

Compaq Analyze

Release Notes

Compaq Analyze is a rules-based hardware fault management diagnostic tool that provides error event analysis and translation. The multi-event correlation analysis feature of Compaq Analyze provides the capability to analyze events stored in the system's event log file and the capability to analyze events from other sources.

The *Compaq Analyze Release Notes* provide general release information and describe the limitations of Compaq Analyze.

Rev. 3/21/02–A

Operating System:	Microsoft Windows NT 4.0 and Windows 2000 Compaq Tru64 UNIX versions 4.0E to 5.1 Compaq OpenVMS Alpha versions 7.1-2, 7.2, 7.2-1, 7.2-1H1, and 7.3
Software Version:	Compaq Analyze 4.0 Service Pak 4



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Contents

Preface

The Compaq Analyze Release Notes provide general information about Compaq Analyze.

Overview

The *Compaq Analyze Release Notes* provide general information about Compaq Analyze including the functionality and known limitations of the software.

Intended Audience

The *Compaq Analyze Release Notes* are intended for anyone who will use the Compaq Analyze software. The audience consists of the following:

- Mission Critical Engineers
- Compaq Customer Support Center Phone Specialists
- Compaq Customers
- Compaq Serviceability Engineers
- Compaq Product Division
- Authorized Service Providers

Documentation Conventions

The following conventions are used in this manual:

User entries

Information that should be entered exactly as it appears in the document is shown in bold.

Preface

Further Information

Variables

Information that will vary depending on your computer or user profile is shown in italics.

System Output

Responses from the system are shown in a monospaced font.

Further Information

Compaq Analyze is a member of the Web-Based Enterprise Service (WEBES) suite of products. For more information on the other WEBES applications, visit the Service Tools support web site at the following URL:

<http://www.support.compaq.com/svctools/>

The following documents contain relevant information:

- *Compaq Analyze User Guide*
- *WEBES Install Guide*

General Information

This chapter describes Compaq Analyze and the new features supported in this release. In addition, it describes the supported products.

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Supported Operating Systems.....	page 1-4
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General Information

1.1 Description

1.1 Description

Compaq Analyze is a fault analysis utility included with the Web-Based Service Enterprise (WEBES) service tools. It is designed to provide analysis for single error/fault events, as well as multiple event and complex analysis. Compaq Analyze provides system analysis that uses other error/fault data sources in addition to the traditional binary event log.

Compaq Analyze provides background automatic analysis by monitoring the active binary event log and processing events as they occur. The events in the binary event log file are checked against the analysis rules. If one or more of the events in the binary event log file meets the conditions specified in the rules, the analysis engine collects the error data and creates a problem report containing a description of the problem and any corrective actions required. Once the problem report is created, it is distributed in accordance with the customer's notification preferences.

Each WEBES-based service tool adds functionality to the Director, a process (or set of processes) that executes continuously. Compaq Analyze provides the Director with the capability to capture and interpret hardware events. The analysis of events can be performed automatically or when requested by an outside process.

Compaq Analyze supports command line and web browser interfaces that enable you to interact with the Director. Although only one Director can run on a machine at any time, many web browser and CLI connections can be active simultaneously.

For a complete list of the new features available in the latest release refer to the readme details text file installed with the kit. The readme files are located in the following directories:

Windows – *installed directory*\compaq\svctools\docs\

OpenVMS – SVCTOOLS_HOME : [DOCS]

Tru64 UNIX – /usr/opt/compaq/svctools/docs/txt

1.2 Functionality

Compaq Analyze presents information through the following user interfaces:

- Command Line Interface (CLI)
- Web Interface

Both interfaces support the following functions:

- Automatic translation and analysis
- Manual translation and analysis
- Scavenge pending events
- Automatically send notification to service provider

Refer to the *Compaq Analyze User Guide* for more information about using the Compaq Analyze interfaces and functions.

1.3 Supported Products

The following list shows the products Compaq Analyze supports.

- Analysis and Bit-To-Text Translation for the following:
 - Compaq AlphaServer DS10 (Tru64 UNIX and OpenVMS, refer to the [AlphaServer Platforms Support](#) section for support information)
 - Compaq AlphaServer DS10L (Tru64 UNIX and OpenVMS, refer to the [AlphaServer Platforms Support](#) section for support information)
 - Compaq AlphaServer DS20e (Tru64 UNIX and OpenVMS, refer to the [AlphaServer Platforms Support](#) section for support information)
 - Compaq AlphaServer DS20 (Tru64 UNIX and OpenVMS, refer to the [AlphaServer Platforms Support](#) section for support information)
 - Compaq AlphaServer ES40/ES45 (Tru64 UNIX and OpenVMS, refer to the [AlphaServer Platforms Support](#) section for support information)
 - Compaq AlphaServer GS80/GS160/GS320 (Tru64 UNIX and Open VMS, refer to the [AlphaServer Platforms Support](#) section for support information)
 - Memory Channel II (Compaq Tru64 UNIX and OpenVMS)
 - TS202C
- I/O – Analysis
 - Disk Storage based on SCSI specification (Compaq Tru64 UNIX, OpenVMS, and Windows)
 - EZ4X/EZ6X (Compaq Tru64 UNIX and OpenVMS)
 - EZ5X/EZ7X (Compaq Tru64 UNIX and OpenVMS)
 - HSG60/HSG80/HSZXX (Compaq Tru64 UNIX and OpenVMS)
 - HSG60/HSG80 (Windows)
- I/O – BTT
 - RA3000
 - KZPSC/KZPAC/KZPBA/KZPCM/KZPSA/KZPCC/KSPEA
 - KGPSA-CA (Compaq Tru64 UNIX and OpenVMS)
 - CCMAB-AA
 - CIPCA-BA

AlphaServer Platforms Support

Please refer to the operating system's SPD for information about the platforms supported by the various operating system versions.

If you need to update your platform's firmware, refer to either of the following locations for the latest version:

General Information

1.4 Supported Operating Systems

- The Alpha Systems Firmware CD
- The Alpha Systems Firmware – Firmware Updates web page, located at the following URL:
<http://www.compaq.com/support/files/index.html>

1.4 Supported Operating Systems

Compaq Sustaining Engineering maintains a schedule of support for the Tru64 UNIX and OpenVMS operating systems. Compaq does not commit to supporting WEBES when installed on an operating system version that has exceeded its end-of-support date. See the following URL:

http://www.compaq.com/services/software/ss_pvs_se_amap.html

1.5 Translation and Analysis Capabilities

The following sections describe the translation capabilities of Compaq Analyze and the message types supported.

1.5.1 Binary Event Log Decomposition

Compaq Analyze formats and displays binary event log entries for the following:

- Compaq AlphaServer DS10
- Compaq AlphaServer DS10L
- Compaq AlphaServer DS20
- Compaq AlphaServer DS20e
- Compaq AlphaServer ES40
- Compaq AlphaServer ES45
- Compaq AlphaServer GS80
- Compaq AlphaServer GS160
- Compaq AlphaServer GS320
- Memory Channel II
- Common Access Method (CAM) error log entries
- Logged message entries
- TS202c

1.5.2 Machine Check Error Log Entry Types

The binary event log entries processed by Compaq Analyze are:

Machine Check Entries

- CPU Correctable Error (630)
- CPU Uncorrectable Error (670)
- System Correctable Error (620)
- System Uncorrectable Error (660)
- System Environmental (68x)
- Console Data Log (113)
- Correctable Error Throttling Notification (120)

I/O Error Log Entries

- CAM SCSI Entry Type (199)

Miscellaneous Entry Types

- Generic Information
- Startup Message
- Shutdown Message
- Panic Message
- Time Stamp
- Diagnostic Message
- Repair Message

1.5.3 GS Error Log Entry Types

All GS160 Uncorrectable Errors (660/670) for the following hardware entities:

- PCI
- PCA
- FE-minilink
- Hosecable
- NE-minilink
- IOP
- CPU
- Memory
- Global port

All GS160 System Faults reported by the following entities:

General Information

1.5 Translation and Analysis Capabilities

- PCA
- FE-minilink
- Hosecable
- NE-minilink
- IOP
- CPU
- Memory
- Global port
- Hswitch
- Dtag
- Directory
- QSA
- QSD

GS160 correctable errors (620/630):

- Memory Correctable Read Errors (620)
- Memory Correctable Write Errors (620)
- Added OS Indictment API support memory PFNs and DIMMs.
- Directory Correctable Read Errors (620)
- Uncorrelated correctable errors between GP GPL and HSwitch (620)
- Uncorrelated correctable errors between GP HSL and HSwitch (620)
- All Processor Correctable Errors (630)

GS160 System Events (68x/113):

- All PSM, PBM and HPM events

General Limitations

This chapter describes the general limitations for Compaq Analyze that apply to all operating systems.

