Oracle® Fusion Middleware

Oracle HTTP Server Release Notes 12c (12.1.2)

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Oracle Fusion Middleware Oracle HTTP Server Release Notes 12c (12.1.2)

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Contents

Pr	eface		. V
	Audie	nce	٧
	Docum	nentation Accessibility	٧
	Related	d Documents	٧
	Conve	ntions	vi
1	Knowi	n Issues	
	1.1	Using shutdown() Without Parameters Shuts Down WebLogic Server	1-2
	1.2	Multiple WLST Versions	1-2
	1.3	No Command to List All OHS Instances, States, and Ports	1-2
	1.4	Configuration Wizard Does Not Present a Summary Screen	1-2
	1.5	Standalone Instances Start in UNKNOWN State	1-2
	1.6	nmServerStatus() Returns UNKNOWN for Non-existent Instances	1-2
	1.7	No Automatic Port Allocation for Standalone Instances	1-3
	1.8	nmStart(), nmServerStatus(), and nmKill() Require ServerType Parameter	1-3
	1.9	Instances Can Be Deleted in the RUNNING State	1-3
	1.10	Private Keys Should Not be on a DMZ Machine	1-3
	1.11	Missing Libraries Might Cause HTTPD to Exit Without Notice	1-3
	1.12	Create DOMAIN_HOME/servers/ <instancename>/logs manually when Diagnosing Start-up Failures 1-5</instancename>	
	1.13	Installer Sporadically Hangs on Specify Security Updates Screen	1-5
	1.14	Warning Appears if No OSH Instance is Created	1-5
	1.15	Installing OHS 11.1.1.7 with WLS 12c	1-5
	1.16	"XL TXE-J compiling stylesheet: null" Message During OHS Instance Configuration	1-6
	1.17	Backslashes in Paths in ohs.plugins.nodemanager.properties must be Escaped	1-6
	1.18	Creating Instance Named "adminserver" Throws Exception	1-6
	1.19	DMS Displays Incorrect Message if OHS is Down	1-6
	1.20	Node Manager 12c (12.1.2) OHS Throws Java Exception on AIX	1-7
	1.21	Set PATH Environment Variable Manually if OHS on Windows Fails to Start	1-7
	1.22	Recovering Instance on Managed Node Requires tar/untar Commands	1-8
	1.23	OHS Instance Creation with Config Wizard Does Not Require Machine Assignment	1-8
	1.24	httpd.exe Fails to Start	1-8
	1.25	SSLWallet Directive in ssl.conf Might be Saved Incorrectly	1-8
	1.26	CONFIG_FILE_PATH Setting for apxs in a Standalone Domain	1-9
	1.27	Create Log directory Manually When Diagnosing Startup Failures	1-9
	1.28	createOHSTestDomain() Should be Used Only in Offline Mode	1-9

1.29	Delay in Processing Websocket Events on Windows	1-9
1.30	startComponent.sh and stopComponent.sh Must be Executed from Directory with Wri	te
	Permission 1-9	
1.31	Disable SSL Security Protocols	1-9
1.32	FIPS is Not Available on the Windows Platform	1-10

Preface

This document contains important release information about Oracle HTTP Server 12*c* (12.1.2).

Audience

Oracle HTTP Server Release Notes is intended for application server administrators, security managers, and managers of databases used by application servers. This documentation is based on the assumption that readers are already familiar with Apache HTTP Server.

Unless otherwise mentioned, the information in this document is applicable when Oracle HTTP Server is installed with Oracle WebLogic Server and Oracle Fusion Middleware Control. It is assumed that readers are familiar with the key concepts of Oracle Fusion Middleware as described in the *Understanding Oracle Fusion Middleware* and *Administering Oracle Fusion Middleware*.

For information about installing Oracle HTTP Server in standalone mode, see *Installing* and Configuring Oracle HTTP Server.

