DECevent OT
Release Notes

The *DECevent Release Notes* provide general release information and restrictions for DECevent.

Rev. 6/13/02–A

Operating System:	Tru64 UNIX OpenVMS
Software Version:	DECevent 3.4

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Contents

Preface

The DECevent Release Notes for Tru64 UNIX and OpenVMS provide general information about DECevent. The restrictions and known problems for the current release are also described.

Intended Audience

The *DECevent Release Notes* for Tru64 UNIX and OpenVMS are intended for use by system managers and service personnel who use the DECevent software.

Documentation Conventions

The following conventions are used in this manual:

Bold	Indicates information that must be typed exactly as it appears.
Italic	Indicates variable information.
`Monospaced Font`	Indicates system output.

Document Contents

The *DECevent Release Notes* contain the following chapters:

Table 1 Document Contents

Chapter	Contents
Chapter 1	Introduces DECevent and the new features contained in version3.4.
Chapter 2	Explains installation and configuration procedures.
Chapter 3	Describes the restrictions and limitations for the current version of DECevent.
Appendix A	Lists the devices that are supported by DECevent's Bit To Text translation feature.
Appendix B	Lists the devices that are supported by DECevent's Analysis and Notification features.

1

Release Information and Enhancements

This chapter provides information about the DECevent event management tool and the enhancements for Tru64 UNIX and for OpenVMS in this release.

Support Update . . . . . page 1–2

Restart After Crash In Automatic Mode . . . . . page 1–2

1.1 New in Version 3.4

DECevent 3.4 supports additional products and incorporates several enhancements. The following sections provide descriptions of the new support and features.

1.2 Support Update

The following support is new in DECevent 3.4.

- Memory Channel II – Analysis has been removed, Translation is still supported
- Updated HSJ80 Controller Bit-to-Text translation
- Updated Fiber Channel Adapter Bit-to-Text translation
- TSS60/GS140 (Turbolaser) power supply event decoding on UNIX
- Support for SICL notification via WorldWire

For a complete listing of the supported products, refer to Appendix A and B.

1.3 Restart After Crash In Automatic Mode

In previous versions, file corruption may occur if a system crash occurs while DECevent is running in automatic mode. New start-up scripts that prevent this problem have been developed and implemented for both Tru64 UNIX and OpenVMS.

2

Installation and Configuration

This chapter provides information about installing and configuring DECevent.

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Installation Requirements . . . . . page 2–2

Uninstalling . . . . . page 2–3

Starting DECevent . . . . . page 2–4

External Notification . . . . . page 2–5

2.1 Obtaining DECevent Kits

DECevent kits are available on the Compaq Services web site, located at the following URL:

http://www.compaq.com/svctools/

2.2 Installation Requirements

The following sections provide pre-installation requirements.

2.2.1 Operating System Version

Table 2–1 describes the operating systems supported by DECevent 3.4:

Table 2–1 Supported Operating Systems

Operating System	Version
Tru64 UNIX	• 4.0D • 4.0E • 4.0F • 5.0 • 5.0a • 5.1
OpenVMS[1]	• VAX 6.2 and all previous versions • Alpha 7.3 and all previous versions

[1] DECevent may work on newer versions of VAX and Alpha VMS, but it has not been tested on any newer version.

2.2.2 DSNlink V2.0 Required for SICL

DECevent requires that your operating system have V2.0 of DSNlink installed for System Initiated Call Logging (SICL) to function properly.

2.2.3 Delete Old Knowledge Files

If you had a previous version of DECevent on your system, you must delete the old knowledge files from your systems.

- Tru64 UNIX — delete the `$HOME/FMG_LOCAL_PARAM_ LIBRARY.KNL` file from the home directory of each user who ran the previous version of DECevent.

- OpenVMS — delete the file SYS$LOGIN:FMG_LOCAL_ PARAM_LIBRARY.KNL from the login directory of each user who ran the previous version of DECevent.

DECevent will not function properly with old version of the knowledge files.

2.2.4 OpenVMS Requires Updated Xwindows and Motif Libraries

The DECevent GUI requires a minimum DECwindows version.

The minimum versions for DECwindows on OpenVMS Alpha are as follows:

```
DECwindows ident is                    DW V1.2-4960312
DECwindows server ident is             DW T6.2-950505
DECwindows transport ident is          DW T6.2-950505
DECwindows xlib ident is               DW V1.2-4960312
DECwindows motif toolkit ident is      DW V1.2-4960313
DECwindows apps ident is               DW V1.2-4960312
DECwindows programming ident is        DW V1.2-4960312
```

The minimum versions for DECwindows on OpenVMS VAX are as follows:

```
DECwindows ident is                        DW V1.2-3960214
DECwindows server ident is                 DW V6.2-950419
DECwindows transport ident is              DW V6.2-950419
DECwindows xlib ident is                   DW V1.2-3960214
DECwindows OSF/Motif Toolkit ident is      DW V1.2-3960214
DECwindows apps ident is                   DW V1.2-3960215
DECwindows programming ident is            DW V1.2-3960214
```

If your system does not meet the minimum requirements, install the VAXMOTF07 (VAX 6.2 / Motif 1.2-3 only) patch or the equivalent patch kit for Motif before installing DECevent.

2.3 Uninstalling

To remove the DECevent software from your system, delete each installed subset. Refer to the procedures for your operating system.

2.3.1 Tru64 UNIX

To delete the installed subsets:

1. Log in as superuser (login name root).
2. Make sure you are at the root directory (/) by entering the following command:
   ```
   # cd /
   ```
3. Enter the following form of the setld command:
   ```
   # setld -i | grep 'DIA.* installed
   ```

This lists the installed subsets:

```
DIABASE330 installed DECevent Base kit (Translation / Analysis)
DIADOCBOOK330 installed DECevent Optional book reader documentation
DIADOCPS330 installed DECevent Optional postscript documentation
DIADOCTXT330 installed DECevent Optional text documentation
```

4. Look for the installed subsets in the listing produced, then delete them with the following command:

   ```
   # setld -d subsetname [subsetname ...]
   ```

   If the DIADOCBOOK330 subset is installed, delete it with the following command:

   ```
   # setld -d DIADOCBOOK330
   ```

   The system verifies the deletion of each subset and the program reports the progress of the deletion and removal of all specified subsets.

5. If you are upgrading from DECevent V3.0 or earlier, verify that the deinstallation process was performed correctly. It may be necessary to manually remove the following installed directories:

   ```
   /var/DIA
   /var/opt/DIA290
   ```

   Depending on the version of DECevent you are removing the directory may be different, for example /var/opt/DIA290

2.3.2 OpenVMS

To uninstall DECevent, use the following procedure:

1. Set process privileges to include SYSPRV.
2. Execute the deinstallation script:

   ```
   $ @sys$manager:decevent$deinstall.com
   ```

   The script removes DECevent from the system.