Interface Independent Notes	page 2-2
CLI Notes	page 2-10
Web Notes	page 2-11

General Limitations

2.1 Interface Independent Notes

2.1 Interface Independent Notes

The following limitations apply to all interfaces.

2.1.1 Time Stamp Interpretation

If an event in a binary log includes a Storage Event Header (SEH) or Common Event Header (CEH), that information is used to provide the time stamp information for analysis results. If the event only includes a Windows NT header, no time stamp is included with analysis results.

In addition, when you translate an event that includes a SEH or CEH header in addition to a Windows NT header, both time stamps are shown in the translation results. However, unless the machine responsible for logging the event is located in the GMT time zone, the time stamps will be different.

The event time is also displayed in the event description (located at the top of a translated event). Depending on the contents of the event and the Compaq Analyze interface used to translate it, the translated output may include different information:

- If the event includes a SEH or CEH header, the time stamp information from that header is included in the event description. If the header has invalid date information the current date is shown along with an error message.
- If you are using the web interface and the event only has a Windows header, no date information is shown in the event description.
- If you are using the CLI to send the translation to the screen or a text file and the event only has a Windows header, the date information from the header is included in the event description.
- If you are using the CLI to send the translation to a HTML file and the event only has a Windows header, no date information is shown in the event description.

SEH and CEH Headers

SEH and CEH time stamp information is stored as a string and reported in the `TLV_Time_as_Local` field of a translated event. It has the following format:

```
Jan 11, 2002 3:06:09 AM GMT-0600
```

This indicates the time the event was logged, in the time zone where the machine responsible for logging the event is located.

Windows Headers

The Windows NT header stores time stamp information as an integer indicating the number of seconds that have elapsed since epoch (January, 1 1970 00:00:00 AM GMT). These integers are translated into a date and time and reported in the `WNT_GMT_Time_Generated` and `WNT_GMT_Time_Written` fields of a translated event using the following format:

Jan 11, 2002 9:06:09 AM GMT

Since the Windows NT header does not include any information about the time zone where the logging machine is located, the GMT time zone is used. This does not mean the logging machine is located in the GMT time zone.

2.1.2 Date Reported By Summary Command

When you view the summary of a log file's contents (either using the web interface or the CLI), the Last Entry Time field may display the current date and time. This occurs if the last event in the log file contains invalid data and Compaq Analyze cannot determine the actual date.

2.1.3 Event Type Reported By Summary Command

If an event does not have an CEH or SEH header or does not contain valid data, Compaq Analyze reports the event type as 0. If the event type is 0, the Summary command (in both the web interface and CLI) indicates that the event is *Unrecognized/Unsupported*. As a result, events that only contain a Windows header are reported as *Unrecognized/Unsupported*, even though they are translated correctly.

2.1.4 Serial Number Prevents Rules From Working

The system serial number on some GS80, GS160, and GS320 systems was not set correctly. The Compaq Analyze rules will only function if the serial number is set correctly.

Workaround

You can check and correct the serial number from the SRM console:

Check the serial number using the following command:

show sys_serial_num

The serial number should match the actual system serial number given on the model/SN tag in the power cab.

If necessary, change the serial number with the following command:

set sys_serial_num

You should enter the six-character serial number provided on the tag located in the power cabinet. The serial number begins with the letter G.

General Limitations

2.1 Interface Independent Notes

Note

If multiple systems were ordered, they may all use the same serial number. As a result, the Compaq Analyze rules will not work correctly because they require that each system have a unique serial number. If this is the case, when you set the serial number, append a -1, -2, or -3 to the serial number to uniquely identify each system.

2.1.5 Resource Usage Seems High

Whenever Compaq Analyze starts, and when you run manual analysis, the program appears to use a lot of system resources and processor cycles. However, Compaq Analyze uses only the capacity that is not being asked for by other programs.

Compaq Analyze always relinquishes processor cycles to other programs whenever they need them. In other words, the program uses whatever resources are available.

At startup Compaq Analyze needs the available capacity for the scavenge process (see Section 2.1.8 for information on configuring the delay). Depending on the system, and the size and content of the log, the initial startup pass can take many minutes or even hours to complete. After completing the scavenge process, Compaq Analyze drops into idle mode, where resource usage hovers at only a few percent.

If you run Compaq Analyze in manual mode, large amounts of system resources and processor cycles might also get used. As in the case of startup in automatic mode, the condition is directly related to the size and content of the log being processed. Once again by design, Compaq Analyze uses as many resources as are available until processing is completed.

You can speed processing by managing the system error log so that it does not grow indefinitely. When you are using manual analysis, it may be beneficial to filter large log files in order to improve processing times.

2.1.6 Starting the Director Process Results in High CPU Usage

When the Director process is first started, it analyzes the entire binary event log. Performing this analysis takes time and may result in high CPU usage. However, once the Director process has completed processing the binary event log file, CPU usage is reduced significantly and new events are processed in real time. Thus, when you first start Compaq Analyze, you may notice some impact on your system's performance.

The initial analysis occurs only once, four minutes after the Director has been started (see Section 2.1.8 for information on configuring the delay). Subsequent restarts of the Director should not result in significant CPU usage except for the normal startup tasks, which may take from 10 to 30 seconds.

2.1.7 Commands Time Out During Scavenge or Heavy Loads

Four minutes after the DESTA Director process starts, a scavenge operation processes the events from the native binary event log that have not already been processed (see Section 2.1.8 for information on configuring the delay). If there are numerous events to process, such as the first time the scavenge operation occurs, the DESTA Director process may be too busy scavenging to respond to other requests from the web interface or the CLI before their time-outs expire, thus, causing the request to fail.

Manual translation or analysis of large binary event logs also may cause the Director to become too busy to respond to other requests in a timely manner.

Resource loading and time-outs will be improved in a future release.

Workaround

Wait for the resource-intensive activity to complete and for the system to become idle again, then repeat the command or operation that failed.

2.1.8 Configuring the Scavenge Start Time

Normally, the scavenge operation begins 4 minutes after the Director is started. Scavenging picks up native events for automatic analysis that occurred while the Director was not running. If there are numerous analyzable events, this operation can consume significant resources until completed.

You can configure the scavenger delay time by changing the scavStart attribute of the reader service in the Web Interface's Director Settings screen (refer to the *Compaq Analyze User Guide* for details on changing attributes in the Web Interface). The name of the reader service varies by operating system:

- Windows – NTReader
- Tru64 UNIX – DUReader
- OpenVMS – VMSReader.

Changes to the scavenger delay time take effect the next time the Director is started. Be aware that because the reader service depends on other service having completed their startup tasks, it is not recommended to lower the value below 2 minutes.

No live event processing is performed until scavenging has been completed, but any events that occur during the delay before scavenging starts will either be processed during or shortly after scavenging.