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Related Documents

For more information, see the following documents in the Oracle HTTP Server documentation set:

- Administering Oracle HTTP Server
- Using Oracle WebLogic Server Proxy Plug-Ins 12.1.2

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Known Issues

This chapter reviews unresolved issues known to exist in Oracle HTTP Server 12c (12.1.2). These issues are described in the following sections:

- Section 1.1, "Using shutdown() Without Parameters Shuts Down WebLogic Server"
- Section 1.2, "Multiple WLST Versions"
- Section 1.3, "No Command to List All OHS Instances, States, and Ports"
- Section 1.4, "Configuration Wizard Does Not Present a Summary Screen"
- Section 1.5, "Standalone Instances Start in UNKNOWN State"
- Section 1.6, "nmServerStatus() Returns UNKNOWN for Non-existent Instances"
- Section 1.7, "No Automatic Port Allocation for Standalone Instances"
- Section 1.8, "nmStart(), nmServerStatus(), and nmKill() Require ServerType Parameter"
- Section 1.9, "Instances Can Be Deleted in the RUNNING State"
- Section 1.10, "Private Keys Should Not be on a DMZ Machine"
- Section 1.11, "Missing Libraries Might Cause HTTPD to Exit Without Notice"
- Section 1.12, "Create DOMAIN_HOME/servers/<instancename>/logs manually when Diagnosing Start-up Failures"
- Section 1.13, "Installer Sporadically Hangs on Specify Security Updates Screen"
- Section 1.14, "Warning Appears if No OSH Instance is Created"
- Section 1.15, "Installing OHS 11.1.1.7 with WLS 12c"
- Section 1.16, ""XL TXE-J compiling stylesheet: null" Message During OHS Instance Configuration"
- Section 1.17, "Backslashes in Paths in ohs.plugins.nodemanager.properties must be Escaped"
- Section 1.18, "Creating Instance Named "adminserver" Throws Exception"
- Section 1.19, "DMS Displays Incorrect Message if OHS is Down"
- Section 1.20, "Node Manager 12c (12.1.2) OHS Throws Java Exception on AIX"
- Section 1.21, "Set PATH Environment Variable Manually if OHS on Windows Fails to Start"
- Section 1.22, "Recovering Instance on Managed Node Requires tar/untar Commands"

- Section 1.23, "OHS Instance Creation with Config Wizard Does Not Require Machine Assignment"
- Section 1.24, "httpd.exe Fails to Start"
- Section 1.25, "SSLWallet Directive in ssl.conf Might be Saved Incorrectly."
- Section 1.26, "CONFIG_FILE_PATH Setting for apxs in a Standalone Domain"
- Section 1.27, "Create Log directory Manually When Diagnosing Startup Failures"
- Section 1.28, "createOHSTestDomain() Should be Used Only in Offline Mode"
- Section 1.29, "Delay in Processing Websocket Events on Windows"
- Section 1.30, "startComponent.sh and stopComponent.sh Must be Executed from Directory with Write Permission"
- Section 1.31, "Disable SSL Security Protocols"
- Section 1.32, "FIPS is Not Available on the Windows Platform"

1.1 Using shutdown() Without Parameters Shuts Down WebLogic Server

The WebLogic Scripting Tool (WLST) command shutdown(<instancename>) is used to stop an Oracle HTTP Server instance in a WebLogic domain. Be aware that using shutdown() with no parameters will shut down the administration server and exit WLST.

1.2 Multiple WLST Versions

Multiple WLST scripts are provided within an Oracle home. Use the WLST script in ORACLE_HOME/ohs/common/bin, which provides access to Oracle HTTP Server commands as well as other Fusion Middleware commands.

1.3 No Command to List All OHS Instances, States, and Ports

This version of Oracle HTTP Server has no command to list all Oracle HTTP Server instances, states and ports. This is different than Oracle HTTP Server 11g, where such information was available by using the command opmnctl status.

1.4 Configuration Wizard Does Not Present a Summary Screen 16267336

When using the Configuration Wizard to create or update a standalone domain, the Configuration Wizard does not present a Configuration Summary Screen. The user does not have the option to go back and make changes.

