

Oracle® Fusion Middleware

Release Notes for Oracle HTTP Server



12c (12.2.1.3.0)

E80476-03

January 2018

The Oracle logo, consisting of a solid red square with the word "ORACLE" in white, uppercase, sans-serif font centered within it.

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Oracle Fusion Middleware Release Notes for Oracle HTTP Server, 12c (12.2.1.3.0)

E80476-03

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Preface

Oracle HTTP Server 12.2.1.3.0 release notes summarize release information related to new features or enhancements, resolved issues, general issues and workarounds, deprecated and removed functionality, and more.

Audience

Release Notes for Oracle HTTP Server 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*.

To install Oracle HTTP Server in standalone mode, see *Installing and Configuring Oracle HTTP Server*.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

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Related Documents

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

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.
<i>italic</i>	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

Introduction

This chapter introduces the Oracle Fusion Middleware Release Notes for Oracle HTTP Server 12.2.1.3.0.

Topics

- [Latest Release Information](#)
- [Purpose of this Document](#)
- [System Requirements and Specifications](#)
- [Certification Information](#)
- [Product Documentation](#)
- [Oracle Support](#)
- [Licensing Information](#)
- [Oracle HTTP Server Support](#)

1.1 Latest Release Information

This document is accurate at the time of publication. Oracle will update the release notes periodically after the software release. You can access the latest information and additions to these release notes on the Oracle Technology Network at:

<http://www.oracle.com/technetwork/indexes/documentation/index.html>

1.2 Purpose of this Document

This document contains the release information for Oracle Fusion Middleware Release for Oracle HTTP Server. It describes differences between Oracle Fusion Middleware and its documented functionality.

Oracle recommends you review its contents before installing, or working with the product.

1.3 System Requirements and Specifications

Oracle HTTP Server installation and configuration will not complete successfully unless users meet the hardware and software pre-requisite requirements before installation. See [Oracle Fusion Middleware System Requirements and Specifications](#).

1.4 Certification Information

To see versions of platforms and related software for which Oracle HTTP Server is certified and supported, go to <http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html>.

1.5 Product Documentation

For complete documentation on Oracle HTTP Server, go to <http://docs.oracle.com/en/middleware/>.

1.6 Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support at <https://support.oracle.com>.

1.7 Licensing Information

Licensing information for Oracle HTTP Server is available at:

<http://oraclestore.oracle.com>

Detailed information regarding license compliance for Oracle Fusion Middleware is available at:

<http://www.oracle.com/technetwork/middleware/ias/overview/index.html>

1.8 Oracle HTTP Server Support

Oracle provides technical support for Oracle HTTP Server features.

The following Oracle HTTP Server features and conditions are supported:

- Modules included in the Oracle distribution. Oracle does not support modules obtained from any other source, including the Apache Software Foundation. Oracle HTTP Server will still be supported when non-Oracle-provided modules are included. If non-Oracle-provided modules are suspect of contributing to reported problems, customers may be requested to reproduce the problems without including those modules.
- Problems that can be reproduced within an Oracle HTTP Server configuration consisting only of supported Oracle HTTP Server modules.

2

What's New in this Release

This chapter describes the features and improvements in Oracle HTTP Server. The following topics introduce the new and changed features of Oracle HTTP Server and other significant changes in the guides, and provides pointers to additional information.

Topics

- [New Features](#)

2.1 New Features

Starting with version 12.2.1.3.0, Oracle HTTP Server supports certificate with Subject Alternative Name (SAN) extension. See [Create Certificate with SAN Extension by Using orapki Utility](#).

3

Lifecycle Management Information

This section describes the lifecycle management information for Oracle HTTP Server.

Topics

- [Upgrading from Earlier Releases of Oracle HTTP Server](#)
- [Other Upgrade Notes](#)

3.1 Upgrading from Earlier Releases of Oracle HTTP Server

To upgrade your Fusion Middleware environment (and Oracle HTTP Server) to 12.2.1.3.0 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. See *Upgrading from Earlier Releases of Oracle HTTP Server* in *Administering Oracle HTTP Server*.

