

SPECCHIO VM Upgrade Guide

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Upgrade Scenarios

There are three possible scenarios when upgrading SPECCHIO.

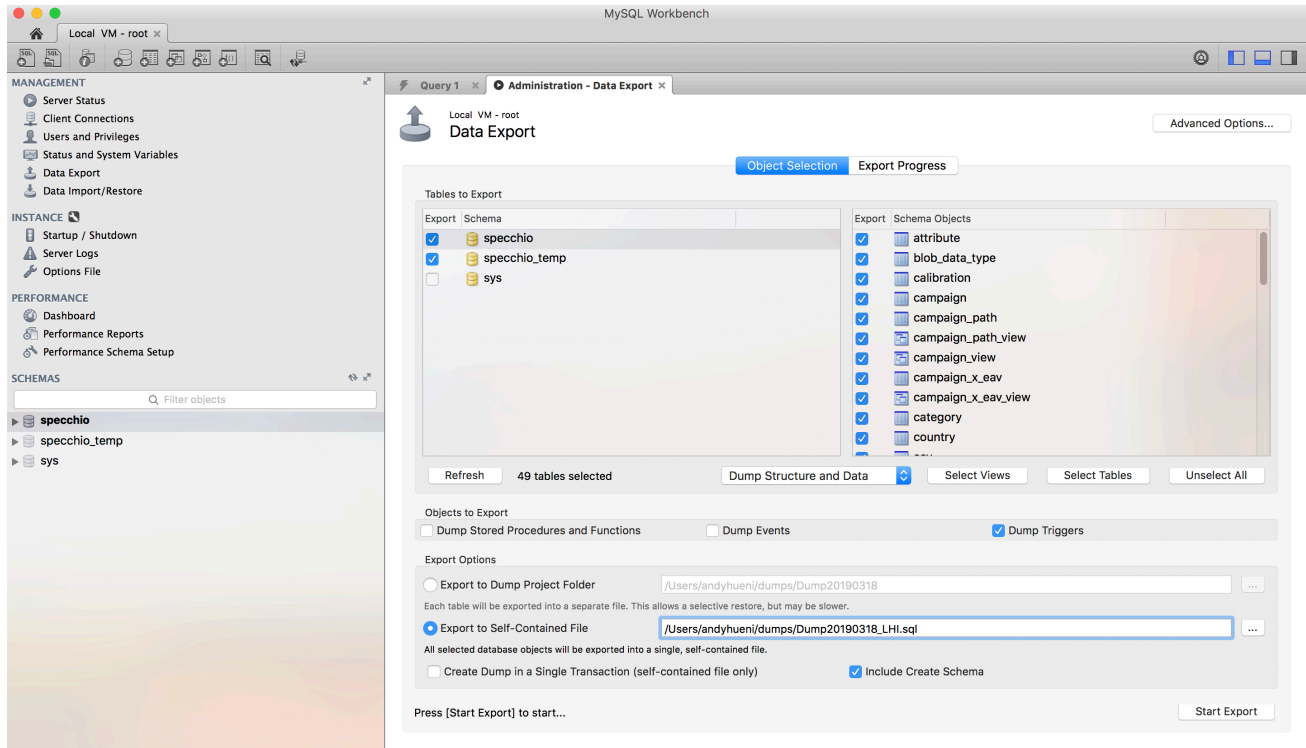
1. Upgrading from a SPECCHIO VM dates earlier than March 2019, which does not yet support the new SPECCHIO database backup tool shipped with the later versions
2. Updating the SPECCHIO client and server inside the virtual machine.
3. Replacing the virtual machine image with a newer version of it.

Upgrade from an old SPECCHIO VM

This section applies only when upgrading from an older SPECCHIO VM (per March 2019), which was shipped without the SPECCHIO database backup tool.

Creating and Exporting a dump in the old SPECCHIO VM

Use MySQL Workbench to dump the SPECCHIO tables into a SQL file. Make sure to tick ‘Include Create Schema’.



Export your dump to your host system by following the section on ‘Transferring the dump’ in this guide.

Transferring and Importing an old dump in the new SPECCHIO VM

Transfer the dump into the new SPECCHIO VM by following the steps on ‘Transferring the dump’ in this guide.

