

Release Notes

JEUS 9.1

TMAXSOFT

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Document History

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1. Overview

This guide describes the newly added functions and the changes made to JEUS 9.1.

Various functions have been added to support different production environments. This guide does not contain detailed information about JEUS 9.1. For detailed information, refer to the relevant guides.

1.1. Release History

Date	Version
2025-12-10	JEUS 9.1
2024-12-24	JEUS 9

2. JEUS 9.1

This chapter briefly describes the new features added to JEUS 9.1.

2.1. New Features

2.1.1. Server

- **Added Node Manager feature**
 - The previously used Host Manager has been removed and replaced with a more stable Node Manager.
- **Added support for Node Manager monitoring management when a managed server is started alone**
 - Node Manager monitoring management is enabled when the `jeus.server.nodemanager.monitoring-standalone-ms` property is set to true, or when the `-monNM` option is added at startup.
- **Added CloudServer feature**
 - Added the `startCloudServer` script and related functionality.
- **Added start-node and stop-node features**
 - Added a `jeusadmin` command that allows starting and stopping the server on a node-by-node basis.

2.1.2. Servlet

- **Added a feature to reconnect after a specified interval in the TCP layer**
 - Added the `jeus.servlet.wjpReconnectTime` option (Default: 150 ms)

2.1.3. Session Server

- **Refactored JEUS centralized session server**
 - Added the ability to configure primary-backup relationship.
 - Added support for multiple backup servers to enable 1:N configurations.
 - Modified the startup process so that a server can recognize itself as a central session server based on its server configuration.
 - Modified session storage to allow specifying a group for each storage, enabling grouping of central session servers configured in a primary-backup relationship.
 - Added a `jeusadmin` command to configure the JEUS central session server.

- Added a jeusadmin command to monitor the JEUS central session server.
- **Added Redis Sentinel**
 - Added Redis Sentinel support.

2.1.4. IO

- **Added client IP blocking feature**
 - Added the ability to block client IPs after a certain number of failed JMX login attempts.

2.1.5. WebAdmin

- **Enhanced WebAdmin**
 - Applied a new UI.
 - WebAdmin is supported only in JDK 17 and JDK 21 environments.
- **Added centralized session server monitoring in JEUS**
 - Added a feature to monitor the JEUS central session server through WebAdmin.
- **Added Edit Mode (Lock&Edit)**
 - Added the ability for administrators to lock settings and edit safely.
- **Added Auto Lock**
 - Added the ability to automatically save changes after configuration is modified across all menus.
- **Added feature to display modified items when server restart is required**
 - Added a feature to display modified items on hover when the server's the 'Need to Restart' item is marked as 'true'.
- **Added monitoring connection pool refresh feature**
 - Added the ability to update the current connection pool status to the latest by setting a time.
- **Added Webtob Connector replication feature**
 - Added a feature to clone a previously created Webtob Connector.
- **Added History feature to view setting change history**
 - Added the ability to check for changes.
 - Added the ability to restore settings to a specific point in time.
 - Added the ability to apply settings by directly uploading a domain file (XML).
 - Added the ability to download settings files from the history.
 - Added a filtering function to search within the change history.
- **Added search functionality for Nodes, Clusters, Servers, Apps, and Resources**
 - Added the ability to search for components using filters in the Nodes, Clusters, Servers, Apps,

and Resources tabs.

2.1.6. JDBC

- **Added ability to use databaseName as serviceName**
 - Added the jeus.jdbc.config.database-name-as-service-name option. (Default: false)
 - Added the jeus.jdbc.config.exclude.database-name-as-service-name option. (Default: " "[empty string])

2.1.7. Tool

- **Added option to display the previous version when running jeusadmin -version**
 - If the jeus.old.version.type property in the TOOL_OPTION section of jeus.properties is set to true, the version format used up to 7 Fix#4 will be displayed.

2.1.8. Security

- **Added SSHA algorithm with user password salt value applied**
 - Added Salted Secure Hash Algorithm (SSHA) to disable password tracking.

2.2. Changed Features

2.2.1. Session Server

- **JEUS Session Manager Name Change**
 - The settings that previously divided the session types under the JEUS session manager into distributed and centralized have been changed to distributed session manager (DISTRIBUTED) and centralized session manager (CENTRAL).

2.2.2. Security

- **Changed to require confirmation of the current password when changing a user password**
 - To enhance security when changing a user's password, the existing password is now verified before being changed.

2.2.3. Server

- **Changed JEUS version format**

- The version format has been changed to major.minor.fix.patch build-number.
- **Changed to display a notification message when deleting a user account**
 - When deleting a user account, a confirmation message is now shown to prevent accidental deletion, and the account is deleted only after user approval.