General Limitations

2.1 Interface Independent Notes

2.1.9 Fragmented Disk Slows Processing

Processing binary event logs manually may be significantly slower because of interaction between virus detection software and a fragmented disk. In order to process binary event logs as quickly as possible, make sure that your disk has been defragmented recently.

2.1.10 Initializing System Error Log With Director Running Causes Errors

If the system error log is re-initialized while the Director is running, events may be missed or processed incorrectly. To avoid this problem, either re-initialize the system error log before the Director is started or stop the Director before modifying the system error log.

2.1.11 Changing IP Address Causes Director to Stop Functioning

If WEBES is installed on a system without a fixed IP address, such as a network that assigns IP addresses using DHCP (Dynamic Host Configuration Protocol), and the IP address changes, the Director will no longer function.

Similarly, if you connect to a network, disconnect from a network, or change the network connection of your machine (for example from LAN to Modem ISP) after the Director has been started, the IP address will change. As a result, the Director will cease to function properly. For example, starting a Windows machine with no network connection gives the Director an IP address of 127.0.0.1 (localhost loopback). If you later connect to a network, the machine obtains a real IP address, but the Director will not function because it still assumes the IP address is 127.0.0.1.

If you know the IP address will change, stop the Director until the change is complete, then restart the Director. Be aware that stopping the Director stops all the WEBES components.

2.1.12 Disabling Automatic Analysis

By default, Compaq Analyze operates in automatic analysis mode. If the binary event log contains entries for hardware that is not supported by automatic analysis you may want to change the default settings. You can disable automatic analysis from the settings window in the web interface. Refer to the *Compaq Analyze User Guide* for information about modifying the settings.

2.1.13 Bad Translation or Analysis Due to No Knowledge Registered

On some systems, the WEBES installation may not register the default knowledge correctly. This problem may affect the event translation knowledge or the analysis rule set knowledge, or both.

If Compaq Analyze analysis does not produce the expected problem reports from a binary event log, determine if there are any knowledge rule sets registered using either the CLI or the web interface.

- From the CLI, enter the following command:

```
ca listrk
```

If there are no knowledge files registered, the following message is returned:

```
There are no knowledge files registered.
```

- From the web interface:
Click the Settings button in the toolbar, select the Director Settings tab, and then click the Register Knowledge button.

If there are no knowledge files registered, none of the check boxes will be selected.

If no knowledge files are registered, register the default analysis knowledge files.

- From the CLI, use the following procedure to register:
 1. Stop all WEBES processes.
 2. Delete the `decorEvt*. *` files from the `ca/data` directory.
 3. Restart the Director.
 4. Re-register the default rule sets with the `ca regknw rdef` command.
- From the web interface, use the following procedure:
Click the check boxes next to the knowledge files in the `ca\data` directory and then click the Update Knowledge Registration button.

If Compaq Analyze still does not produce the expected problem reports, view the translated events from the binary event log using either the web interface or the `ca trans` command.

If the translated output resembles the following example, the event translation knowledge may not be registered:

```
com.compaq.svctools.desta.services.decomposers.DecompNavException:
No frame found to continue processing this event.
0000: FE FF FF FF C0 00 00 00 þÿÿÿÄ...
0008: 50 04 00 00 02 00 00 00 P.....
0010: 01 00 04 00 EC 0D 00 00 ....ì...
0018: 22 00 00 00 00 00 00 00 .....
0020: 01 00 00 00 02 00 00 00 .....
...
```

General Limitations

2.1 Interface Independent Notes

If this is the case, repeat the procedure for registering the analysis knowledge and then enter the following command at the command prompt:

```
desta bldknw
```

This process will re-register the event translation knowledge and the analysis rule set knowledge.

2.1.14 Fields Contain “Unavailable”

This note applies to DS10/DS10L, DS20/DS20E, ES40, and TS202c products.

When a valid configuration tree event is accessible, output will include information in the Part Number, Serial Number, and FW Rev Level fields. If a valid configuration tree event could not be accessed, these fields are reported as “Unavailable.”

2.1.15 File Not Found Error In DESTA Log File

The following error message may appear in the DESTA log file:

```
Could not find file: CApplet403BeanInfo.class
```

It is safe to ignore this message since it does not impact the performance, stability, or functionality of Compaq Analyze.

2.1.16 DSNLink (SICL) Connectivity

There are known DSNLink issues that may result in problems if you use DSNLink to provide SICL functionality, and you connect to DSNLink via modem or X.25.

Workaround

Configure your DSNLink installation to use TCP/IP instead of modem or X.25, if your network supports it.

2.1.17 Spurious Error Messages

When you analyze multiple log files, spurious messages may appear along with the normal output. This can occur if you use a CLI command that processes multiple log files. If you process multiple log files simultaneously with the Web Interface, spurious messages may appear in the Director log file (`desta_dir.log`). In general, spurious messages are preceded by a string value enclosed in square brackets. Some examples are shown here, however, you should be aware that this list is not all inclusive.

```
[mdgs320_se_rule], clRPT_Errlog, init, Duplicate clRPT_Errlog  
[mdgs320_uce_rule], %WF660_main, processing errlog entry 23248.1 - 25 Oct  
2000 13:20:45 -0600 (config)  
[mdgs320_uce_rule], %WF660_main, completed errlog entry 23248.1  
[mdPrivateer], fnSysCsRd, Invalid Arguments
```

These messages can be safely disregarded.

2.1.18 Duplicate Callouts when DECevent and WEBES Installed Together

Note

This situation is most likely to arise when newer Alpha platforms with WEBES (such as GS160) are connected to clusters containing older Alpha platforms with DECevent (such as GS60 Turbolaser), however, other circumstances may also have the same effects.

Running DECevent and WEBES on the same machine results in duplicate callouts to the CSC when event notification occurs. To resolve this problem, you can choose to only start one of the applications at boot time.

Tru64 UNIX

To prevent DECevent from starting on a UNIX platform, use the following procedure:

1. Edit the startup script, `/opt/DIAXXX/sbin/init.d/dia_s_k`
Where XXX is the DECevent version number:
2. On line 64 of the script, remove the following code:

```
if [ -f /usr/sbin/dia ]  
then
```
3. Insert the following code in the same location.
Replace *nodename1* with the name of the node that should not run DECevent. If there are multiple cluster nodes that need to be modified, add a similar `bail="true"` line for each affected cluster node.

```
bail=  
[ "$HOSTNAME" = "nodename1" ] && bail="true"  
if [ -z "$bail" -a -f /usr/sbin/dia ]  
then
```

To prevent WEBES from starting on a UNIX platform, use the following procedure:

1. Execute `/usr/sbin/webes_install_update`.
2. Select menu item 4, Start at Boot Time.
3. Answer yes to change the list.
4. Add the node names of the nodes that should run WEBES.

General Limitations

2.2 CLI Notes

OpenVMS

To prevent DECevent from starting on a VMS platform, use the following procedure:

1. Edit the startup script, `sys$startup:decevent$startup.com`.
2. Insert the following code at the beginning of the file:

Note

Verify the existence and format of the `SYS$NODE` logical before performing this operation.

```
$ node = F$TRNLNM("SYS$NODE",,,,,)
$ IF (node .EQS. "nodename1::") THEN EXIT 1
```

Replace *nodename1* with the name of the node that should not run DECevent. If there are multiple cluster nodes that need to be modified, add a similar IF line for each affected cluster node.

To prevent WEBES from starting on a VMS platform, use the following procedure:

1. Edit the startup script, `sys$startup:desta$startup.com`.
2. Insert the following code at the beginning of the file:

```
$ node = F$TRNLNM("SYS$NODE",,,,,)
$ IF (node .EQS. "nodename1::") THEN EXIT 1
```

Replace *nodename1* with the name of the node that should not run DECevent. If there are multiple cluster nodes that need to be modified, add a similar IF line for each affected cluster node.

