

Fujitsu Enterprise Postgres on IBM LinuxONE

Bug Fix Guide



Preface

Purpose of this document

This document is the guide to apply bug fixes using Software Delivery Management System.

Intended readers

This document is intended for those who use Software Delivery Management System.

Readers of this document are assumed to have general knowledge of:

- FUJITSU Enterprise Postgres
- Linux

Target Products

Products with the following prefixes:

- FJSVfsep-ARB
- FJSVfsep-CL
- FJSVfsep-POOL2
- FJSVfsep-SV
- FJSVfsep-WAD

Structure of this document

This document is structured as follows:

Applying a bug fix (RPM Package)

This section describes how to apply a product package.

Download a notification file

This section describes how to download a notification file.

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Issue date and version

Edition 1.0: February 2021

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Chapter 1 Apply a bug fix (RPM package)

If you are using the GUI to work with downloaded packages, refer to "Download Package with GUI" and later of this document.

1.1 Set Me Up

This section describes how to use Set Me Up for CUI operation.

This feature helps you with the steps to set up the repo configuration for the following CUI package manager on a target machine.

- yum in RHEL
- zypper in SLES

1.1.1 Set Me Up for CUI client

The CUI operation is described below:

1. Click **Artifactory > Artifacts** to show **Artifacts Repository Browser** page.
2. Locate and select an RPM package in **Tree Browser**.
3. Click **Set Me Up** to open **Set Me Up** pop-up window.
4. Optionally, enter your password in **Enter your password** to display your user credentials in the code snippets and click **OK**.
5. View the steps in **General** section - click **Copy text to clipboard** to copy the steps.
6. Copy the steps into a local text file (e.g., `SetMeUp.txt`).

RHEL additional steps

Edit the repository file - you will need root privileges to open the file.

1. Open the repository file (replace `artifactory.repo` in the command-line below to suit your own requirements).

```
sudo vi /etc/yum.repos.d/artifactory.repo
```

2. Replace the undefined sections in the content below

```
[Artifactory]
name=Artifactory
baseurl=https://<URL_ENCODED_USERNAME>:<PASSWORD>@fujitsu.jfrog.io/artifactory/
EnterprisePostgres_AE_onIBMz_patch/<PATH_TO_REPODATA_FOLDER>
enabled=1
gpgcheck=0
```

- a. When Type Password is not provided,
 - Replace <URL_ENCODED_USERNAME> with your Jfrog UI username.
 - Replace <PASSWORD> with either your encrypted password (Copy encrypted password) or your API Key (API Key ,management).
- b. Replace <PATH_TO_REPODATA_FOLDER> with the actual path (see the **Note** in "View an RPM package").

SLES additional steps

1. Log in to the target server with sudo privileges.
2. Upload the repo file (e.g., <zypper_repo>.repo) saved in the Set Me Up section to the target server at a location (e.g., /tmp/Artifactory.repo).

```
#vi /tmp/Artifactory.repo
```

3. Replace the undefined sections in the content below.

```
[Artifactory]
name=Artifactory
baseurl=https://<URL_ENCODED_USERNAME>:<PASSWORD>@fujitsu.jfrog.io/artifactory/
EnterprisePostgres_AE_onIBMz_patch/<PATH_TO_REPODATA_FOLDER>
enabled=1
gpgcheck=0
```

4. Set up a repo with the zypper addrepo command.

```
#zypper addrepo -f '/tmp/Artifactory.repo'
```

5. Refresh the zypper repos with the zypper refresh command.

```
# zypper refresh
```

6. List newly added repo configuration with the zypper repos command.

```
# zypper repos
Repository priorities in effect:                               (See 'zypper lr -P' for details)
   98 (raised priority) : 3 repositories
   99 (default priority) : 4 repositories
# | Alias                | Name                | Enabled | GPG Check | Refresh
1 | Artifactory          | Artifactory         | Yes     | ( ) No    | No
```

1.2 Package operations with CUI

This section describes package operations with CUI, including:

- List available packages
- Update a package
- Check for updated packages

Note

- RHEL
 - It is assumed that a repo for yum is configured on the target machine to access packages on Software Delivery Site (refer to "Set Me Up for CUI client" for details).
 - You need root privilege to perform all yum operations, except for `yum list`.
 - You can optionally include `--disablerepo="*" --enablerepo=<REP repo name>` in yum command-line if you want to exclude other repo configuration files.

Example:

```
sudo yum --disablerepo="*" --enablerepo="Artifactory" --showduplicates list FJSV*
```

- SLES
 - It is assumed that a repo for zypper is configured on the target machine to access packages on Software Delivery Site (refer to "Set Me Up for CUI client" for details).
 - You need root privilege to perform all zypper operations.

1.2.1 List available packages

This section describes how to list available packages.