1.5 Standalone Instances Start in UNKNOWN State

All standalone Oracle HTTP Server instances created by using the Configuration Wizard start in state UNKNOWN.

1.6 nmServerStatus() Returns UNKNOWN for Non-existent Instances

In the standalone mode, using the WLST command nmServerStatus() returns UNKNOWN for non-existent instances (for example, if you have a typo in the serverName= argument). Effectively it cannot distinguish between non-existent instances and instances that really are in UNKNOWN; that is, just after creation, as (see Section 1.5, "Standalone Instances Start in UNKNOWN State").

1.7 No Automatic Port Allocation for Standalone Instances

In the standalone mode, there is no automatic port allocation for Oracle HTTP Server instances.

1.8 nmStart(), nmServerStatus(), and nmKill() Require ServerType **Parameter**

The offline WLST commands nmStart(), nmServerStatus(), and nmKill(), required for management of standalone Oracle HTTP Server instances, all require the serverType='OHS' parameter when managing Oracle HTTP Server. If the serverType parameter is omitted, the command defaults to 'AdminServer" and error messages might be misleading when managing Oracle HTTP Server instances.

1.9 Instances Can Be Deleted in the RUNNING State

Currently standalone domain update allows you to delete instances in a RUNNING state. This should not be done as it is harmful to Oracle HTTP Server. All OHS instances should be SHUTDOWN (or UNKNOWN) before deletion.

1.10 Private Keys Should Not be on a DMZ Machine

The keystores.xml file contains private keys that should not be on a demilitarized zone (DMZ; that is, the zone between the internal and external firewalls) machine. If you unpack a domain on a machine in the DMZ, you must remove keystores.xml from it. To do so, go to \$domain/config/fmwconfig/ and, from the command line, use this command:

rm \$domain/config/fmwconfig/keystores.xml

1.11 Missing Libraries Might Cause HTTPD to Exit Without Notice

On the Windows platform, Oracle HTTP Server requires Microsoft Visual C++ run-time libraries to be installed on the system in order to function. If they are not installed, Oracle HTTP Server might exit with no output or generate an error dialog box, depending on registry settings.

Workaround

If Oracle HTTP Server fails to start and no error messages are logged by Oracle HTTP Server in the server error log or in Node Manager logs, follow this procedure to diagnose the problem:

1. Verify that the following run-time library is installed: Microsoft Visual C++ 2008 Feature Pack Redistributable Package (x64), at http://www.microsoft.com/en-us/download/details.aspx?id=16771

> **Important:** After installing this package, install any service packs or other fixes to this package which are recommended by Microsoft.

If this package was not installed previously, try to start Oracle HTTP Server again after installing it.

- **2.** Attempt to start Oracle HTTP Server from a command prompt.
 - **a.** Create the DOMAIN_HOME/servers/<ohs-instancename>/logs directory if it has not yet been created by Oracle HTTP Server.
 - b. Try to start Oracle HTTP Server using Fusion Middleware Control or WLST.
 - **c.** Copy the file DOMAIN_ HOME/servers/<ohs-instancename>/logs/lastinvocation.log to a new file startohs.cmd.
 - d. Open a new command prompt and run startohs.cmd in that new command prompt.
 - **e.** If it generates error messages after the script runs, use those messages to diagnose the startup failure.
 - f. If it does not generate error messages after the script runs, proceed to the next step.

Note: Oracle HTTP Server does not function properly when started from a command prompt in this manner. This mechanism for starting Oracle HTTP Server is for diagnostic purposes only.

3. Collect Windows error information when attempting to start Oracle HTTP Server

Error reporting for Oracle HTTP Server library errors might be inhibited on your system. Refer to the following Microsoft article for information on verifying or correcting error reporting:

"HOWTO: How To Change Hard Error Popup Handling in Windows NT", at

http://support.microsoft.com/kb/128642

If ErrorMode is set to 1, library errors might not be reported for Oracle HTTP Server. Change the mode to 0 to enable hard error pop-ups or change the mode to 2 to enable reporting to the Windows event log.