2.2 CLI Notes

The following limitations apply to the command line interface:

2.2.1 Syntax Changes Affect All Users

Changing the default syntax affects all the users on the system. Thus, if another user changes the default syntax, it will affect your Compaq Analyze session. To ensure that your commands are interpreted correctly, it is recommended that you always include a syntax designator when you are using a command that supports multiple syntaxes.

2.3 Web Notes

The following limitations apply to the web interface:

2.3.1 Director Communications Limitations

Different versions of the WEBES Director (including different Service Paks of the same version) may not communicate correctly. As a result, if you are logged into a system and attempt to connect a node that is using a different version of WEBES, you may not get the expected analysis results. If you need to monitor multiple nodes using different versions of the Director, open a separate browser window for each Director version and connect to the nodes directly.

Compaq Analyze version 4.0 for UNIX and VMS is not compatible with version 4.0 for Windows. You must install the latest Service Pak on all UNIX, VMS, and Windows systems before they can communicate with each other.

2.3.2 Node Name Changes Cause Connection Failure

If a system's network name changes, the change must be reflected in the web interface. After a node's network name changes, the old network name remains in the web interface and the connection to the node is lost. This occurs even if the name change occurs on the localhost. Thus, for name changes on any node, click on the node's group icon in the navigation tree and delete the old node name. Then add the node again using the new name.

2.3.3 Problems Connecting to Remote Nodes

If you use the web interface to add a remote Windows node, you may not be able to use the Full View option on the remote machine. If the local host is running Windows, full view monitoring will fail unless the operating system is installed in the same place on both machines. If the local host is running UNIX or VMS, you will not be able to use the Full View option for any added remote Windows node.

Workaround

Rather than using the Full View feature, add the remote machine's Windows event log to the Other Logs area. To add the Windows event log to the Other Logs area, type the path and name of the event log in the Add File screen (by default the Windows' event log is `C:\WINNT\system32\config\AppEvent.Evt`). Once the event log is added under the Other Logs area, you can perform manual analysis as normal.

2.3.4 Internet Explorer Limitations

If you are using Internet Explorer as your browser, the following limitations affect the web interface:

2.3.4.1 Java Virtual Machine Required

Compaq Analyze requires the Microsoft Java Virtual Machine (VM). If you are using Internet Explorer version 5.x and have not installed the VM on your machine, you may be asked to install it when you attempt to logon. You can install the Java VM by:

- Following the instructions when you attempt to logon to Compaq Analyze.
- Using your browser to access the following web site:

<http://windowsupdate.microsoft.com>

From the Windows Update page, select the “Product Updates” link and follow the instructions for installing the Java VM.

2.3.4.2 HTTP 1.1 Required

The “Use HTTP 1.1” option must be enabled for the web interface to function properly. To enable the option, select Internet Options from the Tools menu. From the Options window select the Advanced tab and make sure the check box next to “Use HTTP 1.1” is selected.

2.3.4.3 Partial URLs Not Allowed

When you access the web interface, you must preface the URL with **http://** (for example, enter `http://16.23.132.145:7902/` in the address line rather than `16.23.132.145:7902/`). If you do not enter the full URL, Internet Explorer will stop responding and the system may hang.

2.3.4.4 Navigation Icons Updated Slowly

Internet Explorer does not update the icons in the navigation frame quickly. Thus, if automatic analysis results in a problem report or manual analysis completes, the icon changes will not be visible immediately.

2.3.4.5 Icons May Disappear If New Window Opened

If you are using Compaq Analyze and open a new browser window, some of the icons in the first browser window may disappear. The icons can be restored by clicking the browser's Reload button.

2.3.4.6 Event Details Cannot Be Viewed In Separate Window

The web interface user settings can be used to view event details in a separate browser window. Version 4.x of Internet Explorer does not display event details correctly when this option is enabled.

2.3.4.7 Progress Bar Indicates Loading

The progress bar at the bottom of the window indicates that loading is still occurring, even after a page is fully loaded.

You can determine when loading has finished by watching the upper right corner of the web interface. The text `Loading New Page` appears while the page is loading and disappears once loading is completed.

2.3.5 Netscape Limitations

If you are using Netscape as your browser, the following limitation applies to the web interface:

2.3.5.1 Netscape 6 Not Supported

The web interface does not support Netscape 6. If you want to use the web interface with Netscape, you will need to use an earlier version. Refer to the *Compaq Analyze User Guide* for information on the supported versions of Netscape.

2.3.5.2 Java Must Be Enabled

In order to use the web interface, Java must be enabled in your browser settings. To enable Java for Netscape, select Preferences from the Edit menu and click on Advanced. Make sure the check box next to Enable Java is selected.

2.3.5.3 Excessive CPU Usage

If you are using Netscape 4.x with Compaq Analyze, you may notice excessive CPU usage. Some browser requests to Compaq Analyze, may result in Netscape using 100% of the local system's CPU. This problem occurs if you are browsing with Netscape on the same system where Compaq Analyze is running. When Netscape is using all of the CPU, Compaq Analyze, which is a background process, does not respond in a reasonable amount of time. In most cases, this issue occurs in conjunction with requests such as adding files to Other Logs.

If Netscape is using all of the CPU, the browser will appear to wait for Compaq Analyze. Check your system's CPU usage and determine if Netscape is consuming the majority of the processing time.

Workaround

Wait twenty to thirty seconds and click the Stop button in the browser's toolbar. Any necessary updates are shown in the navigation tree, and you can continue to use Compaq Analyze normally. If necessary, you can refresh the display frame by right-clicking on it and selecting Reload Frame from the pop-up menu. Do not use the Reload button located in the Netscape toolbar.

2.3.5.4 Overlapping Text in Navigation Tree

Netscape may not display the contents of the navigation tree correctly. The entries in the tree may not collapse properly and as a result entries may appear to be overlapping and blank lines appear in the tree. To fix the navigation tree, collapse and expand the parent entry of the entry that is displayed incorrectly.

2.3.6 Bookmark May Create Errors

Do not bookmark the web interface after logging on under a username. For example, bookmarking a URL similar to `http://nodename:7902/?profile=user` results in errors. To bookmark the web interface, bookmark the logon screen (`http://nodename:7902`).

2.3.7 Using the Back Button to Access the Web Interface

If you leave an active web interface session to visit a different web page and the logout time expires, clicking on the back button to return to your web interface session will result in multiple errors. In order to logon again, return to the root address of the node (`http://nodename:7902`) and repeat the logon procedure.

2.3.8 Link Color Inaccurate

Under normal operation, the color of hyper-text links changes after the link is visited. Compaq Analyze presents dynamic data that is frequently updated, however, the links used to access the information do not change. As a result of this presentation, the color of links in the navigation tree may be erratic or incorrect. In most cases, the color of visited links will not change.

2.3.9 Group and Category Name Restrictions

Do not use punctuation in the group or category names that you add to the navigation tree. If you use punctuation characters, JavaScript errors may occur when the navigation tree reloads.

If you see JavaScript errors caused by a group name, you can dismiss the error message by clicking the OK button. To correct the problem, remove the offending name and replace it with a new name that does not use one of the restricted characters.

2.3.10 Refreshing the Display

If the web interface is not updating correctly, click your browser's refresh button. This will reset the display and open the about screen in the display frame.

2.3.11 Null-Pointer Errors

If a NullPointerException error occurs while using the web interface, click your browser's Refresh button. If you continue using Compaq Analyze without refreshing, you may encounter additional errors or unexpected behavior.

2.3.12 JavaScript Errors

During heavy processing, you may see JavaScript errors. You can safely ignore these errors. Depending on the error dialog box that appears, respond in one of the following ways:

- Click the OK button on the error dialog box.
- If the dialog box asks if you want to continue running scripts, click the Yes button.