Note

If you want to check the information of the updated package, the details can be referred to in the notification file. "Download a notification file" explains how to download the notification file.

RHEL procedure

To list the latest version of a package, use `yum list available <pkg-name-pattern>`.

```
# yum list available
Available Packages
FJSVfsep-SV-12.s390x      1201-4.e17      Artifactory
```

To list all versions of a package, use `yum --showduplicates list available <pkg-name-pattern>`.

```
# yum --showduplicate list available
Available Packages
FJSVfsep-SV-12.s390x      1201-2.e17      Artifactory
FJSVfsep-SV-12.s390x      1201-3.e17      Artifactory
FJSVfsep-SV-12.s390x      1201-4.e17      Artifactory
```


SLES procedure

To list all version of a package, use `yum list available "zypper se -s --repo <repo-name>"`.

```
# zypper se -s --repo Artifactory

Loading repository data...
Reading installed packages...
S | Name | Type | Version | Arch | Repository
-----+-----+-----+-----+-----+-----
| FJSVfsep-SV-12 | package | 1201-3 | s390x | Artifactory
| FJSVfsep-SV-12 | package | 1201-2 | s390x | Artifactory
| FJSVfsep-SV-12 | package | 1201-1 | s390x | Artifactory
```

1.2.2 Update a package to a specific version

Keep the version of the product installed on the target machine before updating the package. This is required in order to verify which packages are applicable.

RHEL procedure

Use `yum list installed | grep <pkg-name-pattern>`.

Get the version of the installed package.

```
# yum list installed | grep FJSVfsep-SV-12
FJSVfsep-SV-12.s390x 1201-2.e17 installed
```

To update a package, use `yum update <pkg-name-pattern>-<version>`.

```
# yum update FJSVfsep-SV-12-1201-3.e17
Loaded plugins: langpacks, product-id, search-disabled-repos, subscription-manager
This system is not registered with an entitlement server. You can use subscription-manager to register.
Resolving Dependencies
--> Running transaction check
---> Package FJSVfsep-SV-12.s390x 0:1201-2.e17 will be updated
---> Package FJSVfsep-SV-12.s390x 0:1201-3.e17 will be an update
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package... Arch... Version... Repository... Size
=====
Updating:
 FJSVfsep-SV-12... s390x... 1201-3.e17... Artifactory... 5.2 k

Transaction Summary
=====
Upgrade 1 Package

Total download size: 5.2 k
Is this ok [y/d/N]: y
Downloading packages:
No Presto metadata available for Artifactory
FJSVfsep-SV-12-1201-3.e17.s390x.rpm... | 5.2 kB 00:00:00
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Updating   : FJSVfsep-SV-12-1201-3.e17.s390x... 1/2
  Cleanup   : FJSVfsep-SV-12-1201-2.e17.s390x... 2/2
  Verifying  : FJSVfsep-SV-12-1201-3.e17.s390x... 1/2
```

```
Verifying   : FJSVfsep-SV-12-1201-2.e17.s390x.. 2/2
Updated:
  FJSVfsep-SV-12.s390x 0:1201-3.e17
Complete!
```

SLES procedure

Get the version of the installed package.

```
# rpm -qa | grep FJSVfsep-SV-12
FJSVfsep-SV-12.s390x 1201-2.e17          installed
```

To update a package to specific version, use `zypper up <pkg-name-pattern>-<version>`.

```
# zypper up FJSVfsep-SV-12-1201-3
Loading repository data...
Reading installed packages...
Resolving package dependencies...

The following package is going to be upgraded:
  FJSVfsep-SV-12

The following package has no support information from it's vendor:
  FJSVfsep-SV-12

1 package to upgrade.
Overall download size: 331.5 KiB. Already cached: 0 B. No additional space
will be used or freed after the operation.
Continue? [y/n/...? shows all options] (y): y
Retrieving package FJSVfsep-SV-12-1201-3.s390x
                                (1/1), 331.5 KiB (921.3 KiB unpacked)
Retrieving: FJSVfsep-SV-12-1201-3.s390x.rpm .....[done]

Checking for file conflicts: .....[done]
(1/1) Installing: FJSVfsep-SV-12-1201-3.s390x .....[done]
```

Note

For rollback, you need the package name and version of the installed product.

1.2.3 Check for updated packages

This section describes how to verify that the package has been updated correctly.

To check for the updated package, use `rpm -qa | grep <pkg-name>`.

```
# rpm -qa | grep FJSVfsep-SV-12
FJSVfsep-SV-12.1201-3
```


1.3 Package operations using downloaded RPM

This section describes package operations using the downloaded RPM, including:

- Download a package with GUI
- Download a package with CUI
- Update a package using the downloaded RPM
- Check for updated packages

1.3.1 Download package with GUI

This section describes how to download an RPM package with GUI operation. See section 1.3. 2 for how to download with yum client.

