Oracle® Fusion Middleware

Release Notes for Oracle HTTP Server

12*c* (12.2.1)

E56043-02

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Oracle HTTP Server 12*c* (12.2.1).

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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*.

Documentation Accessibility

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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.

1

Known Issues

This chapter describes unresolved issues known to exist in Oracle HTTP Server 12c (12.2.1).

The following sections describe known issues:

- Section 1.1, "WLS Plug-ins for Apache"
- Section 1.2, "Upgrading from Earlier Releases of Oracle HTTP Server"
- Section 1.3, "Known Issues in Oracle HTTP Server 12c (12.2.1)"

Chapter 2, "Issues Resolved", describes known issues in 12c (12.1.*x*) that have been resolved in Oracle HTTP Server 12*c* (12.2.1).

1.1 WLS Plug-ins for Apache

This issue applies to WLS plug-ins for Apache 2.2 on Windows only (not applicable for OHS or any other Listeners/Web Servers).

If an IPv6 address is specified for WebLogicHost/WebLogicCluster parameter, then WLS plug-in may be unable to resolve this IPv6 address. This is due to a bug in the APR library that is shipped Apache httpd 2.2.x (underlying APR library, libapr-1.dll), and is resolved in Apache httpd 2.2.24.

1.2 Upgrading from Earlier Releases of Oracle HTTP Server

To upgrade your Fusion Middleware environment (and OHS) to 12.2.1 from an earlier release, follow the instructions in *Upgrading with the Upgrade Assistant*. If you are upgrading a collocated Oracle HTTP Server setup (not a standalone installation), then you must perform some manual steps after you complete the Upgrade Assistant. For detailed information about these steps, see "Upgrading from Earlier Releases of Oracle HTTP Server" in *Administering Oracle HTTP Server*.

1.3 Known Issues in Oracle HTTP Server 12*c* (12.2.1)

This section contains descriptions of unresolved issues known to exist in Oracle HTTP Server 12c (12.2.1). The following sections describe these issues:

- Section 1.3.1, "SSL Renegotiation When Using CGM Ciphers"
- Section 1.3.2, "Server Configuration Page for OHS Fusion Middleware Control"
- Section 1.3.3, "FIPS Mode Support for OTD 12.2.1 on AIX.PPC64"
- Section 1.3.4, "Continuously Hitting Web Application Through OHS on IBM-AIX Might Generate a Large Error Log"

- Section 1.3.5, "DMS Displays Incorrect Message if OHS is Down"
- Section 1.3.6, "No Automatic Port Allocation for Standalone Instances"
- Section 1.3.7, "Oracle HTTP Server in Fusion Middleware Control Does Not Recognize Deployer Role"
- Section 1.3.8, "Problem Setting MPM Name in Fusion Middleware Control"

1.3.1 SSL Renegotiation When Using CGM Ciphers

When SSLVerifyClient is configured in the directory context, it forces an SSL renegotiation with the reconfigured client verification level after the request was read, but before the response is sent. GCM ciphers

```
(TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384,
TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256,
TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384, TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256,
TLS_RSA_WITH_AES_256_GCM_SHA384, TLS_RSA_WITH_AES_128_GCM_SHA256) are found
not to be working during the SSL renegotiation.
```

To work around this issue, disable GCM ciphers by removing GCM ciphers from the SSLCipherSuite directive in ssl.conf. This is required only when you have a SSLVerifyClient directive configured in the directory context.

1.3.2 Server Configuration Page for OHS Fusion Middleware Control

In the online Help text for this page, the following content applies:

In the console, the updated value of attributes is displayed even when the changes made in *edit Session* have not been activated.

This is not the case with the list of enabled modules displayed on the Server Configuration Page. It displays only those modules which are present under <DOMAIN_HOME>/config/fmwconfig/components/OHS/<instanceName>/moduleconf and does not include the modules that were enabled or disabled in the current session that is not yet activated.

1.3.3 FIPS Mode Support for OTD 12.2.1 on AIX.PPC64

When FIPS mode is enabled in an OTD Instance on AIX, OTD instance startup fails with the following error:

```
nzos_SetFipsMode is returning NZ error 29231 which is NZERROR_TK_CE_INIT = 29231
/* Crypto engine failed to initialize */
```

The OTD server does not start because of FIPS initialization failure due to RSA third party issues.

