7 System backup and restore

When the installation has been verified, we recommend performing a system backup by updating the backup stick delivered with the product. The backup stick is contains a full image of the installed system.

The is a USB flash drive with a bootable Linux partition that starts the **Secure Backup and Restore** tool (SBR).

Note _____

If the delivered backup stick can not be located, it is recommended to create a new backup stick. A USB flash drive with 8 GB capacity is required to create a backup stick. The backup process is described in Update or create backup stick on page 81. If the system suffers from a disk failure and the backup stick is not available, follow the procedure described in Create backup stick on a PC on page 85.

_____

7.1 Update or create backup stick

The following procedure describes how to update or create a system backup. The system backup is stored locally on the unit's system disk and on a backup stick.

Note _____

The backup stick update procedure will stop output from the system for about 45 minutes.

_____

How to create or update a backup stick

1 Select **System** menu →**Restart** →**System**.

2 Press **Esc** repeatedly during boot to open the startup feature menu with the following items:

• Start system

• Secure Backup and Restore

• Memtest

Select **Secure Backup and Restore**.

3   Select **System Backup** and press **Enter** to enter the **Backup Menu**.

4   Insert a USB flash drive with a capacity of at least 8 GB into a USB port.

5   Select **Create backup stick and local copy** to create or update the backup stick and update the local copy in one operation.

6   Modify the backup description if needed, then pres **Enter** to start the backup process.

7   This task requires around 45 minutes to complete. The creation progress is indicated.

8   The message
Successfully created Backup Stick
is displayed when the backup stick is ready. Press **Enter** to return to the **Backup Menu**.

9   Press **Esc** to return to the main menu.

10   Select **Reboot HWP** and press **Enter**. Remove the backup stick.

11   The Operator SW will start automatically after reboot.

12   Store the backup stick in the *Site Manual*.

Caution

Local backup will be lost in case of a disk failure. We recommended that a backup stick always be updated.

Note

The system only backs up the unit on which the backup is updated. Hence, backing up the Processing Unit is not possible from a remote HMI Unit.

Related topics

- *Restore from disk based backup* on page 82
- *Restore from backup stick* on page 83

7.2 Restore from disk based backup

Restoring a system from the disk based backup (local copy) requires significantly shorter time than from the backup stick. This option might be handy if the system suffers from a file system failure rather than a complete disk failure.

Note

The backup stick restore procedure will stop output from the DPS system for about 15 minutes.

Note

Restoring a Processing Unit from the disk based backup requires a keyboard and a monitor be connected. Please contact Customer Support if you need further advice.

Caution

ALL data on the system drive (normally `C:`) of the unit on which the restore is performed will be cleared and replaced by the contents of the backup. The `D:` drive is not backed up and hence not modified during restore from disk based backup.

How to restore system from a local copy

1   Turn the unit's power on.

2   Press **Esc** repeatedly during boot to open the startup feature menu with the following items:

- Start system

- Secure Backup and Restore

- Memtest

3   Select **Secure Backup and Restore** and press **Enter**.

4   Select **System restore** and press **Enter** to enter the **Restore Menu**.

5   Select **Restore from local copy** and press **Enter**.

6   Select **OK** and press **Enter** to confirm to start the restore process.

Caution

*There is no way to stop the restore process after this point. Select **Cancel** and press Enter if you are not absolutely sure a restore is OK.*

7   The message `Local backup of system partition successfully restored` is displayed when the restore has finished. Press **Enter** to return to the **Restore Menu**.

8   Press **Esc** to return to the main menu.

9   Select **Reboot HWP** and press **Enter**. Remove the backup stick.

10   The Operator SW will start automatically after reboot.

Related topics

- *How to restore system configuration from a USB stick* on page 77

- Software upgrade procedure in the *User Manual*

- *Update or create backup stick* on page 81

7.3   Restore from backup stick

The following procedure describes how to restore the system from a backup stick, e.g. in case of a disk failure.

Note _____

The backup stick restore procedure will stop output from the DPS system for about 15 minutes.

Note _____

Restoring a Processing Unit from the disk based backup requires a keyboard and a monitor be connected. Please contact Customer Support if you need further advice.

Caution _____

ALL data on the unit on which the restore is performed, will be cleared and replaced by the contents of the backup stick.

How to restore system from a backup stick

1 Insert the backup stick into the USB port.

2 Turn the unit's power on.

3 Select **Secure Backup and Restore** from the appearing menu.

Note _____

*If this menu does not appear, press **Ctrl**+**Alt**+**Del** to reboot, then click **F11** repeatedly during boot in order to present the boot device menu. Select the USB disk and continue this procedure.*

4 Press **Esc** repeatedly during boot to open the startup feature menu with the following items:

- Start system
- Secure Backup and Restore
- Memtest

5 Select **Secure Backup and Restore** and press **Enter**.

6 Select **System restore** and press **Enter** to enter the **Restore Menu**.

7 Select **Restore from backup stick** and press **Enter**.

8 Select **OK** and press **Enter** to confirm to start the restore process.

Caution _____

*There is no way to stop the restore process after this point. Select **Cancel** and press **Enter** if you are not absolutely sure a restore is OK.*

9 The message `Backup successfully restored` is displayed when the restore has finished. Press **Enter** to return to the **Restore Menu**.

10 Press **Esc** to return to the main menu.

11 Select **Reboot HWP** and press **Enter**. Remove the backup stick.

12 The Operator SW will start automatically after reboot.

If the latest configuration changes were not backed up to the backup stick used to restore the system, the latest configuration backed up with the **Configuration copier** tool can be restored as described.

Related topics

- *How to restore system configuration from a USB stick* on page 77
- Software upgrade procedure in the *User Manual*
- *Update or create backup stick* on page 81

7.4 Create backup stick on a PC

The backup and restore system supports distribution of the software needed to create a backup stick on e.g. a laptop PC.

A backup stick creation package consists of an executable (`.exe`) file and an image archive file (`.7z`) containing the product's system software. Please contact customer support for advice on where and how to get the package.

How to create a backup stick on a PC

1   Download or copy the backup stick creation package to a PC, e.g. a laptop, and make sure that the image archive file is located in the same folder as the executable file.

Note

Do NOT download the backup stick creation package to a HMI or Processing Unit.

2   Insert a 8GB USB flash drive into a USB port in your PC.

Note

The USB stick will be reformatted as part of the creation process, and existing contents will be lost.

3   Start backup stick creation by double-clicking the executable file.

4   Select the drive letter corresponding with the inserted flash drive.

5   Select the product backup to include on the backup stick from the list.

6   Close the program when the backup stick has been created.

7   Remove the backup stick from the PC.

8   Use the newly created backup stick according to the procedure described in *Restore from backup stick* on page 83.