



# 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:
<b>Extend the Information Model</b>		
Extend the set of supported properties for a network element and display them in the Inventory window.	Soft Properties	<a href="#">Modeling and Displaying Additional NE Properties, page 2-1</a>
Add support for currently unsupported device types.	VNE Customization Builder	<a href="#">Adding Support for Additional Device Types by Creating U-VNEs, page 3-6</a>
Add support for currently unsupported device software versions	VNE Customization Builder	<a href="#">Adding Support for Additional Software Versions, page 3-11</a>
Add support for new standard and pluggable modules	VNE Customization Builder	<a href="#">Add Support for Additional Modules, page 3-12</a>
<b>Create New Commands and Activation Workflows for Configuring Devices</b>		
Create new device commands and add them to the GUI	Command Manager Command Builder	<a href="#">Creating Commands and Command Scripts to Perform Device Configuration Operations, page 4-1</a>
Create new transactions to allow users to deploy activations to devices	Transaction Manager	<a href="#">Deploying Activation Workflows to Devices Using Transaction Manager, page 5-1</a>
<b>Extend the GUI Client</b>		
Add launch points to external applications	External Launch procedure	<a href="#">Adding External Launch Points to the GUI Client, page 8-1</a>

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

To make this extension:	Use these tools:	Described here:
<b>Extend or Change Fault Management Capabilities</b>		
Add support for currently unsupported events	VNE Customization Builder	<a href="#">Adding Support for New Events Using the VCB, page 6-1</a>
Change the way Prime Network deals with events	VNE Customization Builder	<a href="#">Customizing Events, page 6-15</a>
Create new threshold-crossing alarms	Soft Properties	<a href="#">Adding New Threshold-Crossing Alarms, page 7-1</a>

## 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 Manager and Command Builder

Prime Network Command Manager and Command Builder allow you to create user-created commands and scripts that perform device configuration operations. Commands can range from simple show commands to wizards with multiple pages and input methods such as check boxes and drop-down lists. The commands you create execute a programmable sequence of SNMP or Telnet command lines. Once you have created and tested a new command, you can apply it to a wider scope of NEs. The new commands will be listed in the NE's context-sensitive menu and can be executed from there. The commands can also be used to create transactions which call a sequence of commands.

Command Manager uses the Command Builder back-end, but it provides the following additional features:

- View the command repository, which displays all device-level commands that are available in the system
- Execute commands on multiple devices
- Use input from files to provide parameter substitution
- Apply versions to individual commands
- Create command packages

However, Command Manager commands can only be applied at the network element (IManagedElement) level, while Command Builder commands can be associated with any existing object group (IMO), type, or instance.

You can launch Command Manager from the main menu of the Change and Configuration Management (CCM) GUI. You must have Configurator privileges to run Command Manager. To open CCM, use the following URL:

<http://gateway-IP:8043/ccmweb/ccm/login.htm>

To launch Command Builder, right-click a VNE and choose **Management**. This client also requires Configurator privileges.

### Transaction Manager

Transaction Manager provides a GUI framework you can use to schedule and run transactions (activation workflows) that are created using the Prime Network XDE Eclipse SDK. It replaces the Workflow and Activation Wizard Builder features that were provided in previous releases of Prime Network. You can also run transactions using the NBI.

You can launch Transaction Manager from the main menu of the Change and Configuration Management (CCM) GUI. You must have Configurator privileges to run Transaction Manager. To open CCM, use the following URL:

<http://gateway-IP:8043/ccmweb/ccm/login.htm>

### 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:

<https://gateway-ip:8043/prime-network-web/login.jsp>

### 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 using the Registry Controller available from the Administration GUI client. Other parameters can be changed using the CLI. Those parameters are documented in this guide.