Netscape 3.x and JavaScript

If you are using Netscape 3.x or later and you attempt to resize the browser window while using Compaq Analyze, Netscape reloads the page.

General Limitations

2.3 Web Notes

Due to the JavaScript limitations of Netscape 3.x, anytime the navigation tree is refreshed you may see the following error:

```
Javascript Error: xxx..., line 159:  
Undefined is not a number.
```

This error has no effect on Compaq Analyze's behavior or functionality. You can ignore the error and click OK to proceed.

When you are selecting tabs in the display window (such as the Problem Reports and Events tabs shown for processed event logs), you may see the following error:

```
Javascript Error: xxx..., line nnn:  
access disallowed from scripts at http://xxx...  
to documents at another location
```

You can ignore this error and click OK to proceed. Compaq Analyze is not trying to access any location other than the node you are connected to, and is functioning correctly. If this error message appears frequently, you may be able to reduce the occurrences by logging off and then logging into Compaq Analyze again.

These Javascript issues have been fixed in Netscape's later releases.

2.3.13 Timeout Issue

If you consistently receive timeout notifications when using the web interface for a specific function, use the same function in the Command Line Interface as a workaround.

2.3.14 Logout Time Set to 0

If you set the logout time to 0, you will be logged out and lose your data in the following situations:

- If you click your browser's Refresh button.
- If you click on a link that opens a page outside Compaq Analyze.

2.3.15 Restricting Remote Machines

Compaq Analyze can connect to other machine's Directors using a set of standard IP port numbers. You can restrict access to your Director by changing the ports to nonstandard numbers and only disclosing the new port numbers to people who need access. For more information on configuring the ports, refer the *Compaq Analyze User Guide*.

2.3.16 Hostname Not Recognized

Unless the target system is accessible through your nameserver, you must use the IP address instead of the name of the node for remote connections.

For example, the hostname of a Windows machine using Dynamic Host Configuration Protocol (DHCP) is not listed with the nameserver, and therefore must be added using its IP address instead of its hostname.

2.3.17 Cannot Activate a Running Node

If you cannot activate a node that is currently running, continue to click on the “Activate Node” entry in the navigation tree intermittently until the node is activated.

2.3.18 Negative Timeout Values

Using the web interface settings window, you can change the timeout values for the EvtAnalyzer component. If you need to change settings, make sure that the timeout value for the WForDecomp attribute is a positive number.

If the timeout value is a negative number, Compaq Analyze will fail.

General Limitations

2.3 Web Notes

Operating System Specific Limitations

This chapter describes the Compaq Analyze limitations associated with each operating system.

Notes for Tru64 UNIX and Windows	page 3-2
Notes for Tru64 UNIX	page 3-3
Notes for OpenVMS	page 3-6
Notes for Windows	page 3-15

3.1 Notes for Tru64 UNIX and Windows

The following limitations apply to both Tru64 UNIX and Windows.

3.1.1 Entering Paths in the CLI

When you are entering paths in the CLI you must pay special attention to any space or backslash characters.

3.1.1.1 Spaces

If you specify a path that contains spaces, it must be wrapped in double-quotes. However, this causes some operating system specific issues. When using this method to pass path or filename arguments to a non-OS program, the Windows and Tru64 UNIX shells do not expand path wildcards wrapped with double-quotes.

For example, "C:\Program Files\someDirectory*.zpd" does not expand to all the *.zpd files in the directory "C:\Program Files\someDirectory".

Workaround

Change to a directory in which you do not have to use double-quotes and execute the Compaq Analyze CLI command of choice. For instance, in the example, do either of the following:

```
C:\>cd C:\Program Files
C:\>ca trans someDirectory\*.zpd
```

or

```
C:\>cd C:\Program Files\someDirectory
C:\>ca trans *.zpd
```

Exception

Windows does not require the second double-quote, since it automatically completes the set of quotes. Thus, if you enter the following command:

```
C:\>ca trans "C:\Program Files\someDirectory\hscirl.zpd
```

Windows interprets it as:

```
C:\>ca trans "C:\Program Files\someDirectory\hscirl.zpd"
```

3.1.1.2 Backslash

Furthermore, with Windows, if a backslash character (\) is placed at the end of a double-quoted directory, the double-quote following the backslash is treated as part of the text

passed to the program. This causes Windows to treat all characters, including spaces, before the end of the line as a single argument. For example, if you enter the following arguments:

```
"C:\Program Files\someDirectory\" C:\anotherDirectory
```

They are interpreted by the Windows command interpreter as:

```
"C:\Program Files\someDirectory" C:\anotherDirectory"
```

The second double-quote is considered part of the literal line of characters and the third double-quote is added by Windows. Thus, the two arguments are passed to the program as a single argument with an embedded double-quote character:

```
C:\Program Files\someDirectory" C:\anotherDirectory
```

Workaround:

There are two ways to avoid this problem:

- Do not place a trailing backslash character following a double-quoted directory name.
- Place two consecutive backslash characters at the end of the double-quoted directory name.

For example, you could replace the following command:

```
"C:\Program Files\someDirectory\" C:\anotherDirectory
```

With either of the following commands:

```
"C:\Program Files\someDirectory" C:\anotherDirectory  
"C:\Program Files\someDirectory\\" C:\anotherDirectory
```

3.1.2 Transferring Event Log Files with FTP

If you use FTP to transfer binary event log files between machines, make sure that the transfer mode is binary rather than ASCII. Compaq Analyze does not generate an error message when you process a file that was transferred in ASCII mode, but it may skip some events and produce unreliable analysis results.

3.2 Notes for Tru64 UNIX

The following limitations apply to Tru64 UNIX.

3.2.1 Compaq Analyze Now Polls for New Events (UNIX)

Compaq Analyze no longer uses the UNIX binlogd daemon to get new binary events for automatic analysis. The binlogd daemon has problems which caused the Director to crash in

Operating System Specific Limitations

3.2 Notes for Tru64 UNIX

some circumstances. As a result, Compaq Analyze no longer receives events as they occur. In the current release, Compaq Analyze polls (re-reads) the native binary event log `/var/adm/binary.errlog` every 5 minutes to obtain new events.

You can configure the period for polling by changing the new `pollTime` attribute of the DUREader service in the Web Interface's Director Settings screen (refer to the *Compaq Analyze User Guide* for details on changing attributes in the Web Interface).

Note

The new `pollTime` attribute appears on all platforms but only affects Tru64 UNIX systems.

3.2.2 Network Connection to Local IP Address Time Out

On a Tru64 UNIX system with PPP as its only non-loopback interface, network connections to the local IP address time out.

Workaround

Add an entry to the routemap table with the local IP address routed through the loopback interface, as shown in the following example:

```
# ifconfig ppp0
ppp0: flags=51<UP,POINTOPOINT,RUNNING>
    inet 10.0.0.2 --> 10.0.0.1 netmask ffffffff00 ipmtu 576 trustgrp
    unknown
# route add 10.0.0.2 127.0.0.1
```

3.2.3 Memory Errors

When Compaq Analyze is used with large event logs, processing may abort with an out-of-memory message, a communications error, or a streams error. If you are using the web interface, these errors are logged in the DESTA Director log. If you are using the command line interface, the errors will appear on the screen.

Workaround

Use the filtering tools to create a new, smaller event log, and try to process the new log. See the *Compaq Analyze User Guide* for more information on filtering event logs.

Try increasing the total swap space allocation on your system. See the *WEBES Install Guide* for more information on swap space requirements.

On multiprocessor systems, if you have already tried creating a new log file and still receive processing errors, you may be able to eliminate those errors by forcing the DESTA Director to

run on only one processor. When the DESTA Director runs on only one processor it is less susceptible to internal synchronization problems, and as a side benefit, it uses less memory. However, throughput is reduced.

