

Application Note

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Event logs on PCoIP hosts and zero clients

Teradici processors write log entries to an internal event log, stored in non-volatile memory on the PCoIP device. Information in these event logs can be very useful when troubleshooting and diagnosing problems. This application note describes how to use the Administrative Web Interface (AWI), a PCoIP management tool, to collect event logs from your PCoIP hosts and zero clients.

We recommend that you configure your PCoIP devices to use an NTP server so that event log entries are time-stamped based on NTP time. This makes it easier to match together event logs from different devices. For details, see the section [Configure NTP on the PCoIP host card or zero client](#).

This application note also describes how to enable enhanced logging for individual event categories. For details, see [Specify enhanced logging for a single event category](#).

Collect event logs immediately if a problem occurs!

On PCoIP devices, information in the event log is overwritten in a circular fashion. In particular, rebooting and connecting a PCoIP device can generate enough new log entries to overwrite the existing event log. This could mean that existing log data is lost before it can be used to diagnose a problem. For this reason, it is essential that you collect event log data *immediately, once you see a problem*.

If the problem relates to imaging performance during a PCoIP session, you must disconnect the session after reproducing the problem and then immediately collect the event log data. When the session is disconnected, useful statistics are written to the event log which can make it easier to diagnose the problem.

Set up event logging

This section describes how to use the Administrative Web Interface (AWI) to collect event logs. You will need to know the IP addresses of your PCoIP host cards and zero clients.

Follow this procedure for both host cards and zero clients.

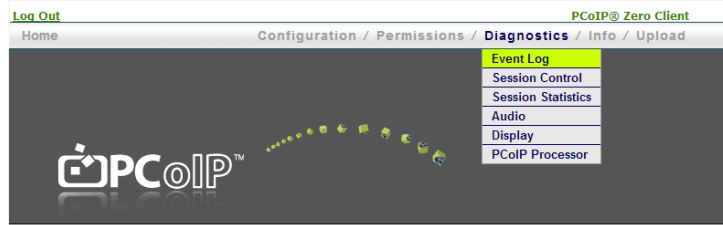
1. Browse to the IP address of the host card or zero client whose logs you want to collect.
2. When the AWI Log In page displays, enter the password. The default password is *ahkdante*.



The screenshot shows the 'Log In' page of the Administrative Web Interface. At the top, the text 'Log In' is displayed in green. Below it, a message reads: 'Please enter the administrative password to access this device.' There are two input fields: a text box for the password, labeled 'Password:' in green, and a dropdown menu for the idle timeout, labeled 'Idle Timeout:' in green, with 'Never' selected. A 'Log In' button is located to the right of the dropdown menu.

AWI Log In page

- When the AWI home page displays, select **Diagnostics > Event Log**.



AWI Diagnostics menu

- When the Event Log page appears, click the **View** button to view the event log contents.

Event Log

Configure diagnostic logging options

Enable Event Log:

Event Log Messages:

Enable Syslog:

Identify Syslog Host By: IP address FQDN

Syslog Host IP Address: . . .

Syslog Host Port:

Syslog Facility:


Enhanced logging mode:

Category	Enable enhanced logging
AUDIO	<input type="radio"/>
MANAGEMENT CONSOLE	<input type="radio"/>
NETWORKING	<input type="radio"/>
ONESIGN	<input type="radio"/>
SESSION NEGOTIATION	<input type="radio"/>
SMARTCARD	<input type="radio"/>
SYSTEM	<input type="radio"/>
UNIFIED COMMUNICATIONS	<input type="radio"/>
USB	<input type="radio"/>
VIDEO	<input type="radio"/>

AWI Event Log page

Note: For details about enhanced logging mode, see [Specify enhanced logging for a single event category](#).