Important: If this is changed to 0, set it back to the previous value immediately after collecting diagnostic information as it can result in operational problems if errors occur when the server is unattended.

The recommended setting is 2.

- Change ErrorMode to the desired value.
- **b.** Try to start Oracle HTTP Server using Fusion Middleware Control or WLST or the startohs.cmd script which was created in the previous step.
- **c.** Check for diagnostic information in a hard error popup or in the Windows event log, depending on the setting of ErrorMode.

To check the Windows event log, open Windows Event Viewer and view the logs for Event Viewer (Local) / Windows Logs / Application

Find the event log entries written at the time of the attempt to start Oracle HTTP Server.

Errors locating run-time libraries might be reported as SideBySide errors with event ids 33 or 35, which text describing the Oracle library attempting to load the library and the specific library being loaded. Example:

level=Error Source=SideBySide Event Id = 33Activation context generation failed for "C:\work\Oracle\MD1212\ORACLE~1\bin\oraiau.dll". Dependent Assembly Microsoft.VC90.CRT, processorArchitecture="amd64", publicKeyToken="1fc8b3b9a1e18e3b", type="win32", version="9.0.21022.8" could not be found. Please use sxstrace.exe for detailed diagnosis.

The indicated library needs to be installed. This example shows VC90, which is the Microsoft Visual C++ 2008 library described in step 1 above.

d. Restore ErrorMode to the previous setting.

1.12 Create DOMAIN_HOME/servers/<instancename>/logs manually when Diagnosing Start-up Failures

If an Oracle HTTP Server instance does not start and has not been started before, manually create the directory DOMAIN_HOME/servers/<instancename>/logs if it does not exist, then attempt to start the instance again so that all diagnostic information can be written. The log file lastinvocation.log, used for diagnosing some types of startup failures, will not be written if this log directory does not exist.

1.13 Installer Sporadically Hangs on Specify Security Updates Screen

Occasionally, the Oracle WebLogic Server or Oracle HTTP Server installation process hangs on the Specify Security Updates screen (5 of 9) in the NextGen Oracle Universal Installer (OUI). When this occurs, all of the buttons at the bottom of the OUI screen are disabled and inaccessible and the links to go back in the left-hand pane are similarly inactive.

Workaround:

When this situation occurs, you must forcibly exit the installer by pressing CTRL-C in the xterm where you initially launched the installer. You can then restart and walk through the installation normally.

1.14 Warning Appears if No OSH Instance is Created

In a WebLogic Server domain, while you are not required to create any Oracle HTTP Server instances, if you do not, you will receive a warning is displayed. You can ignore this warning.

1.15 Installing OHS 11.1.1.7 with WLS 12c

You can install Oracle HTTP Server 11.1.17 with the Oracle WebLogic Server 12c JRF/ADF combination if you do the following:

Install the two components into two separate Oracle Homes, from scratch, and choose the correct versions (Oracle HTTP Server 11.1.17 with Oracle WebLogic Server 12c JRF/ADF)

During the Oracle HTTP Server 11g installation, deselect the components associated with a WebLogic Domain.

1.16 "XL TXE-J compiling stylesheet: null" Message During OHS Instance Configuration

After installing Oracle HTTP Server, while configuring Oracle Web Tier 12c (12.1.2) on vanilla AIX 6.1 and 7.1 machines, the following message is seen in the console:

```
XL TXE-J compiling stylesheet: null
XL TXE-J compiling stylesheet: null
_____
```

You can ignore this benign message as it does not impact functionality.

1.17 Backslashes in Paths in ohs.plugins.nodemanager.properties must be Escaped

Any paths placed in Windows implementations of ohs.plugins.nodemanager.properties that include backslashes must have those backslashes escaped.

You must do this manually after upgrading from Oracle HTTP Server 11g where paths with backslashes were migrated from opmn.xml to ohs.plugins.nodemanager.properties.