3. Manually delete the deinstallation script from sys$manager.
4. Edit the system's site specific startup procedure (sys$startup:systartup_vms.com) by removing the following line:

   ```
   $ @sys$startup:decevent$startup.com
   ```

5. Edit the system's site specific shutdown procedure (sys$manager:syshutdwn.com) by removing the following line:

   ```
   $ @sys$manager:decevent$shutdown.com
   ```

2.4 Starting DECevent

There are three ways to run DECevent:

- Automatic Analysis Mode
- Command Line Interface
- Graphical User Interface

Automatic Analysis Mode

In automatic analysis mode, DECevent is started every time your system reboots. In this mode, DECevent enrolls itself as a client of the system's error reporting service (binlog for Tru64 UNIX and ERRFMT for OpenVMS). Events that are generated by the host's subsystems are automatically analyzed as they are received.

Command Line Interface

DECevent can be invoked from the command line to perform bit-to-text translation and manual analysis of error log files. To invoke DECevent interactively from the command line, enter the following command (valid for both VMS and Unix):

```
>> dia -int
```

Information on other commands can be obtained from the `diagnose` help topic in VMS or the `dia` man page in UNIX.

Graphical User Interface

The GUI interface can be invoked with the following command:

- UNIX — `# xdia`
- OpenVMS — `$ diagnose /interface=DECW`

Be aware that the GUI does not include all the functionality of the command line interface.

Refer to Chapter 3 for known restrictions for the GUI. Refer to The *DECevent Graphical User Interface User Guide*, AA-QE26A-TE, for information about how to use the GUI.

2.5 External Notification

External notification enables you to create a command file that is executed when a callout is generated by automatic mode event analysis. The command file can be either a VMS command procedure or a Unix script.

In general, the command file or script receives parameters with the following values:

- P1 or $1 — DECevent version number
- P2 or $2 — system name or type
- P3 or $3 — system or device serial number
- P4 or $4 — device name or type
- P5 or $5 — N/A

- P6 or $6 — N/A
- P7 or $7 — theory code of the callout
- P8 or $8 — N/A

Note

Although the parameters normally have the given values, this is not a strict rule. DECevent handles different events in different ways; therefore it is possible for the parameter values to occur in a different order.

The WorldWire notification scripts can be used as an example to write scripts for external notification. The UNIX version (`wwnotify`) can be found in the directory `/usr/opt/DIA340/sbin`. The VMS version (`wwnotify.com`) is located in the `sys$manager` directory.

2.5.1 Configuring UNIX External Notification

To set up external notification on a UNIX system add the list path and filename of an executable script to the customer external notification list. For example:

```
# dia ad ext -f /usr/opt/DIA340/sbin/mail_me -l customer
```

The `-f` parameter is the name of the external notification script to be invoked. The `-l` parameter is the list identifier.

Note

In version 3.4 all external notification scripts must reside in the DECevent executables directory (`/usr/opt/DIA340/sbin`).

2.5.2 Configuring VMS External Notification

Under VMS, DECevent uses logical names to find command files. To set up external notification, define one or more of the pre-configured logical names listed here:

`FMGR$NOTIFY_CUST`*n*

where n is a number from 0 to 3

The logical names should be defined to contain the path and filename of a command procedure. For example:

```
$ define/sys/exec FMGR$NOTIFY_CUST3 user2:[smith]mailme.com
```

The command procedure should hold VMS commands used to send a mail message to the system administrator or other interested party. For example, the following file:

```
$ MAIL/SUBJECT="DECevent Notification"  body.txt  your_name
```

Will send you a VMS mail message with a subject line of "DECevent Notification" and body text taken from the `body.txt` file.

Identify the logical name(s) that need to be translated by adding them to either the Customer or the Reserved external notification list with the following command

```
DIA>  add external FMGR$NOTIFY_CUSTn customer
```

2.5.3 Configuring SICL Notification Via WorldWire

System Initiated Call Logging (SICL) is normally executed via DSNLink. Version 3.4 includes a external notification script that allows SICL notification via the Matrix HelpDesk and WorldWire products.

Note

WorldWire and DSNLink are mutually exclusive. Migrating from DSNLink to WorldWire-based SICL requires deinstallation of DECevent and DSNLink. Reinstallation must occur in the following order: first WorldWire, then Matrix HelpDesk, and finally DECevent. This configuration supersedes the normal DECevent SICL, and SICL should not be enabled in the usual fashion.

See Sections 2.5.3.1 and 2.5.3.2 for instructions on how to set up external notification for each operating system with WorldWire-based SICL notification.

This type of notification works best when a customer profile has been defined. The profile is a text file that contains system information along with the names and phone numbers of contacts that should be notified when the Customer Service Center receives a SICL message from DECevent. If the system does not already have a profile file, create a text file with the following contents to use as a profile:

```
Customer:
Address:
System Type:
Serial number:
Primary Contact:
Secondary Contact:
Phone number (s):
Special Instructions:

Configuration Information:
    System:           Model:
    System S/N:       System name:
```

```
    System IP address:
<any other configuration information>
```

2.5.3.1 UNIX

Issue the following commands to enable WorldWire notification and set up the customer profile:

- Disable normal SICL notification:

  ```
  # disable_sicl
  ```
- Add the existing WorldWire script to the customer external notification list:

  ```
  # dia ad ext -f /usr/opt/DIA340/sbin/wwnotify -l customer
  ```
- Copy a text file containing the customer profile to:

  ```
  /var/DIA/FMGPROFILE
  ```
- Ensure the DECevent system setting (`FMG__CUST_PROFILE`) contains the correct path and filename:

  ```
  # dia shw set FMG__CUST_PROFILE

  # dia -int
  dia> sets FMG__CUST_PROFILE /var/DIA/FMGPROFILE
  dia> sav sys
  dia> exit
  ```

2.5.3.2 VMS

Perform the following steps to enable WorldWire notification and set up the customer profile:

- Disable normal SICL notification:

  ```
  $ @DIA$MGR:DECEVENT$SICL_DISABLE.COM
  ```
- Disabling SICL leaves DECevent running. Shut down DECevent using the following command:

  ```
  $ @SYS$MANAGER:DECEVENT$SHUTDOWN.COM
  ```
- There are several pre-configured notification logical names, for example:

  ```
  FMGR$NOTIFY_CUSTn
  ```

  Where *n* is a number from 0 to 3. Choose an unused logical (check for used logicals by issuing the command `dia show external`) and edit the DECevent startup file (`SYS$STARTUP:DECEVENT$STARTUP.COM`) to add this line:

  ```
  $ define/sys/exec FMGR$NOTIFY_CUSTn SYS$MANAGER:WWNOTIFY.COM
  ```

  Where *n* is a number from 0 to 3.
- Add the existing WorldWire script to the customer external notification list:

  ```
  $ dia add external FMGR$NOTIFY_CUSTn customer
  ```

- Edit the DECevent startup file (SYS$STARTUP:DECEVENT$STARTUP.COM) to define a logical name identifying your profile:

  ```
  $ define/sys/exec FMGPROFILE  DISK:[PATH]YOUR_FILENAME.TXT
  ```

  Where *DISK:[PATH]YOUR_FILENAME*.TXT is the full path and filename of your profile.

2.6 Permanent State Database Replaced On Startup

DECevent stores details on events that have occurred in a binary file called the permanent state database. This file may be corrupted if the system crashes while DECevent is analyzing an event.

To avoid the issue of database corruption, the DECevent 3.4 startup file replaces the permanent state database whenever the application is started during system boot. If you do not use tailored thresholds, this change has no impact.