3.2 Other Upgrade Notes

The current release of Oracle HTTP Server is based on Apache Server 2.4. If you are using an earlier release of Oracle HTTP Server, note the following:

FilterProvider

The syntax of the `FilterProvider` directive under `mod_filter` has changed in Apache 2.4. This directive must be upgraded manually.

See http://httpd.apache.org/docs/2.4/mod/mod_filter.html and <http://httpd.apache.org/docs/2.4/upgrading.html>.

Authorization and Access Control

There have been significant changes in authorization and access control configuration in Apache 2.4. Oracle HTTP Server Upgrade Assistant does not upgrade the authorization and access control directives to the new configuration style. Instead, Oracle HTTP Server includes the `mod_access_compat` module to provide compatibility with old configurations.

Oracle recommends that you manually upgrade the authorization and access-control configuration to Apache 2.4 style. See <http://httpd.apache.org/docs/2.4/upgrading.html#run-time>.

umask Settings

Prior to Oracle HTTP Server 12c (12.2.1), the operating system level `umask` setting was applicable to Oracle HTTP Server as well. With Oracle HTTP Server 12c (12.2.1), a new property is introduced in `ohs.nodemanager.properties` file to specify the `umask` setting. By default, a value of 0027 is used. See *Configuring the Log File Creation Mode (umask) (UNIX/Linux Only)*.

4

Known Issues and Workaround

Topics

- [In IBM AIX, OHS Server Startup Fails Even After Successful Installation and Configuration of Oracle HTTP Server](#)
- [In IBM AIX, Continuously Hitting Web Application Through Oracle HTTP Server Generates a Large Error Log](#)
- [Dynamic Monitoring Service Displays Incorrect Message if Oracle HTTP Server is Down](#)
- [No Automatic Port Allocation for Standalone Instances](#)
- [Problem Setting MPM Name in Fusion Middleware Control](#)
- [Metrics Fail to Load after Restarting Oracle HTTP Server Through Oracle Enterprise Manager Fusion Middleware Control Console on HP IA](#)
- [WebLogic Server Plug-ins for Apache](#)

4.1 In IBM AIX, OHS Server Startup Fails Even After Successful Installation and Configuration of Oracle HTTP Server

Issue

Impacted Platforms: IBM AIX

After successful installation and configuration of Oracle HTTP Server 12.2.1.3.0 , the Oracle HTTP Server (OHS) startup fails with following error:

```
exec(): 0509-036 Cannot load program httpd because of the following errors:  
rtld: 0712-001 Symbol CreateIoCompletionPort was referenced from module $ORACLE_HOME/  
wlsrver/./lib/libclntsh.so(), but a runtime definition of the symbol was not found.
```

Workaround

Oracle HTTP Server 12.2.1.3.0 is bundled with IBM AIX Database client 12.1.0.2.0 version. The issue is related to the IOCP API symbols dependency in IBM AIX Database 12.1.0.2 client library. Enable the IOCP module in the machine where Oracle HTTP Server is installed to resolve this issue.

On IBM AIX in IBM POWER Systems (64-Bit), enable I/O completion ports (IOCP) before initiating the install process. To enable IOCP ports, set the status of the IOCP port to *Available*.

To check if the IOCP port is *Available*, enter the `lsdev` command as follows:

```
$ lsdev | grep iocp
```

By default, IOCP status is set to *Defined*, and hence not enabled. The following example output shows that the IOCP status is set to *Defined*:

```
iocp0 Defined I/O Completion Ports
```

Complete the following steps to set IOCP status to *Available*:

1. Log in as root and run the following command:

```
smitty iocp
```

2. Select **Change / Show Characteristics of I/O Completion Ports**.
3. Change configured state at system restart from *Defined* to *Available*.
4. Run the `lsdev` command to confirm the IOCP status is set to *Available*.

```
$ lsdev | grep iocp
iocp0 Available I/O Completion Ports
```

5. Perform a system restart to make the changes permanent.

4.2 In IBM AIX, Continuously Hitting Web Application Through Oracle HTTP Server Generates a Large Error Log

Issue

Impacted Platforms: IBM AIX

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.

