configure Conditionally Populated Field Dialog Box*

The **Select Value(s) for the Chosen Attribute** dialog box appears.

3. Under **Populate attribute**, choose the attribute you want to populate. (This parameter is populated with combo attributes.)
After you choose the attribute, the possible values appear in the **Values** and **Label** columns.
4. As needed, modify the **Values** and **Label** by typing new text or choosing an item from the drop-down lists.

Creating a New Wizard

Use the following procedure to create new Network Activation wizards. Before you perform this procedure, you must have the following:

- A completed activation workflow. The workflow must be stored on the gateway of the server that you will access with Prime Network AWB.
- A wizard design plan based on the workflow attributes,

-
- Step 1** Start Prime Network AWB and log into the server containing the workflow for which you want to create the new wizard.
- The workflows on the server are loaded into the Network AWB window Workflows area.
- Step 2** Right-click the workflow and choose **Create Wizard**.
- Network AWB retrieves the workflow attributes and places them in the Unassigned Workflow Attributes area. The first screen, “Page1,” is displayed in the screen area.
- Step 3** Complete the attributes for the first screen. See [Defining Wizard Attributes, page 3-7](#), for information about defining attribute parameters.
- Step 4** If you want to add additional screens to the wizard, click **Add Screen**, then repeat [Step 3](#). If not, continue with the next step.
- Step 5** If you want to add loops to the wizard, complete the following steps. If not, continue with [Step 6](#).
- a. Click the **Loops** tab.
 - b. Click **Add Loop**, then define the loop parameters. See [Defining Wizard Loops, page 3-12](#), for information.
- Step 6** If you want to define attribute groups, complete the following steps. If not, continue with [Step 7](#).
- a. Click the **Groups** tab.
 - b. Click **Add Grouping**, then define the group parameters. See [Defining Attribute Groups, page 3-13](#) for information.
- Step 7** After you complete the wizard attributes, loops, and groups, click **Wizard > Validate Wizard**.
- Network AWB validates the wizard and displays the results in the Validation tab. If it encounters errors, they appear in the Validation tab. See [Wizard Validation Messages, page 3-20](#), for a description of wizard validation error messages.
- Step 8** If validation has found errors, fix the errors, then repeat the validation.
- Step 9** After the validation succeeds with no errors, click **Wizard > Upload to Gateway**.
- Step 10** Start Network Activation, then run through the new wizard to verify the wizard screens.
-

Customizing a Wizard

Use the following procedure to customize a Network Activation wizard.

-
- Step 1** Start Network AWB and log into the server containing the wizard you want to customize.
- The workflows on the server are loaded into the Network AWB window Workflows area.

- Step 2** From the Wizard menu, choose **Download from Gateway**.
- Step 3** In the Download Wizard Metadata from Gateway dialog box, choose the wizard you want to download from the wizard tree and click **OK**.
- Step 4** On the Screens tab, edit the screen attributes, as needed. See [Defining Wizard Attributes, page 3-7](#) for information.
- Step 5** Click the **Loops** tab.
- Step 6** Customize or create wizard loops, as needed. See [Defining Wizard Loops, page 3-12](#) for information.
- Step 7** Click the **Groups** tab.
- Step 8** Customize or create wizard groups, as needed. See [Defining Attribute Groups, page 3-13](#).
- Step 9** After you complete the wizard changes, click **Wizard > Validate Wizard**.
Network AWB validates the wizard and displays the results in the Validation tab. If it encounters errors, they are displayed in the Validation tab. See [Wizard Validation Messages, page 3-20](#), for a description of wizard validation error messages.
- Step 10** If validation has found errors, fix the errors, then repeat the validation.
- Step 11** After the validation succeeds with no errors, click **Wizard > Upload to Gateway**.
- Step 12** Start Network Activation, then run through the new wizard to verify the wizard screens.
-