However, if you use tailored thresholds, “ignore” devices, “recognize” devices, and “repair” data, be aware that any data for these settings stored in the permanent database is lost.

If you are not having issues with database corruption and want to use the features mentioned here, you can disable the database replacement feature.

2.6.1 UNIX

To disable database replacement on UNIX systems, edit the following file:

```
/opt/DIA340/sbin/init.d/dia_s_k
```

At the top of the file, change the variable shown from:

```
KEEP_OLD_DATABASE=”NO”
```

to

```
KEEP_OLD_DATABASE=”YES”
```

2.6.2 VMS

To disable database replacement on VMS systems, edit the following file:

```
SYS$STARTUP:DECEVENT$STARTUP.COM
```

At the top of the file, change the variable shown from:

```
KEEP_OLD_DATABASE == “NO”
```

to

```
KEEP_OLD_DATABASE == "YES"
```

3

Known Restrictions

This chapter describes known restrictions and enhancements with this release of the DECevent Graphical User Interface (GUI).

Overall Restrictions. . . . . page 3–2

GUI Restrictions . . . . . page 3–6

Command Line Restrictions . . . . . page 3–8

3.1 Overall Restrictions

The following restrictions apply to all DECevent interfaces.

3.1.1 General Restrictions

The following restrictions apply to all the interfaces on all operating systems.

3.1.1.1 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/DIA`*`XXX`*`/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.

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 existance 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.

3.1.1.2 Mailing List Entry Length

Entries in DECevent mailing lists can have a maximum length of 31 characters. Addresses can be entered in either DECmail format (`nodename::username`) or SMTP format (`first.lastname@company.com`).

3.1.2 Tru64 UNIX Restrictions

The restrictions described here apply to Tru64 UNIX systems.

3.1.2.1 Large Error Log Entries

In some cases, error log entries are larger than DECevent's handling capability. If the following error is reported by DECevent, rename the file `/var/adm/binary.errlog`, and disable FRU table logging at the Alpha console level.

```
DECevent V3.4 Event record: 11 of file; /var/adm/binary.errlog is
incorrect, recovering.
************************** ENTRY 1 **********************
          Logging OS 2. Digital UNIX
          System Architecture 2. Alpha
          Event sequence number 0
```

3.1.2.2 Translation Restrictions

If you are executing several singular translations or executing the `dump (-d)` operation, DECevent may use most of the system memory. As a result, the error message `unable to complete translation` may appear or the process may hang.

Exit DECevent and restart to clear the system memory.

3.1.2.3 Restrictions on Non-Root Users

Due to DECevent file ownership and other permissions issues, some of the DECevent commands require that the user be logged in as root. When these restrictions are encountered, DECevent displays an error message. For example, a non-root user trying to perform bit-to-text translation on the system error log will see the following message:

```
anode> dia -a
DECevent V3.4

Permission denied - /usr/adm/binary.errlog can only be accessed from root
account.
_DIAGNOSE-FAT: Execution failed
```

Non-root users trying to show the contents of the DECevent permanent state database will see the following message:

```
anode> dia shw par

DECevent V3.4

Permission denied - this operation can only be performed from root
account.
_DIAGNOSE-FAT: Execution failed
```

3.1.3 OpenVMS Restrictions

The restrictions described here apply to OpenVMS systems.

3.1.3.1 SYSLCK Privilege Necessary

Utilizing analysis commands requires the SYSLCK privilege.

3.1.3.2 KNL File Internal Corruption or Hang Problems

If the file `DECC$SHR.EXE` is dated earlier than April 1997, the following problems may occur:

- The error message `KNL File is internally corrupted` may occur
- DECevent may hang

This problem may occur with OpenVMS V6.2, V6.2-1H3, V7.0 and V7.1.

To fix the problem install one of the patch kits containing an updated C Run-Time Library. The kit names are listed here:

- ALPACRT02_71 for OpenVMS Alpha V7.1
- ALPACRT09_062 or VAXACRT09_062 for OpenVMS VAX V6.2.

Note

This library is used by other system applications, verify that installing the kit will not adversely affect those applications.

3.1.3.3 FRU_TABLE Entry Causes Incorrect Errorlog Entry

When the console variable FRU_TABLE is set to ON, which is the default for version 5.0 and newer of the console firmware, FRU_TABLE will place an entry into errorlog that may be too large for the default setting to handle.

The OpenVMS errorlog will show the first entry correctly, but the subsequent entries will appear as 11/785 entries with unusual time stamps.

Other symptoms may include the following error messages.

```
$ dia

DECevent V3.4
_DIAGNOSE-FAT: Unexpected error adding Error Message in thread 4

    Value of errno is: 0, and vaxc$errno is: 0
    Unexpected Status Exception: not enough core

_DIAGNOSE-FAT: Unexpected error deleting Error Message object in thread 4

    Value of errno is: 0, and vaxc$errno is: 0
```

```
    Unexpected Status Exception: not enough core

PRE_ERR-INF-?-pre_err__m_get_stat: Exception -
%CMA-F-EXCEPTION, exception raised; address of exception object 0057A670
```

or

```
$ anal/err/since=1-dec-1997/exc=vol
Error Log Report Generator     Version V6.1

%ERF-E-READERR, error reading SYS$SYSROOT:[SYSERR]ERRLOG.SYS;4<CR>
-RMS-W-RTB, 4674 byte record too large for user's buffer.
```

This occurs on 4100 and 8200/8400.

There are several things that may help resolve this problem:

1. Modify MODPARAMS.DAT or use SYSMAN to increase the following to their maximum allowed values (reboot for the changes to take effect):

   VMS versions earlier than 7.1-2

   - ERRORLOGBUFFERS = 63 (4 is the default)
   - ERLBUFFERPAGES = 31 (8 is the default)

   VMS version 7.1-2 and later

   - ERRORLOGBUFFERS = 63 (4 is the default)
   - ERLBUFFERPAGES = 127 (8 is the default)
2. Rename errorlog.sys and reboot the system

or

1. Shut down the system and set FRU_TABLE to OFF.
2. Reboot and rename errorlog.sys.

3.1.3.4 Automatic Analysis and Trace Conflict on Alpha Platforms

DECevent can be configured to generate debug trace files (be aware that this is discouraged due to a large performance impact and the possibility to generate very large trace files). When DECevent is running in automatic analysis mode with scavenging enabled on a VMS Alpha platform, the Debug and Trace settings must be turned off. If the Debug and Trace settings are turned on, the application will crash.

3.2 GUI Restrictions

The following restrictions pertain to the DECevent GUI.

3.2.1 General Restrictions

The restrictions described here apply to the GUI for both Tru64 UNIX and OpenVMS systems.

3.2.1.1 GUI Cannot Start Automatic Analysis

Automatic Analysis must be started from the command line. Refer to the *Analysis Guide* for more information.

3.2.1.2 Text Entries

All text field entries must be terminated with a <RETURN>.

3.2.1.3 Multiple Input File Restriction

You cannot perform translation or analysis on multiple input files. Only one input file can be translated or analysis performed upon at a time.

3.2.1.4 sys info Text Length Restriction

The text length fields in the sys info icon box are limited to 40 characters.