Import the dump into your new VM by using the command line. Open a Terminal and type:

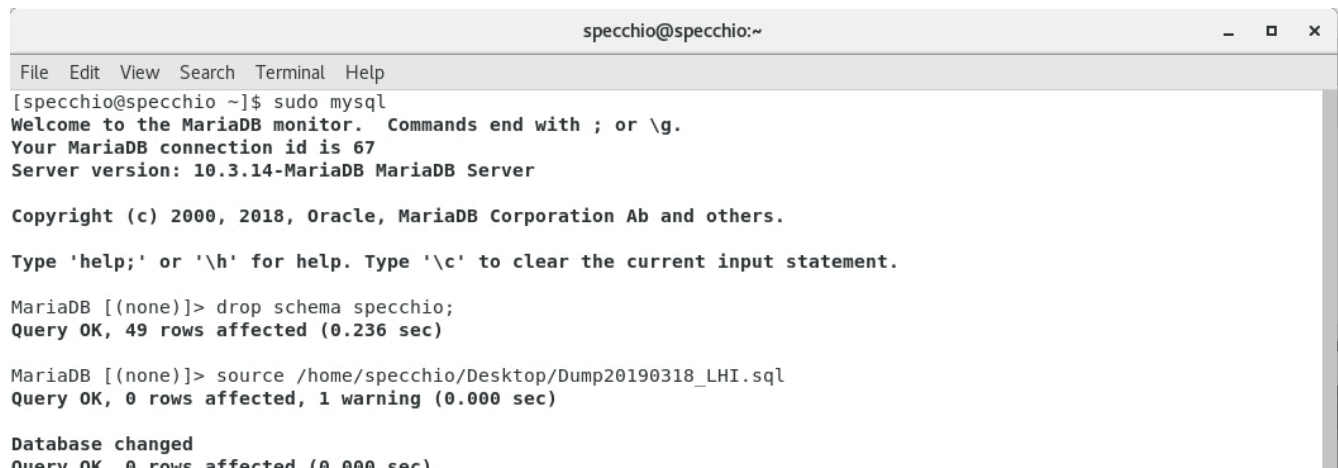
```
sudo mysql
```

This opens the prompt of MySQL (MariaDB).
Remove the existing SPECCHIO schema by typing:

```
drop schema specchio
```

Load your dump by typing:

```
source <path to your dump>
```

A screenshot of a terminal window titled 'specchio@specchio:~'. The terminal shows the execution of 'sudo mysql' which opens the MariaDB monitor. The user enters 'drop schema specchio;' and receives the message 'Query OK, 49 rows affected (0.236 sec)'. Then, the user enters 'source /home/specchio/Desktop/Dump20190318_LHI.sql' and receives 'Query OK, 0 rows affected, 1 warning (0.000 sec)'. The terminal also displays copyright information for Oracle and MariaDB, and instructions on how to use help and clear the input statement.

```
specchio@specchio:~  
File Edit View Search Terminal Help  
[specchio@specchio ~]$ sudo mysql  
Welcome to the MariaDB monitor.  Commands end with ; or \g.  
Your MariaDB connection id is 67  
Server version: 10.3.14-MariaDB MariaDB Server  
  
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.  
  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
  
MariaDB [(none)]> drop schema specchio;  
Query OK, 49 rows affected (0.236 sec)  
  
MariaDB [(none)]> source /home/specchio/Desktop/Dump20190318_LHI.sql  
Query OK, 0 rows affected, 1 warning (0.000 sec)  
  
Database changed  
Query OK, 0 rows affected (0.000 sec)
```

