

# KNIME Server Release Notes and Update Guide

KNIME AG, Zurich, Switzerland  
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# Release Notes

KNIME Server 4.12 is a feature release of the 4.x release line. All clients that have worked with KNIME Server 4.11 will continue to work with KNIME Server 4.12 without restrictions.



To find out which version of KNIME Server you are currently running, you can check the [Administration pages](#) on the WebPortal.

## New Features

For a list that includes the new Analytics Platform 4.3 features see [here](#).

Highlighted new functionality is:

- New WebPortal is now the default
- Improved monitoring functionality ([what's new](#))
- Redesign of administration pages ([what's new](#))
- Added support for RabbitMQ High Availability ([what's new](#))
- Pay-as-you-go Executors on Azure ([Azure Marketplace](#))

A detailed changelog for [KNIME Server 4.12](#) is also available.

## Java 11 support

KNIME Server 4.12 adds support for Java 11. While it is possible to continue using Java 8 for existing installations, we recommend the use of Java 11 for fresh installations. Note: Java 11 support is only confirmed for Tomcat-based installations of KNIME Server. TomEE-based installations should continue to use Java 8

## Configuration for email notifications

Configuration for email notifications sent by KNIME Server has moved from the `knime.xml` file to `knime-server.config`. In order for email notifications to still work, please migrate your settings to the new location. This can be done at runtime, it is not necessary to restart KNIME Server.

## Revised job states

Job state handling has been revised to be more consistent. Among other things, it is now easier to identify jobs that have failed. See [here](#) for a list of all job states.

## New configuration options

Various new configuration options were added to KNIME Server to improve usability:

`com.knime.server.job.max_schedule_failures=<number>`: It is now possible to configure the number of attempts to create a job before a schedule is disabled. Set to -1 to deactivate auto-disabling of schedules. This was previously hardcoded to 3.

`com.knime.server.gateway.timeout=<duration with unit, e.g. 30s, 1m>`: Allows increasing the timeout for loading jobs in the Remote Editor. This was previously hardcoded to 20s

`com.knime.server.action.job.force_discard_on_failure=<true|false>`  
`com.knime.server.action.job.force_discard_on_success=<true|false>`  
`com.knime.server.action.job.enable_discard_checkboxes=<true|false>`: Automatic discarding of jobs after execution is now more flexible. Previously, it was only possible to discard jobs after successful execution. We have now added an option to also discard on failure. Default values for discard on success/failure can be configured using the first two options listed above. The third option allows the admin to enforce these settings by disabling the checkbox that would change the behavior.

## Local file system access by KNIME workflows

A growing number of KNIME nodes are being revised to use a new shared framework for file access. More nodes will follow over the next releases, so that eventually the file access of all KNIME nodes uses the shared framework.

When executing on KNIME Server, a preference controls whether those nodes may access the local file system of the KNIME Server Executor or not. With this release, local file system access is **disallowed** by default (previously it was allowed).

To **allow** local file system access (not recommended), you can add the following line to the customization profile used by your KNIME Server Executor(s):

```
/instance/org.knime.filehandling.core/allow_local_fs_access_on_server=true
```

This preference affects all nodes that are part of the revised file handling framework. Old nodes that have not yet been ported to the new framework are not affected by this setting.

# Introduction to the update process

This document guides you through the steps that are needed to upgrade an existing KNIME Server installation from version 4.11 to 4.12 or update by applying a bugfix to version 4.12.

You will find a complete guide to installing KNIME Server in the [KNIME Server Installation Guide](#), and a complete description of all configuration options in the [KNIME Server Administration Guide](#).

If you have any questions or need assistance with the update process, please contact your dedicated KNIME support specialist.

Since version 4.11, new installations of KNIME Server are based on Apache **Tomcat**, rather than Apache **TomEE** which was used in previous releases. In addition, we continue to offer a TomEE based installer for the time being and the TomEE version for this has been updated to version 8.0.3 (from TomEE 7.0.5).

You will need to perform a fresh installation of KNIME Server if:

- You want to upgrade from a TomEE based installation to a Tomcat based one
- You want to update to the newest TomEE version 8.0.3 from an older TomEE version.