3.2.2 Tru64 UNIX Restrictions

The following restrictions apply to the GUI when it is run on a Tru64 UNIX system.

3.2.2.1 GUI Display Restriction with 100 D.P.I. Monitors

Switch 100 D.P.I. monitors to 75 D.P.I. to eliminate window display problems.

3.2.2.2 Brief Report Type Restriction

When the brief report type is selected for manual analysis, the resulting translation shows a full report.

3.2.2.3 Qualifier List Screen Restrictions

Clicking on the FILE icon shows a list of main DECevent qualifiers. When selecting BINARY from this qualifier list and using a start and end entry number followed by a return, the cursor hangs. Manually click the OK box for that screen and the start and ending entry numbers will be applied.

3.3 Command Line Restrictions

The following restrictions apply to the command line interface for DECevent.

3.3.1 General Restrictions

These restrictions apply to both Tru64 UNIX and OpenVMS.

3.3.1.1 Unavailable Commands with Automatic Analysis

It is possible to run DECevent from the command line when DECevent is running Automatic Analysis in the background. However, not all commands are available in this mode. DECevent maintains its internal state in a collection of knowledge libraries. In order to avoid conflicts, only one process may access these files at any time. Thus, while local settings can be changed and saved, changes to the DECevent system settings cannot be saved.

The commands in the Table 3–1 will not function properly if Automatic Analysis is running in the background.

Table 3–1 Command Restrictions

Tru64 UNIX	OpenVMS
• ad ext -u • ad -u • ana • flsh • ign • rec • rep • rmrp • rmsys • rm -u • rm ext • sav sys • set sys • set thr • shw par • shw rep • shw sum • shw the • shw thr • shw typ • stup	• ADD EXTERNAL • ADD USER • ANALYZE • FLUSH • IGNORE • RECOGNIZE • REPAIR • REMOVE REPAIRED • REMOVE SYSTEM_INFO • REMOVE USER • REMOVE EXTERNAL • SAVE SYSTEM SETTINGS • SET SYSTEM_INFO • SET THRESHOLD • SHOW PARAMETERS • SHOW REPAIRED • SHOW SUMMARY • SHOW THEORY • SHOW THRESHOLD • SHOW TYPES • START

To run these commands, stop DECevent automatic analysis using the appropriate procedure for your operating system:

- For Tru64 UNIX systems, run the following script:
  ```
  % /sbin/init.d/dia_s_k stop
  ```
- For OpenVMS systems, issue the following command:
  ```
  $ @SYS$STARTUP:DECEVENT$SHUTDOWN.COM
  ```

After issuing the desired command, restart DECevent automatic analysis using the appropriate procedure for your operating system:

- For Tru64 UNIX systems, run the following script:
  ```
  % /sbin/init.d/dia_s_k start
  ```
- For OpenVMS systems, issue the following command:
  ```
  SYS$STARTUP:DECEVENT$STARTUP.COM
  ```

3.3.1.2 Privileges Needed to Save System Settings

If a user without write access to the global library file attempts to perform a `SAVE SYSTEM SETTINGS` or `sav sys` command, one of the following errors will result:

- The error a message:

```
_DIANOSE-ERR The write of the global library failed. Check if
Auto-Analysis is running.
```

- DECevent may hang and you will have to use Ctrl+C to abort it.

3.3.1.3 Analysis Restriction

Only one instance of analysis (Automatic or Manual) can be run at a time on a given system. DECevent locks out any other attempt to use an analysis command, including those used only to read.

3.3.1.4 Wildcard Restrictions

When a user attempts a translation using a wildcard in the file specification and the number or size of the filenames exceeds an internal buffer, an error message indicating that the internal file array buffer has been exceeded is displayed.

```
_DIAGNOSE-FAT: An error occurred while executing a command ruleset
_DIAGNOSE-FAT: Translate - Exceeded Internal file array buffer
```

When this restriction is encountered DECevent will issue an error message. For example, a user trying to perform manual analysis when DECevent is running on the system in automatic analysis mode will see the following:

```
anode> dia ana -f errlog.bin

DECevent T3.1

Another instance of analysis is running
Please shutdown and reissue command.

_DIAGNOSE-FAT: Execution failed
```

3.3.1.5 Truncated Theory Number

The second theory number is truncated, if multiple theories are called out using one of the following commands:

- Tru64 UNIX — `shw the`
- OpenVMS — `SHOW THEORY`

3.3.1.6 Processing Statistics Restriction

DECevent can display informational messages describing how many event entries were selected and how many were rejected. When no output report is specified with this command, the informational messages may be embedded within the report. This affects the following commands:

- Tru64 UNIX — the `-v` flag
- OpenVMS — the `/LOG` qualifier

3.3.1.7 Evidence Support

This release of DECevent software does not currently provide evidence information in the analysis/notification reports.

3.3.1.8 Distribution List Name Restrictions

When adding users with the following commands:

- Tru64 UNIX — `ad usr`
- OpenVMS — `ADD USER`

The following words cannot be user names:

Table 3–2 User Name Restrictions

Tru64 UNIX	OpenVMS
• customer • fse • monitor • sicl	• CUSTOMER • FSE • MONITOR • SICL

3.3.1.9 Time Parameter Restrictions

If the starting date is greater than the ending date, the time parameter is ignored and no error message is generated. This affects the following parameters:

- Tru64 UNIX — `s:` (starting date) and `e:` (ending date)
- OpenVMS — `/BEFORE` (starting date) and `/SINCE` (ending date)

3.3.1.10 Set SICL Restriction and Command Procedure

You can set the SICL state to on from within the interactive command shell and then save the settings to ensure the SICL state stays on. However, setting the SICL state with the following commands is preferred.

- Tru64 UNIX — `enable_sicl`
- OpenVMS — `DIA$MGR:DECEVENT$SICL_ENABLE.COM`

Use the following scripts to disable SICL:

- Tru64 UNIX — `disable_sicl`
- OpenVMS — `DECEVENT$DISABLE_SICL.COM`

3.3.1.11 Missing Information from Show Summary Output

The output of the show summary command does not specify whether a field service or a customer threshold was crossed. This affects the following commands:

- Tru64 UNIX — `shw sum`
- OpenVMS — `SHOW SUMMARY`

3.3.1.12 DSNlink Message Size Exceeded

DECevent may exceed the DSNlink message size when trying to notify the Customer Support Center. If so, the following message appears:

```
DSN-W-MAXFILESIZE, maximum allowed file size is 60 blocks
```

3.3.1.13 Set Threshold Name Restriction

The threshold name can only be set for devices that have previously logged an event. This affects the following commands:

- Tru64 UNIX — `set thr -n`
- OpenVMS — `SET THRESHOLD/NAME`

3.3.2 Tru64 UNIX Restrictions

These restrictions apply to Tru64 UNIX systems running the DECevent command line.

3.3.2.1 Non-Support of Multiple Version Event Logs

Do not run DECevent on operating systems whose event logs contain events from multiple versions of Tru64 UNIX.

3.3.2.2 “set phone” Command Restriction

Characters entered with the set phone command must be valid numeric characters. Use of alphabetical characters is not allowed.