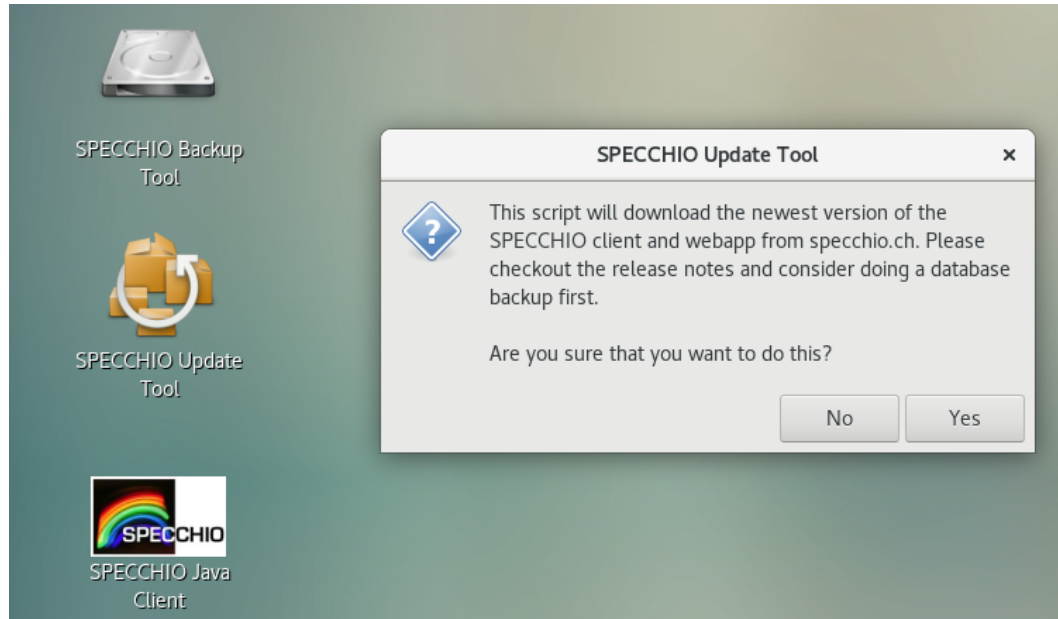
Update the admin password in the imported database to match the default password of sdb_admin user in the new SPECCHIO VM:

```
ALTER USER 'sdb_admin'@'localhost' IDENTIFIED BY 'ALSOCHANGEME';  
Update specchio.specchio_user set password = MD5('ALSOCHANGEME')  
where user = 'sdb_admin';  
flush privileges;
```

To complete the upgrade, carry out the schema upgrades via the SPECCHIO client as described in this guide: Apply Schema Changes.

In-place Upgrade

Most of the times you simply want to get your hands on a new SPECCHIO release. For this, you need to start the “SPECCHIO Update Tool” and confirm the dialog. The script will then download the most recent SPECCHIO client and webapp release.



You can now skip to the chapter “Post-upgrade tasks” for tasks you might have to do after an upgrade.

Virtual Machine Image Upgrade

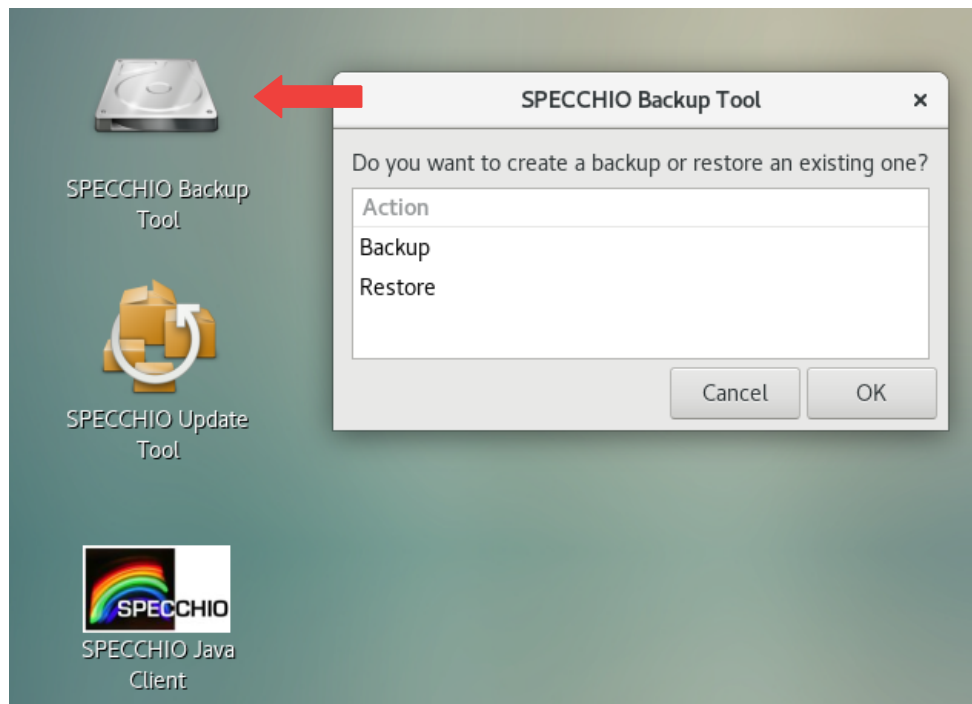
To upgrade the virtual machine image you want to download the newest version from the website. Then start the new virtual machine as well as the old one side by side.

