This guide contains information on how to use the Feature Extraction Migration Utility to transfer grid templates, protocols, and metric sets from Feature Extraction versions 10.7.3 and 11.0 to Feature Extraction version 11.5.
About Agilent Feature Extraction Migration Utility

Because Feature Extraction 11.5 stores data differently than Feature Extraction 10.7.3 and 11.0, it is not possible to upgrade directly from the older version and preserve the data. The Migration Utility provides a way to move grid templates, protocols, and metric sets from Feature Extraction 10.7.3 (MSSQL or MySQL database) or 11.0 (MySQL database) to Feature Extraction 11.5. (PostGreSQL database).

You can use the Migration Utility to migrate data for the following scenarios:

- Feature Extraction 10.7.3 and/or Feature Extraction 11.0 are installed on a different computer than Feature Extraction 11.5.
- Feature Extraction 10.7.3 and/or Feature Extraction 11.0 are installed on the same computer as Feature Extraction 11.5.

NOTE

Feature Extraction 11.0 and Feature Extraction 11.5 cannot co-exist on the same computer simultaneously. To migrate data from version 11.0 to 11.5, first export the data from Feature Extraction 11.0, then uninstall Feature Extraction 11.0. You can then install Feature Extraction 11.5 and import the data.

NOTE

It is not necessary to close Feature Extraction while you run the Migration Utility. However, make sure that the previous version of Feature Extraction (10.7.3 or 11.0) is not running at the same time as Feature Extraction 11.5, and that you are not extracting data.

Close the Migration Utility before extracting data in Feature Extraction.
Installing the Migration Utility


2. Unzip the MigrationUtility.zip file to a location where you want to install the Migration Utility software.

   A Migration_Utility folder is created that contains the Migration Utility.

**NOTE**

To export data from Feature Extraction 10.7.3, install the Migration Utility on the same computer where Feature Extraction 10.7.3 is installed.

To export data from Feature Extraction 11.0, install the Migration Utility on the same computer where Feature Extraction 11.0 is installed.

To import data to Feature Extraction 11.5, install the Migration Utility on the same computer where Feature Extraction 11.5 is installed.

If Feature Extraction 10.7.3 or 11.0 is installed on the same computer where Feature Extraction 11.5 is installed or will be installed, only one copy of the Migration Utility software is required. (Note that versions 11.0 and 11.5 cannot be installed on the same computer simultaneously.)
Running the Migration Utility

Complete migration of data from Feature Extraction 10.7.3 or 11.0 to Feature Extraction 11.5 is performed by the program in two steps. First, the grid templates, protocols, and metric sets are exported from Feature Extraction 10.7.3 or 11.0. Then, the exported data are imported to Feature Extraction 11.5.

• If the previous version of Feature Extraction (10.7.3 or 11.0) is installed on a different computer than Feature Extraction 11.5, first run the Migration Utility on the computer with the previous version of Feature Extraction to export the data. Then, run the Migration Utility on the computer with Feature Extraction 11.5 to import the data.

If you are migrating data from one computer to another, make sure that the computer with Feature Extraction 11.5 has access to the folder where you are exporting the data. If not, after you export the data, you must copy the Migration Utility Output folder from the computer with Feature Extraction 10.7.3 or 11.0 to the Migration Utility installation folder on the computer with Feature Extraction 11.5.

• If Feature Extraction 10.7.3 and Feature Extraction 11.5 are installed on the same computer, both steps (export from version 10.7.3 and import into version 11.5) are performed when you start the Migration Utility. See “To perform data migration from Feature Extraction 10.7.3 to Feature Extraction 11.5 on a single computer” on page 5.

• If Feature Extraction 11.0 is currently installed on the same computer where you want to install Feature Extraction 11.5, first run the Migration Utility in Feature Extraction 11.0 to export the data. Then, uninstall Feature Extraction 11.0 and install Feature Extraction 11.5. Finally, run the Migration Utility in Feature Extraction 11.5 to import the data.

Grid Templates exported by the Migration Utility are not compatible with Agilent Genomic Workbench or Agilent CytoGenomics.

The Migration Utility does not migrate manual grid files that were created in Feature Extraction 10.7.3.
Do not run extractions or perform export, import, or delete operations within Feature Extraction while the Migration Utility is exporting or importing data.

To perform data migration from Feature Extraction 10.7.3 to Feature Extraction 11.5 on a single computer

Use the instructions below if you have Feature Extraction 10.7.3 and Feature Extraction 11.5 installed on the same computer and you want to migrate data from version 10.7.3 to version 11.5.