1.3.1.1 Locate an RPM package

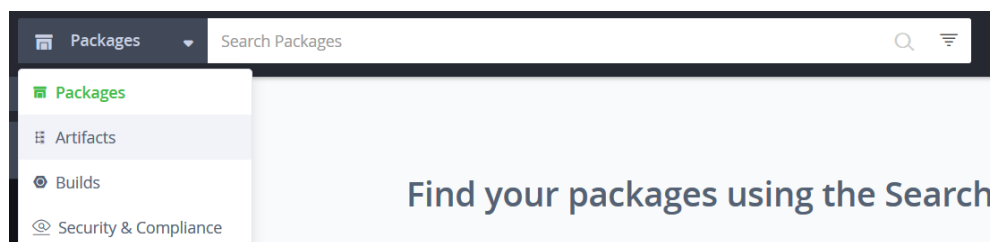
There are two options to locate an RPM package from Artifacts:

- Search Artifacts
- Browse Artifacts

1.3.1.2 Search Artifacts

This section describes how to search Artifacts.

1. Locate Search Bar at the top of JFrog UI window.



2. Enter the text to match the RPM package (e.g., `postgresql12*`).
3. Select the RPM package from search result list.
4. Click the link to selected to view the package details in the Artifacts Tree page.

Note

Free text search supports * and ? wildcards to help you narrow down your search.

For example, when searching for a package named `FJSVfsep-SV-12-1201-0.e17.s390x.rpm`, typing `FJSVfsep-SV-12*` or `FJSVfsep-SV-12*e17.s390x.rpm` will return a list of matching packages as a result.

1.3.1.3 Browsing Artifacts

This section describes how to browse Artifacts.

1. Click Artifactory > Artifacts - this will open the Artifacts Repository Browser page.
2. You can browse through repositories via mode below:

Tree browsing mode shows repositories as a tree

3. Expand the nodes in a tree to locate an RPM package.
4. Click to select and show the package details .

1.3.1.4 View an RPM package

This section describes how to view details of an RPM package.

Follow the steps below to view an RPM package.

1. Locate and select an RPM package to show the package details page.
2. Click **General** tab to view the summary of the package.
3. Click **Rpm Info** tab to view details of the package, including the information below:
 - Package Info
 - Provides
 - Change Log
4. Click **Propertires** tab to view the metadata of the package.

Note

Copy `<PATH_TO_REPODATA_FOLDER>` required in the Set Me Up section by following the steps below:

1. Select the immediate parent folder of the selected package from Tree Browser.
2. Locate **Repository Path:** and click **Copy to clipboard** to copy the patch.
Example: `EnterprisePostgres_AE_onIBMz_patch/12/RHEL7/`
3. Replace `<PATH_TO_REPODATA_FOLDER>` with `12/RHEL7`.

1.3.1.5 Download an RPM package

Follow the steps below to download an RPM package.

1. Locate and select the RPM package.
2. Click **Download** and follow the instructions on the browser to save the package locally.

1.3.2 Download a package with CUI

This section describes how to download a package with CUI.

RHEL procedure

To download a package, use `yum install --downloadonly --downloaddir=<download-dir> <pkg-name-pattern>`.

```
# yum install --downloadonly --downloaddir=~/.RPM_DIR FJSVfsep-SV-12
Loaded plugins: langpacks, product-id, search-disabled-repos, subscription-manager
This system is not registered with an entitlement server. You can use subscription-manager to
register.
Artifactory... | 964 B 00:00:00
Resolving Dependencies
--> Running transaction check
---> Package FJSVfsep-SV-12.s390x 0:1201-0.el7 will be updated
---> Package FJSVfsep-SV-12.s390x 0:1201-4.el7 will be an update
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package...      Arch...  Version...  Repository...  Size
=====
Updating:
  FJSVfsep-SV-12... s390x... 1201-4.el7... Artifactory... 33 M

Transaction Summary
=====
Upgrade 1 Package

Total download size: 33 M
Background downloading packages, then exiting:
No Presto metadata available for Artifactory
FJSVfsep-SV-12-1201-4.el7.s390x.rpm... | 33 MB 00:00:04
exiting because "Download Only" specified
```

SLES procedure

To download a package (specific version), use `zypper download <pkg-name>-<version>`.

```
# zypper download FJSVfsep-SV-12-1201-4
Loading repository data...
Reading installed packages...
Retrieving package FJSVfsep-SV-12-1201-4.s390x... (1/1), 331.5 KiB (921.3 KiB unpacked)
(1/1) /var/cache/zypp/packages/Artifactory/FJSVfsep-SV-12-1201-
4.s390x.rpm .....[done]

download: Done.
```

Note

Be sure to comply with the data download limit of Fujitsu during your download activity.