For example:

```
environment.TMP = C:\Users\user\AppData\Local\Temp\1
```

Must be modified manually to:

environment.TMP = C:\\Users\\user\\AppData\\Local\\Temp\\1

1.18 Creating Instance Named "adminserver" Throws Exception

If you try to create an instance with the name "adminserver", Oracle HTTP Server throws an exception post after which you will not be able to create instances, even if they have valid names. Therefore, do not attempt to create instances that use the same name as a given administration server.

1.19 DMS Displays Incorrect Message if OHS is Down

If you attempt to obtain metrics when Oracle HTTP Server is not running, DMS will display an incorrect message on displayMetricTables.display:

```
MetricTables(servers='ohs1',servertype='OHS') Traceback (innermost last):
 File "<console>", line 1, in ?
 File
"/scratch/oracle/Middleware/oracle_common/common/wlst/OracleDMS.py",
line 67, in displayMetricTables
"/scratch/oracle/Middleware/oracle_common/common/script_handlers/oracle
dms_handler.py", line 1105, in oracledmsDisplayMetricTables
 File
"/scratch/oracle/Middleware/oracle_common/common/script_handlers/oracle
```

```
dms_handler.py", line 648, in oracledmsHandleException
NameError: ora_mbs
```

1.20 Node Manager 12c (12.1.2) OHS Throws Java Exception on AIX

When running Oracle HTTP Server on AIX, if ULIMIT values of file handlers are small, Node Manager console/log throws"java.io.IOException: error=24, Too many open files" error on AIX.

Workaround

To resolve the issue, increase the ULIMIT values of file handlers as described here:

- Log in as the root user.
- Open /etc/security/limits file.
- Edit the file and set the following values:
 - nofiles=8192
 - nofiles_hard=65536
- Reboot the machine to enable the changes.

1.21 Set PATH Environment Variable Manually if OHS on Windows Fails to Start

If Oracle HTTP Server fails to start on Windows and no log files are generated, the PATH environment variable must be manually specified. To do so, edit the Oracle HTTP Server nodemanager.properties file for this component (found in the domain directory) by doing the following:

config\fmwconfig\components\OHS\ohs1\ohs.plugins.nodemanager.properties

Add the following two lines:

```
environment.ORACLE HOME = MW HOME
environment.PATH =%ORACLE_HOME%\\ohs\\bin;%ORACLE_
HOME%\\bin;C:\\Windows;C:\\Windows\\system32
```

Where MW_HOME is the path to the middle ware install, for example:

```
environment.ORACLE_HOME = C:\\Oracle\\Middleware\\Oracle_Home
```

Note that all backslash file separators must be escaped with a backslash.

- Save the file.
- For Web Logic Server domains, replicate the changes in the run-time area.
 - For more information on the nodemanager.properties file, see "ohs.plugins.nodemanager.properties" in *Administering Oracle HTTP Server*.
- Start Oracle HTTP Server as described in "Starting Oracle HTTP Server Instances" in *Administering Oracle HTTP Server*.

1.22 Recovering Instance on Managed Node Requires tar/untar **Commands**

Use tar/untar commands for recovering an instance on an managed node rather than pack/unpack. Pack/unpack are used for recovery on an administration node. pack/unpack are applicable to just the administration node; managed nodes must use tar/untar.

1.23 OHS Instance Creation with Config Wizard Does Not Require **Machine Assignment**

When creating an Oracle HTTP Server instance by using the Configuration Wizard, you do not need to assign it to a machine. This is different behavior than you would experience when creating an instance by using the FMW Control's Create OHS command (described in "Creating an Instance by Using Fusion Middleware Control" in Administering Oracle HTTP Server), where you are prompted for a machine name.

1.24 httpd.exe Fails to Start

On some occasions, httpd.exe will fail to start, displaying the following error:

Error: The Side-by-Side configuration information for "ORACLE HOME\bin\ORAIAU.DLL" contains errors.