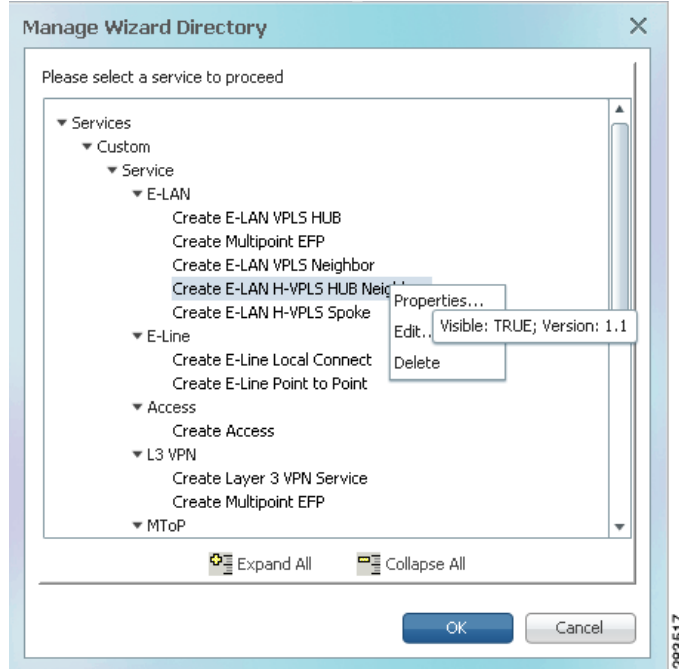
Customizing the Wizard Activation Tree

You can use Network AWB to customize the wizard activation tree displayed in the activation window of Network Activation ([Figure 3-10](#)). Network AWB allows you to edit or delete the activation window wizard tree items, and you can also change the order of the items.

To customize the activation window wizard tree:

-
- Step 1** From the Network AWB Wizard menu, choose **Manage Wizards**.
- Step 2** In the Manage Wizard Directory window, click **Expand All**.
The activation directory is expanded.
- Step 3** Right-click the wizard item you want to customize, as shown in [Figure 3-10](#).

Figure 3-10 Manage Wizard Directory Window



Step 4 Perform any of the following actions:

- To view the wizard tree item properties, choose **Properties**.
- To edit the wizard tree item properties, choose **Edit**.

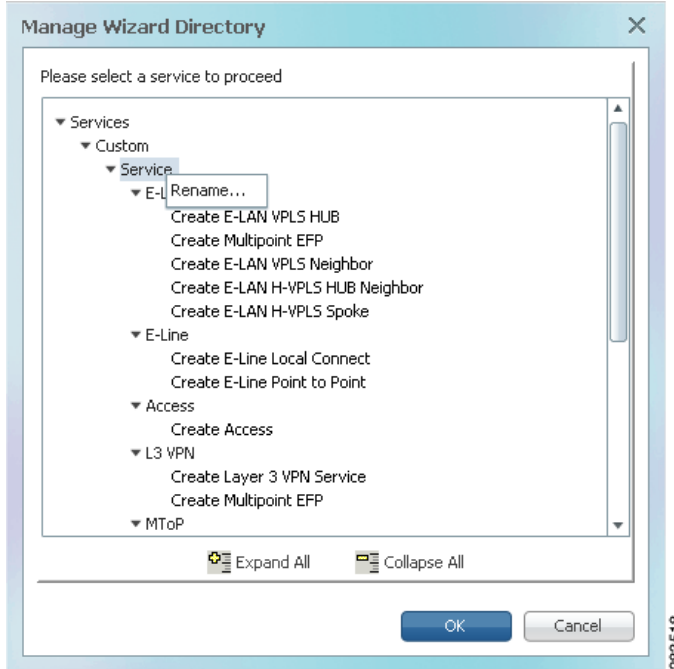
The Edit Wizard Properties dialog box appears. In the dialog box, you can make the following changes:

- Wizard Name—Click the box and edit the wizard name.
- Comment—If desired, enter comment text.
- Version—Is user-defined version number.
- Enable—If checked, the wizard item appears in the Activation window tree. If you want to hide the wizard item, unselect the box.

Click **OK**, which you finish the edits.