The solution to this issue is to take the following actions:

1. Create short symlinks from a short write-protected directory to library folders inside ${MW_HOME} as shown in this example:

```
ln -s /usr/otd_user/12cOTD/mw_home/otd/lib /usr/lib1
ln -s /usr/otd_user/12cOTD/mw_home/oracle_common/lib /usr/lib2
ln -s /usr/otd_user/12cOTD/mw_home/lib/ /usr/lib3
```

Where: *MW_HOME* is - /usr/otd_user/12cOTD/mw_home and /usr is the shortest secure folder

2. In this example in which the OTD instance is named "test", edit the script in

```
${DOMAIN_HOME}/config/fmwconfig/components/OTD/instances/otd_test_
Machine-0/bin/startserv
```

Change SERVER_LIB_PATH from

```
SERVER_LIB_PATH="${SERVER_LIB_DIR}:${ORACLE_HOME}/lib:${ORACLE_HOME}/oracle_
common/lib"
```
to

```
SERVER_LIB_PATH=/usr/lib1:/usr/lib2:/usr/lib3
```

1.3.4 Continuously Hitting Web Application Through OHS on IBM-AIX Might Generate a Large Error Log

IBM-AIX users continuously hitting a web application that has many users (for example, greater than 400) through Oracle HTTP Server might experience a large error log being generated. This is most likely a tuning issue that can be corrected by updating certain IBM-AIX system parameters and Oracle HTTP Server tuning parameters, as described as shown in the following examples.

For AIX system parameters:

In /etc/security/limits, should have the following parameters:

```
nofiles = -1
nofiles_hard = -1
```

In /etc/rc.net, should have the following parameters:

```
/usr/sbin/no -o sb_max=6192000
/usr/sbin/no -o tcp_sendspace=4096000
/usr/sbin/no -o tcp_recvspace=4096000
/usr/sbin/no -o udp_sendspace=65536
/usr/sbin/no -o udp_recvspace=655360
/usr/sbin/no -o rfc1323=1
/usr/sbin/no -o ipqmaxlen=150
/usr/sbin/no -o clean_partial_conns=true
```

You will need to reboot your machine.

For Oracle HTTP Server Configuration:

In mod_wl_ohs.conf, should look like the following: example:

```
LoadModule weblogic_module   "${PRODUCT_HOME}/modules/mod_wl_ohs.so"
# This empty block is needed to save mod_wl related configuration from EM to this
file when changes are made at the Base Virtual Host Level

<IfModule weblogic_module>
#      WebLogicHost <WEBLOGIC_HOST>
#      WebLogicPort <WEBLOGIC_PORT>
#      MatchExpression *.jsp
WebLogicCluster <host-name>:<port>,<host-name>:<port>,<host-name>:<port>
ConnectTimeoutSecs 99999 //[Optional parameter]
WLIOTimeoutSecs 99999 //[default value 300]
WLSocketTimeoutSecs 99999 //[default value 2]
MatchExpression *

<Location /diagservlet>
#      SetHandler weblogic-handler
       WLSRequest On
```

```
          WebLogicCluster
<host-name>:<port>,<host-name>:<port>,<host-name>:<port>
#       PathTrim /weblogic
#       ErrorPage  http:/WEBLOGIC_HOME:WEBLOGIC_PORT/
          </Location>

</IfModule>
```

In `httpd.conf`, set the following:

```
<IfModule mpm_worker_module>
          -
          -
          -
MinSpareThreads      200 [default value 25]
MaxSpareThreads      800 [default value 75]
          -
          -
          -
          -
</IfModule>
```

