



## Adding New Threshold-Crossing Alarms

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Prime Network enables the creation of Threshold-Crossing Alarms (TCAs), which are generated when a specific condition is met. These alarms can be viewed in the Prime Network Vision and Events GUI clients.

TCAs are associated with soft properties. A soft property is a mechanism for extending the NE information that Prime Network models. The soft property contains rules for retrieving new NE information, parsing the retrieved information, and displaying it in the Inventory window. To create a TCA, you can apply it to an existing soft property, or create a new soft property and associate a TCA to it. For information on creating soft properties, see [Steps for Adding New NE Property Information to the Inventory, page 2-3](#).

This topic explains how to create TCAs for soft properties:

- [Creating a New Threshold-Crossing Alarm, page 7-1](#)

### Creating a New Threshold-Crossing Alarm

The procedure for creating a TCA is an extension of the procedure for creating a soft property, described in [Displaying a New Property in the Inventory Window, page 2-4](#). You can create a TCA for an existing soft property, or create a new soft property and associate a TCA to it. You can create multiple TCAs for the same soft property. If necessary, the TCA can be disabled, in which case it will not be triggered for the specified condition until it is re-enabled.

TCAs are only supported on Property type soft properties.

#### Before You Begin

- Locate the soft property for which you want to define an alarm condition by right-clicking the relevant NE and choosing **Management > Soft Properties Management**.
- If you need to create a new soft property, follow the procedure in [Displaying a New Property in the Inventory Window, page 2-4](#) or [Adding a New Inventory Table Containing SNMP get Details, page 2-11](#)

To create a TCA:

- Step 1** In Prime Network Vision, right-click a relevant NE and choose **Management > Soft Properties Management**.
- The Soft Properties Manager dialog box opens and displays any existing soft properties for the selected NE.
- Step 2** If you are creating a new soft property, choose **File > New Element** and follow the procedure in [Displaying a New Property in the Inventory Window, page 2-4](#).
- or
- If you are adding a TCA for an existing soft property, choose **File > Edit Element**. This displays a window listing the complete hierarchy for the soft property. Checks indicate the classes to which the soft property is available.
- Step 3** In the Edit Soft Property dialog box, locate the local instance of the soft property; this is most likely at the very bottom of the table. Select it and click **OK**.
- Step 4** Click the TCA Alarms tab. If the soft property has any defined TCAs, they will be listed.
- Step 5** Click **Add** to open the Add TCA dialog box.
- Step 6** Click the General tab and enter the basic alarm information.

Field	Description	Example
Name	Alarm name that is displayed in the ticket pane when the alarm is triggered.	<b>My value is not 5</b>
Enabled	Whether the VNE is monitoring for this alarm. This field allows you to temporarily disable a TCA, if needed.	(Enabled)
Description	(Optional) A description of the alarm.	<b>Show this alarm if the value is not equal to 5</b>
Alarm Severity	Choose the severity that is appropriate for this TCA in your network: Critical, Major, Minor, Warning, or Normal (clearing).	<b>Critical</b>
Can be correlated to other alarms	Enables correlating this alarm to other alarms.	(Not selected)
Other alarms can correlate to this alarm	Enables other alarms to correlate to this alarm.	(Not selected)

- Step 7** Click the Trigger tab and define the conditions that will trigger the alarm.



**Note** For triggers that require numeric values, the parse integer rule must be applied on the soft property as an ending rule.

Trigger	Description
Value Equal	Generates an alarm when the when the soft property value is equal to the specified target value.
Value Not Equal	Generates an alarm when the when the soft property value is not equal to the specified target value.
Upper Threshold	Generates an alarm when the value exceeds the specified value. Clears this alarm when the value drops below the specified value. The upper threshold value must be numeric.
Lower Threshold	Generates an alarm when the value drops below the specified value. Clears this alarm when the value rises above the specified value. The lower threshold value must be numeric.
Upper Rate	Checks counter value changes over a period of one second. Generates an alarm when the specified upper rate is exceeded. Clears the alarm when the rate drops to the specified value. When this trigger is used with the <i>Trigger alarm only if change persists more than</i> option, you can check that the rate is maintained above the specified value over time.  <b>Note</b> If the property is sampled every $x$ seconds, the calculation is the <i>current value</i> less the <i>previous value</i> divided by $x$ seconds.
Lower Rate	Checks counter value changes over a period of one second. Generates an alarm when the rate drops below the specified lower rate. Clears the alarm when the rate reaches the specified value. When this is used with the <i>Trigger alarm only if change persists more than</i> option, you can check that the rate is maintained below the specified value over time.  <b>Note</b> If the property is sampled every $x$ seconds, the calculation is the <i>current value</i> less the <i>previous value</i> divided by $x$ seconds.

- Step 8** To generate the alarm only if the trigger condition is maintained for a certain length of time, select the relevant check box and specify the length of time in seconds.
- Step 9** Click **OK** to exit the Edit TCA dialog box.
- Step 10** Click **OK** to exit the Edit Soft Property dialog box.
- Step 11** Click **Close** to exit the Soft Properties Manager.

The TCA is activated on the NE. If the trigger conditions are met, you should see the event in the Tickets tab (Prime Network Vision) or tickets table (Prime Network Events). When you restart the VNE, the TCA is applied to all similar components on the VNE.

If you want to make the TCA available to other NEs, follow the procedure in [Making the Soft Property Available to Other NEs, page 2-14](#).