- To move a wizard tree item, drag and drop the item to the new location.

Step 5 To rename an activation directory, right-click the directory and choose **Rename** (Figure 3-11).

Figure 3-11 Renaming an Activation Wizard Directory

Step 6 In the Manage Wizard Directory dialog box, enter the new name, then click **OK**.

Step 7 After you finish the wizard tree customization, click **OK**.

The changes are uploaded to the server.

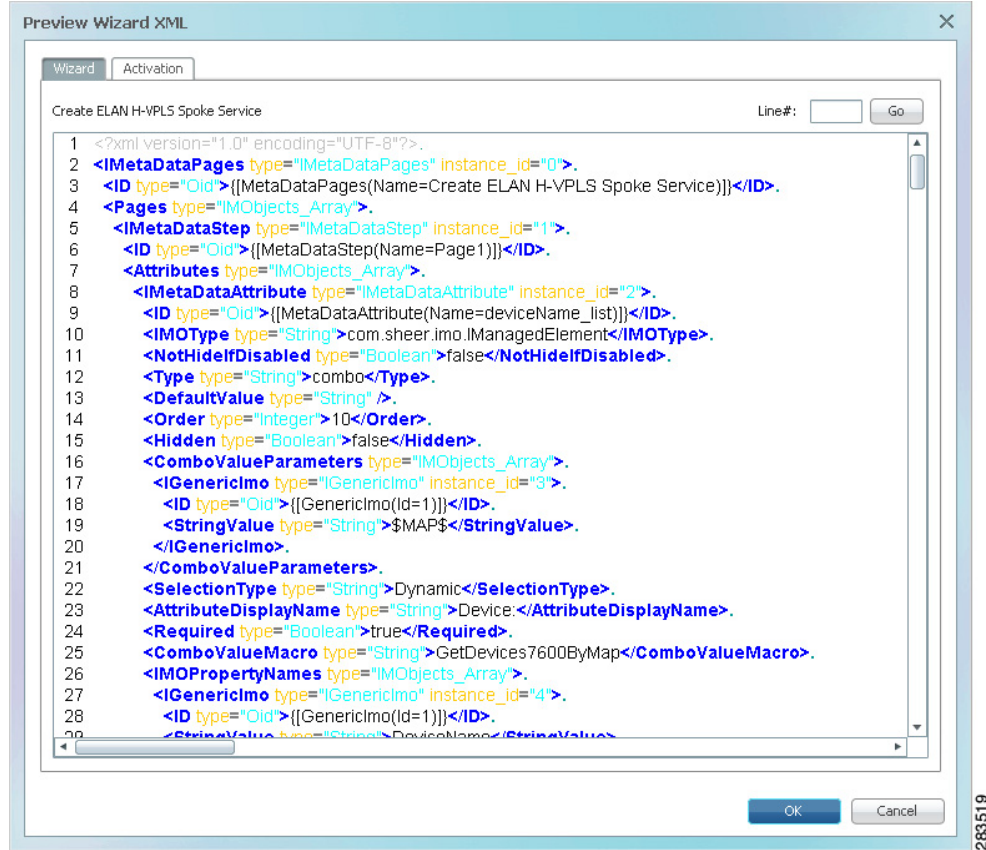
Previewing Wizard Metadata

After you create or customize wizards, you can preview the wizard pages and activation metadata files that are created when you complete the wizard definition. To preview the wizard XML metadata files, from the Wizard menu, choose **Preview XML**.

The Preview Wizard XML window appears (Figure 3-12).

- Wizard tab—Displays the wizard pages metadata file. See the [Pages Metadata, page 2-8](#).
- Activation tab—Displays the activation metadata file. See the [“Activation Metadata, page 2-19](#).

Figure 3-12 Preview Wizard XML Window



Synchronizing a Wizard with an Updated Workflow

Use the following procedure to synchronize a wizard with a modified workflow. You perform this procedure after a workflow is updated.

