Windows® 10

Upgrade Instructions

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Contents

Overview

This document is for customers who are upgrading a BD cytometer system to one of the following software applications:

- BD FACSDiva™ software version 9.0 (from v8.0 and later)

- BD FACSCanto™ clinical software version 4.0 (from v3.0 and later)

- BD FACS™ SPA software version 6.0 (from v5.0 and later)

These applications run on the Microsoft® Windows® 10 (64-bit) operating system. The workstation model HP Z240 can be upgraded to the Windows 10 operating system by a BD Field Service Engineer (FSE).

All other workstation models are not supported for the upgrade, so new workstations must be purchased prior to the upgrade. Contact your BD sales representative for assistance.

For both upgraded workstations and new workstations, you must back up all the data from the existing workstation in order to have that data available to you after the upgrade.

NOTE It is very important that you perform this backup procedure prior to the BD FSE arriving to perform the upgrade installation. The BD FSE will contact you in advance to confirm that this procedure has been done.

NOTE You are solely responsible for backing up your patient data.

Before you begin

You will need an external drive, network drive, or server to back up data. The external device must be available after the upgrade.

Other considerations before you start:

1 Identify other user-supplied software applications that will be installed after the operating system is upgraded.

Confirm that you have the needed installers for other applications you want to install, and that they are compatible with the Windows 10 64-bit operating system. If the software applications are not native 64-bit, they might not function properly.

2 If your workstation is part of a facility network, contact your local IT department to schedule a time to properly add the workstation and printer back to your facility's network following the upgrade.

Preparing BD Cytometer System for Data Migration

Perform the following actions to prepare for the upgrade to BD FACSDiva software v9.0 and BD FACSCanto clinical software v4.0 on Windows 10:

- Confirm database size

- Export experiments from the Browser

- Create an Archive folder

- Back up the database

- Copy Data to the Archive folder

- Copy the Archive folder to an external drive

The time required to complete this procedure depends on the amount of data stored and custom file locations on the computer. Ensure that you have enough time to complete the procedure.

NOTE Complete this procedure prior to the scheduled upgrade installation. Your BD FSE will contact you to confirm.

NOTE If you need guidance regarding this procedure contact BD technical support at 877.232.8995. If you need a BD technical scientist to provide onsite support, contact your BD representative. There may be additional charges for onsite support.

Confirm Database Size

The database must not exceed 40% of the available disk space before the upgrade. This ensures that there is enough diskspace available to back up your data.

For more information about Verifying your database size, see the *BD FACSDiva™ Software Reference Manual,* Verifying Database Size.

1 Open My computer and navigate to the BDDatabase folder, at D:\BDDatabase (some computers may have this located on the C drive).

2 Right-click the BDDatabase folder and select **Properties.**

3   In the Properties window confirm the Size does not exceed 40% of the available disk space.

If the database is too large, you must export experiments from the Browser until the database is under 40% of the available disk space.

Export Experiments from the Browser

Remove any unused or old experiments that you do not need in your Browser after the upgrade.

NOTE   This should be part of your lab's weekly data management procedures. If this hasn't been done recently or your database exceeds 40% of the available disk space, then you must perform this procedure prior to the upgrade.

Exported experiments can be imported back into the Browser after the upgrade process.

For more information about Exporting Experiments, see the *BD FACSDiva™ Software Reference Manual*, Exporting and Importing Experiments.

Perform these steps for each user login:

1   Select the experiments in the Browser to be exported.

2   Select **File > Export > Experiments**.

3   Make appropriate selections in the Export Experiments dialog.

- Select the **Delete experiments after export** checkbox to delete the listed experiments from the Browser after exporting.

  You can also choose to leave this selection cleared and manually delete the experiments from the Browser after export.

- Specify the directory where the experiments will be stored. By default, experiments are exported to D:\BDExport\Experiment.

4   Click **OK**.

Create an Archive folder

The Archive folder will store all your data and any additional saved information that you will need after the upgrade.

Right-click the desktop and choose **New > Folder**, rename the folder *Archive*.

Back up the Database

Use the BD FACSDiva Data Manager Utility to make a backup of the BD FACSDiva database.