You can instead follow the upgrade process explained in this documentation if you either want to upgrade from an older installation of KNIME Server that is already Tomcat based, or want to upgrade from an older installation of KNIME Server based on TomEE 7.0.5 but maintaining this older TomEE version.



In order to upgrade a TomEE-based KNIME Server, TomEE needs to be at least version 7.0.5. Older versions are not supported, and require a fresh installation.

KNIME Executors from version 4.3 are not affected by these changes, and can be updated following the standard procedure.



Due to some updated libraries, the KNIME Server REST API documentation available at `https://<your-server>/knime/rest/doc/index.html` does not work anymore in installations based on TomEE 7.0.5. If you need this functionality, please install a fresh KNIME Server, which is based on TomEE 8.0.3 (or move directly to Tomcat). This does **not** affect the per-workflow Swagger pages (right-click in KNIME Explorer > *Show API Definition*), which continue to work on all TomEE versions.



In addition, the newly-added *Administration portal* on KNIME WebPortal is read-only for TomEE 7.0.5 Servers. While configuration values are shown, you will not be able to modify them.

## Prerequisites

### Server

- You have already KNIME Server 4.11.x or KNIME Server 4.12.x running.
- A KNIME Server installation based on Tomcat application server
- A KNIME Server installation based on TomEE application server of at least version 7.0.5.



You will not be able to upgrade to a Tomcat based installation or to update your underlying TomEE application server. If you want to perform one of these two operations you will need to perform a fresh KNIME Server installation.



For the sake of readability, this documentation uses `<apache-tomcat>/` to refer to the installation directory of the server application. Apart from the directory name, the location will be the same on TomEE-based folders.

### Client & Executor

- KNIME Analytics Platform clients with KNIME ServerSpace 4.0+ otherwise it will not be able to talk to the Server.
- KNIME Analytics Platform 4.3 as Executor with the corresponding *KNIME Executor Connector* extension version 4.12 installed on the Server side.

### Backup

Even though all the data on the Server should be preserved during the update it is highly recommended to create a backup of all important data (see [KNIME Server Administration Guide](#) for backup information).





With KNIME Server 4.12 the email configuration moved from the `knime.xml` to the `<knime-server-repository>/config/knime-server.config`, so any existing custom configuration must be moved. More information concerning the email configuration can be found in the [KNIME Server Administration Guide](#)

## Upgrade/update steps

### Application server upgrade/update

Start by downloading the following files and make sure that the owner of these files is your KNIME user:

- The `<knime-tomcat>.jar` file listed [here](#)
- If you are updating using Tomcat: the latest Tomcat `.war` file listed [here](#)
- If you are updating using TomEE: the latest TomEE `.war` file listed [here](#)
- The latest KNIME Server Executor file listed [here](#)

Next backup these files before starting the update process:

- The `knime.xml` file located in `<apache-tomcat>/conf/Catalina/localhost/` Please be aware that the name of the file might be different if the `.war` file had a different name (e.g. `com.knime.enterprise.server.xml` or `webportal.xml`).



Failure to backup this file will result in losing access to your scheduled jobs since it contains the secret key that is used to encrypt the schedule.

- The `server.xml` file located in `<apache-tomcat>/conf/`

Then follow these steps:

#### 1. Stop KNIME Server.

- a. On Windows: If you have [KNIME Server installed as a service](#), stop KNIME Server and Executor.

If you don't have KNIME Server installed as a service, then run the `shutdown.bat` file located in `<apache-tomcat>/bin`

- b. On Linux: If you have [KNIME Server installed as a service](#), stop KNIME Server by running the `systemctl stop knime-server.service` command

If you don't have KNIME Server installed as a service, then run the `shutdown.sh` file located in `<apache-tomcat>/bin`

2. Delete the existing folder `<apache-tomcat>/webapps/knime`. You may not have a folder with this name located in the `webapps` folder. If this is the case, delete the folder that matches the file name of the `.war` file located in the `webapps` folder. E.g. if you see a `webportal.war` file in the `webapps` folder, delete the `webportal` folder.
3. Move the `<filename>.war` file located in the `webapps` folder to a different folder. Then copy the new downloaded `war-4.12.x.y.war` file to the `webapps` folder and rename it to `<filename>.war`.
4. Check if the `knime.xml` file that you backed up before still exists. If not copy the backup to the previous location.
5. Copy the downloaded file `<knime-tomcat>.jar` to `<apache-tomcat>/lib`. Delete the existing old `<knime-tomcat>.jar` file that was already in that directory.