- Step 1** Start Network AWB and log into the server containing the wizard you want to synchronize with the modified workflow.
The workflows on the server are loaded into the Network AWB window Workflows area.
- Step 2** From the Wizard menu, choose **Download from Gateway**.
- Step 3** In the Download Wizard Metadata from Gateway dialog box, expand the wizard tree, choose the wizard you want to download and click **OK**.
- Step 4** After the wizard is downloaded to Network AWB, from the Wizard menu, choose **Sync with Workflow**.
The Wizard and Workflow Synchronization window displays the changes between the workflow and the wizard.
- Step 5** If Network AWB discovered changes between the workflow and wizard, click **Yes** to merge the changes with the wizard.
- Step 6** Click **OK** on the confirmation dialog.

- Step 7** After the changes are merged, complete the following, as needed, to define the merged items:
- On the Basic Design tab, assign any unassigned workflow attributes and edit the attributes parameters, as needed. See [Defining Wizard Attributes, page 3-7](#).
 - On the Advanced Design tab, edit the wizard loops, as needed. See [Defining Wizard Loops, page 3-12](#).
 - Edit the wizard groups, as needed. See [Defining Attribute Groups, page 3-13](#).
- Step 8** After you complete the wizard changes, click **Wizard > Validate Wizard**.
Network AWB validates the wizard and displays the results in the Validation tab. If it encounters errors, they are displayed in the Validation tab.
- Step 9** If validation has found errors, fix the errors. See [Wizard Validation Messages, page 3-20](#).
- Step 10** After the validation completes with no errors, click **Wizard > Upload to Gateway**.
- Step 11** Start Network Activation, then run through the new wizard to verify the wizard screens.

Wizard Validation Messages

Before uploading new or customized wizards to the gateway, you run the Network AWB Validation function. The validation function checks the wizard:

- Internal model
- Screens
- Groups
- Loops
- XML

If no errors are found, the following message appears:

```
VALIDATING_SUCCESS No validation errors found!
```

If the Network AWB validation function finds errors, the following message appears followed by a list of errors:

```
VALIDATING_FAILURE Validation failed with error(s)!
```

[Table 3-3](#) lists the validation error messages and the actions that are required to fix them.

Table 3-3 Wizard Validation Messages

Message	Description
A value is required for this field.	A wizard parameter field is missing a value. Review the wizard parameters and check to see that each has a value. See Table 3-2 on page 3-7 .
At least one field is required for the screen.	At least one wizard screen does not have a field defined. Verify that all wizard screens have at least one field defined.
Null wizardflow object is not allowed.	No wizard is loaded in Prime Network AWB.
Grouping condition is required.	A grouping condition is missing. See Wizard Attribute Groups, page 3-4 .

Table 3-3 Wizard Validation Messages (continued)

Message	Description
A field is required for each grouping condition.	A grouping condition is missing a value. Define at least one field for the group condition. See Wizard Attribute Groups, page 3-4 .
At least one value is required for each grouping condition.	A value is missing from the grouping condition. See Wizard Attribute Groups, page 3-4 .
At least one field is required for each grouping.	A grouping does not have a field. See Wizard Attribute Groups, page 3-4 .
An iteration variable is required for a loop.	A loop iteration variable is missing. See Defining Wizard Loops, page 3-12 .
Name is required for each loop.	A name is not defined for the loop. See Defining Wizard Loops, page 3-12 .
At least one screen is required for a loop.	A screen has not been defined for the loop. Make sure each loop has at least one screen.
Type is required for each field.	All screen fields require a type. See Table 3-2 on page 3-7 . This error is infrequent, but can occur if you imported the wizard files.
Workflow template name is required for each wizardflow.	The wizard must be linked to a workflow. This error is infrequent, but can occur if you imported the wizard files.
Activation name is required for each wizardflow.	Indicates the wizard is missing an activation name. This error is infrequent, but can occur if you imported the wizard files.
At least one screen is required for each wizardflow.	No screens are defined for the wizard. You must define at least one screen.
Name is required!	A name is missing from a field. All wizards must have a field name. This error is infrequent, but can occur if you imported the wizard files.

