Red Hat JBoss Web Server 5.4

Red Hat JBoss Web Server 5.4 Release Notes

For Use with the Red Hat JBoss Web Server 5.4

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Legal Notice

Abstract

These release notes contain important information related to the Red Hat JBoss Web Server 5.4.

Table of Contents

CHAPTER 1. REDHAT JBOSS WEB SERVER 5.4

Welcome to the Red Hat JBoss Web Server version 5.4 release.

Red Hat JBoss Web Server is a fully integrated and certified set of components for hosting Java web applications. It consists of an application server (Apache Tomcat Servlet container), and the Tomcat Native Library. A short description of key components is given below:

- **Apache tomcat**: a servlet container in accordance with the Java Servlet Specification. JBoss Web Server contains Apache Tomcat 9.

- **Apache tomcat native library**: a Tomcat library, which improves Tomcat scalability, performance, and integration with native server technologies.

- **tomcat-vault**: an extension for the JBoss Web Server used for securely storing passwords and other sensitive information used by a JBoss Web Server.

- **mod_cluster** library: a library that allows communication between Apache Tomcat and the Apache HTTP Server's mod_proxy_cluster module. This allows the Apache HTTP Server to be used as a load balancer for JBoss Web Server. For information on the configuration of mod_cluster, or for information on the installation and configuration of the alternative load balancers mod_jk and mod_proxy, see the HTTP Connectors and Load Balancing Guide .

- **Apache portable runtime(APR)**: A runtime which provides superior scalability, performance, and improved integration with native server technologies. APR is a highly portable library that is at the heart of Apache HTTP Server 2.x. It enables access to advanced IO functionality (for example: sendfile, epoll and OpenSSL), Operating System level functionality (for example: random number generation and system status), and native process handling (shared memory, NT pipes and Unix sockets).

- **OpenSSL**: A software library which implements the Secure Sockets Layer (SSL) and Transport Layer Security (TLS) protocols and includes a basic cryptographic library.

This release of JBoss Web Server focuses on syncing JWS with the latest Apache HTTPD JBoss Core Services, as well as fixing some security issues. In addition, it also provides new OpenShift images based on Red Hat Enterprise Linux 8.

CHAPTER 2. INSTALLING THE RED HAT JBOSS WEB SERVER 5.4

The JBoss Web Server 5.4 can be installed using one of the following sections of the installation guide:

- Installing JBoss Web Server on Red Hat Enterprise Linux .

- Installing JBoss Web Server on Microsoft Windows.

CHAPTER 3. OS/JVM CERTIFICATIONS

Operating System	Chipset Architecture	Java Virtual Machine
Red Hat Enterprise Linux 8	x86_64	Red Hat OpenJDK 1.8.x, Red Hat OpenJDK 11, OracleJDK 11
Red Hat Enterprise Linux 7	x86_64	Red Hat OpenJDK 1.8.x, Red Hat OpenJDK 11, Oracle JDK 1.8.x, Oracle JDK 11, IBM JDK 1.8.x
Red Hat Enterpries Linux 6	x86_64, x86	Red Hat OpenJDK 1.8.x, Oracle JDK 1.8.x, Oracle JDK 11(**x86_64 Only**), IBM JDK 1.8.x
Microsoft Windows 2019 Server	x86_64	Red Hat OpenJDK 1.8.x, Red Hat OpenJDK 11, Oracle JDK 1.8.x, Oracle JDK 11
Microsoft Windows 2016 Server	x86_64	Red Hat OpenJDK 1.8.x, Red Hat OpenJDK 11, Oracle JDK 1.8.x, Oracle JDK 11
Microsoft Windows 2012 Server R2	x86_64	Red Hat OpenJDK 1.8.x, Red Hat OpenJDK 11, Oracle JDK 1.8.x, Oracle JDK 11

CHAPTER 4. SECURITY FIXES

This update includes fixes for the following security related issues:

ID	Impact	Summary
CVE-2020-11996	Moderate	tomcat: specially crafted sequence of HTTP/2 requests can lead to DoS [jws-5]
CVE-2020-13934	Important	tomcat: OutOfMemoryException caused by HTTP/2 connection leak could lead to DoS [jws-5]
CVE-2020-13935	Important	tomcat: multiple requests with invalid payload length in a WebSocket frame could lead to DoS [jws-5]

CHAPTER 5. RESOLVED ISSUES

Issue	Description
JWS-843	QE perl script causes IllegalArgumentException
JWS-1050	windows text files have linux-like lines ends
JWS-1148	Windows 2019 Server Support
JWS-1162	Update Maven Repository Zip to Standardized Maven Repository Specification
JWS-1445	[ASF BZ 63765] NIO2 connector with OpenSSL 1.1.1 hangs with TLSv1.3
JWS-1466	Upgrade mod_cluster to version 1.4.2.Final
JWS-1469	Upgrade Hibernate to version 5.3.16.Final from EAP 7.3
JWS-1471	Upgrade jboss-logging to version 3.4.1.Final from EAP 7.3
JWS-1494	Vault Keystore Management Validation
JWS-1600	Use https URLs in maven poms
JWS-1610	Rebase tomcat on version 9.0.36
JWS-1611	Upgrade Apache CXF to version 3.3.5 from EAP 7.3
JWS-1612	Update to the latest JBCS version
JWS-1623	Update JWS 5 base layer to UBI8 with OpenJDK8
JWS-1624	Update JWS 5 base layer to UBI8 with OpenJDK11
JWS-1631	Upgrade tomcat-native to 1.2.25
JWS-1636	Native APR connector behavior changing between 5.2 and 5.3
JWS-1712	Upgrade/Rebase components for the release 5.4
JWS-1713	Updating JWS Image Base Layer to UBI8 Image with flavours of OpenJDK

Issue	Description
JWS-1739	unable to make tomcat9/jws5 FIPS-compliant with NSS
JWS-1825	OpenShift image docs refers to /opt/webserver/webapps/ when the path is /opt/jws-<version>/tomcat/
JWS-1826	OpenShift Image docs contains outdated examples.
JWS-1827	OpenShift Image docs should explain how to add stuff to our images using docker.
JWS-1828	o.a.c.valves.HealthCheckValve returns 404 incorrectly
JWS-1829	OpenShift Image contains /manager webapp and jmxproxy health checks [remove the manager webapp]
JWS-1854	JWS 5.4 will not provide database templates for UBI8 images
JWS-1856	Certify JBoss Web Server on OCP 4.6
JWS-1859	Update JWS OpenShift documentation
JWS-1884	Remove Supported Configs from documentation

CHAPTER 6. KNOWN ISSUES

Issue	Description
JWS-1740	Warning thrown after loading persisted configuration
JWS-1857	Documentation doesn't match changed behaviour of HealthCheckValve

CHAPTER 7. COMPONENTS INCLUDED IN RED HAT JBOSS WEB SERVER 5.4

Component	Version
Apache CXF	3.3.5
Apache Tomcat	9.0.36
ECJ	4.12.0
Hibernate	5.3.16.Final
JBoss logging	3.4.1.Final
libapr	1.6.3
mod_cluster	1.4.2.Final
OpenSSL	1.1.1c
Tomcat-Native	1.2.25
Tomcat-Vault	1.1.8.Final