To set DESTA Director to run on only one processor:

1. Stop the Director (`desta stop` from the command line).
2. Using any text editor, append the following line to the DESTA.REG file. (The default path for this file is `/usr/opt/compaq/svctools/desta/config`.)

```
desta.CPUAffinity=t
```

3. Restart the Director (`desta start` from the command line).

Another workaround is to remove the swap space limitation that the Director imposes on itself to prevent it from using too much of the system's swap space. Normally, swap space usage is limited to half of the total swap space allocated by the system. Be aware that this workaround can potentially allow the Director to hang or crash the machine if it uses all the available system swap space. The Director process and the available swap space must be monitored during the time this workaround is in place (Refer to the *Compaq Analyze User Guide* for details on monitoring the Director).

To remove the swap space restriction, use the following procedure:

1. Stop the Director (`/usr/sbin/desta stop`).
2. In the file `/usr/opt/compaq/svctools/bin/desta`, change the following line:

```
ulimit -v $ulimitvNEW  
to:  
ulimit -v $ulimitvOLD
```

3. Restart the Director (`/usr/sbin/desta start`).

The change only affects the Director process, not any other WEBES processes such as command-line analysis processes.

3.2.4 Cannot Load Shared Object Library

Tru64 UNIX may not correctly open WEBES shared object libraries when running under the default Fast Virtual Machine (VM). Follow these steps if WEBES does not behave correctly and the following error appears in

`/usr/opt/compaq/svctools/logs/desta_dir.log`. The library name in `__` can vary:

```
EXCEPTION java.lang.UnsatisfiedLinkError: dlopen: cannot load  
/usr/opt/compaq/svctools/share/lib__.so
```

1. As the root user, type `/usr/sbin/desta stop`

Operating System Specific Limitations

3.3 Notes for OpenVMS

2. Manually edit the file `/usr/opt/compaq/svctools/bin/desta`. Look for the following line:

```
DESTA_CMD_NO_PREFIX="$JAVA_HOME/bin/java -fast  
-DSvctools.Home=$SVCTOOLS_HOME -DSwcc.Home=/var/adm"
```

3. Remove the `-fast` flag and replace it with:

```
-ss512K -mx256M
```

This disables the Fast VM and reverts WEBES to the Classic VM, which does not exhibit this behavior. Be aware that performance will be slower.

You also may see error messages about swap space while executing WEBES CLI commands. The messages can be safely ignored unless you are truly low on swap space. (Type `/usr/sbin/swapon -s` to see how much is left.)

4. Type `/usr/sbin/desta setsub`
5. Type `/usr/sbin/desta start`
6. Report this problem to product support for further investigation.

3.2.5 Time Reported Incorrectly

Tru64 UNIX v5.1 does not correctly log the time in Common Event Headers and Storage Event Headers. As a result, the time reported by Compaq Analyze may not have the correct offset from GMT.

3.3 Notes for OpenVMS

The following limitations apply to OpenVMS.

3.3.1 Director Crashes

OpenVMS versions 7.1–2 and 7.2 include issues with thread handling that may cause the WEBES Director to crash. These crashes may occur in either automatic or manual mode.

Workaround

If the Director crashes and does not appear in the `SHOW SYSTEM` output, restart the Director and try the operation again. If the Director continues to crash, you will need to process the event log on a different platform or a system running a newer version of OpenVMS.

If the Director crashes repeatedly during the scavenge operation that occurs when Compaq Analyze is started, disable automatic analysis using the procedures described in the *Compaq Analyze User Guide*.

3.3.2 Startup Errors

VMS systems may experience problems during Desta startup if the Director setting `logMinSeverity` was set to INFO or DEBUG prior to the last Director shutdown. When this occurs, the `desta start` command displays an error message stating that the Director may not have started correctly, and the web interface is unable to activate the local node. In addition, the `desta stop` command may not successfully stop the Director (and its CCAT subprocess if CCAT is installed).

Workaround

To avoid this problem, if the `logMinSeverity` setting is set to INFO or DEBUG make sure that it is reset to WARNING before stopping the Director.

To recover should the problem occur, use the `stop/id` DCL command to manually stop the Director and CCAT processes (for more information on the naming convention used for WEBES processes, refer to the *Compaq Analyze User Guide*). Manually resetting the `logMinSeverity` setting requires that the `desta` configuration file be deleted with the following command:

```
$ delete svctools_home:[desta.config]configuration.dat;*
```

The Director can then be started using the `desta start` command.

3.3.3 Lengthy Processing Time on Large Error Logs

Compaq Analyze may require additional time to process large error logs. To improve performance, create a new binary log file containing only the relevant events and then process the new, smaller error log.

3.3.4 Trans Command Unresponsive

You may see instances where translation does not appear to do anything. If this occurs, adjust the filtering in order to process a smaller subset of events. Create a smaller, secondary event log file, which can then be submitted for analysis, translation, or any other Compaq Analyze process.

3.3.5 Analyze Command Aborts

You may see instances where analysis aborts prematurely. When this occurs, create a new binary log file containing only the relevant events and then process the new, smaller error log.

Another alternative is to copy the error log file to a platform running another operating system such as Windows NT or Tru64 UNIX, and analyze the OpenVMS error log from there instead.

Operating System Specific Limitations

3.3 Notes for OpenVMS

3.3.6 Unsatisfied Link Error

An error message similar to the following may be returned by a CLI command or appear in the Director log file `SVCTOOLS_HOME:[LOGS]DESTA_DIR.LOG`:

```
RECOVERED FROM ERROR on August 14, 2001 9:52:39 PM GMT+00:00 (26.462 sec
elapsed)
Can't load DeCOR library
Current Thread[Thread-8,5,main]
EXCEPTION java.lang.UnsatisfiedLinkError: no DeCOR in java.library.path
```

The name of the library (DeCOR in the previous example) can vary.

This message is likely caused by interference from certain DECC logicals. This is a WEBES installation issue and the solution is described in the *WEBES Installation Guide*.

3.3.7 Stack Overflow and Bugcheck Messages

The WEBES Director process on OpenVMS may crash with stack overflow and bugcheck messages. The symptoms, causes, and corrective actions associated with these issues are presented in the *WEBES Installation Guide*.

Be aware that corrective steps may include configuring WEBES to run on only one CPU or to run using classic Java 2 technology, both of which can reduce performance.

3.3.8 Memory Errors (OpenVMS 7.2 and earlier)

When Compaq Analyze is used with large event logs, processing may abort with an out-of-memory message, a communications error, or a streams error. If you are using the web interface, these errors are logged in the DESTA Director log. If you are using the command line interface, the errors will appear on the screen.

Workaround

Use the filtering tools to create a new, smaller event log, and try to process the new log. Refer to the *Compaq Analyze User Guide* for more information on creating new event logs.

If you have already tried creating a new log file and still received processing errors, try changing the heap memory allocation for the CLI command or for the Director process. The default settings for the Compaq Analyze command's heap memory allocation are stored in the `ca.com` file located in the `SVCTOOLS_HOME:[BIN]` directory the default settings for the Director are stored in the `desta.com` file, located in the same directory.

Note

Each command executed by the `ca.com` file contains a DCL section that sets the value of the `SVCTOOLS_HEAP` logical. Normally, the `SVCTOOLS_HEAP` logical is set to the maximum heap allocated by the JRE for the command with the `-mx` switch. However, the JRE for OpenVMS allocates all of the memory specified with the `-mx` switch as the initial startup heap and does not free this memory until the process ends. As a result, increasing this maximum heap setting will consume extra resources from the time the command is invoked until the process is complete. Therefore, you should return the modified settings to their original values once you have finished processing the large event log.