NOTE   This should be part of your lab's weekly data management procedures. To ensure that the latest backup is available, we suggest performing this procedure immediately prior to the upgrade.

For more information about Using the Data Manager Utility, see the *BD FACSDiva™ Software Reference Manual*, Using the Data Manager Utility.

1   Exit BD FACSDiva software.

2   Start the BD FACSDiva Data Manager Utility.

3   In the Backup tab, click **Browse**.

4   Navigate to the Archive folder that you created on the desktop.

5   Click **New Folder** to create a new folder named Backup_today's date.

6   Click **Save**.

7   Click **Backup**.

Copy Data to the Archive folder

Copy the necessary BD FACSDiva folders to the archive folder.

NOTE If user-generated data is stored in customized file locations instead of the default locations, make sure to copy the data from the customized locations to the Archive folder as well.

NOTE If you have user-generated data that is not stored in the BD default locations, you can optionally use an external drive to back up the entire computer. See Additional Information: Using an External Drive on page 7 for more information.

1   Copy the following BD FACSDiva items to the Archive folder:

Item	Navigate to:	Copy:
Exported files	D:\BDExport	BDExport folder
User login tracking	C:\ProgramData\BD\Shared	YYYY\MM.csv files (optional)

BD FACSCanto clinical software files will be transferred during the upgrade process.

2   Copy any additional folders or data that resides on your workstation that you want to preserve.

Copy the Archive folder to an External Drive

1   Open the Archive folder and ensure that all the folders, data, and other information needed are listed in the folder.

2   Copy the Archive folder to an external drive, network drive, or server.

Do not delete the Archive folder after transfer. Leave the Archive folder with all its contents on the desktop.

Additional Information: Using an External Drive

To ensure that you have captured all the data stored in non-BD default locations, using an external drive to capture all the data on the computer is a viable option.

1   Insert the external drive into a USB port.

2   Copy the C and D drives (if both exist) to the external drive.

3   Copy all desktop folders to the external drive.

Summary of the Upgrade Process

The BD FSE will perform the following steps on your system to upgrade the operating system and install the new software:

- Reimage your hard drive, deleting all data on the system. Alternatively, your workstation will be replaced.

- Install BD FACSDiva and BD FACSCanto clinical software (if needed) on the Windows 10 system.

- Restore the system folders (folders containing exported data and non-BD data will not be restored) and database you archived before the FSE arrived.

- Qualify the upgrade.

After the Upgrade

Once the BD FSE has completed the upgrade, complete the following steps to ensure that the tasks outside of the FSE's control are performed on your upgraded computer.

Copy the backed-up files from the Archive folder.

1   In the Archive folder, copy the following files and folders as needed.

- BDExport folder: copy all exported files that you would like to be accessible to you. The Templates folder has already been transferred for you.

- User login tracking: copy the YYYY\MM.csv files that you would like to be accessible to the C:\ProgramData\BD\Shared.

2   If you have customized file locations:

a   Create the file locations on the new system.

NOTE   Your local IT department might need to be present to create these customized file locations for you.

b   Copy any user-generated data, stored in the Archive folder that you would like to be accessible, to the customized file locations.

c   If you export to these locations, set the preference in FACSDiva and FACSCanto clinical software appropriately.

3   Re-install any user-supplied applications that you backed up prior to the upgrade.

4   As needed, import any exported experiments back into the upgraded system.

a   Select **File > Import > Experiments**.

b   Locate the experiment to be imported in the dialog that opens.

c   Select the folder containing the required experiments and click **Import**.

5   (BD FACSCanto clinical software only) If you have optimized the settings on your cytometer prior to the upgrade process, you will have to perform the optimization again once the upgrade is completed. The .opt file from the previously optimized system will not work on the upgraded system. See your cytometer manual for instructions on optimizing settings.

6   When you have copied all the necessary files and folders from the Archive folder, you can delete the folder, if needed.

See the *BD FACSDiva™ Software Reference Manual* for more details on importing experiments.

