

# Fudo Enterprise 5.4.8

## Release Note

This is a minor Fudo release, introducing a range of improvements and new fixes.

### IMPROVEMENTS

- Upgraded OpenSSH to version 9.6, enhancing security and performance with the following changes:
  - Introduced support for additional key algorithms.
  - Moved `ssh-rsa` and `ssh-rsa-cert-v01@openssh.com` to the Legacy crypto mode.
- Reintroduced support for the `<username>#<server-address>` login string in the bastion mode for streamlined access.
- Improved session cleanup efficiency by deleting associated records instead of marking them as removed, conserving disk space and preventing unnecessary data redistribution.
- Updated `TZdata` files to reflect Kazakhstan's administrative time zone change from UTC+6 to UTC+5.
- Enhanced the SNMP daemon configuration to support the use of specific routing tables.

### BUG FIXES

- Addressed an issue causing RDS connections to terminate shortly after receiving the redirection packet.
- Corrected misleading *"Incorrect username or password"* messages displayed during login attempts through a proxy listener with valid domain credentials.
- Addressed an issue causing SSH key updates to fail during LDAP synchronization.
- Resolved an issue where SSH connections could not be established due to the `ssh-rsa` key type not being listed in `PubkeyAcceptedAlgorithms`.
- Resolved an issue with the password changers service worker by restoring its default settings to align with previous versions.
- Identified and addressed an issue preventing AI model training when session event file sizes exceed a certain threshold.
- Resolved an issue leading to unnecessary multiple requests for the second authentication factor, ensuring authentication ceases after the first incorrect attempt.
- Corrected an issue related to improper SSO verification, which led to unwanted credential prompts in browsers.
- Updated the certificate fetching process to respect server settings, allowing it only under TLS and NLA conditions active.

- Addressed a display issue in Fudo player that resulted in only half of the recording being displayed for HTTP sessions.
- Corrected the mislabeled account validity date field in the Users tab.

## BEFORE YOU UPGRADE

It is highly recommended to perform the ['Upgrade check'](#) before the proper upgrade. The result of the failed check may contain information about configuration changes that needs to be done by a Fudo administrator to successfully upgrade Fudo.

There are a few things that need to be verified before this upgrade can be applied:

- Make sure your Fudo instance isn't undergoing any system-wide process, such as storage rebuild, or the system isn't under full-load.
- In a cluster configuration, make sure all nodes are synchronized and upgrade the slave node first.
- Make sure you have an active Premium or Standard Support maintenance contract.

## IMPORTANT INFORMATION FOR UPGRADING FROM VERSIONS 5.2.x AND OLDER

Due to the significant changes in the database, the upgrading process from 5.2.x and older versions might take more time than usual.

There are a few things that need to be verified before the upgrade can be applied:

- Make sure your Fudo instance isn't undergoing any system-wide process, such as storage rebuild, or the system isn't under full-load.
- In a cluster configuration, make sure all nodes are synchronized and upgrade the slave node first.
- Make sure you have an active Premium or Standard Support maintenance contract.
- As of Fudo PAM 5.3, Citrix, ICA, and Oracle protocols are no longer supported; it is required to remove the sessions (except those already exported) associated with these protocols.
- It is required to have the "Use root store certificates" option enabled in every HTTP server configuration.
- "Hitachi ID Privileged Access Manager" and "Lieberman Enterprise Random Password" must be removed from the External password repositories configuration.
- Users with names containing '#' or '%' chars must be removed or renamed.
- If there are multiple servers with the same address and port pair but different protocols, then only one of them can be left and the other must be removed.
- Remote app configuration must be removed from all the servers and accounts.

- In password changers configuration the server properties: “*protocol*”, “*secproto*”, “*ssl\_to\_server*”, “*ssl\_v2*”, “*ssl\_v3*”, “*subnet*” are no longer supported and must be removed.
- Port number 8888 is now reserved. Listeners using this port must be modified to use another port.
- Port numbers greater or equal 60000 are now reserved. Listeners using these ports must be modified to use other ports.

## RECOMMENDED UPGRADE PATH

Before proceeding with the upgrade, please verify the version number of your Fudo Enterprise instance. Depending on the version number, you will need to follow a specific upgrade path. To learn more, please refer to the [Fudo Enterprise Product Upgrade Path](#) article.

## HOW TO UPGRADE YOUR FUDO

1. Login to your Fudo Admin Panel.
2. Select ‘*Settings > System*’ from the main menu on the left-hand side and go to the ‘*Upgrade*’ tab.

If your Fudo is running in a cluster, start the upgrade on the Slave node, and only when the upgrade finishes successfully start upgrading the Master node. When both systems are running the same Fudo version cluster communication will be restored.

3. Select ‘*Upload*’ from the top right side and upload the previously downloaded and unzipped upgrade package file.
4. Select ‘*Run Check*’ to determine if your upgrade file is correct and can be applied to the existing Fudo configuration. Refresh your browser window to see ‘*Upgrade check*’ current progress.
5. Upon a successful ‘*Run Check*’ result, upgrade your Fudo by using the ‘*Upgrade*’ button. Upon system restart, all active sessions will be terminated.

In case of an unsuccessful check do not upgrade your system, double check your upgrade file checksum. If you encounter any problems, get in touch with us and we will assist you.

## THE ROLLBACK PROCEDURE

If you are experiencing issues with the newly installed version, you have an option to roll back to the previous version of Fudo running on this machine. To do so, click the user menu on the top right, select '*Restart*', and select previous system revision from the drop-down list.

Please keep in mind any session recordings performed on a newer version will be lost upon upgrade rollback execution.

## CONTACT US

If you have questions or concerns, please get in touch at [support@fudosecurity.com](mailto:support@fudosecurity.com) or by phone: +48 22 100 67 09.

Sincerely,

*Fudo Security Team*