Now you will need to follow the steps in the [KNIME Executor update](#) section to update the KNIME Server Executor, before starting Tomcat application server.

## KNIME Executor update

KNIME Server 4.12 requires KNIME Analytics Platform 4.3 or later.

### Updating from KNIME Analytics Platform 4.3.0

If possible, start the executor installation in graphical mode (using the correct installation user!). If you have internet access, go to *File* → *Update KNIME...* and it will suggest updating to the new version. Follow the steps in the wizard. If you don't have direct internet access, you must download the zipped update sites from the [commercial downloads page](#). Then register the ZIP files in *File* → *Preferences* → *Install/Update* → *Available Software Sites* and go to *File* → *Update KNIME...*

Under Linux, if you cannot start the graphical user interface, you can use the `update-executor.sh` script that is in the root of the executor installation.

Call the script on the command line and provide a list of update sites that contain the new versions of the installed extensions and all installed extension will be updated (given that an update is available):

```
./update-executor.sh https://update.knime.com/analytics-platform/4.3
```

If you get error messages when executing `update-executor.sh` about missing "installable units", make sure that you have provided all necessary update sites.

If you want to selectively update only certain extensions, you have to build the update command yourself. An update is performed by uninstalling (-u) and installing (-i) an extension at the same time:

```
./knime -application org.eclipse.equinox.p2.director -nosplash -consolelog -r <list-of-  
update-sites> -i  
<list-of-features> -u <list-of-features> -d <knime-installation-folder>
```

## Upgrading from KNIME Analytics Platform 4.2.x and older

Due to some larger changes, it is not possible to upgrade to KNIME Analytics Platform 4.3.x from a version older than 4.3.0. Therefore, you need to install KNIME Executor 4.3.x version from scratch.

Before starting the KNIME Executor installation process create a backup of the `<executor-folder>` renaming it to `<executor-folder>.old`. After you successfully install the desired version of KNIME Executor, rename the new folder containing the Executor installation to the old folder name.

Then proceed with the installation of KNIME Executor by downloading the KNIME Executor full build from [here](#) and extracting it. This installer includes all extensions required for running as an Executor for KNIME Server.

Alternatively you can also install KNIME Analytics Platform from scratch and install the KNIME Executor connector extension version 4.12 into it. In this case, you will need to run the newly installed KNIME Analytics Platform 4.3 instance as the user that owns the installation.

Please refer to the [KNIME Server Installation Guide](#) for more details about installing a KNIME Executor.



Upgrading using the standard procedures is possible again from KNIME Analytics Platform 4.3.1 onwards.

## knime.ini file

In case you want to use custom settings from your old KNIME Executor's `knime.ini` file, please copy only the lines following `-vmargs` to the new `knime.ini`. The only exception to this are the four lines related to Server Managed Customizations (`-profileLocation...`), in case

those are set. The remaining lines above `-vmargs` contain paths to resources that have been changed in the new release, so they are not compatible.

## server.xml file

For fresh installations, please note that a `server.xml` file (`<apache-tomcat>/conf/server.xml`) from an older installation cannot be copied over due to some larger changes. Any custom changes applied to your existing `server.xml` need to be manually copied over to the new `server.xml`. For upgrades the existing `server.xml` continues to work, and does not need any adjustments.

# Configuration of the updated KNIME Server

## KNIME Server license

The KNIME Server license continues working with the new Server. If you haven't received a license file or if it is not working correctly, please contact KNIME support or your dedicated KNIME account manager.