1.3.5 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
  File
"/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
```

1.3.6 No Automatic Port Allocation for Standalone Instances

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

1.3.7 Oracle HTTP Server in Fusion Middleware Control Does Not Recognize Deployer Role

Oracle WebLogic Server supports these default roles: Admin, Deployer, Operator, and Monitor. In previous release, the Deployer role was supported in the JMX Framework and Fusion Middleware Control.

The user of the Deployer role will be able to log in to Fusion Middleware Control. For the particular page or integrator area, whether or not the Deployer role should be enabled, depends on the page's functionality and Deployer role privileges. It is up to the page or integrator owner (such as Oracle HTTP Server, IDM, and so on) to decide.

Oracle HTTP Server does not support the Deployer role since this role does not make sense for the proxy tier such as Oracle Traffic Director or Oracle HTTP Server.

1.3.8 Problem Setting MPM Name in Fusion Middleware Control

There is an intermittent problem in setting the MPM Name value of the Performance Directives page of Fusion Middleware Control.

An error message appears and displays the text:

`Error Setting performance Directives`

Workaround:

If you encounter this error, retry the operation until it succeeds.

2

Issues Resolved

This chapter reviews issues known to exist in previous Oracle HTTP Server releases that have now been resolved.

The following table describes the resolved issues:

Issue	Description	Reported In OHS Version
Start and Stop scripts require directory write permission	The startComponent.sh and stopComponent.sh scripts fail when executed from a directory without write permission.	12.1.3.0.0
Oracle HTTP Server Instance fails To load mod_cgid	While launching Oracle HTTP Server instance, this message appears: `Couldn't set permissions on unix domain socket` in Oracle HTTP Server Instance log while loading the cgid module (mod_cgid). This message indicates that the mod_cgid is not loaded because the cgisock log file path length exceeds the actual character array length of sun_path variable defined in /usr/include/sys/un.h.	12.1.3.0.0

Bad CLASSPATH environment variable can break WLST	A bad CLASSPATH environment variable can block the WebLogic Scripting Tool (WLST) from starting. If a bad CLASSPATH is set in your environment variables and you attempt to start WLST, you might see a message like:
	
	`Problem invoking WLST - java.lang.NoClassDefFoundError:`
	
	`javax/enterprise/deploy/spi/exceptions/DeploymentManagerCreationException`
		12.1.3.0.0

Oracle HTTP Server Configuration Assistant Launcher Fails on Solaris 5.10	While creating an Oracle HTTP Server domain, `ORACLE_HOME/ohs/common/bin/config.sh` launcher fails and throws an error.	12.1.3.0.0
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.	12.1.3.0.0

Issue	Description	Reported In OHS Version
Installing Oracle HTTP Server on Oracle Linux 7 environments	Oracle HTTP Server 12c (12.1.3) can be installed into Oracle Linux 7 (OEL7) environments only if you run the Oracle Universal Installer (OUI) from the command line with the `-ignoreSysPrereqs` option, for example: `./runInstaller -ignoreSysPrereqs...`	12.1.3.0.0
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.	12.1.3.0.0
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.	12.1.2.0.0
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.	12.1.2.0.0
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.	12.1.2.0.0

The order of attributes in the SSL certificate DN has been corrected.	In 12.1.x releases of Oracle HTTP Server, when the SSL certificate DN was queried using the CGI interface, the order of attributes of the DN was reversed from:
	
	`Country, location, Organisation, Organisational Unit, Common Name, Email`
	
	to:
	
	`Email, Common Name, Organisational Unit, Organisation, Location, Country`
	
	This has been corrected in the 12.2.1 release.
		12.1.2.0.0

Using shutdown() without parameters shuts down WebLogic Server	This is "as designed". As per the WLST documentation, this *argument(name)* defaults to the server to which WLST is currently connected	12.1.2.0.0
Multiple WLST versions	Use the wlst.sh from $ORACLE_HOME/oracle_common/common/bin instead of ORACLE_HOME/ohs/common/bin.	12.1.2.0.0
nmStart(), nmServerStatus(), and nmKill() require ServerType parameter	This is "as designed". Please refer to the WLST documentation which clearly says the ServerType defaults to the server to which WLST is currently connected	12.1.2.0.0
Warning appears if no Oracle HTTP Server instance is created	This issue has been resolved.	12.1.2.0.0

Issue	Description	Reported In OHS Version
Creating an instance named "adminserver" throws an exception	Do not attempt to create instances that use the same name as a given administration server.	12.1.2.0.0
SSLWallet directive in ssl.conf might be saved Incorrectly	This issue has been resolved.	12.1.2.0.0
CONFIG_FILE_PATH setting for apxs in a standalone domain	If CONFIG_FILE_PATH is not set before invoking apxs, the error message might provide incorrect information for setting CONFIG_PATH. For the proper setting of CONFIG_FILE_PATH, see "Using the apxs Command to Install Extension Modules" in *Administering Oracle HTTP Server*	12.1.2.0.0
Backslashes in paths in ohs.plugins.nodemanager.properties must be escaped	Escape characters are no longer required.	12.1.2.0.0