By default, the only persistent thing inside the virtual machine is the database. The database can be exported through the built-in SPECCHIO backup tool. This export (also called database-dump) can then be transferred to the new virtual machine and imported using the same tool.

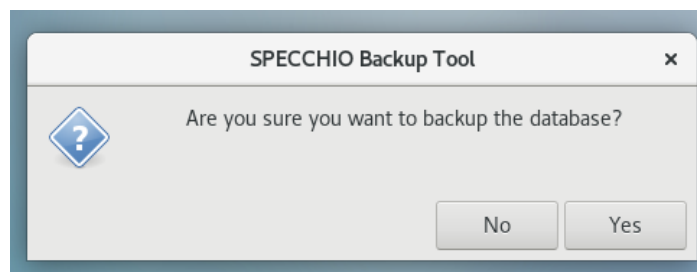
You might also consider creating a snapshot of your current virtual machine (just in case). Check out the [VirtualBox manual](#) on how to do this.

Database Export

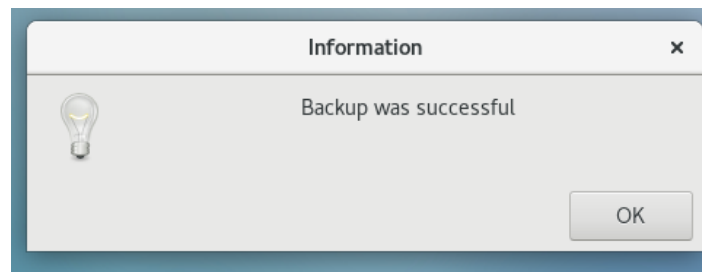
Simply click on the desktop link called “SPECCHIO Backup Tool”. You will then be asked whether you would like to do a backup or restore an existing database-dump. Select “Backup”:



Confirm once more that you want to create a backup. Also, ensure that your virtual machine has enough space to store the database export:



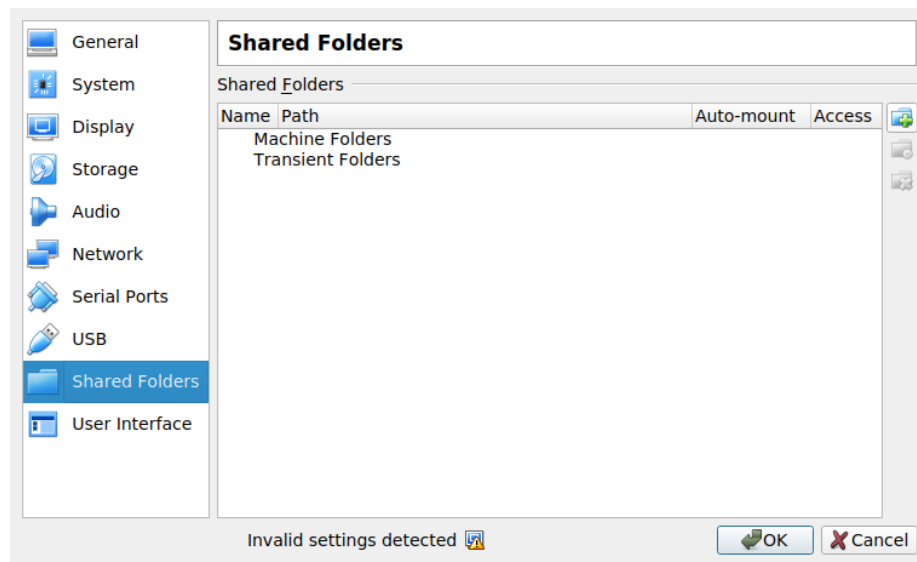
Dependent on the size of your database you will see a progress bar. After the export has finished you should see a confirmation that the backup was successful:



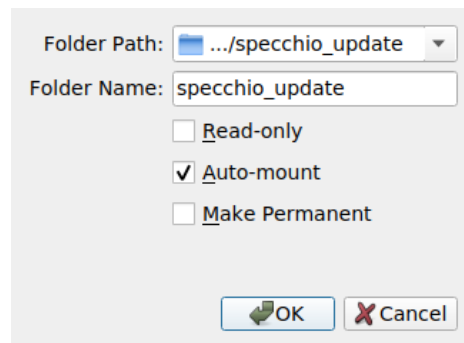
Transferring the dump

To transfer your backup to the new virtual machine image we recommend that you create a shared folder and copy the database dump to your host system. Then create a second shared folder inside the new virtual machine and restore the dump from there.

Open the shared folders menu (“Devices” → “Shared Folders” → “Shared Folders Settings...”). Then click on the folder with the green plus symbol on it:



Create a new directory on your system and select it as “Folder Path”. Name the shared folder “specchio_update” and ensure the “Auto-mount” feature is selected.



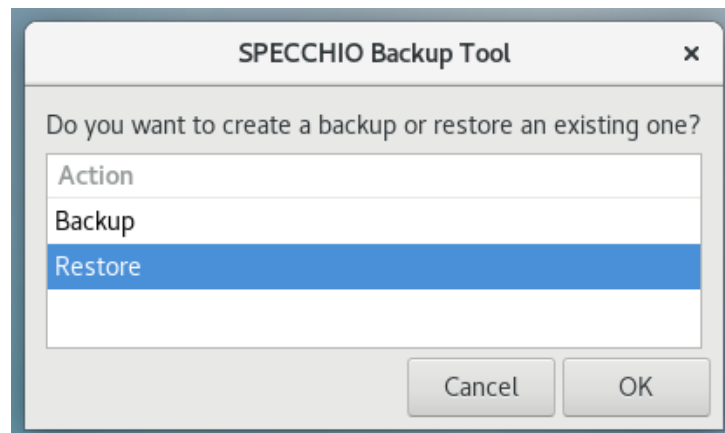
You then want to restart the virtual machine. Once you’re logged in again you should see a new symbol on your desktop called “sf_specchio_update”. Open up a terminal and copy your backup with rsync to the shared folder. (*sudo rsync -P Desktop/SPECCHIO_*.sql.gz /media/sf_specchio_update/*)

```
specchio@specchio:~  
File Edit View Search Terminal Help  
[specchio@specchio ~]$ sudo rsync -P Desktop/SPECCHIO_20190309_150124.sql.gz /media/sf_specchio_update/  
SPECCHIO_20190309_150124.sql.gz  
 215,074 100% 173.86MB/s   0:00:00 (xfr#1, to-chk=0/1)  
[specchio@specchio ~]$
```