## Enabling execution via Apache Qpid

KNIME Server 4.11 introduced an integrated message broker for communication between KNIME Server and KNIME Executor, based on Apache Qpid (<https://qpid.apache.org/>). This can be thought of as using an architecture that corresponds closely to distributed KNIME Executors, but runs on a single host, which is used by both KNIME Server and KNIME Executor.

Unlike distributed KNIME Executors, it is not necessary to install a separate message broker such as RabbitMQ. Instead, Apache Qpid is bundled as part of all KNIME Server installations. New installations of KNIME Server use Qpid by default. To switch your current installation to Qpid, changes are required in two locations:

## Application Server

Activate queue in `knime-server.config`. The file can be found in `<knime-server-repository>/config/knime-server.config`. Set the parameter

```
com.knime.enterprise.executor.embedded-broker= to true
```

In addition, comment out the line `com.knime.server.executor.knime_exe=` by placing a `#` character at the start of the line.

## KNIME Executor

In the KNIME Executor installation directory, add the following line to the `knime.ini` file, anywhere after the `-vmargs` line:

```
-Dcom.knime.enterprise.executor.msgq=amqp://knime:20knime16@localhost/
```



Unlike the RMI-based execution, using the Qpid message broker requires to startup KNIME Server and KNIME Executor **separately**. For starting up KNIME Server, you can still use the `startup.sh/.bat` file located in `<apache-tomcat>/bin`. For starting the Executor, you can use `<executor directory>/start-executor.sh` (Linux) or `<executor directory>/start-executor.bat` (Windows)

In case the Executor startup script is not present, you can start the Executor from command line by running

```
./knime -nosplash -consolelog -application  
com.knime.enterprise.slave.KNIME_REMOTE_APPLICATION
```

For setting up the KNIME Server service, please follow the steps outlined in the [KNIME Server Installation Guide](#). Installing the Executor as a service follows the same procedure as described for distributed [KNIME Executors](#).

For increased security, we recommend to run both services by different users.

## Preferences file

Note that when switching from RMI to Qpid, the old preferences.epf file in `./workflow_repository/config` is **not** used anymore. In order to set preferences on the Executor (e.g. database drivers or Python configuration), please use a preference profile as described in the [KNIME Server Admin Guide](#).

## Server temp directory

Switching to Qpid also uses a different temp directory than RMI. On Linux, this defaults to `/tmp`, which might have size restrictions. In order to manually set a different temp directory, please add the following to the `knime.ini` file of the KNIME Executor, anywhere below the

-vmargs line: -Djava.io.tmpdir=/path/to/tmpdir

## Qpid port

In some environments, it is necessary to explicitly open a port for connections to Qpid **on localhost** (even though Server and Executor are running on the same host). By default, the port is 5672. This can be changed in the `knime-server.config` file.

## Server host name in /hosts

By default, the host name of the machine is available in `/etc/hosts/`. If this is not the case, KNIME Server will not work using Qpid. This can be resolved by adding the server's host name to `/etc/hosts/`, e.g. `127.0.0.1 <hostname>`.

## Compressed responses

Due to a change in Tomcat responses sent by KNIME Server 4.11 and 4.12 are not compressed even though compression is configured in the `server.xml`. In order to enable compression again, you have to add the attribute `noCompressionStrongETag=false` to all `<Connector>` elements in your `server.xml`, e.g.

```
...  
<Connector noCompressionStrongETag="false" compressibleMimeType="..." compression="on"/>  
...
```

If you create a new server installation using the KNIME Server Installer for 4.12.4 this attribute will be added automatically.

# Troubleshooting

## All schedules are lost after updating

One important step during update process is the backup of the `knime.xml` file so that it can be copied back into the KNIME Server installation folder. The `knime.xml` file contains a secret key for encrypting the communication between the server and the installation folder. If this is not restored before starting the server, the server will not be able to load jobs and schedules previously created.

## Access to KNIME WebPortal version > 4.11 is not possible

### Access gives error 404

If you cannot access the URL of the KNIME WebPortal version > 4.11

`https://<server-address>/knime/webportal/`

and it fails with error 404, usually indicates that during update or installation process the Context Root used to define the KNIME WebPortal URL was left empty (`/`). This is not possible starting with the release of KNIME WebPortal version 4.11+ for which it is necessary to **always** specify a Context Root.