Caution

It is important that you only set or change the `SVCTOOL_*` logicals in the DCL scripts, rather than from the command line.

Before increasing JVM memory, determine which process has run out of memory.

- If memory shortage errors appear in the DESTA log file (located at `SVCTOOLS_HOME:[logs]desta_dir.log`), then the Director's memory should be increased. Performing unusually large manual analysis jobs from the web interface will most likely result in the failure of the Director process.
- If errors occur at the command prompt after a Compaq Analyze command is issued, the memory for that CLI command should be increased.

If the failure is related to the Director, you can increase the Director's memory settings by changing the following symbol values in the `SVCTOOLS_HOME:[BIN]desta.com` file.

- `defaultHeap`
- `defaultNativeStack`
- `defaultJavaStack`

The Director's memory settings can be determined by the following lines in the `desta.com` file (the values shown here are examples and may vary from the actual values):

```
$ !DESTA Director memory settings:
$ defaultHeap := "-mx65M"
$ defaultNativeStack := "-ss512k"
$ defaultJavaStack := "-oss400K"
```

If performing manual analysis with the CLI caused the out of memory errors, increase the memory settings for CLI analysis command. Search for the following lines in the `SVCTOOLS_HOME:[BIN]ca.com` file (the values shown here are examples and may vary from the actual values).

```
$ IF completion_code .EQS. "%X000000C9" ! ANALYZE command = 201 base 10
$ THEN
```

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```
$ DEFINE SVCTOOLS_HEAP "-mx100M"  
$ DEFINE SVCTOOLS_JAVA_STACK "-oss1M"  
$ DEFINE SVCTOOLS_NATIVE_STACK "-ss1M"
```

Note

Depending on the system, continuing to increase the heap size may eventually cause disk swapping to occur.

Use the following guidelines when adjusting the settings:

- If Java.OutOfMemory errors occur, increase the heap size.
- If stack overflow errors occur, increase the stack settings.

Modifying Memory Settings

If you need to change the memory settings, open the appropriate .com file and search for the desired settings. The value for the memory setting uses the following format:

`"-mxnu"`

Where *n* refers to the maximum size of the memory allocation pool. The value of *n* must be greater than or equal to 1000 bytes. *u* indicates the units associated with the size. By default, the size is measured in bytes. Use the letter K to indicate kilobytes or the letter M to indicate megabytes.

The following example shows the how to specify a size of 256 kilobytes:

`"-mx256K"`

Modifying Heap Settings

The changes to the heap setting that are required will vary depending on the system. Use the following procedure to determine the correct heap size.

Note

The procedure here describes how to modify the ca.com file. If you are modifying the desta.com file you should use the same procedure, using smaller size increments.

7. Using a text editor, change the value of the SVCTOOLS_HEAP from the default of `"-mx100M"` to `"-mx80M"`.
8. Save your changes and attempt to process the error log again.

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9. If the log still fails to process correctly, determine which of the following circumstances applies:
 - If processing failed earlier (less of the log file was processed), open the .com file again and increase the heap size to "-mx120M".
 - If processing failed later (more of the log file was processed), open the .com file again and reduce the heap size to "-mx60M".
10. Continue modifying the heap size until the log file is processed correctly.

Modifying Stack Sizes

If you are increasing the stack sizes, be aware that the JVM stack settings (-ss and -oss) work collectively. For the best results, increase both the stack sizes. Table 3-1 provides some recommended sizes for increasing the JVM stack size.

Table 3-1 JVM Stack Sizes

-ss (in kilobytes)	-oss (in kilobytes)
512	400
512	800
800	800
1500	800
1500	1200
1500	1600
1700	2000

As with other memory changes, modify the stack sizes using a text editor.

3.3.9 Memory Errors (OpenVMS 7.2-1 and later)

When Compaq Analyze is used with large event logs, processing may abort with an out-of-memory message, a communications error, or a streams error. If you are using the web interface, these errors are logged in the DESTA Director log. If you are using the command line interface, the errors will appear on the screen.

Workaround

Use the filtering tools to create a new, smaller event log, and try to process the new log. See the *Compaq Analyze User Guide* for more information on filtering event logs.

3.3.10 Locked Error Log Files

OpenVMS 7.2-1 has a file locking limitation that may prevent locked files from being released. This locking problem may affect error logs, including the system error log (`sys$errorlog:errlog.sys`). If a CLI command that requires access to a locked file is invoked, an error will occur. The error message in the DESTA log is similar to the following:

```
EvtReader cannot read log directory[sub]errorlog.zpd. The file may be  
inaccessible.: IOException...
```

Where *directory[sub]* indicates the directory where the log file is located and *errlog.zpd* indicates the file name.

The file locking issue is fixed with the following patches:

- VMS721_SYS-V0500
- VMS721_UPDATE-V0100
- VMS721_PCSI-V0100

3.3.11 Event Logs May Be Read Incorrectly

Event logs created on a Tru64 UNIX system and processed with Compaq Analyze on an OpenVMS system may be read incorrectly.

If you are using a binary event log (binlog) that was created on a DS20 system, and not renamed or deleted prior to the V4.0E installation of Patch Kit 1 or Patch Kit 2, the binlog file will contain entries with both the traditional event header and the Common Event Header (CEH). Processing an event file of this type with Compaq Analyze on a system running OpenVMS may cause a timeout error.

Workaround

To process the binary event log, open it with a file editor. If the value of the first 4 bytes is not 0xFFFFFFFF, then the log file does not begin with a Common Event Header.

Note

The editor may display the bytes in the order they appear in the log file – least significant byte first – so the value may appear as EFFF FFFF in the file.

If the log file does not start with a Common Event Header, delete all the data proceeding the first CEH entry and then save the modified file.

3.3.12 Directory Names Unrecognized in CLI Commands

Due to an issue with Java 2, CLI commands that accept a directory as a parameter do not function correctly. Java 2 incorrectly prepends the current directory to the directory parameter supplied with the CLI command.

For example, if the current directory is USER:[THOMAS] and you attempt to run the following command:

```
ca summ svctools_home:[ca.examples]
```

The directory is interpreted as /user/thomas/svctools_home:[ca.examples].

Workaround

Use one of the following workarounds:

- Set the directory to the desired directory, and supply the argument “.” as the directory parameter. For example:

```
$ set def svctools_home:[ca.examples]
$ ca summ .
```

Java 2 interprets the “.” as the current directory and successfully executes the command.

- Supply the directory name with a UNIX-style path. For example:

```
$ ca summ /svctools_home/ca/examples
```

To convert an absolute VMS path into a UNIX-style path, prepend a “/” and convert each contiguous set of colons, brackets, and periods into a “/”. Do not include a trailing “/”. Since relative paths are difficult to convert to UNIX-style, only use absolute paths.

3.3.13 Invalid Directory Error Message

When you use the analysis or translation commands and specify a directory as [...] or [-], the process generates an Invalid directory path error message and quits.

Workaround

Specify the directory or directories explicitly.

3.3.14 Maximum Character Length Error Message

If you enter a lengthy CLI command, you may exceed the OpenVMS maximum command character length. As a result, OpenVMS may return a command error message that refuses the number of characters that you have used.

Operating System Specific Limitations

3.3 Notes for OpenVMS

Workaround

Shorten the parameters in the CLI command. For example, you can substitute a lengthy absolute file path with a shortened relative path for a file's directory.

3.3.15 Wildcards Not Expanded

Filenames containing wildcards are not expanded and result in command parsing errors. VMS does not expand wildcards before passing arguments to a program, and as a result VMS cannot find any files that match the given argument.

Workaround

To input all files in a directory, just enter the directory path alone, without wildcard characters. To specify multiple input files, put them in a comma-separated list after the input parameter.

3.3.16 Scrolling Output in Terminal Display

When you enter a CLI command in a command window, the resulting output will scroll continuously in the terminal display.

Workaround

To set a screen pause after each output page, enter the following command:

```
$PIPE ca trans errlog_filename | TYPE/PAGE=SAVE SYS$INPUT
```

You need to enter the command for all CLI outputs you want to pause. To simplify the process, you can save this stream to a variable by entering the following line in the login script:

```
$ more:==TYPE/PAGE=SAVE SYS$INPUT
```

Once this variable is established in the login script or at the command line, you can use the following command to set a screen pause:

```
$PIPE ca trans errlog_filename | more
```

3.3.17 Preserving File Attributes with FTP

If you are using FTP to transfer files for use with Compaq Analyze, you must ensure that the correct file attributes are preserved. Compaq Analyze files should be formatted as Streamed_LF with the CR control character. This file formatting restriction applies to binary event log files, knowledge rule sets (*.krs), and all other Compaq Analyze files containing binary (non-text) data.

When you are using FTP to transfer files to an OpenVMS system, use the following command to ensure that the attributes are set correctly:

```
set file/attr=(rfm:stmlf,rat:cr) filename.*
```

3.3.18 Web Interface No Longer Supported

The most recent browser supported by OpenVMS remains Netscape 3.03, which is not new enough to consistently and reliably operate the web interface. Although the web GUI is still available, it is not officially supported as of WEBES 4.0 on OpenVMS.

Workaround

Run the CLI on the OpenVMS system, or open the web interface from a non-OpenVMS system (one with a more recent browser).

3.4 Notes for Windows

The following limitations apply to Windows NT and Windows 2000.

3.4.1 No Response on Systems with Norton Anti-Virus

Compaq Analyze may stop responding on Alpha systems that have Norton Anti-Virus installed and running. When this happens the system shows 100% CPU usage, and the keyboard may stop responding.

Workaround

Turn off the Norton Anti-Virus auto mode.

3.4.2 Netscape Limitation

Netscape for Windows inserts extra blank lines in saved problem reports. If you use the Save As option to save Compaq Analyze problem reports in HTML format, the new HTML file will contain an extra blank line between every line of text. As a result, the new file appears double-spaced while the original appears single-spaced.

When Netscape's Save As operation encounters the <PRE> tag in the original HTML file, it inserts extra lines into the source of the new file. Thus, regardless of the browser you use to open the new HTML file, the extra lines are present.

Since this problem only affects text formatted with the <PRE> tag, it does not affect most translated events.

Operating System Specific Limitations

3.4 Notes for Windows

Workaround

Right-click the Frame containing the HTML report and select View Frame Source from the pop-up menu. A text window containing the HTML source opens. In that window, press Ctrl-a to select all the text and then press Ctrl-c to copy it to the Clipboard. Paste the contents of the clipboard into an editor and save it to a file.

3.4.3 Director Problems – Uninstall Issues

If you installed a version of WEBES prior to 4.0, and the uninstall was not completed correctly you may have problems with general WEBES operation. These may include difficulties starting and stopping the Director and problems with the Director hanging or crashing. If you encounter problems with general WEBES operation that are not solved by another Release Note, and you installed an earlier version of WEBES, perform these steps to clear any possible problems associated with the previous WEBES uninstallation:

1. Uninstall WEBES V4.0.
2. Reboot the machine.
3. Re-install WEBES V4.0.

The WEBES V4.0 uninstall is more comprehensive than the uninstall from previous versions and will remove everything from previous WEBES versions in addition to version 4.0. The reboot enables the operating system to release file, service, and registry references. WEBES is completely removed once the system is rebooted.

3.4.4 Commands With Comma Must Use Quotation Marks

CLI commands that contain an argument with a comma must enclose the argument in quotation marks. If the argument is not in quotation marks, Java will not interpret the comma and you may receive undesired results. This affects all the syntaxes.

The exact placement of the quotation marks is not critical, and both of the following examples show valid commands:

```
ca n ana index="s:1, e:1"  
ca n ana "index=s:1, e:1"
```

3.4.5 NullPointerException If No Scavmark

If you delete the file *installed_dir\ca\data\scavmark.dat*, the following error appears in the Director's log file the next time scavenge occurs shortly after Director startup:

```
_____  
WARNING on March 21, 2002 11:54:56 AM MST (244.872 sec elapsed)
```


Operating System Specific Limitations

3.4 Notes for Windows

```
NTR.findMark scav
Current Thread[Thread-23:
com.compaq.svctools.ca.services.eventreaders.NTReader ,5,main]
EXCEPTION java.lang.NullPointerException
at com.compaq.svctools.ca.services.eventreaders.NTReader.findMark
(NTReader.java:223)
at com.compaq.svctools.ca.services.eventreaders.NTReader.scavengeLog
(NTReader.java:367)
at
com.compaq.svctools.ca.services.eventreaders.EvtReader.stateMachine
(EvtReader.java:541)
at com.compaq.svctools.ca.services.eventreaders.NTReader.run
(NTReader.java:104)
at java.lang.Thread.run(Thread.java:484)
```

This message is expected and can be ignored. A new `scavmark.dat` file will be created and the message will not be repeated.

Operating System Specific Limitations

3.4 Notes for Windows

Return Codes

The following return codes are used with Compaq Analyze CLI commands.

All Commands

- 0 – No error

ca log, ca report, ca sicil, ca listrk, ca regknw, ca msg, desta msg, desta qsap, desta servob

- 386 – Insufficient arguments
- 10 – Too many arguments.
- 18 – Illegal number of arguments.
- 42 – No default krs files in default directory to process.
- 50 – Illegal arguments.
- 402 – Unknown option.
- 66 – DESTAException.
- 74 – Directory not found.
- 82 – krs files not found in directory.
- 354 – File I/O Error
- 106 – Service obligation expired.
- 114 – Bad user specified event log, or no default event logs in user specified
- 122 – Bad user specified krs file, or no default krs files in user specified
- 130 – No valid event log file(s) specified.
- 138 – No valid krs file(s) specified.
- 146 – Illegal output option argument.

ca trans, ca analyze, ca filterlog, ca fru, ca summ

- 306 – Different argument expected
- 314 – Invalid command
- 322 – Invalid operator

Return Codes

- 330 – Numerical value expected
- 338 – Invalid keyword
- 346 – Invalid report type
- 354 – File I/O error
- 362 – Can not determine OS
- 370 – Invalid abbreviation
- 378 – Date value expected
- 386 – Insufficient arguments
- 394 – Command execution error
- 402 – Unknown option

desta status

- 1 – Director is not running
- 3 – Director is running
- 5 – Director is starting up
- 7 – Director is shutting down
- 9 – Director status file indicates that it is running, but the process ID was not found. As a result, the Director is assumed to be no longer running.
- 99 – Director is in an unknown state

Java VM Related Exit Codes

- 602 – VM error
- 610 – Unknown argument
- 618 – Unknown class
- 626 – Unknown method
- 634 – Missing environment
- 386 – Insufficient arguments

Installation Related Exit Codes

- 642 – The \$SVCTOOLS_HOME directory does not exist.
- 650 – Could not find the Service Tools installed jar files.
- 658 – Could not find Java environment.
- 666 – Could not execute DESTA <DESTA program> executable.

Note

On VMS systems each error code has a severity of 2. Thus, an ON ERROR statement can be used in DCL scripts to trap for errors. For VMS, a bit-wise OR of the value 0x10000000 is performed on the published return code before the actual code is returned, which changes the value in \$STATUS. Therefore, to determine the correct value, the leading 1 should be removed. For example, if an `Insufficient arguments` error is returned, an OR is performed with 0x10000000 and 0x00000182 (386 base 10) resulting in 0x10000182 or 268435842 base 10. Remove the leading 1 to obtain the correct decimal value.

Return Codes