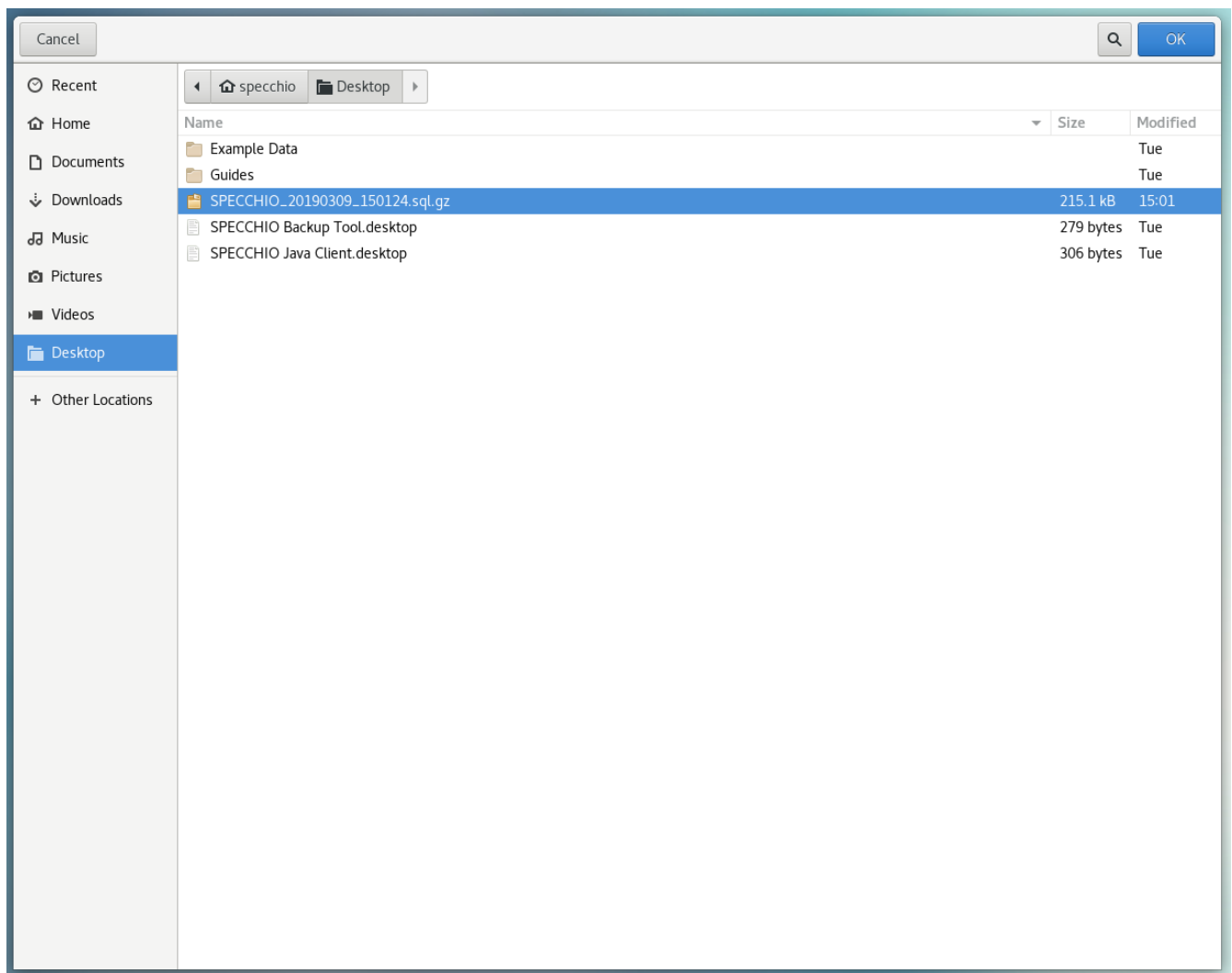
Create the shared folder on the new virtual machine, reboot and run rsync again. This time with the arguments reversed. (*sudo rsync -P /media/sf_specchio_update/SPECCHIO_*.sql.gz ~/Desktop/*).

Importing the dump

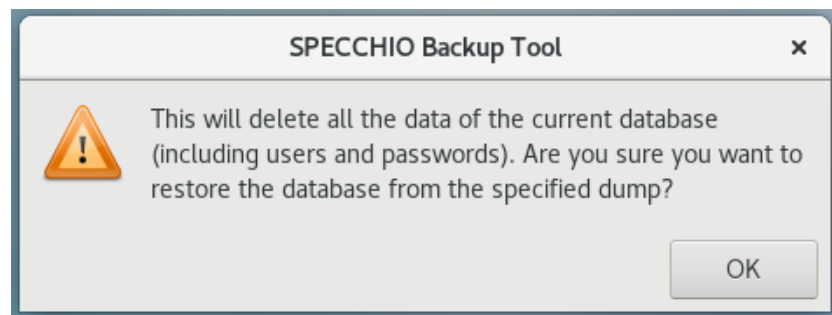
To import the database backup you want open the SPECCHIO backup tool but this time choose the “Restore” action.