3.3.2.3 “show thr” Restriction

The shw thr command displays the event counts as 1 for devices that have logged errors. This occurs even when the devices have exceeded their thresholds and notification has been performed. DECevent handles the events properly and performs notification at the appropriate times, but it does not display the correct counts.

3.3.2.4 -j Flag Restriction

You must specify a file for rejected information to be written to when using the -j flag.

3.3.2.5 Year Restriction with Start (s:) and End (e:) Parameters

The year 2029 is the highest year you can enter on the command line with the `s:` and `e:` parameters.

3.3.2.6 Multiple Wildcards in File Specification Produces an Error

When specifying an event log for translation or analysis, only one wildcard character (*) may be used in the file specification.

3.3.2.7 Reverse Output Entries Incorrectly Numbered

When reverse output is specified with the `-R` flag, the entries are numbered as if they were in normal, rather than reversed, order.

3.3.2.8 Threshold Limit Maximum is 127

When changing the threshold for a device using the `set thr` command. A limit of 127 is the highest possible setting.

3.3.2.9 Avoiding Use of Reserved Command Verbs for Filenames

Names of command verbs are not acceptable for use as filenames to be used by DECevent.

3.3.2.10 Avoiding Use of Same Filename for Input and Output

When using DECevent, the filename for input and output must never be the same name. The original input file will be corrupted if the output filename has the same name.

3.3.2.11 UERF and the Common Event Header

The UNIX Error Report Formatter (UERF) utility does not understand the Common Event Header (CEH) format files. If you wish to use this utility to process binary event log files, you can use the `cehuerf` shell script, which is provided with the `DECevent_cvt_cef` utility. Refer to the *Binary Error Log Translation Utility User Guide* for more information about this script.

3.3.2.12 UNIX 5.X Clusters

Enabling DECevent automatic analysis mode on any node of a 5.X cluster enables automatic analysis on all of the nodes in the cluster. The same is true when you disable automatic analysis.

Some information involved in automatic analysis event reporting, such as the customer profile and the mailing and external notification lists, is shared by all the nodes in the cluster. However, each node of the cluster should report its own serial number and node name when automatic analysis generates an event notification. In order to accomplish this, the `diasetup` program must be executed on each node of the cluster.

SICL (System Initiated Call Logging) is enabled or disabled with the `enable_sicl` and `disable_sicl` scripts. The scripts prompt you to shutdown DECevent on all the nodes in the cluster. If this is not done, the new SICL settings will not be detected by the nodes where DECevent was left running.

3.3.3 OpenVMS Alpha Restrictions

These restrictions apply to OpenVMS Alpha systems running the DECevent command line.

3.3.3.1 File Specification Restriction

DECevent does not support file specifications that start with a node address. For example:

```
GARCIA::disk1:[]lesh.sys
```

3.3.3.2 Page File Quota Restriction

DECevent may fail with an access violation if the page file quota is exceeded. The process terminates and returns you to the system prompt if this happens. You must have your system administrator increase your PGFLQUO parameter in the SYSUAF file, then logout and log in again. You may need to re-issue the last failing command.

3.3.3.3 JTquota Restriction

The JTquota shown with the `SHOW FIELD` command when using `AUTHORIZE` must be increased to 8192 for DECevent software to function correctly. At the `UAF>` prompt following the SHOW FIELD command, change the JTquota by entering the following:

```
MODIFY FIELD/JTQUOTA=8192.
```

3.3.3.4 /FSTERR Report Type Restriction

The `/FSTERR` report type only produces an output for RA70, RA72, RA73 and RA9x series devices.

3.3.3.5 /SINCE Parameter Restriction

Using a colon (:) after the `/SINCE` parameter causes a syntax error and is not allowed.

3.3.3.6 RF74 Algorithm Incorrect

The RF74 LBN to physical cylinder, head, and sector conversion is incorrect. The RF74 is a “banded drive” and contains a variable number of sectors per track, depending on the band. The algorithm uses this information as if it were a fixed sector disk. RF74 analysis may be affected by this.

3.3.3.7 RF31T Support

RF31T events are translated as RF31 events even though RF31 events have a different format. RF31T is unsupported for analysis.

3.3.4 OpenVMS VAX Restrictions

These restrictions apply to OpenVMS VAX systems running the DECevent command line.

3.3.4.1 Restriction When Translating Large Event Logs

When processing large event logs on some OpenVMS VAX systems, the performance of DECevent is noticeably slower when compared to the DCL command `ANALYZE/ERROR`. You can alleviate this problem by periodically creating new event logs. A reasonable practice is to rename the `sys$errorlog:errorlog.sys` file to `errorlog.yy-mm-dd` every month.

A

Devices Supported for Bit to Text Translation

This appendix lists the systems and devices supported by the DECevent Bit To Text translation feature.

Note

As much translation as possible is performed for unlisted systems and devices. All the untranslatable information in the event will be dumped in hex.

Tru64 UNIX . . . . . .page A–2

OpenVMS Alpha. . . . . .page A–5

OpenVMS VAX . . . . . .page A–10

A.1 Tru64 UNIX

The following Tru64 UNIX devices are supported by Bit to Text translation.

Table A–1 Tru64 UNIX — Supported Devices

Type	Device
Alpha Systems	• AlphaServer 800 5/xxx • AlphaServer 1000 4/xxx • AlphaServer 1000A 4/266 • AlphaServer 1000A 5/xxx • AlphaServer 2000 4/xxx • AlphaServer 2000 5/375/400 • AlphaServer 2000A 5/xxx • AlphaServer 2100A 5/xxx • AlphaServer 2100A RM 5/xxx • AlphaServer 2100 4/xxx • AlphaServer 2100 RM 5/375 • AlphaServer 2100 5/xxx • AlphaServer 4000/4100 5/xxx • AlphaServer 8200/8400 4GB M • AlphaServer 8200/8400 CRD • AlphaServer 8200/8400 5/300/350/440/625 • GS60/GS60e 6/xxx • GS140 6/xxx • AlphaStation 200 4/xxx • AlphaStation 205 4/xxx • AlphaStation 255 4/xxx • AlphaStation 400 4/xxx • AlphaStation 500 5/xxx • AlphaStation 600 5/xxx • AlphaStation 533au2 • AXPvme • DEC 2000 200/300/400/500/700/900 • DEC 3000 300/400/500/700/900 • DEC 4000 • DEC 7000 • DEC 10000
File System / Software	• ADVFS • Logical Storage Manager
HSXXX Battery Failure Notification	
Memory Channel Adapter	• Memory Channel I and II Adapters[1]
PCI Adapters	• DWLPA • DWLPB • CCMPA • KZPCC • KZPCM-DA • KZPDA-AA QLOGIC (1020/1040) Chip Support • KZPBA-CA QLOGIC (1020/1040) Chip Support • PCI-Fiber Host Bus Adapter(KGPSA) • PCI-SCSI Adapters (KZPSA/KZTSA) • PCI Bus

Table A–1 Tru64 UNIX — Supported Devices (continued)