- When the event log opens in a new window, press Ctrl+A to select the entire log file contents. Then press Ctrl+C to copy the contents.



```

***** Device Configuration *****
Firmware Version: 5.0.2  Firmware Build ID: release/fw/r5_0@35019.7db9da0.4061755
*****
IN VPD:          mac_addr = 00-17-FD-53-00-84
IN FLASH:       peer_mac_addr = 00-17-FD-42-04-10
IN FLASH:       ip_address = 172.16.0.4
IN FLASH:       peer_address = 192.168.202.107
IN FLASH:       subnet_mask = 255.255.248.0
IN FLASH:       gateway = 172.16.7.254
IN FLASH:       primary_dns = 172.16.7.248
IN FLASH:       secondary_dns = 0.0.0.0
DEFAULT:       language = ENGLISH
IN OFD:        enable_audio = enabled
IN FLASH:      enable_auto_reconnect = disabled
IN FLASH:      enable_dhcp = enabled
DEFAULT:      enable_slp_discovery = enabled
DEFAULT:      enable_dual_monitor = disabled
IN VPD:        unique_id = 0017FD530084
IN VPD:        serial = DL10057DA
IN VPD:        version = DXZC PVA.1.A
DEFAULT:      vlan_tag = 0
DEFAULT:      host_remote_power_button = soft and hard
DEFAULT:      osd_top_text =
DEFAULT:      dns_based_discovery_prefix =
IN FLASH:     keyboard_layout = UK
IN OFD:      osd_screen_saver_timeout = 300
DEFAULT:     dns_based_discovery_delay = 300
IN OFD:     password_hash = [hash not shown]
IN FLASH:  enet_mode = Auto Negotiation
IN FLASH:   osd_mouse_scale = 148
IN FLASH:   kbd_repeat_delay = 500
IN FLASH:   kbd_repeat_rate = 33
DEFAULT:   enable_monitor_emulation_0 = enabled
DEFAULT:   enable_monitor_emulation_1 = enabled
DEFAULT:   minimum_image_quality = 40
  
```

Example event log

- Paste the event log contents to a text file. Then save the file using a descriptive file name such as: **dxr4- ip chip1. txt**

Note: If you are sending logs from more than one zero client or host card, include the device serial number in the filename.

Important! *Always send the complete event log because the critical entries may not necessarily occur at the end of the log!*

- When you have collected all the log files from the Teradici processors, attach them to an email and send to Amulet Hotkey Support.

If you are already in discussion with Amulet Hotkey Support about the problem, include the ticket number in the subject line ('AHK...').

Configure NTP on the PCoIP host card or zero client

This section describes how to configure Network Time Protocol (NTP) on a PCoIP host or zero client so that event log entries are time-stamped based on NTP time.

Note: If a PCoIP device is not configured to use NTP, event log entries use a timestamp that specifies the time in days, hours, minutes and seconds since the chip last booted. For example:

0d, 00: 01: 04>

Assign an NTP profile

To ensure a consistent NTP configuration across your PCoIP devices, we recommend that you configure an 'NTP' profile in the Teradici Management Console (a profile is a collection of device configuration settings). You can then assign this profile to specific PCoIP groups (a group is a collection of one or more PCoIP hosts or zero clients).

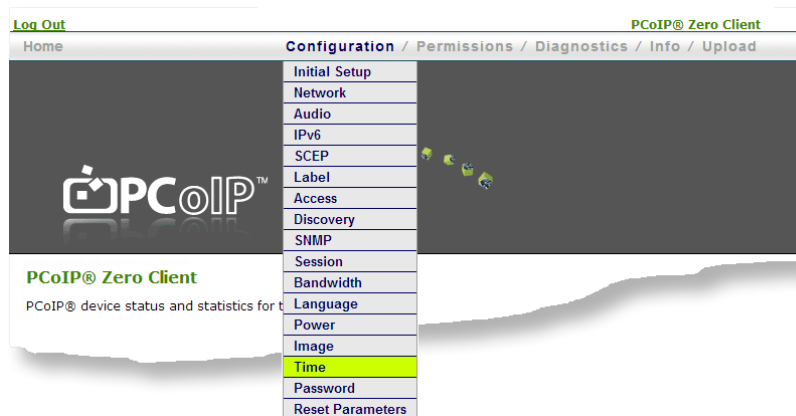
For details about Management Console profiles, see the Teradici *PCoIP Zero Client and Host Administrator Guide*. Amulet Hotkey can provide this manual. In addition, at May 2016 this manual was available on the Downloads page of the Teradici Support web site:

<http://techsupport.teradici.com/ics/support/DLSplash.asp?task=download>

Specify an NTP host server

Follow these steps:

1. From the AWI home page, select **Configuration > Time**.



AWI Configuration menu

2. When the Time page displays:
 - a. Select the **Enable NTP** checkbox.
 - b. Identify the NTP server that the PCoIP host or zero client will contact to determine the current time.