These instructions do not apply to data migration from version 11.0 to version 11.5 because these two versions cannot be installed on the same computer simultaneously. Instead, you must first export the data from Feature Extraction 11.0 and then uninstall Feature Extraction 11.0. You can install Feature Extraction 11.5 and import the data that you exported. See “To export data from a previous version of Feature Extraction (10.7.3 or 11.0)” on page 7 and “To import data to Feature Extraction 11.5” on page 9.

1. Browse to the folder where the Migration Utility software is installed and double-click MigrationUtility.exe.

The MigrationUtility dialog box opens. The program recognizes that Feature Extraction 10.7.3 and Feature Extraction 11.5 are both installed, and selects the import and export options by default. Options to export grid templates, protocols, and metric sets are also selected.
To perform data migration from Feature Extraction 10.7.3 to Feature Extraction 11.5 on a single computer

2 (Optional) Clear the boxes for data you do not want to migrate (Grid Templates, Protocols, MetricSets).

3 By default, the program exports the data to the <Migration Utility installation folder>\Migration_Utility\Output folder. To change the export location,
   a Under Export, click **Browse**.
   b In the Browse for Folder dialog box, locate the folder where you want to export the data.
   OR
   To create a folder, browse to a location and click **Make New Folder**, then type the name of the folder where you want to export the data.
   c Click **OK**.

4 Click **Start**.

   The program exports the selected data from Feature Extraction 10.7.3. During data export, a progress bar appears in the dialog box. After the data is exported from Feature Extraction 10.7.3, the program imports the data to Feature Extraction 11.5.

   During data export, a progress bar appears in the dialog box.
To export data from a previous version of Feature Extraction (10.7.3 or 11.0)

1. On the computer where Feature Extraction 10.7.3 or 11.0 is installed, browse to the folder where you installed the Migration Utility software, and start the MigrationUtility.exe program.

   The MigrationUtility dialog box appears. When the program starts, it creates Output and Logs folders in the Migration Utility installation folder.

   The program recognizes that Feature Extraction 10.7.3 or 11.0 software is installed, and by default selects to export grid templates, protocols, and metric sets.

   **NOTE** If Feature Extraction 10.7.3 and Feature Extraction 11.5 are installed simultaneously on the same computer, the program recognizes both programs, and selects the **Export from FE v10.3** and **Import to FE v11.5** options by default.

5. When data export is complete, a message appears. Click **OK**.
To export data from a previous version of Feature Extraction (10.7.3 or 11.0)

2 (Optional) Clear the boxes for data you do not want to migrate (Grid Templates, Protocols, MetricSets).

3 By default, the program exports the data to the <Migration Utility installation folder>\Migration_Utility\Output folder. To change the export location,
   a Under Export, click **Browse**.
   b In the Browse for Folder dialog box, locate the folder where you want to export the data.
      OR
   To create a folder, browse to a location and click **Make New Folder**, then type the name of the folder where you want to export the data.
   c Click **OK**.

**NOTE** Make sure you have write permissions in the Output folder location.

4 Click **Start**.

The program exports the selected data from Feature Extraction 10.7.3 or 11.0. During data export, a progress bar appears in the dialog box.
To import data to Feature Extraction 11.5

5 When data export is complete, a message appears. Click OK.
Exported data is saved in the designated Output folder, in separate folders: GridTemplates, MetricSets, and Protocols.

CAUTION Do not use exported grid template files in Agilent Genomic Workbench, Agilent CytoGenomics, or in any program other than Feature Extraction 11.5. “FE_Only” is appended to the names of exported grid template files.

To import data to Feature Extraction 11.5

1 On the computer where Feature Extraction 11.5 is installed, browse to the folder where you installed the Migration Utility software, and double-click the MigrationUtility.exe program.
The MigrationUtility dialog box appears. The program recognizes that Feature Extraction 11.5 software is installed, and by default selects to import grid templates, protocols, and metric sets.

NOTE Make sure you have write permissions in the Output folder before you start the Import operation.

2 (Optional) clear the boxes for data you do not want to migrate.

3 By default, the program imports the data from the <Migration Utility Installation Folder>\Migration_Utility\Release\Output folder. To change the import location,
   a Under Export, click Browse.
   b In the Browse for Folder dialog box, locate the folder where the exported data is located.