Please refer to the [KNIME Server Installation Guide](#).

### Access gives error 500

If you cannot access the URL of the KNIME WebPortal version > 4.11

`https://<server-address>/knime/webportal/`

and it fails with error 500, usually indicates that the update did not work as expected.

Please contact KNIME support team via [support@knime.com](mailto:support@knime.com) to get this fixed.

## Update of KNIME Executor via command line is not possible

This is a known bug when updating from a KNIME Server version 4.11.1. This bug is fixed starting with KNIME Server version 4.11.2.

To solve the issue you need to follow these steps:

1. Create a copy of the file named `knime.ini-copy`
2. Remove the `-profileLocation` option from the `knime.ini` file
3. Update the KNIME Executor via command line
4. After a successful update, overwrite your `knime.ini` file with `knime.ini-copy`.

If this solution does not work, please contact KNIME support team via [support@knime.com](mailto:support@knime.com)

## Workflows deployed on the server cannot be executed

- If the following error message appears:

```
Unable to load workflow, it was created with a future version of KNIME
```

The KNIME Analytics Platform client with which you are connecting to the KNIME Server and with which the server was built needs to have a lower or equal version to the KNIME Executor. If this is not the case, please ask your KNIME Server Administrator to update the KNIME Server and/or KNIME Executor to the release version of the KNIME Analytics Platform client you are using locally.

- If a missing node is reported, instead, check if the node is already installed and if the version of the respective extension is the same in both the KNIME Analytics Platform client and the KNIME Executor.
- Finally, if your scripting (R or Python) snippets fail, it is possible that the respective packages are missing on KNIME Server. Please refer to the respective guides to install [Python](#) and [R](#) packages. Please also make sure the user under which you install those packages is the same user running the KNIME Executor.

## Connection to KNIME Executor hosts after switching to Qpid is not possible

- Make sure the hostname of the KNIME Server is mentioned in the `/etc/hosts` file
- Check that the following ports are accessible on `localhost`. They do not need (and in fact should not) to be accessible from other systems (usually this is the case).
  - With RMI: `com.knime.server.executor.start_port` (default 60100)
  - With QPid: `com.knime.enterprise.executor.embedded-broker.port` (default 5672)



- With RabbitMQ: For KNIME Server and for the KNIME Executor that is setup on a separate machine (default 5672)
- Starting with QPid, KNIME Executor needs to be started manually. Please follow the instructions in the [KNIME Server Installation Guide](#) to do so.
- It might be necessary to change the user running the service. Please follow the instructions in the [KNIME Server Installation Guide](#) to do so.

## Reading from my local file system after update to KNIME Server 4.11+ is not possible

Starting with KNIME Analytics Platform version 4.2, which is the KNIME Executor version for the KNIME Server 4.11 we are, by default, not allowing access to the local file system on the KNIME Server via the new File Util nodes. You can enable this again as described in [KNIME Server Admin Guide](#).

Please note that this only affects nodes that are part of the revised file handling framework.

## The authentication field is empty

Please update the `knime-tomcat.jar` as described in the [Application server update section](#). This must be done before restarting the KNIME Server.

# Changelog (KNIME Server 4.12)

## **KNIME Server 4.12.5** (released November 8, 2021)

### Enhancements

- [SRV-3616] - Automatically forward webserver root to context root in new installations
- [SRV-3613] - Server installer should restrict permission on auto-install.xml

### Bugfixes

- [SRV-3612] - Directory path traversal when requesting client profiles<sup>[1]</sup>
- [WEBP-876] - Cross-Site-Scripting vulnerability in old WebPortal login<sup>[2]</sup>
- [SRV-3594] - Timeout while restoring from swap may result in orphaned jobs in executor
- [SRV-3593] - Server shutdown is delayed if RabbitMQ is not reachable ]
- [SRV-3589] - KNIME Server fails during startup and does not try to reconnect to RMQ if initial connection to RMQ cannot be established
- [SRV-3575] - Admin users logging in to the webportal with upper-case characters don't have admin access
- [SRV-3573] - Properties endpoint sends wrong type header
- [SRV-3554] - Configuration page in WebPortal adds new spaces to msgq rules and names on every change
- [SRV-3536] - Modifying scheduled job while its timer expired creates duplicate schedules until server restart
- [SRV-3524] - Inactive job not removed if post execution tasks didn't run