1.3.3 Update a package using the downloaded RPM

This section describes how to update a package to a specific version from a downloaded RPM.

Copy the RPMs to the target machine before updating a package.

Keep the version of the product installed on the target machine before updating the package. In case of rollback, use `rpm -qa | grep <pkg-name-pattern>`.

Get the version of the installed package.

```
# rpm -qa | grep FJSVfsep-SV-12
FJSVfsep-SV-12-1201-1.s390x
```

Use the command below to update the package.

```
#rpm -U FJSVfsep-SV-12-1201-4.s390x.rpm
```

1.3.4 Check for updated packages

This section describes how to verify that the package has been updated correctly.

To check for the updated package, use `rpm -qa | grep <pkg-name-pattern>`.

```
# rpm -qa | grep FJSVfsep-SV-12
FJSVfsep-SV-12-1201-4.s390x
```

1.4 Other operations

This section describes package operations with CUI, including:

- Rolling back a package with yum clients
- Rolling back a package using downloaded RPM

1.4.1 Rollback a package

This section describe how to rollback a package with CUI.

RHEL procedure

To rollback a package, use `yum downgrade <old-pkg-name>-<version>`.

Rollback requires the information: `<old-pkg-name>-<version>`.

```
# yum downgrade FJSVfsep-SV-12-1201-2.e17
Loaded plugins: langpacks, product-id, search-disabled-repos, subscription-manager
This system is not registered with an entitlement server. You can use subscription-manager to
register.
Resolving Dependencies
--> Running transaction check
---> Package FJSVfsep-SV-12.s390x 0:1201-2.e17 will be a downgrade
---> Package FJSVfsep-SV-12.s390x 0:1201-4.e17 will be erased
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package...          Arch...   Version...   Repository...   Size
=====
Downgrading:
  FJSVfsep-SV-12... s390x...  1201-2.e17... Artifactory...  33 M

Transaction Summary
=====
Downgrade 1 Package

Total download size: 33 M
Is this ok [y/d/N]: y
Downloading packages:
FJSVfsep-SV-12-1201-2.e17.s390x.rpm... | 33 MB  00:00:03
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : FJSVfsep-SV-12-1201-2.e17.s390x... 1/2
  Cleanup    : FJSVfsep-SV-12-1201-4.e17.s390x... 2/2
  Verifying  : FJSVfsep-SV-12-1201-2.e17.s390x... 1/2
  Verifying  : FJSVfsep-SV-12-1201-4.e17.s390x... 2/2

Removed:
  FJSVfsep-SV-12.s390x 0:1201-4.e17

Installed:
  FJSVfsep-SV-12.s390x 0:1201-2.e17

Complete!
```


SLES procedure

To rollback a package, use `zypper in --oldpackage <old-pkg-name>`.

Rollback requires the old package name or version.

```
# zypper in --oldpackage FJSVfsep-SV-12-1201-2
Reading installed packages...
Resolving package dependencies...

The following package is going to be downgraded:
  FJSVfsep-SV-12

The following package has no support information from it's vendor:
  FJSVfsep-SV-12

1 package to downgrade.
Overall download size: 331.5 KiB. Already cached: 0 B. No additional space will be used or freed
after the operation.
Continue? [y/n/...? shows all options] (y): y
Retrieving package FJSVfsep-SV-12-1201-2.s390x... (1/1), 331.5 KiB (921.3 KiB unpacked)
Retrieving: FJSVfsep-SV-12-1201-2.s390x.rpm... [done]

Checking for file conflicts: ... [done]
(1/1) Installing: FJSVfsep-SV-12-1201-2.s390x
```

1.4.2 Rollback a package using downloaded RPM

This section describe how to rollback a package using a downloaded RPM.

To rollback a package using a downloaded RPM, use `rpm -U --oldpackage <old-RPM-pkg-name>`.

```
#rpm -U --oldpackage FJSVfsep-SV-12-1201-1.s390x.rpm
```

Verify that the package has been updated correctly.

```
# rpm -qa | grep FJSVfsep-SV-12
FJSVfsep-SV-12-1201-1.s390x
```

Chapter 2 Download a notification file

This chapter describes how to download a bug fix notification file in Software Delivery Site, including:

Download a notification file

2.1 Download a notification file

To download a notification file, use `curl -u<USERNAME>:<PASSWORD> -O "<TARGET_FILE_PATH>"`.

```
# curl -u<USERNAME>:<PASSWORD> -O  
"https://fujitsusoftwaresupport.jfrog.io/artifactory/EnterprisePostgres_AE_onIBMz_Notification/<T  
ARGET_FILE_PATH>"
```

Check the notification file in your OS editor.