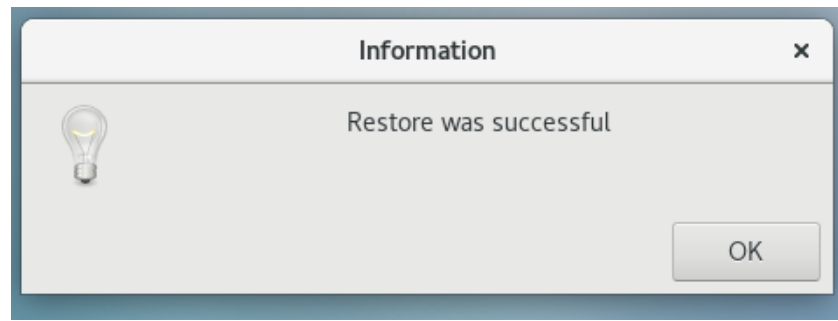
You will then be asked to specify the dump from which you want to restore:



Restoring a database will delete the current database and will also reset all users and passwords to the version of the dump. If you are ok with this, confirm the warning dialog:



Once again dependent on the size of the dump you will see a progress bar or not. Once the import finished you should see the following infobox:



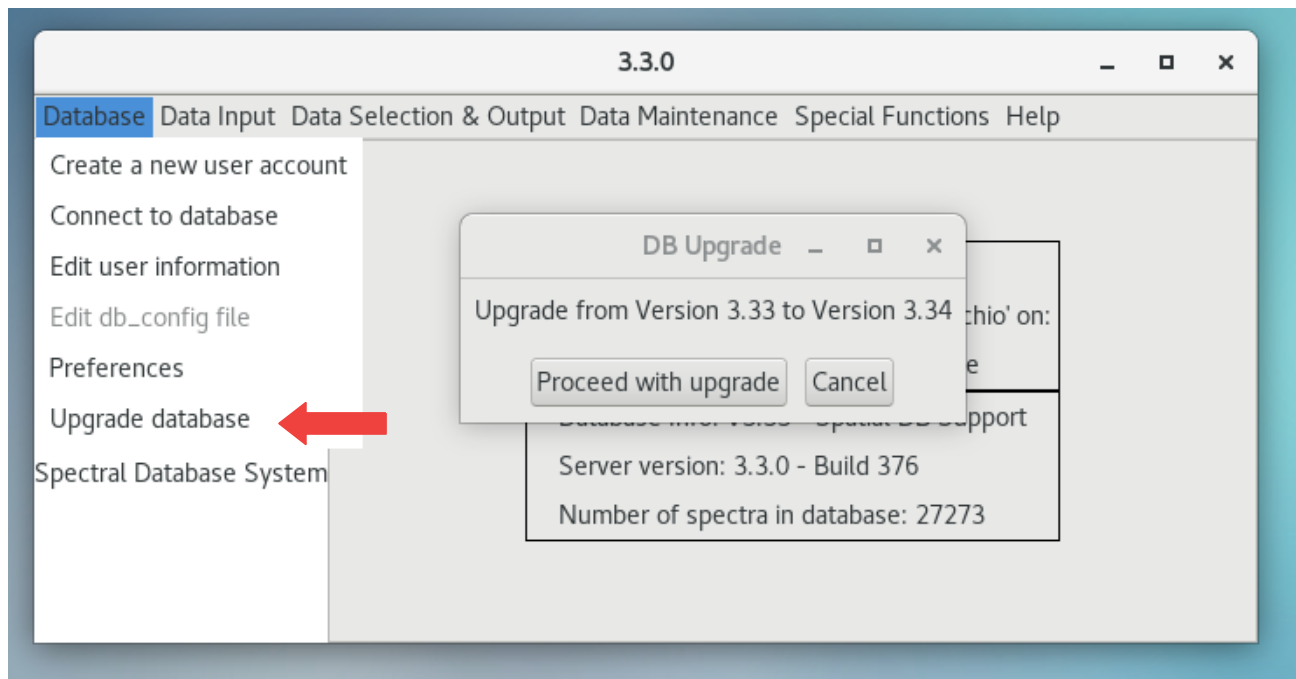
Congratulations you've successfully transferred all your data to the new virtual machine.

Post-upgrade tasks

Apply Schema Changes

Regardless of the scenario you chose, there might be pending schema changes that need to be applied. To verify this, check out the SPECCHIO_ReleaseNotes.pdf inside the Guide folder.

If there are schema migrations simply start the SPECCHIO client select “Upgrade database” from the “Database” context menu.



You're now ready to use the new features. Have fun!