## **KNIME Server 4.12.4** (released July 14, 2021)

### Enhancements

- [SRV-3427] - Make executor try reconnecting to server indefinitely the default instead of 9 times

## Bugfixes

- [SRV-3530] - Executor endpoint not thread-safe
- [SRV-3528] - Changed properties of loaded job get lost after server crash
- [SRV-3522] - Time intervals of scheduled don't behave correctly in some cases
- [SRV-3510] - "Skip if previous job is still running" skips jobs if server and executor crash during execution of last job
- [SRV-3509] - Workflow Authentication tokens allowed access to other calls
- [SRV-3501] - Admin username not case insensitive
- [SRV-3500] - Race condition in ObjectStore
- [SRV-3499] - Add authorization header to request to OIDC token endpoint
- [SRV-3494] - update-executor.sh script uses wrong Java installation
- [SRV-3493] - Refreshing the access token yields server logout
- [SRV-3488] - Response compression does not work any more due to change in Tomcat
- [SRV-3487] - Explorer sets connection timeout instead of read timeout when fetch timeout is provided
- [SRV-3485] - Hourly job check-in of server may lead to a racing condition in the executor job reporting
- [SRV-3483] - startedExecutionAt is a different timezone than finishedExecutionAt/createdAt in REST jobs endpoint
- [SRV-3481] - Error on loading swapped job yields unexpected job state
- [SRV-3477] - Job with state EXECUTION\_FAILED\_WITH\_CONTENT is not marked as finished
- [SRV-3466] - Report formats cannot be updated via Admin Portal
- [SRV-3459] - Jobs are stuck in idle during execution
- [SRV-3448] - Scheduled job id changes when overwriting workflow
- [SRV-3432] - Missing descriptions in KNIME Server OpenAPI documentation
- [SRV-3333] - Disable workflow execution in installer doesn't disable Qpid
- [WEBP-827] - Webportal deletes random schedule/jobs on second or subsequent pages
- [WEBP-778] - Don't send inactivity notifications for WebPortal executions
- [WEBP-757] - WebPortal backend sometimes returns 'configured' as wizard execution state

**KNIME Server 4.12.3** (released May 26, 2021)

## Enhancements

- [SRV-3430] - Modify service.bat to increase default heap memory
- [SRV-3419] - Log connection errors from add mount point panel
- [SRV-3410] - Set mail.smtp.from and mail.from to the same value
- [WEBP-733] - Enable V3000 for some molecule formats in the MarvinJS Integration

## Bugfixes

- [SRV-3464] - Change in the configuration page breaks OIDC configuration in server config
- [SRV-3437] - Stopping/Changing the state of an executor via the REST API doesn't work if it belongs to an executor group
- [SRV-3375] - Server installer must use executor JVM when installing executor
- [SRV-3371] - Discarding a job after load timeout may lead to error

### **KNIME Server 4.12.2** (released March 8, 2021)

## Enhancements

- [SRV-3379] - Make swap timeout during executor shutdown configurable
- [SRV-3353] - Add support for SameSite attribute in cookies
- [SRV-3357] - Installer should not allow empty context root any more
- [SRV-3206] - Auto-forward to identity provider authentication page
- [WEBP-689] - Update MarvinJS integration

## Bugfixes

- [SRV-3387] - Username/Passwords with umlauts not handled properly when using form authentication on the webportal
- [SRV-3386] - User list in Admin Console not updated correctly
- [SRV-3360] - Parent job directories on executor aren't deleted on discard or swap
- [SRV-3359] - Remote Workflow Editor prevents jobs from being swapped
- [SRV-3352] - Too large configuration/input parameters may render server unusable for the current user

