

Oracle® Fusion Middleware

Release Notes for Oracle HTTP Server



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Preface

Oracle HTTP Server 14.1.2.0.0 release notes summarize release information related to new features or enhancements, resolved issues, general issues and workarounds, deprecated and removed functionality, and more.

- [Audience](#)
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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

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also

mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

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.
<code>monospace</code>	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 14.1.2.0.0.

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

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>

Purpose of this Document

This document contains the release information for Oracle Fusion Middleware Release for Oracle HTTP Server.

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

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](#).

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>.

Product Documentation

For complete documentation on Oracle HTTP Server, go to [Oracle HTTP Server](#).

Oracle Support

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

Licensing Information

For the latest information on Oracle Fusion Middleware Licensing, see Licensing Information User Manual.

Oracle HTTP Server Support

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.

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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.

- [New Features](#)
- [Deprecated Features](#)

New Features

The following are the new features in Oracle HTTP Server 14.1.2.0.0:

- Oracle HTTP Server now supports the latest version of TLS, version 1.3. The default settings for the `SSLProtocol` directive have also changed. See *SSLProtocol Directive* in *Administering Oracle HTTP Server*.
- Oracle HTTP Server now supports Apache HTTP Server version 2.4.62 with enhancements and latest security fixes.
- Oracle HTTP Server supports only `auto_login_only` wallets. See *Creating a Wallet* in *Administering Oracle HTTP Server*.
- Oracle HTTP Server provides a script to convert the `auto_login` wallet to `auto_login_only` wallet when upgrading from Oracle HTTP Server 12.2.1.4.0. For more information, see *Convert Auto_login Wallets to Auto_login_only* in *Upgrading Oracle HTTP Server*.
- Server Name Indication, which allows clients to include the requested host name in the initial message of their SSL handshake, is now supported. See *Server Name Indication* in *Administering Oracle HTTP Server*.
- Oracle HTTP Server provides intelligent load balancing as an alternative to the default round-robin method. See *Support for Intelligent Load Balancing* in *Using Oracle WebLogic Server Proxy Plug-Ins*.
- The `WLSSLWallet` is no longer allowed in the Location container. See *WLSSLWallet* in *Using Oracle WebLogic Server Proxy Plug-Ins*.
- Oracle HTTP Server uses the OpenSSL library as the underlying cryptography library instead of the NZ library. See *Security Features* in *Administering Oracle HTTP Server*.

Deprecated Features

This section describes the deprecated features of Oracle HTTP Server.

Although deprecated features may continue to work in the current release, we recommend migrating away from them as soon as possible as they may be removed in a future release.

- [mod_ora_audit Module](#)
- [Removed Directives](#)

mod_ora_audit Module

The `mod_ora_audit` module is deprecated and removed from this release. Use the `mod_security` module for audit log instead. See *Configuring mod_security for Audit Logging in Administering Oracle HTTP Server*.

Removed Directives

The following directives are no longer supported and were removed as of Oracle HTTP Server 14.1.2.0.0:

- `SSLProxySessionCache`
- `SSLRequire`
- `SSLTraceLogLevel`
- `SSLCRLCheck Off`
- `OraAuditEnable`
- `SSLInsecureRenegotiation`

3

Lifecycle Management Information

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

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

Upgrading from Earlier Releases of Oracle HTTP Server

Oracle HTTP Server 14.1.2.0.0 allows direct upgrade from 12.2.1.4.0 release only. An upgrade from other releases are not supported as the Upgrade Assistant does not provide an option for older releases.

To upgrade your Fusion Middleware environment (and Oracle HTTP Server) to 14.1.2.0.0 from an earlier release, follow the instructions in *Upgrading with the Upgrade Assistant*.

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

From Oracle HTTP Server 12c (12.2.1) onwards, a new property is introduced in `ohs.plugins.nodemanager.properties` file to specify the umask setting.



Note:

The file name is `ohs.plugins.nodemanager.properties` not `ohs.nodemanager.properties`.

