Oracle® Enterprise Manager

Addendum to Event Test Reference Manual

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Introduction

The Addendum to Event Test Reference Manual provides the information for the events that are new in Oracle9iAS Release 2 (9.0.2) of the Oracle Server. This addendum is a supplement to the Oracle Enterprise Manager Event Test Reference Manual.

The following categories of events are included:

- Enterprise Manager Web Site (See Table 1)
- HTTP Server (See Table 2)
- Oracle9*i*AS Containers for J2EE (OC4J) (See Table 3)



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- Web Cache (See Table 4)
- Apache JServ (See Table 5)

Summary of Oracle9iAS Release 2 (9.0.2) Event Tests

The following tables list the Oracle9*i*AS Release 2 (9.0.2) event tests by target type. The full descriptions of the individual event tests follow the tables. The event tests are in alphabetical order.

 Table 1
 Enterprise Manager Web Site Event Test

Event Test	Description
EM Web Site UpDown	This event test checks whether the Enterprise Manager Web Site is running. A critical alert is generated whenever the Enterprise Manager Web Site is down or there is an error connecting to the Enterprise Manager Web Site. See the Oracle9i Application Server Administrator's Guide for information about the Enterprise Manager Web Site.

Table 2 HTTP Server Event Tests

Event Test	Description
Connection Creation Time (sec)	This event test measures the amount of time, in seconds, a connection stays open.
Error Rate (%)	This event test measures the percentage of requests that have errors. The type of errors can include: illegal page access and pages that do not exist.
HTTP Server UpDown	This event test checks whether the HTTP server is running. A critical alert is generated whenever the value is 0, that is, whenever the HTTP server stops.
Request Processing Time (sec)	This event test measures the average time, in seconds, it takes to process a request.

Table 3	Oracle9iAS	Containers f	for J2EE	(OC4J) Event Test
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Event Test	Description		
OC4J UpDown	This event test checks whether the OC4J server is running. A critical alert is generated whenever the value is 0, that is, whenever OC4J stops.		

Table 4 Web Cache Event Test

Event Test	Description
Web Cache UpDown	This event test checks whether the Web Cache is running. A critical alert is generated whenever the value is 0, that is, whenever Web Cache stops.

Table 5 Apache JServ Event Test

Event Test	Description		
JServ UpDown	This event test checks whether the JServ server is running. A critical alert is generated whenever the value is 0, that is, whenever JServ stops.		

Descriptions of Oracle9*i*AS Release 2 (9.0.2) Event Tests

The Oracle9*i*AS Release 2 (9.0.2) event tests are listed in alphabetical order within target type.

Enterprise Manager Web Site Event Test

EM Web Site UpDown

Description

This event test checks whether the Enterprise Manager Web Site is running. A critical alert is generated whenever the Enterprise Manager Web Site is down or an error occurs.

Parameters

None.

Possible Error Messages and User Actions

If the EM Web Site UpDown event test identifies a problem, one of the following messages may be generated. See the *Oracle9i Application Server Administrator's Guide* for additional information.

File <file name> is not readable.

Cause: The emtab file does not have read permissions.

Action: Verify that the emtab file has the read permissions set.

emctl: <*emctl*> does not exist.

Cause: The Enterprise Manager Web Site home may be invalid, there is an invalid format in the emtab file, or the emctl executable may be in the incorrect directory

Action: There are several actions to perform. Verify that the Enterprise Manager Web Site home is valid. Correct the format in the emtab file. The format should be "DEFAULT=<ORACLE_HOME>". Verify that the emctl command is located in the ORACLE_HOME/bin directory. Also, verify that the emctl command is an executable.

File *<file name>* does not exist.

Cause: The Enterprise Manager Web Site may not be successfully installed.

Action: Verify that the Enterprise Manager Web Site is installed. If the Enterprise Manager Web Site is installed, verify that the emtab file is placed in the correct directory. For example, on Solaris the emtab file should be located at /var/opt/oracle/emtab. On HP, the file should be located at /etc/emtab. On NT, emtab is stored in the em_loc registry key which is located at HKEY_LOCAL_MACHINE\Software\Oracle.

General Errors Using emctl Command

\$(ORACLE_HOME)/bin/emctl: \$(SOME_JAVA_HOME)/bin/java: not found

Cause: \$(SOME_JAVA_HOME) is an incorrect JAVA_HOME

Action: Make sure JAVA_HOME is set correctly.

Exception in thread "main" java.lang.NoClassDefFoundError: org/sml/sax/SAXException

Cause: This class could not be found and is required for getting the status of the Enterprise Manager Web Site.