- [SRV-3350] - Embedded Webapp constantly reloading/flickering
- [SRV-3349] - Workflow Authentication Tokens only work when permissions are inherited
- [WEBP-727] - Custom molecule sketcher will not load in old WebPortal
- [WEBP-563] - Use node model to set server credentials (Credentials Widget)

## **KNIME Server 4.12.1** (released January 29, 2021)

### Enhancements

- [SRV-3311] - Enable parallel loading of jobs in executor
- [SRV-3303] - Allow custom content in "Thanks for logging in" page
- [SRV-3299] - Log job id in executor when loading a job
- [SRV-3188] - Setting to allow users to create workflow authentication tokens
- [SRV-3183] - REST endpoint to create and revoke tokens for workflow execution
- [SRV-3181] - Increase timeout for getting next page in WebPortal
- [WEBP-701] - Suppress basic auth popup also for admin client type
- [WEBP-699] - Edit user in WebPortal

### Bugfixes

- [SRV-3324] - Workflows may not get loaded if there is at least one reservation rule mismatch
- [SRV-3338] - Swapped jobs may fail to get restored right after server restart
- [SRV-3334] - Swapped jobs cannot be found any more after server repository has been renamed/moved
- [SRV-3318] - File Download Widget does not work on KNIME Server Small with new WebPortal
- [SRV-3302] - Race condition when updating configuration values on the webportal
- [SRV-3296] - Workflow summary endpoint returns 500 when summary does not exist
- [SRV-3167] - lastEditedOn in server meta information is never updated
- [WEBP-694] - No possibility to edit users in standard KNIME User Database
- [WEBP-690] - File Download Widget receives status 403 when used on KNIME Server Small

- [WEBP-688] - WebPortal Jobs page does not show all jobs
- [WEBP-671] - Direct access to a workflow from unauthenticated session redirects to landing page when using OAuth
- [WEBP-664] - Fix client headers to allow license upload
- [WEBP-663] - Log file date range downloads incorrect dates
- [WEBP-661] - Add client type to all download links as query parameter
- [WEBP-653] - Fullscreen button has overlay when change password/ sign out dropdown is open

## **KNIME Server 4.12.0** (released December 6, 2020)

### Enhancements

- [SRV-1000] - Enforce discarding (successful) jobs
- [SRV-1346] - Update KNIME Server to be compliant with Java 11 LTS
- [SRV-2201] - Number of failures until schedule is deactivated should be configurable
- [SRV-2272] - Move job state logic from server to executor
- [SRV-2408] - REST API: Allow loading of repository for a specified number of levels
- [SRV-2695] - Add TLSv1.2 support for email notifications
- [SRV-3071] - Allow changing server configuration via REST interface
- [SRV-3073] - Move E-Mail configuration from knime.xml to server configuration
- [SRV-3075] - Add meta information for server configuration to REST interface
- [SRV-3076] - Adding a feature to set an executor to a draining state and stop it
- [SRV-3081] - Store source of job request
- [SRV-3082] - Definite state mapping for jobs
- [SRV-3083] - Add log file for tracing individual jobs
- [SRV-3086] - Add more executor information
- [SRV-3093] - Logs should be retrievable with date range.
- [SRV-3094] - Add reset before execution option to Call Workflow Action
- [SRV-3120] - Let admins assign a maximum number of core tokens to executor groups
- [SRV-3123] - RabbitMQ HA support
- [SRV-3151] - Remove SysV init scripts