2.2.4. WebAdmin

- **Changed Webtob thread status values**
 - Modified the output of the Webtob thread status in monitoring.

2.3. Bug Fixes

2.3.1. Deployment

- **Fixed issue where classes were not found when checking handle type in applications using a Multi-Release JAR**
 - Resolved an issue of not finding a class when checking the handle type in an application with a Multi-Release jar.

2.3.2. JMS

- **Fixed issue where messages were not received when reconnecting consumers with remaining messages**
 - Resolved an issue where messages were not received upon reconnection after closing a consumer if unprocessed messages still remained.
- **Fixed issue where JMS message order was not guaranteed during restoration**
 - Resolved an issue where the order of JMS messages was not preserved when recovering after a server restart.

2.3.3. Server

- **Fixed abnormal behavior when the Valid Size option exceeded 3 GB**
 - Resolved an issue where log file rotation behaved abnormally when the Valid-Size option exceeded 3 GB.

2.3.4. Servlet

- **Fixed issue where an IllegalArgumentException occurred when the first letter of the**

domain attribute was a number

- Resolved `IllegalArgumentException` that occurred when the first character in the domain attribute of a session cookie was numeric.

- **Fixed issue where headers disappeared when `sendError` was called after `response.addHeader` in service**

- Resolved an issue where headers were lost when `sendError` was called after `response.addHeader` in service.

- **Fixed issue where overlapping sections were not properly handled with multiple ranges**

- Resolved an issue where overlapping sections were not handled properly when there were multiple ranges.

- **Fixed issue where data messages were not processed when the server did not have a handler for client pong messages**

- Resolved an issue where, if the client endpoint sent a pong message and the server endpoint did not have a handler for it, subsequent data messages were not processed properly.

- **Fixed issue where sessions were lost due to deserialization failure when displaying the Access Log**

- Resolved an issue where sessions were lost due to a deserialization failure when retrieving a session during the process of displaying the Access Log.

- **Modified to apply the default content type without calling `getWriter` or `characterEncoding` related APIs**

- The default content type is now applied without calling the response's `getWriter` and `characterEncoding` related APIs.

- **Fixed issue where a `WebSocket` connection was not established immediately after restarting `WebtoB`**

- Resolved an issue where a `WebSocket` connection failed when attempting to send a message immediately after restarting `WebtoB`.

- **Fixed issue where `samesite` was not applied when cookie was version 1**

- Resolved an issue where `samesite` was not applied when the cookie was version 1.

- **Fixed issue where the `WebtoB` connection state remained in "reconnecting" when an `async` servlet was not dispatched**

- Resolved an issue where the `WebtoB` connection state remained in the "reconnecting" status when an `async` servlet was not dispatched.

- **Modified to raise exception in accordance with the `Servlet` API specification**

- Modified behavior to raise an appropriate exceptions in accordance with the `Servlet` API specification.

2.3.5. EJB

- **Fixed issue where `IIOP` was not called in a `JDK 17` environment**

- Resolved an issue where IIOP calls were not executed in JEUS running on JDK 17 by changing the class loader used during Corba ORB initialization from the system class loader to the thread context class loader.

3. JEUS 9

This chapter briefly describes the new features added to JEUS 9.

3.1. New Features

JEUS 9 fully supports the essential features of Jakarta EE 9 to enhance the development productivity. JEUS 9 also uses various enhanced technologies of Jakarta EE 9 to provide a more reliable environment.

3.1.1. Server

- **Added option to terminate server when app deploy fails**
 - Set `jeus.server.boot.all-apps-running` property to true.
- **Added option to specify a separate listener for the JNDI port**
 - Set `jeus.jndi.port` to configure JNDI to run on a dedicated listener port.

3.1.2. Servlet

- **Added compression function**
 - Introduced a minimum size option that determines whether to apply compression based on the Content-Length of the response.
- **Added %z option for compression ratio in ACCESS-LOG**
 - Introduced the %z option to display the compression ratio when using the HTTP compression feature. The compression ratio is displayed as 'default'.
- **Added Partitioned cookie support**
 - Introduced an option to add the Partitioned attribute to cookies when the Secure attribute is set, enabling support for partitioned cookies.
 - Set `jeus.servlet.response.cookie.partitioned` to true.
- **Added option to clear ThreadLocal for every request**
 - Introduced a function to clear ThreadLocal data at the start of every request. This feature helps prevent issues caused by leftover data when using open-source libraries or storing data in ThreadLocal.
 - You can enable or disable this feature using the `clear-thread-local` command. (Default: false)
- **Added option to skip waiting for worker threads during local-shutdown in built-in WebtoB**
 - In a managed server (MS) linked with the built-in WebtoB (web server), the `-g` and `-to` options can be used when executing 'local-shutdown' to enable immediate shutdown without waiting

for worker threads to finish.