Type	Device
HS Array Controllers	• All HS Array Controllers have full Bit To Text support.
MSCP DSA Disks	• All MSCP DSA Disks have full Bit To Text support.
MSCP DSSI Disks	• All MSCP DSSI Disks have full Bit To Text support.
All SCSI Devices[2]	• RZ28L-AA Atlas II 2GB • RZ29L-AA Atlas II 4GB • RZ40-AA Atlas II 9GB • RZ1BB-AS Atlas II 3GB • RZ1BB-BA Atlas II 3GB • RZ1BB-BS Atlas II 3GB • RZ1BB-CA Atlas II 3GB • RZ1BB-CS Atlas II 3GB • RZ1CB-AS Atlas II 4GB • RZ1CB-BA Atlas II 4GB • RZ1CB-BS Atlas II 4GB • RZ1CB-CA Atlas II 4GB • RZ1CB-CS Atlas II 4GB • RZ1DB-AS Atlas II 9GB • RZ1DB-BA Atlas II 9GB • RZ1DB-BS Atlas II 9GB • RZ1DB-CA Atlas II 9GB • RZ1DB-CS Atlas II 9GB • RZXX • RDXX • RW5XX • RWZXX • RX26 • RX31 • RZ1CD-BS - 4.3GB 10000RPM Ultra Wide 68 Pin • RZ1CD-CS - 4.3GB 10000RPM Ultra Wide 80 Pin SCA2 • RZ1EF-AA - 18.2GB 7200RPM Ultra Narrow 50 Pin • RZ1EF-AB - 18.2 GB 7200RPM Ultra 50 Pin Narrow • RZ1EF-AS - 18.2GB 7200RPM Ultra Narrow 50 Pin • RZ1EF-BA - 18.2GB 7200RPM Ultra Wide 68 PIN • RZ1EF-BB - 18.2 GB 7200RPM Ultra Wide 68 PIN • RZ1EF-BS - 18.2GB 7200RPM Ultra Wide 68 PIN • RZ1EF-CA - 18.2GB 7200RPM Ultra Wide 80 Pin SCA2 • RZ1EF-CB - 18.2 GB 7200RPM Ultra Wide 80 Pin SCA2 • RZ1EF-CS - 18.2GB 7200RPM Ultra Wide 80 Pin SCA2

Table A–1 Tru64 UNIX — Supported Devices (continued)

Type	Device
TZ8X Tape Family	• TZ85/857 • TZ86/867 • TZ87/875/877 • TZ88
Other Tapes:	• TK50 • TKXZZ • TSZXX
SCSI Solid State Disks	• EZ31 - 100MB or 134MB Solid State Disk • EZ32 - 200MB or 268.3MB Solid State Disk • EZ33 - 300MB Solid State Disk • EZ34 - 400MB Solid State Disk • EZ35 - 500MB Solid State Disk • EZ51 - 107MB Solid State Disk with Data Retention • EZ52 - 214MB Solid State Disk with Data Retention • EZ53 - 267MB Solid State Disk without Data Retention • EZ54 - 428MB Solid State Disk with Data Retention • EZ58 - 1.07GB Solid State Disk without Data Retention or 856MB Solid State Disk with Data Retention • EZ64 - 475MB Solid State Disk • EZ69 - 950MB Solid State Disk

[1] Includes the PCI slot identifier quadword.
[2] DECevent SCSI support for Tru64 UNIX is implemented via CAM (Common Access Method).

A.2 OpenVMS Alpha

The following OpenVMS Alpha devices are supported by Bit to Text translation.

Table A–2 OpenVMS Alpha — Supported Devices

Type	Device
Alpha Systems	• AlphaServer 800 5/xxx • AlphaServer 1000 4/xxx • AlphaServer 1000A 4/266 • AlphaServer 1000A 5/xxx • AlphaServer 1200 5/xxx • AlphaServer 2000 4/xxx • AlphaServer 2000 5/325/375/400 • AlphaServer 2000A 5/xxx • AlphaServer 2100A 5/xxx • AlphaServer 2100A RM 5/xxx • AlphaServer 2100 5/375/400 • AlphaServer 2100 RM 5/375 • AlphaServer 2100 4/xxx • AlphaServer 4000/4100 5/xxx • AlphaServer 8200/8400 4GB M • AlphaServer 8200/8400 CRD • AlphaServer 8200/8400 5/300/350/440/625 • AlphaServer 8200/8400 6/440/625 • GS60/GS60e 6/xxx • GS140 6/xxx • AlphaStation 200 4/xxx • AlphaStation 205 4/xxx • AlphaStation 255 4/xxx • AlphaStation 400 4/xxx • AlphaStation 500 5/xxx • AlphaStation 600 5/xxx • AlphaStation 533au2 • AXPvme • DEC 2000 200/300/400/500/700/900 • DEC 3000 300/400/500/700/900 • DEC 4000 • DEC 7000 • DEC 10000
HSxxx Battery Failure Notification	
PCI Adapters	• DWLPA • DWLPB • CCMPA • PCI-Fiber Host Bus Adapter(KGPSA) • PCI-SCSI Adapters (KZPSA/KZTSA) • PCI Bus • ISP 1020 • KZPCM-DA • KZPDA-AA QLOGIC (1020/1040) Chip Support • KZPBA-CA QLOGIC (1020/1040) Chip Support

Table A–2 OpenVMS Alpha — Supported Devices (continued)

Type	Device
SCSI Solid State Disks	• EZ31 - 100MB or 134MB Solid State Disk • EZ32 - 200MB or 268.3MB Solid State Disk • EZ33 - 300MB Solid State Disk • EZ34 - 400MB Solid State Disk • EZ35 - 500MB Solid State Disk • EZ51 - 107MB Solid State Disk with Data Retention • EZ512R • EZ52 - 214MB Solid State Disk with Data Retention • EZ53 - 267MB Solid State Disk without Data Retention • EZ54 - 428MB Solid State Disk with Data Retention • EZ54R • EZ58 - 1.07GB Solid State Disk without Data Retention or 856MB Solid State Disk with Data Retention • EZ64 - 475MB Solid State Disk • EZ69 - 950MB Solid State Disk • EZXX
SCSI Port Drivers	• AHA1740/1742A • SIMPORT • Qlogic 1038/1070 SCSI disk controller
SCSI Disk Support	• RZ28L-AA Atlas II 2GB • RZ29L-AA Atlas II 4GB • RZ40-AA Atlas II 9GB • RZ1BB-AS Atlas II 3GB • RZ1BB-BA Atlas II 3GB • RZ1BB-BS Atlas II 3GB • RZ1BB-CA Atlas II 3GB • RZ1BB-CS Atlas II 3GB • RZ1CB-AS Atlas II 4GB • RZ1CB-BA Atlas II 4GB • RZ1CB-BS Atlas II 4GB • RZ1CB-CA Atlas II 4GB • RZ1CB-CS Atlas II 4GB • RZ1DB-AS Atlas II 9GB • RZ1DB-BA Atlas II 9GB • RZ1DB-BS Atlas II 9GB • RZ1DB-CA Atlas II 9GB • RZ1DB-CS Atlas II 9GB • RZ1CD-BS - 4.3GB 10000RPM Ultra Wide 68 Pin • RZ1CD-CS - 4.3GB 10000RPM Ultra Wide 80 Pin SCA2 • RZ1EF-AA - 18.2GB 7200RPM Ultra Narrow 50 Pin • RZ1EF-AB - 18.2 GB 7200RPM Ultra 50 Pin Narrow • RZ1EF-AS - 18.2GB 7200RPM Ultra Narrow 50 Pin • RZ1EF-BA - 18.2GB 7200RPM Ultra Wide 68 PIN • RZ1EF-BB - 18.2 GB 7200RPM Ultra Wide 68 PIN • RZ1EF-BS - 18.2GB 7200RPM Ultra Wide 68 PIN • RZ1EF-CA - 18.2GB 7200RPM Ultra Wide 80 Pin SCA2 • RZ1EF-CB - 18.2 GB 7200RPM Ultra Wide 80 Pin SCA2 • RZ1EF-CS - 18.2GB 7200RPM Ultra Wide 80 Pin SCA2 • RZXX
HSC Family[1]	• HSC40 • HSC50 • HSC60 • HSC65 • HSC70 • HSC90 • HSC95