4 Click Start.
The program imports the selected data from the Import Location folder. During data import, the progress is displayed in the MigrationUtility dialog box.

5 When import is complete, a message appears. Click OK.

NOTE If not all files are imported, check the log file for further information. See “To display the log file” on page 11.
To stop data migration

**NOTE** Grid templates imported using the Migration Utility are named <original design file name>_FE_Only.

**To stop data migration**

1. To stop data migration in progress, click **Abort**.
2. A message appears for you to confirm. Click **Yes** to stop the data migration.

**NOTE** The data migration does not abort until you click **Yes**.

If data migration is stopped during data export, the export operation stops and the current output file is not saved in the Output folder. All files exported before the abort operation remain in the Output folder. No further files are exported.

If data migration is stopped during data import, the current file import is completed, but no additional files are imported. Data imported before the abort operation are available in Feature Extraction 11.5.
Troubleshooting

During data migration, the status of each data migration operation is saved in a log file. The log file is useful in troubleshooting.

To display the log file

1. Browse to the Logs folder in the Migration Utility export/import location. By default, this is `<Migration Utility installation folder>\Migration_Utility\Logs`. If you changed the default location, browse to that location.
2. Using a text editor, open the Logs.txt file.

The Migration Utility log file is displayed.

Figure 4  Migration Utility log file
## Error messages

When a problem occurs during data migration, a message is displayed that provides information about what happened. The following table describes possible messages and explanations.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Message displayed</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feature Extraction (v 10.7.3, 11.0, or 11.5) is not installed on the system.</td>
<td>The Migration utility requires Feature Extraction Software (10.7.3, 11.0, or 11.5) to be installed on the system. Please check if one of these versions are installed on the system.</td>
<td>Check log file for details. Check that Feature Extraction 10.7.3, 11.0, or 11.5 is installed on the computer.</td>
</tr>
<tr>
<td>Incorrect connection parameters provided.</td>
<td>Error in connecting to FE database. Please check log file at <code>&lt;Migration_utility_executable_path&gt;\Logs</code> for details.</td>
<td>Verify that the database service is running on the computer. Also, check that the database is properly installed and accessible through Feature Extraction.</td>
</tr>
<tr>
<td>Incorrect export folder path.</td>
<td>Error in creating Grid Template/Protocol/Metric Set XML. Please check log file at <code>&lt;Migration_utility_executable_path&gt;\Logs</code> for details.</td>
<td>Check that the export folder is located in the provided path. Also check if the user has access rights to write the file in that path. Check the log file for more details.</td>
</tr>
<tr>
<td>Incorrect import folder path.</td>
<td>Error in importing Grid Template/Protocol/Metric Set XML. Please check log file at <code>&lt;Migration_utility_executable_path&gt;\Logs</code> for details.</td>
<td>Check that the import folder is located in the provided path and if user has read access rights. Also check that the GridTemplates, Protocols, and MetricSets folders are present at this location. Check log file for more information.</td>
</tr>
<tr>
<td>Not enough space.</td>
<td>Not enough disk space to generate Grid Template XML.</td>
<td>Check disk space available at the destination folder drive and create some free disk space.</td>
</tr>
<tr>
<td>One instance of the utility is already running on the system and user tries to launch another instance</td>
<td>Migration Utility is already running on this computer. Only one instance of Migration Utility is allowed per computer.</td>
<td>Only one instance of the utility can run at a time. Do not start the Migration Utility while it is already running.</td>
</tr>
</tbody>
</table>
### Table 1 Error messages (continued)

<table>
<thead>
<tr>
<th>Problem</th>
<th>Message displayed</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not enough physical memory left to migrate large data files.</td>
<td>Not enough storage is available to process this command.</td>
<td>Close all unnecessary programs and try again. Make sure the computer meets the memory requirements for Feature Extraction.</td>
</tr>
<tr>
<td>Tried to import a design that was previously imported.</td>
<td>Either grid template <code>&lt;Migration Utility Installation_folder&gt;\Migration_Utility\Output\GridTemplates\&lt;GridFileName&gt;_FE_Only.xml</code> already exists or unable to write to Temp folder while importing.</td>
<td>Grid template already exists in database.</td>
</tr>
</tbody>
</table>
In this book

This guide contains information on how to use the Feature Extraction Migration Utility to transfer grid templates, protocols, and metric sets from Feature Extraction version 10.7.3 or 11.0 to Feature Extraction version 11.5.