Workaround

This is a performance tuning issue that can be corrected by updating some of the IBM AIX system parameters and Oracle HTTP Server tuning parameters.

For example,

For IBM AIX system parameters:

1. Ensure that the following parameters are available in `/etc/security/limits`:

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

2. Ensure that the following parameters are available in `/etc/rc.net`:

```
/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
```

3. Restart the computer.

For Oracle HTTP Server Configuration:

1. Set the `mod_wl_ohs.conf` file to 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>
```

2. Set the following in the `httpd.conf` file:

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

4.3 Dynamic Monitoring Service Displays Incorrect Message if Oracle HTTP Server is Down

Issue

Impacted Platforms: Generic

If you try to get metrics when Oracle HTTP Server is not running, Dynamic Monitoring Service (DMS) displays an incorrect message on `displayMetricTables.display`:

```
wls:/nm/base_domain> displayMetricTables(servers='ohs1',servertype='OHS')
Traceback (innermost last):
  File "<console>", line 1, in ?
  File "/scratch/prkishor/ps3_stg21_sa/oracle_common/modules/oracle.dms/diagnostics-
common-wlst.jar!/wlstScriptDir/OracleDMS.py",
  line 71, in displayMetricTables
  File "<string>", line 1085, in oracledmsDisplayMetricTables
  File "<string>", line 661, in oracledmsHandleException
ImportError: no module named socket
```

Workaround

No workaround available.

4.4 No Automatic Port Allocation for Standalone Instances

Issue

Impacted Platforms: Generic

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

Workaround

No workaround available.

4.5 Problem Setting MPM Name in Fusion Middleware Control

Issue

Impacted Platforms: Generic

The operation of setting Multi-Processing Module (MPM) name succeeds but a false misleading message stating that it has failed appears.

The following error message appears:

```
Error Setting performance Directives
```

Workaround

Retry the operation until it succeeds.

4.6 Metrics Fail to Load after Restarting Oracle HTTP Server Through Oracle Enterprise Manager Fusion Middleware Control Console on HP IA

Issue

Impacted Platforms: Generic

After a successful collocated Oracle HTTP Server installation on the HP IA-64 platform, Oracle HTTP Server startup metrics fail to load if you restart Oracle HTTP Server instance through Oracle Enterprise Manager Fusion Middleware Control console. You might get one of the following errors:

```
"Metrics are currently unavailable"
```

```
"Metrics are not configured"
```

Workaround

Logout and log in from Oracle Enterprise Manager Fusion Middleware Control console after Oracle HTTP Server starts.

4.7 WebLogic Server Plug-ins for Apache

Issue

Impacted Platforms: Generic

If an IPv6 address is specified for WebLogicHost or WebLogicCluster parameter, then WebLogic Server plug-in may be unable to resolve this IPv6 address. This is due to missing or corrupted DLL errors in the Apache Portable Runtime (APR) project library that is shipped with Apache httpd 2.2.x. The underlying APR library is libapr-1.dll. .

This issue applies to WebLogic Server plug-ins for Apache 2.2 on Windows only, and is not applicable to Oracle HTTP Server or any other Listeners or Web Servers.

Workaround

This issue is resolved in Apache httpd 2.2.24.

5

Documentation Changes

Major Changes to Books or Online Help

Starting Oracle HTTP Server 12.2.1.3.0, the What's New section is added to the *Oracle HTTP Server Release Notes*. This information is available in the *Administering Oracle HTTP Server Guide* for the previous releases.