Preparing an Offline Workstation for Data Migration

If you have an offline analysis workstation running BD FACSDiva software that you want to upgrade to version 9.0, follow these steps. These instructions also apply if you are upgrading BD FACSCanto clinical software to version 4.0.

NOTE You must supply the Windows 10 (64-bit) operating system. Verify that the workstation meets the minimum requirements for the BD FACSDiva software v9.0.

Analysis-only workstations must be equipped with an Intel® i5-650 processor, or higher, with at least 4 GB of RAM and the Windows 10 64-bit operating system (US English only). For optimal performance and full analysis capability, we recommend that you purchase a workstation that has been validated by BD Biosciences. Contact your sales representative for more information.

NOTE If the D drive does not exist on an offline workstation, the BD file paths revert to the C drive.

Back up the Database

1 Exit BD FACSDiva software.

2 Start the BD FACSDiva Data Manager Utility. In the Backup tab, click **Browse.**Navigate to the Archive folder that you created on the desktop.

3 Click **New Folder** to create a new folder named Backup_today's date.

4 Click **Save**.

5 Click **Backup**.

   See the *BD FACSDiva™ Software Reference Manual* for instructions on using the Data Manager Utility.

Copy Data to an external drive

1 Copy the following BD FACSDiva items to the Archive folder:

Item	Navigate to:	Copy:
Exported files	D:\BDExport	BDExport folder
User login tracking	C:\ProgramData\BD\Shared	YYYY\MM.csv files (optional)

2 Copy any additional folders or data that resides on your workstation that you want to preserve.

Upgrading the System

1 Install the Windows 10 (64-bit) operating system.

2 After the new operating system is installed, install BD FACSDiva software v9.0.

See the *BD FACSDiva™ Software Installation Guide* for instructions.

a Follow the directions for an analysis-only workstation.

b For the database option, select *New empty database from the install media*.

If you are installing BD FACSCanto clinical software, see the *BD FACSCanto™ Clinical Software Reference Manual*.

Restoring your Database

1 Start the Data Manager utility.

2 Click the **Restore** tab.

3   Locate your database backup.

To change the path, click the **Browse** button or enter the path in the **Directory** field.

4   Click **Restore.**

5   Click **OK** to continue.

6   Click **OK** to close the Data Manager utility.

For more details about restoring a database, see Restoring a Database in the *BD FACSDiva™ Software Reference Manual*.

After the Upgrade

1   Restore any other data files or applications that you backed up before starting the upgrade process, following the steps in After the Upgrade on page 7.

SPA Upgrade Procedure

Preparing for an upgrade to SPA software v6.0 running on Windows 10 consists of the following steps:

- Create an Archive folder

- Copy Data to the Archive folder

- Copy the Archive folder to an external drive

The time required to complete this procedure depends on the amount of data stored and custom file locations on the computer. Ensure that you have enough time to complete the procedure.

NOTE   Complete this procedure prior to the scheduled upgrade installation. Your BD FSE will contact you to confirm.

NOTE   If you need guidance regarding this procedure contact BD technical support. If you need a BD technical scientist to provide onsite support, contact 877.232.8995. There may be additional charges for onsite support.

1   Right-click the desktop and choose **New > Folder**, rename the folder *Archive*.

2   Copy the following folder, including all subfolders: C:\Program Files\BD FACS SPA Software to the Archive folder.

NOTE   If user-generated data is stored in customized file locations instead of the default locations, make sure to copy the data from the customized locations to the Archive folder as well.

NOTE   If you have user-generated data that is not stored in the BD default locations, you can optionally use an external drive to back up the entire computer. See Using an External Drive for more information.

3   Copy the worktable database file (BD–HwWktb.mdb): C:\Program Files\BD FACS SPA Software\Data files to the Archive folder.

4   Copy any additional folders or data that reside on your workstation that you want to preserve.

5   Copy the Archive folder to an external drive, network drive, or server.

     Do not delete the Archive folder after transfer. Leave the Archive folder with all its contents on the desktop.

Once the BD FSE has completed the upgrade, copy your backed-up user generated data files onto the new system.

Re-install any user-supplied applications that you backed up prior to the upgrade.

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