Uploading Wizards

To upload wizards from Network AWB to the server, complete the following steps:

-
- Step 1** From the Wizard menu, choose **Upload to Gateway**.
- Network AWB performs a validation and displays the results. If a “Validation has passed successfully.” message appears, proceed to the next step. If validation errors appear, resolve the errors, then try the upload again. See [Table 3-3 on page 3-20](#) for error descriptions.
- Step 2** On the validation message, click **OK**.
- Step 3** In the Upload Wizard Metadata to Server window, expand the wizard directory where you want to upload the wizard.
- Step 4** If you want to upload the wizard to a new directory or to a new wizard name, right-click the directory, as shown in [Figure 3-13](#), and complete the following:
- To create a new category, click **Create Category**, enter the new category name in the Create New Category dialog box, then click OK.
- The new category appears in the Upload Wizard Metadata to Gateway.

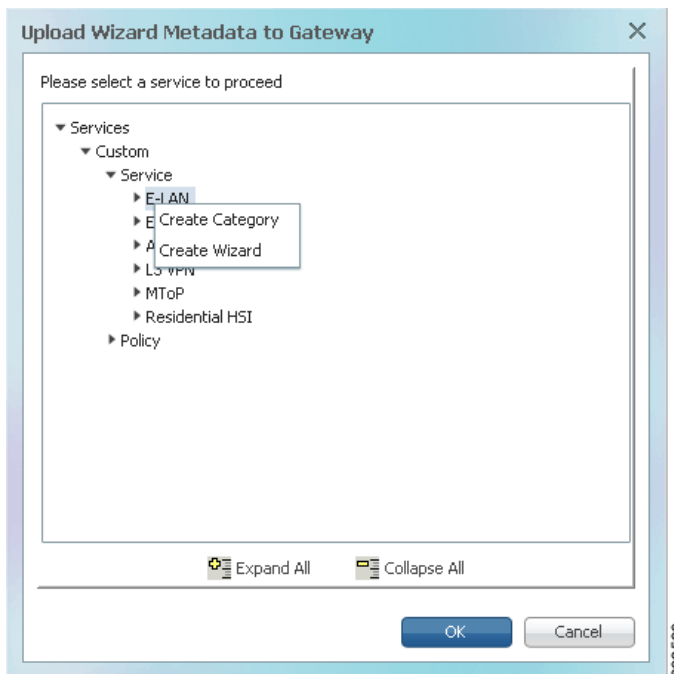
- b. To create a new wizard name, click **Create Wizard**, enter the following wizard attributes in the Edit Wizard Properties dialog box.
 - Wizard Name—Enter the new wizard name.
 - Comment—Enter comments, if desired.
 - Version—Enter a version number, if desired.
- c. Click **OK**.

The new category appears in the Upload Wizard Metadata to Gateway window.



Note You must create the new category and new wizard name if you want to upload the customized wizard to a new wizard directory and/or new wizard name.

Figure 3-13 Creating a New Wizard Category and Wizard in the Network AWB Directory.



Step 5 Highlight the wizard in the Upload Wizard Metadata to Gateway window to which you want to upload the customized wizard in Network AWB.

Step 6 Click **OK**.

The response depends on the wizard you selected for the upload:

- If you selected a new wizard created in Step 4, the upload occurs immediately, and you will see an Upload successful message.
- If you select a wizard with a wizard already associated to it, the Upload Wizard Metadata to Gateway will ask you to choose an option (Figure 3-14):

Figure 3-14 Upload Wizard Metadata to Gateway Message Window

Step 7 If you are uploading to a wizard directory item with a wizard associated to it, choose one of the following options:

- **Create New Wizard**—This option retains the existing wizard metadata files and uploads the new wizard metadata files.
- **Overwrite Existing Wizard**—Overwrites the existing wizard metadata files.

Step 8 Click **OK**.

The wizard is uploaded and a confirmation is displayed.

Step 9 Click **OK** on the confirmation.

If you chose Create New Wizard, the existing wizard item appears in light gray under the wizard item just uploaded.