Table A–2 OpenVMS Alpha — Supported Devices (continued)

Type	Device
Other Adapters	• DSYT1 • KFMSA • KFMSB • SHAC • PAxxx • PNxxx • Memory Channel Adapters I and II • DE422-SA • DEFAA • DEFTA • DEFZA • DEFEA • DWTVA
HS Array Controllers	• HSD05/10/30/40/50 • HSG80 • HSJ30/40/50/80 • HSZ10/15/20/40/50/70
Internal Device Controllers	• CIXCD-AC
Other Support	• DDR- Dynamic Device Recognition • DSR - Dynamic System Recognition • Host Based RAID 0 and 5
I/O Adapters	• DEMFA • DEMNA • KDM70 • KZMSA
MSCP DSA Disks	• RA60 • RA70 • RA71 • RA72 • RA73 • RA80 • RA81 • RA82 • RA90 • RA92
MSCP DSA Tapes	• TAD34 • TAD44 • TA78 • TA79 • TA81 • TAD85 • TAD86 • TAD87 • TA90 • TA90E • TA91 • TA85/TA857 • TA86/TA867 • TA90E

Table A–2 OpenVMS Alpha — Supported Devices (continued)

Type	Device
MSCP DSSI Disks	• RF30 • RF31 • RF31F • RF31T • RF35 • RF36 • RF70 • RF71 • RF72 • RF73 • RF74 • RFH3 • RFH31 • RFH35 • RFH36 • RFH72 • RFH73 • RFH74
MSCP DSSI Tapes	• TF30 • TF70 • TF85 • TF86 • TF867 • TF857
SCSI Tapes	• TZ85\857 • TZ86\867 • TZ87\875\877 • TZ88
Other SCSI Devices	• RRDXX • RW5XX • RWZXX • RX26 • RX31
Generic Devices	• Generic DU (for example, MSCP disks not yet known by OpenVMS) • Generic TU (for example, MSCP tapes not yet known by OpenVMS) • NI SCA events • OpenVMS Striping Events • OVMS Volume Shadow Events
MSCP Controllers	• KCM44 • KDA50-Q • KDB50 • KFBTA • KRQ50 • RQDX1 • RQDX3 • RQDX4 • UDA50 • UDA50-A

Table A–2 OpenVMS Alpha — Supported Devices (continued)

Type	Device
MSCP DSA Solid State Disks	• ESE20 • ESE52 • ESE56 • ESE58
MSCP DSA Optical Disks	• RV20 • RV60
MSCP DSSI Solid State Disks	• EF51 • EF52 • EF53 • EF54 • EF58
Other TMSCP Tapes/Controllers	• TBK70 • TK50 • TK50S • TK50-DEBNT • TK70 • TKZXX • TKLXX • TQK50 • TSZXX • TUK50

[1] The names of these HSC devices are displayed as controlling devices for appropriate disk and tape errors. However, their out-of-band errors are not yet supported by DECevent translation. The out-of-band events are dumped in hex.

A.3 OpenVMS VAX

The following OpenVMS VAX devices are supported by Bit to Text translation.

Note

DECevent software's primary focus on VAX operating systems is to support Bit To Text translation for the StorageWorks products.

Table A–3 OpenVMS VAX — Supported Devices

Type	Device
CPUs	• VAX 6000 400/500/ 600 • VAX 7000 600/700/800 • VAX 7000 xxx 2GB M • VAX 10000 600/700/800 • VAX 10000 xxx 2GB M
HSXXX Battery Failure Notification	
HS Array Controllers	• HSD05/10/30/40/50 • HSJ30/40/50/80 • HSZ10/15/40/50/70 • HSG80
I/O Adapters	• DEMFA • DEMNA • KDM70 • KZMSA • KFMSA • SHAC • PAxxx • PNxxx • DEFAA • DEFEA • DEFZA • DEFTA • DEFAH
MSCP DSA Disks	• RA60 • RA70 • RA71 • RA72 • RA73 • RA80 • RA81 • RA82 • RA90 • RA92

Table A–3 OpenVMS VAX — Supported Devices (continued)

Type	Device
MSCP DSSI Disks	• RF30 • RF31 • RF31F • RF31T • RF35 • RF36 • RF70 • RF71 • RF72 • RF73 • RF74 • RFH3 • RFH31 • RFH35 • RFH36 • RFH72 • RFH73 • RFH74
MSCP DSA Tapes	• TA78 • TA79 • TA81 • TA85/TA857 • TA86/TA867 • TA90 • TA90E • TA91 • TAD34 • TAD44 • TAD85 • TAD86 • TAD87
MSCP DSSI Tapes	• TF30 • TF70 • TF85 • TF857 • TF86 • TF867
HSC Family[1]	• HSC40 • HSC50 • HSC60 • HSC65 • HSC70 • HSC90 • HSC95
PCI Adapters	• KZPCM-DA • PCI-Fiber Host Bus Adapter(KGPSA)
Other Adapters	• CIXCD (also known as CIMNA) • PCI Bus • DE422-SA • DWTVA

Table A–3 OpenVMS VAX — Supported Devices (continued)