Action: Verify that the \$ORACLE_HOME variable is correctly set. If you still get the same error after verifying \$ORACLE_HOME, verify that the CLASSPATH variable is correctly set.

Exception in thread "main" java.lang.NoClassDefFoundError: oracle/sysman/emd/emdcli/EmCtl

Cause: This class could not be found and is required for getting the status of the Enterprise Manager Web Site.

Action: Verify that the \$ORACLE_HOME variable is correctly set.

General Errors - Enterprise Manager Web Site Is Not Up

Cause: The Enterprise Manager Web Site is down.

Action: Restart the Enterprise Manager Web Site by accessing the \$ORACLE_HOME/bin/ directory and typing the command: emctl start emd. If this does not work, consult the emd.log file in the \$ORACLE_HOME/sysman/log directory. The log file can provide additional information to help determine the problem.

Cause: The Enterprise Manager Web Site is up but the Enterprise Manager control returned an HTTP404 (Not Found) error.

Action: Verify that the EMD_URL variable is correctly set in the \$ORACLE_HOME/sysman/config/emd.properties file.

HTTP Server Event Tests

Connection Creation Time (sec)

Description

This event test measures the amount of time, in seconds, a connection stays open.

Parameters

- Warning Threshold: Threshold for warning alert. Default is 10 seconds.
- Critical Threshold: Threshold for critical alert. Default is 50 seconds.

Output

Amount of time (in seconds)

Output Example

It is taking too long to establish an HTTP connection. Currently it is taking 30 seconds.

Recommended Frequency

5 minutes

User Action

Examine your computer resources. Determine whether there is enough available CPU time for the HTTP Server. If not, reallocate the CPU resources needed.

Error Rate (%)

Description

This event test measures the percentage of requests that have errors. The type of errors can include: illegal page access and pages that do not exist.

Parameters

- Warning Threshold: Threshold for warning alert. Default is one percent.
- Critical Threshold: Threshold for critical alert. Default is five percent.

Output

Percentage of requests that have errors

Output Example

Error Rate (%) is too high. The current value is 2%.

Recommended Frequency

5 minutes

User Action

Look at HTTP Error Log to see what pages are causing the errors.

HTTP Server UpDown

Description

This event test checks whether the HTTP server is running. A critical alert is generated whenever the value is 0, that is, whenever the HTTP server stops.

Parameters

Critical Threshold: Threshold for critical alert. Default is 0. This threshold is read only.

Output

States whether the HTTP server is up or down.

Recommended Frequency

5 minutes

User Action

If the HTTP server is down, click **Start Server** on the HTTP Server home page.

Request Processing Time (sec)

Description

This event test measures the average time, in seconds, it takes to process an HTTP Server request.

Parameters

- Warning Threshold: Threshold for warning alert. Default is 2 seconds.
- Critical Threshold: Threshold for critical alert. Default is 5 seconds.

Output

Average amount of time (in seconds)

Output Example

HTTP Server is taking too long to process one request. Currently it is taking an average of 5 seconds.

Recommended Frequency

5 minutes

User Action

Examine the processes and identify all processes that are taking a long time to process. Investigate the HTTP Server Response and Load metrics from the EM Web Site. Consult the *Oracle9i Application Server Administrator's Guide* for additional information.

OC4J Event Test

OC4J UpDown

Description

This event test checks whether the OC4J server is running. A critical alert is generated whenever the value is 0, that is, whenever OC4J stops.

Parameters

Critical Threshold: Threshold for critical alert. Default is 0. This threshold is read only.

Output

States whether the OC4J server is up or down.

Recommended Frequency

5 minutes

User Action

If the OC4J server is down, click **Start Server** on the OC4J home page.

Web Cache Event Test

Web Cache UpDown

Description

This event test checks whether Web Cache is running. A critical alert is generated whenever the value is 0, that is, whenever Web Cache stops.

Parameters

Critical Threshold: Threshold for critical alert. Default is 0. This threshold is read only.

Output

States whether Web Cache is up or down.

Recommended Frequency

5 minutes

User Action

If Web Cache is down, click Start Web Cache on the Web Cache home page.

JServ Event Test

JServ UpDown

Description

This event test checks whether JServ is running. A critical alert is generated whenever the value is 0, that is, whenever JServ stops.

Parameters

Critical Threshold: Threshold for critical alert. Default is 0. This threshold is read only.

Output

States whether JServ is up or down.

Recommended Frequency

5 minutes

User Action

You may need to restart the Apache server. Click **Start Server** on the HTTP Server home page. JServ will be started as part of the Apache startup.

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