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Known Issues and Workaround

This chapter describes the issues associated with Oracle HTTP Server.

- [Weighted Least Connection Uneven Distribution](#)
- [Error Reported for Large Post Requests](#)
- [OHS Upgrade Assistant Plug-In](#)
- [Exporting Multiple Wallets](#)
- [Error Message During OHS Upgrades](#)
- [Slow Oracle HTTP Server Startup](#)
- [SSL Connection Failure](#)
- [Upgrade Failure](#)

Weighted Least Connection Uneven Distribution

Issue

Impacted Platforms: Generic

When the weighted least connection routing algorithm is chosen, the active connection count to weight ratio is computed for each managed server. The server with the lowest ratio is selected and if multiple servers have the same value, one among them is selected randomly. Due to this random nature of selecting servers, slight deviations occur which is more pronounced in the case of a small number of requests. But as the number of requests increases, we expect it to level out and make the distribution more even.

Workaround

N/A

Error Reported for Large Post Requests

Issue

Impacted Platforms: Generic

In the WebServer Logs, errors similar to the following example are observed.

```
Error reading POST data from client - Total length of data currently
processed is : 1073741824
. . .
IO error reading client POST data;
. . .
```

Workaround

As per the Apache specifications, by default the LimitRequestBody value is considered as 1073741824 bytes. In order to allow a large request size, you need to use higher values. You can use 0 to allow unlimited data. However, using 0 is not recommended.

For more information, see [Apache Core Features](#).

OHS Upgrade Assistant Plug-In

Issue

Impacted Platforms: Generic

The 14.1.2.0.0 Oracle HTTP Server Upgrade Assistant plug-in allows upgrade from OHS 12.2.1.4 only, as the starting point.

Workaround

N/A

Exporting Multiple Wallets

Issue

In OHS 14.1.2, when multiple wallets need to be exported, calls to the `EXPORT_WALLET` program may lead to slow OHS startup times.

Workaround

N/A

Error Message During OHS Upgrades

Issue

Impacted Platforms: Generic

An error message is displayed during Upgrade Assistant Readiness check if the current version is not supported for a direct upgrade to the 14.1.2.0.0 version.

Workaround

The only supported starting point for upgrade to 14.1.2.0.0 is 12.2.1.4.0. You must first perform an upgrade to the 12.2.1.4.0 version and then try to upgrade to the 14.1.2.0.0 version.

Slow Oracle HTTP Server Startup

Issue

Impacted Platforms: Generic

In Oracle HTTP Server 14c, for each SSL enabled Virtual Host an `export_wallet` program is called to export content of the wallet configured for that Virtual Host. This is true for both SSLWallet and SSLProxyWallet that mod_ossll handles. In a configuration that has 100 Virtual

Hosts, the `export_wallet` program is called 100 times before OHS can startup which results in the Oracle HTTP Server slow startup.

Workaround

N/A

SSL Connection Failure

Issue

Impacted Platforms: Generic

SSL connection fails when the OHS WLS plugin connects to the WebLogic server using a certificate signed from an intermediate Certificate Authority.

Workaround

Use the WebLogic server identity certificate signed from a root Certificate Authority.

Upgrade Failure

Issue

Impacted Platforms: Generic

The OHS upgrade fails when the upgrade assistant is unable to locate the "OracleHTTPServer12c_files" folder in the htdocs location. The following stack trace is displayed after invoking the Upgrade Assistant:

```
Reading installer inventory, this will take a few moments...
...completed reading installer inventory.
java.nio.file.NoSuchFileException: /scratch/username/ps4_sa/user_projects/domains/
base_domain3dec/config/fmwconfig/components/OHS/ohs1/htdocs/OracleHTTPServer12c_files
at java.base/sun.nio.fs.UnixException.translateToIOException(UnixException.java:92)
```

Workaround

Rename the folder "OracleHTTPServer_files" located under `$DOMAIN_HOME/config/fmwconfig/components/OHS/$INSTANCE_NAME/htdocs` to "OracleHTTPServer12c_files".