



CHAPTER 1

Prime Network Customization Overview

Prime Network provides the ability to customize the application in order to extend its functionality beyond what is provided “out-of-the-box”.

[Table 1-1](#) describes the extensions you can make to Prime Network and where to find the procedures that will guide you through the process.

Table 1-1 Supported Extensions for Prime Network

To make this extension:	Use these tools:	Described here:
Extend the Information Model		
Extend the set of supported properties for a network element and display them in the Inventory window.	Soft Properties	Model and Display Additional NE Properties, page 2-1
Add support for currently unsupported device types.	VNE Customization Builder	Add Support for Additional Device Types by Creating U-VNEs, page 3-6
Add support for currently unsupported device software versions	VNE Customization Builder	Add Support for Additional Software Versions, page 3-11
Add support for new standard and pluggable modules	VNE Customization Builder	Add Support for Additional Modules, page 3-12
Create New Commands and Activations to Configure Devices		
Create new device commands and add them to the GUI	Command Builder	Configure Devices by Creating and Executing Commands, page 4-1
Create new workflows	Workflow	Create Workflows to Execute a Series of Commands on a Device, page 5-1
Create new activation wizards to allow users to deploy workflows to devices	Workflow and Activation Wizard Builder	Create GUI Wizards for Deployment of Activations, page 6-1
Extend the GUI Client		
Add launch points to external applications	External Launch procedure	Add External Launch Points to the GUI Client, page 9-1

Table 1-1 Supported Extensions for Prime Network (continued)

To make this extension:	Use these tools:	Described here:
Extend or Change Fault Management Capabilities		
Add support for currently unsupported events	VNE Customization Builder	Add Support for New Events, page 7-1
Change the way Prime Network deals with events	VNE Customization Builder	Customize Events, page 7-9
Create new threshold-crossing alarms	Soft Properties	Add New Threshold-Crossing Alarms, page 8-1

Tools for Extending Prime Network

This topic provides a brief introduction to the tools you can use to extend the features of Prime Network.

Soft Properties

The Soft Properties tool in Prime Network Vision enables you to extend the set of supported properties for a network element (NE), by adding new (soft) properties. These properties extend the Cisco Information Model Object (IMO) and are available through the client GUI as well as through the Broadband Query Language (BQL) API. Soft properties are retrieved from the NE using Simple Network Management Protocol (SNMP) or Telnet/Secure Shell Protocol (SSH). In addition, alarm thresholds enable you to constantly monitor selected properties and generate an alarm every time these properties cross a user-defined threshold or violate a condition. The Soft Properties tool is launched by right-clicking a VNE and choosing **Management > Soft Properties Management**. To use this tool, you must have Configurator privileges.

Command Builder

The Command Builder tool in Prime Network Vision enables you to create custom-tailored commands for configuring devices. Command Builder commands execute a programmable sequence of SNMP or Telnet command lines. Commands can be associated with any existing object group (IMO), type, or instance.

Once you have created and tested a new command, you can publish it to a wider scope of NEs of the same family, type, or software version.

The new commands created using Command Builder will be listed in the NE's context-sensitive menu and can be executed from there. The commands can also be used to create activation workflows which call a sequence of commands.

The Command Builder tool is launched by right-clicking a VNE and choosing **Management > Command Builder**. To use this client, you must have Configurator privileges.

Workflow

Prime Network Workflow is a GUI client you can use for creating activation *workflow templates*. A workflow template consists of several tasks which are grouped together and specified into a flow, with certain sequences, branches, and failure policies (including rollback procedures). You can test and preview workflow templates before *deploying* (copying) them to the gateway to make them available to Prime Network users.

After a template is deployed to the gateway, users with OperatorPlus privileges can execute the workflow using a BQL command. Each time a user executes a workflow, Prime Network creates a new workflow instance with its own unique ID, and stores it in the database. Thus there can be many instantiations of a single workflow template. Each instance has its own output, which you can export and use to analyze the commands.

You must have OperatorPlus privileges to create workflows. When the Workflow GUI client is installed, you can launch it using the same method you use for launching the Prime Network Vision, Events, or Administration GUI clients.

Activation Wizard Builder

The Prime Network Activation Wizard Builder (AWB) is a tool for creating activation wizards that operators can access in Prime Network Vision and use to execute workflows. The AWB lists all valid activation workflow templates that can be used for the wizard creation.

The AWB lets you create the wizard screens and designate which workflow attributes should appear on each screen. You can configure attribute display names, wizard loops, tool tips, and conditions that determine the wizard content. When you are done, the AWB validates the wizard definition. Then you can upload the wizard to the gateway and view it in Prime Network Vision. You can also change the configuration of existing wizards by downloading them from the gateway into AWB.

You must have Configurator or Administrator privileges to create wizards. The AWB tool is launched using the following URL: <http://gateway-ip:6080/ana/services/install/install/webstart.html>.

VNE Customization Builder (VCB)

The VCB is a tool that allows you to enable support for currently unsupported device types, software versions, and modules. You can also use the VCB to make Prime Network process unsupported syslogs, traps, or service events as Prime Network events, or to customize the way in which Prime Network processes events.

You must have Configurator or Administrator privileges to use the VCB. The VCB GUI client is launched from the Prime Network Administration GUI client by choosing **Tools > VNE Customization Builder** or by using the following URL:

<http://gateway-ip:6080/ana/services/install/install/webstart.html>.

External Launch

You can add launch points to external applications or URLs to the right-click menu of NEs, links, tickets, and events. When the external launch point is clicked, it invokes the external application (for example, a script or batch file), or opens the specified URL in the default browser. You can also add filters so that the launch points are only displayed if the instance meets the filter requirements. You must have Configurator or higher privileges to use this procedure.

Editing the Registry

The Prime Network registry is a collection of xml files (called hives) that comprise and control the Prime Network system configuration. The registry contains almost all definitions and configurations used by Prime Network, including whether service alarms are correlated, the settings that control flapping, the severity, and so forth. You can change these parameters, if needed.