Set the **Identify NTP Host by** setting to IP address or FQDN. Then enter the NTP host server's IP address or DNS Name as required.

- c. Click **Apply**.

Note: Active Directory domain controllers can be used as NTP hosts in their default configuration. You can also use an external source such as pool.ntp.org, if it is reachable. Consult your network administrator to ensure you use a suitable setting.

Time
Change the local time configuration

Current time: 08/21/2012 13:22:29

Enable NTP:

Identify NTP Host by: IP address FQDN

NTP Host DNS Name:

NTP Host Port:

NTP Query Interval: Day(s)

Time Zone:

Enable Daylight Saving Time:

Apply Cancel

Identify the NTP host server

AWI Time page: In this example, the NTP server is identified by FQDN

3. When the Teradici chip restarts after specifying an NTP server, an entry is written to the device event log similar to this:


```
07/12/2012, 07:19:04> LVL: 1 RC: 0 MGMT_TOD :NTP time acquired, uptime = 74 seconds
```

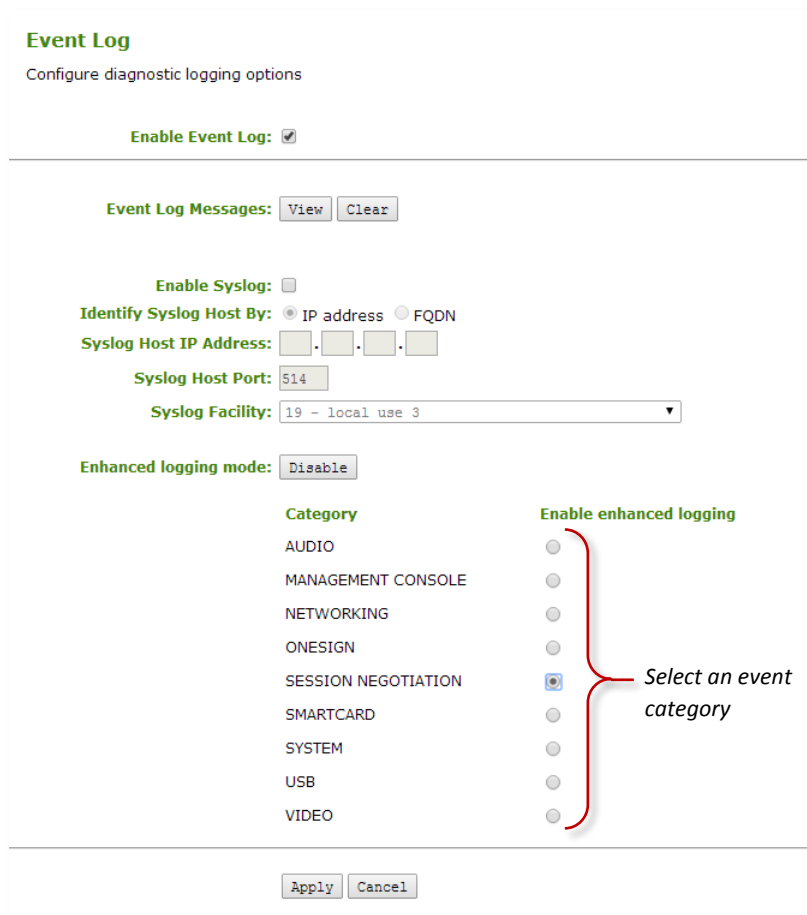
 Subsequent log entries will now have the correct date and time.

Specify enhanced logging for a single event category

Since the release of PCoIP firmware 4.2.0, verbose logging is enabled by default and terse logging has been deprecated. It is no longer necessary to explicitly specify the verbose event log filter mode.

However, it is still possible to enable enhanced logging mode for specific event categories. If Amulet Hotkey Technical Support request that you do so, follow these steps:

1. From the AWI home page, select **Diagnostics > Event Log**.
2. In the Event Log page, confirm that the Enable Event Log check box is selected.
3. To enable enhanced logging, select the required event category:



AWI Event Log page: Event categories for enhanced logging mode

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