This happens if you are missing the SP1 version of the 64-bit redistributable. You can obtain this file at:

http://www.microsoft.com/en-us/download/details.aspx?id=2092

1.25 SSLWallet Directive in ssl.conf Might be Saved Incorrectly.

When updating the SSL wallet in Fusion Middleware Control, the SSLWallet directive in ssl.conf might be saved incorrectly.

Oracle HTTP Server expects something similar to this form:

SSLWallet "\${ORACLE_INSTANCE}/config/fmwconfig/components/\${COMPONENT_ TYPE}/instances/\${ COMPONENT_NAME}/keystores/wallet2"

The incorrect directive might look like this:

SSLWallet "\${ORACLE_INSTANCE}/config/fmwconfig/components/\${COMPONENT_ TYPE}/instances/\${COMPONENT_NAME}/keystores//OHS/user_projects/domains/base_ domain/config/fmwconfig/components/OHS/ohs1/keystores/wallet2"

This incorrect directive will prevent Oracle HTTP Server from starting successfully and a message similar to the following might appear in the OHS error log if OHS startup fails:

server www.example.com:443 has an invalid wallet: file:/OHS/user_projects/domains/base_ domain/config/fmwconfig/components/OHS/instances/ohs1/keystores//OHS/user_ projects/domains/base_ domain/config/fmwconfig/components/OHS/ohs1/keystores/wallet2 :: 28759

To resolve the issue, use the Advanced Configuration feature in FMW Control to select the file ssl.conf and edit it to correct the SSLWallet directive.

1.26 CONFIG_FILE_PATH Setting for apxs in a Standalone Domain

The apxs program provided with Oracle HTTP Server supports the -a and -A options for editing the configuration in a standalone domain to include the new module. This feature requires that the CONFIG_FILE_PATH environment variable point to the instance configuration directory.

If CONFIG FILE PATH is not set prior to invoking apxs, the error message might provide incorrect information for setting CONFIG_PATH. For the proper setting of CONFIG_FILE_PATH, see Section 4.5.6 "Configuring the Oracle HTTP Server Environment to Use the apxs Script" in *Administering Oracle HTTP Server*.

1.27 Create Log directory Manually When Diagnosing Startup Failures

If an Oracle HTTP Server instance does not start and has not been started before, manually create the directory DOMAIN_HOME/servers/<instancename>/logs if it does not exist, then attempt to start the instance again so that all diagnostic information can be written. The log file lastinvocation.log, used for diagnosing some types of startup failures, will not be written if this log directory does not exist.

1.28 createOHSTestDomain() Should be Used Only in Offline Mode

createOHSTestDomain() is intended only for WLST offline mode. If WLST is currently connected to an administration server, use the WLST command disconnect() to disconnect before using createOHSTestDomain(). If createOHSTestDomain() is used in online mode, the resulting error messages will not describe the usage problem.

1.29 Delay in Processing Websocket Events on Windows

The WLS Plug-in can now effectively proxy a websocket upgrade request to the backend WebLogic Server/Cluster. However, Windows users might observe a delay in proxying the read/write to/from the WebLogic Server. This delay is due to the underlying socket layer on Windows platforms.

1.30 startComponent.sh and stopComponent.sh Must be Executed from **Directory with Write Permission**

The startComponent.sh and stopComponent.sh scripts will fail if you attempt to execute them from a directory for which you do not have write permission. To successfully execute these scripts, ensure you are in \$DOMAIN_HOME/bin or any other directory for which you have write permission.

1.31 Disable SSL Security Protocols

In several places, the Administering Oracle HTTP Server12c documentation discusses the SSL version 3 (SSLv3) security protocol. Because of security concerns, Oracle strongly recommends that you disable the SSLv3 security protocol from Oracle HTTP Server. For more information, see "Disable SSLv2 and SSLv3 Security Protocols" in Administering Oracle HTTP Server12c.

1.32 FIPS is Not Available on the Windows Platform

FIPS is available only on the UNIX/Linux platform. It is not available on the Windows platform. See "OHS 12.1.2 Supports FIPS 140" and "SSLFIPS" in Administering Oracle HTTP Server.