Type	Device
SCSI Tapes	• TZ85\857 • TZ86\867 • TZ87\875\877 • TZ88
SCSI Solid State Disks	• EZ31 - 100MB or 134MB Solid State Disk • EZ32 - 200MB or 268.3MB Solid State Disk • EZ33 - 300MB Solid State Disk • EZ34 - 400MB Solid State Disk • EZ35 - 500MB Solid State Disk • EZ51 - 107MB Solid State Disk with Data Retention • EZ52 - 214MB Solid State Disk with Data Retention • EZ53 - 267MB Solid State Disk without Data Retention • EZ54 - 428MB Solid State Disk with Data Retention • EZ58 - 1.07GB Solid State Disk without Data Retention or 856MB Solid State Disk with Data Retention • EZ64 - 475MB Solid State Disk • EZ69 - 950MB Solid State Disk • EZXX
SCSI Disk Support	• RZ28L-AA Atlas II 2GB • RZ28L-AS Atlas II 2GB • RZ29L-AA Atlas II 4GB • RZ29L-AS Atlas II 4GB • RZ40-AA Atlas II 9GB • RZ40-AS Atlas II 9GB • RZ1BB-AS Atlas II 3GB • RZ1BB-BA Atlas II 3GB • RZ1BB-BS Atlas II 3GB • RZ1BB-CA Atlas II 3GB • RZ1BB-CS Atlas II 3GB • RZ1CB-AS Atlas II 4GB • RZ1CB-BA Atlas II 4GB • RZ1CB-BS Atlas II 4GB • RZ1CB-CA Atlas II 4GB • RZ1CB-CS Atlas II 4GB • RZ1DB-AS Atlas II 9GB • RZ1DB-BA Atlas II 9GB • RZ1DB-BS Atlas II 9GB • RZ1DB-CA Atlas II 9GB • RZ1DB-CS Atlas II 9GB • RZ1EF-AA - 18.2GB 7200RPM Ultra Narrow 50 Pin • RZ1EF-AB - 18.2 GB 7200RPM Ultra 50 Pin Narrow • RZ1EF-AS - 18.2GB 7200RPM Ultra Narrow 50 Pin • RZ1EF-BA - 18.2GB 7200RPM Ultra Wide 68 PIN • RZ1EF-BB - 18.2 GB 7200RPM Ultra Wide 68 PIN • RZ1EF-BS - 18.2GB 7200RPM Ultra Wide 68 PIN • RZ1EF-CA - 18.2GB 7200RPM Ultra Wide 80 Pin SCA2 • RZ1EF-CB - 18.2 GB 7200RPM Ultra Wide 80 Pin SCA2 • RZ1EF-CS - 18.2GB 7200RPM Ultra Wide 80 Pin SCA2
Other Support	• DDR-Dynamic Device Recognition • DSR-Dynamic System Recognition • Host Based RAID 0 and 5

Table A–3 OpenVMS VAX — Supported Devices (continued)

Type	Device
SCSI Devices	• RRDXX • RWSXX • RWZXX • RX26 • RX31
Generic Devices	• Generic DU (for example, MSCP disks not yet known by OpenVMS) • Generic TU (for example, MSCP tapes not yet known by OpenVMS) • NI SCA events • OpenVMS Volume Shadow events (Phase II)
MSCP Controllers	• KCM44 • KDA50-Q • KDB50 • KFBTA • KRQ50 • RQDX1 • RQDX3 • RQDX4 • UDA50 • UDA05-A
MSCP DSA Solid State Disks	• ESE20 • ESE52 • ESE56 • ESE58
MSCP DSSI Solid State Disks	• EF51 • EF52 • EF53 • EF54 • EF58
MSCP DSA Optical Disks	• RV20 • RV60
Other TMSCP Tapes/Controllers	• TBK70 • TK50 • TK50S • TK50-DEBNT • TK70 • TQK50 • TUK50
Other Tapes	• TKZXX

[1] The names of these HSC devices are displayed as controlling devices for appropriate disk and tape errors. However, their own out-of-band events are not yet supported by DECevent. The HSC out-of-band events are now decoded but due to a problem in OpenVMS, some text may be truncated.

B

Devices Supported for Analysis and Notification

This appendix lists the systems and devices supported by the DECevent analysis and notification features.

Tru64 UNIX . . . . . page B–2

OpenVMS Alpha. . . . . page B–3

OpenVMS VAX . . . . . page B–4

B.1 Tru64 UNIX

The following Tru64 UNIX devices are supported by analysis and notification.

Table B–1 Tru64 UNIX — Supported Devices

Type	Device
Alpha Systems	• AlphaServer 800 5/xxx • AlphaServer 1000 4/xxx • AlphaServer 1000 4/200 • AlphaServer 1000A 4/266 • AlphaServer 1200 5/xxx • AlphaServer 2000 4/xxx • AlphaServer 2000 5/375/400 • AlphaServer 2000A 5/xxx • AlphaServer 2100A 5/xxx • AlphaServer 2100A RM 5/xxx • AlphaServer 2100 4/xxx • AlphaServer 2100 RM 5/375 • AlphaServer 2100 5/xxx • AlphaServer 4000/4100 5/xxx • AlphaServer 8200/8400 5/300/350/440/625 • AlphaServer 8200/8400 4Gb Memory • AlphaServer 8200/8400 CRD Analysis • GS60/GS60e 6/xxx • GS140 6/xxx • AlphaStation 533au2 • AXPvme • DEC 4000 • DEC 10000
HSxxx Battery Failure Notification	
HS Array Controllers	• HSG80 • HSZ40/50/70
MSCP DSA Disks	• MSCP DSA disks are fully supported for analysis by DECevent.
MSCP DSSI Disks	• MSCP DSSI disks are fully supported for analysis by DECevent.

B.2 OpenVMS Alpha

The following OpenVMS Alpha devices are supported by analysis and notification.

Table B–2 OpenVMS Alpha — Supported Devices

Type	Device
Alpha Systems	• AlphaServer 800 5/xxx • AlphaServer 1000 4/xxx • AlphaServer 1000 4/200 • AlphaServer 1000A 4/266 • AlphaServer 1000A 5/xxx • AlphaServer 1200 5/xxx • AlphaServer 2000 4/xxx • AlphaServer 2000 5/375/400 • AlphaServer 2100 RM 5/375 • AlphaServer 2100 4/xxx • AlphaServer 2100 5/375/400 • AlphaServer 4000/4100 5/xxx • AlphaServer 8200/8400 5/300/350/440/625 • AlphaStation 533au2 • AXPvme • DEC 4000 • DEC 7000 • DEC 10000
I/O Adapters	• KDM70
HSxxx Battery Failure Notification	
MSCP DSA Disks	• RA60 • RA70 • RA71 • RA72 • RA73 • RA80 • RA81 • RA82 • RA90 • RA92
HS Array Controllers	• HSD30/40/50 • HSG80 • HSJ30/40/50/80 • HSZ40/50/70
RAxx Devices	Available analysis areas are listed in Section B.4.
MSCP DSSI Disks	• RF30 • RF31 • RF31F • RF35 • RF70 • RF71 • RF72 • RF73

B.3 OpenVMS VAX

The following OpenVMS VAX devices are supported by analysis and notification.

Table B–3 OpenVMS VAX — Supported Devices

Type	Device
HSxxx Battery Failure Notification	
HS Array Controllers	• HSD30/40/50 • HSG80 • HSJ30/40/50 • HSZ40/50/70
MSCP DSA Disks	• RA60 • RA70 • RA71 • RA72 • RA73 • RA80 • RA81 • RA82 • RA90 • RA92
MSCP DSSI Storage Disks	• RF30
RAxx Devices	Available analysis areas are listed in Section B.4.

B.4 Supported RAxx Analysis Areas for OpenVMS

The areas of analysis that can be done for OpenVMS systems on RAxx devices are listed here.

- RA90/92 Special Analysis
- SDI Communication Errors Analysis
- Non-media Drive Detected Errors Analysis
- Media Drive Detected Errors Analysis
- Head Matrix Analysis
- Bad Surface Analysis
- Servo Failures Analysis
- Head Slap Test Analysis
- Random Read Path Analysis
- Bad Head Analysis
- Radial Scratch Analysis
- Circumferential Scratch Analysis

- Bad Spot Analysis
- Possible Media Errors Analysis
- Forced Error Analysis