- Set `jeus.servlet.engine.waitForWorkerDestroy` to `false`.

- **Added Service Timeout log**

- Introduced a log entry to monitor and identify when a service timeout occurs.

- **Added ability to import `jeus-web-dd.xml` and `web.xml` from external sources**

- Introduced the `-jwdp` and `-wp` options to the `deploy` command, enabling the import of `jeus-web-dd.xml` and `web.xml` files from external locations.

- **Added feature to prevent throwing error even if request uri contains user information**

- Introduced the `jeus.servlet.ignoreUserInfoInRequestURI` option for this functionality.

- **Modified to print the cause of JDK compiler failures in JEUS log**

- Added functionality to output JDK compiler failure logs, including errors JEUS cannot recognize, directly to the JEUS log.

- **Added option to skip auto-reload when hot swap fails**

- Introduced the `jeus.servlet.loader.ignoreAutoReloadAfterHotSwapFailed` and `jeus.server.useHotSwapAgent` options for this functionality.

3.1.3. EJB

- **Added Support for Java global naming in EJB 2.x**

- The `java:global` JNDI lookup, previously supported only in EJB 3.x, is now also supported in EJB 2.x.

3.1.4. Session Server

- **Added functionality to support JEUS internal central session server method**

- Introduced a centralized session server method so that you can choose between a distributed or centralized session server method when using the JEUS session manager.
- Set as follows using the `jeusadmin` console tool.

Add the scope to apply the centralized session server method

```
add-sessionstorage-scope [SCOPE_NAME] -target [TARGET_SESSION_STORAGE] -sessionType CENTRAL  
-clusters [CLUSTER_NAME]
```

Configure the primary and backup servers to use in the centralized session server environment

```
set-jeus-central-session-server -primary [PRIMARY_SERVER] -secondary [BACKUP_SERVER]
```

- **Added basic options for session storage**

- Introduced the following two options to prevent session loss during a reboot.

- backup-queue-size=0
- backup-flowcontrol-enabled = false
- **Added separate thread pool for processing session requests**
 - Introduced a dedicated thread pool for session request processing, ensuring that delays caused by overloaded threads sending requests are mitigated.

3.1.5. IO

- **Added ability to set connection retry count**
 - Introduced an option to specify the number of retry attempts to reestablish a failed connection with the cluster due to an exception.
 - Use `jeus.cluster.retry` to configure this setting.
- **Added ability to set the time interval between connection retries**
 - Introduced the option to specify the amount of time to wait before reattempting a connection between different JEUS processes.
 - Use `jeus.net.connect.interval` to configure this setting.

3.1.6. JDBC

- **Added functionality to test if XAResource is working properly during getConnection**
 - Use the `jeus.jdbc.xa-check` option. (default: false)

3.2. Changed Features

3.2.1. Server

- **Modified sequence of JNS Port binding from during server startup to after server startup**
 - When using an EJB client, EJBs were previously called on the base port, which opens before the server's EJBs are deployed, resulting in specific logs being printed. This has been addressed by changing the JNS port binding to occur after the server startup completes.

3.2.2. Servlet

- **Renamed option for security logic against vulnerabilities related to Out-of-Memory (OOM) during WJP or HTTP parsing**
 - The functionalities have been integrated into the `jeus.servlet.http.maxTotalHeaderSize` option.
- **Modified ACCESS-LOG schema**

- The <formatter-pattern>, <level>, and <filter-class> tags have been removed from the schema, as they were incorrectly grouped with the System-Log tags.
- **Mitigated service delay caused by lock during JSP reload through hash table bypass**
 - Resolved the delay issue during JSP reload by using a JSP include.
- **Removed functionality to limit count using JspWrapperCount**
 - The jeus.servlet.loader.jspcount option has been removed.
- **Deleted Max Instance Pool Size schema**
 - This option, used to set the number of servlet instances with STM (software transactional memory), has been removed as STM was excluded from the specification.

3.2.3. JMS

- **Modified behavior to prevent the host name in the address exposed by ConnectionFactory from resolving to an IP address**
 - Previously, the address was always resolved to an IP address, but in some environments, the resolved address may differ between the client and the server. To address this, the host name is now included instead of the resolved IP address.