C H A P T E R **5**

Administrative Tasks for CBT 3.3

Revised: June 28, 2007, OL-13930-01

This section describes administrative configuration tasks that improve additional functions of CBT 3.3:

Mapping Hostnames from Applet to Servlet

CBT 3.3 introduces support for hostname-based communications between applet and aervlet on the network, in addition to sustaining IP-based communications, as with the prior CBT 3.2.

In CBT 3.2 all the communication between the applet and the servlet was based only on the IP address of the server. Every request and response between the applet and servlet had the IP address in the URL. CBT 3.3 removes this limitation, to support both hostnames and IP addresses.

This procedure changes the UseHostName parameter of the GUNSLINGER.INI file. By default, this value is NO in CBT 3.3. Changing this value to YES enables hostname-based communication between applet and servlet, and removes IP addresses from corresponding displays and processing.

Some Web proxy functions only allow hostname-based IP communication, and otherwise drop communications with IP addresses in the URL. This feature is helpful in such cases.

This procedure requires that applet and servlet hostnames be established and otherwise functional on the network prior to mapping hostnames in CBT 3.3. Both the client and server should be able to resolve the hostname of the CBT server machine.

Perform these steps to map hostnames from applet to servlet.

Step 1 Open the GUNSLINGER.INI file available in the CBT server machine.

- For Solaris and Linux, the GUNSLINGER.INI file is under the directory
  /opt/CSCOcbt/httpServer/webapps/ROOT or
  <CBT_Install_Directory>/httpServer/webapps/ROOT.

- For Windows, the GUNSLINGER.INI file is under the directory C:\Program Files\Cisco
  Systems\Cisco Broadband Troubleshooter\httpServer\webapps\ROOT\ or
  <CBT_Install_Directory>\httpServer\webapps\ROOT\.

Step 2 Change the UseHostName parameter to YES or NO depending on your need.

- YES enables hostname-based communications.

- **NO** implements IP-address-based communications.

Step 3   Save the GUNSLINGER.INI file with your changes.

Step 4   Restart CBT 3.3.

Configuring Administrative Parameters for Spectrum Analysis

CBT releases prior to CBT 3.3 support options for spectrum operation parameters, and CBT 3.3 continues support for these parameters. CBT 3.3 introduces support for adminstrators to configure upper and lower limits for multiple fields in the Spectrum Operations windows. CBT 3.3 introduces additional configurable parameters in the SPECTRUM.INI file.

Perform the following steps to define administrative upper and lower limits in Spectrum Operations windows.

Step 1   Open the SPECTRUM.INI file available in the CBT server machine.

- For Solaris and Linux, the SPECTRUM.INI file is under the directory /opt/CSCOcbt/httpServer/webapps/ROOT or <CBT_Install_Directory>/httpServer/webapps/ROOT.

- For Windows, the SPECTRUM.INI file is under the directory C:\Program Files\Cisco Systems\Cisco Broadband Troubleshooter\httpServer\webapps\ROOT\ or <CBT_Install_Directory>\httpServer\webapps\ROOT\.

Step 2   Change the default settings for as few or as many parameters as desired. Listed below are default values, and acceptable ranges for these parameters.

- SpecEventStartFreqMinValue=5
- SpecEventStartFreqMaxValue=65
- SpecEventStopFreqMinValue=5
- SpecEventStopFreqMaxValue=65
- SpecEventCenterFreqMinValue
- SpecEventCenterFreqMaxValue
- SpecEventFreqSpanMinValue
- SpecEventFreqSpanMaxValue
- SpecEventDataPointsMinValue
- SpecEventDataPointsMaxValue
- SpecEventPollIntervalMinValue
- SpecEventPollIntervalMaxValue
- SpecEventStepSizeMinValue
- SpecEventStepSizeMaxValue
- SpecEventSamplesMinValue
- SpecEventSamplesMaxValue

You can configure the upper and lower limit for the start, stop frequency, poll interval, step size and data points. While entering such data spectrum parameters, CBT 3.3 sustains native-level validation, and additionally, CBT 3.3 validates entries with respect to the newly configured limits in the SPECTRUM.INI file. The following list describes various fields and supported ranges for validation in a Spectrum Event:

- Start Frequency—Should be in the range of 5 to 65, with the value representing MHz. A decimal value is supported.

- Stop Frequency—Should be in the range of 5 to 65, with the value representing MHz. A decimal value is supported.

- Center Frequency and Frequency Span—The frequency span cannot be greater than these results:

  – minimum—(center frequency - 5) x 2

  – minimum—(65 - center frequency) x 2

  Validation is performed on Center Frequency and Frequency Span in the following way:

  – Start and stop Frequencies are calculated.

  – startFreq = centerFreq - (freqSpan/2)

  – stopFreq = centerFreq + (freqSpan/2)

  As a result, these values should be in the range 5 to 65. In this way both the fields are validated.

- Data Points—Should be an integer greater than 2, and are subject to the following additional range requirements, according to the cable interface line cards:

  – Should be in the range from 2 to 6001 for the MC5X20S/U/H BPE.

  – Different upper limits of Data Points for different cable interface line cards are as follows:

    - MC16S: 617

    - MC16U: 3001

    - MC16X: 3001

    - MC28U: 3001

    - MC28X: 3001

    - MC520S: 5886

    - MC520U: 6001

  – Data Points with other cable interface line card combinations should result in a start and stop frequency range of 5 to 65.

- Poll Interval—Must be a positive integer.

- Step Size—Should be a positive integer not greater than 6000.

> **Note**   For any combination of the above-mentioned field values that you enter, the start and stop frequency should always be in the range 5 to 65

Step 3   CBT 3.3 also supports additional checking with respect to the administratively configured values in the SPECTRUM.INI file. When changing this file, all the field values should also be in the range specified, and saved to the SPECTRUM.INI file for non-default configurations.

Example

If the value of the SpecEventPollIntervalMinValue parameter is set to 1, then only values above 1 are accepted in the Poll Interval dialog box. This example removes the bandwidth-consuming zero-second polling.