- [SRV-3157] - Executors using RabbitMQ should get as many core tokens as available
- [SRV-3164] - Add multiple 'My-KNIME-Hub' mountpoints via the 'Add Mountpoint' dialog
- [SRV-3179] - Add last execution date and job ID to scheduled jobs
- [SRV-3211] - Throttle deep repository listing requests
- [SRV-3212] - Make repository read timeout configurable
- [SRV-3225] - Allow concurrent triggering of scheduled jobs
- [SRV-3228] - Update to Tomcat 9.0.39
- [SRV-3232] - Add new server configuration option for noVNC launch script
- [SRV-3233] - Add new REST call for launching a noVNC container
- [SRV-3234] - Create launch script for noVNC docker container
- [SRV-3235] - Create Dockerfile for noNVC image
- [SRV-3247] - Option to hide folders without view permissions
- [SRV-3287] - Increase default job load timeout to 3 minutes
- [SRV-3289] - Make creation of workflow summary configurable
- [WEBP-58] - Toggle “full screen” mode
- [WEBP-464] - Add Fullscreen controls to the WebPortal UI
- [WEBP-486] - Implement new Admin/Monitoring page routing
- [WEBP-488] - Forward to new admin portal
- [WEBP-497] - Documentation page
- [WEBP-502] - WebPortal/PB File Upload API for widget rewrite
- [WEBP-506] - Navigation bar for monitoring and admin portal
- [WEBP-507] - Side bar component
- [WEBP-508] - Data retrieval for schedules page in monitoring portal
- [WEBP-510] - Data retrieval for executors overview page in monitoring portal
- [WEBP-512] - Jobs page in monitoring portal
- [WEBP-514] - License page for admin portal
- [WEBP-515] - User/group pages for admin portal
- [WEBP-516] - Config page for admin portal
- [WEBP-517] - New REST endpoint to change server configuration
- [WEBP-518] - Editable server config in admin portal

- [WEBP-519] - Implement table view for admin portal
- [WEBP-522] - Change password page
- [WEBP-540] - Navigation bar responsive design
- [WEBP-551] - Change default title of WebPortal to 'WebPortal'
- [WEBP-567] - Toggle component
- [WEBP-568] - Include table on schedules page
- [WEBP-569] - Donut chart
- [WEBP-570] - Include table on executors page
- [WEBP-577] - Logs page in monitoring portal
- [WEBP-581] - Do not show empty workflow groups in WebPortal
- [WEBP-586] - Button to open VNC instance
- [WEBP-587] - Deactivate legacy WebPortal by default
- [WEBP-597] - Monitoring Permissions
- [WEBP-611] - Set admin client type header for admin requests
- [WEBP-612] - License page needs to display expired license

## Bugfixes

- [SRV-3138] - Timeouts in remote workflow editor are too low
- [SRV-3169] - Script install-executor-as-service.bat fails if path contains blanks
- [SRV-3215] - Race condition when updating job states in interactive execution
- [SRV-3221] - Incorrect credentials warning when opening a job in Remote Workflow Editor
- [SRV-3227] - Timeouts while swapping a job don't mark the job as non-swappable
- [SRV-3229] - Executor group is not set in case server is restarted
- [SRV-3230] - Race condition between job swapping and status update
- [SRV-3231] - Username not extracted from JWT for Hub mount points
- [SRV-3249] - KNIME Server Installer adds mail resources even though it hasn't been configured
- [SRV-3252] - Deadlock in executor during job state notifications
- [SRV-3259] - Typo in log error/exception messaging



- [SRV-3260] - Cannot set configuration nodes via WebPortal when using OAuth
- [SRV-3264] - Allow user to replace a connection in remote workflow editor
- [SRV-3269] - Maximum JWT lifetime not set if parameter cannot be parsed
- [SRV-3273] - Wrong state returned for cancelled job
- [SRV-3278] - Invalid token on discard prohibits onClose operations of nodes
- [SRV-3286] - Multiple error dialogs when connecting to community server
- [SRV-3290] - Possible null pointer when OAuthAuthenticator tries to bring KAP to front
- [WEBP-325] - Fix keyboard navigation in JobList for Firefox
- [WEBP-441] - Missing required input on last page of executed job succeeded but have to throw an error
- [WEBP-552] - SubMenu component throws error when re-render occurs after menu item has been selected
- [WEBP-557] - Focus of navigation bar tabs not working
- [WEBP-564] - Monitoring in the Menu misses hover state when using keyboard navigation
- [WEBP-576] - Remove duplicate notifications from Schedules/Executor polling
- [WEBP-651] - URL parameters should not be comma separated list
- [WEBP-652] - Configuration node's value can only be passed via WebPortal URL if the parameter name contains node ID

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