Hardware Profiles

Hardware profiles consist of the instrument and one or more configured devices. Hardware profiles enable the software to communicate with the instrument and attached devices. You can set up these profiles using the Hardware Configuration Editor, which provides an interface to configure the devices. You can set up multiple hardware profiles but only one can be active at any one time. To activate a hardware profile, the device for which the profile is configured must be connected to the workstation.

Topics in this section:

Working with Hardware Profiles

Each hardware profile must include a mass spectrometer and only peripheral devices included in the active hardware profile can be used when creating acquisition methods. Before creating an acquisition method, make sure that all devices you want to use in the method are included in the hardware profile, including a syringe pump, if your instrument comes with an integrated syringe pump. For information about troubleshooting any hardware profile issues, see Troubleshooting hardware profiles.

Topics in this section:

Creating a Hardware Profile

1. **On the Navigation bar, under Configure, double-click Hardware Configuration.**
2. **In the Hardware Configuration Editor dialog, click New Profile.**
3. **In the Profile Name field, type a name for the profile.**
4. **Click Add Device.**

   In the Available Devices dialog, in the Device Type field, Mass Spectrometer is the default value.
5. **In the Devices list, select the instrument and then click OK.**
6. **In the Devices in current profile list, click the instrument and then click Setup Device.**
7. **(Only applicable to the 6500 series of instruments) On the Configuration tab, in the Dual Mass Mode section, select one of the following two options:**
   - **Low Mass: To operate in limited mass range, high sensitivity operating mode, select this option. The mass range is 5–1000 Da for LIT and 50–1250 Da for RF/DC.**
   - **High Mass: To operate in extended mass range operating mode, select this option.The mass range is 5–2000 Da for LIT and 50–2000 Da for RF/DC.**
8. **Select other features on the Configuration tab and Communication tab as required**
9. **Click OK to return to the Create New Hardware Profile dialog.**
10. **Click Add Device and then add and configure each device that you are using with the instrument.**
11. **On the Create New Hardware Profile dialog, click OK.**
12. **To activate the hardware profile, on the Hardware Configuration Editor, click the hardware profile and then click Activate Profile.**

    A green check mark appears next to the profile.

Tip: You do not have to deactivate one hardware profile before activating another. Just click the hardware profile that you want to activate and then click Activate Profile; the other profile is deactivated automatically.

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13. Click Close.

Note: You can view the current operating mode of the active hardware profile in the Detailed Status dialog for the instrument by double-clicking the Mass Spec ion on the lower-right section in the Analyst® software window. (only applicable to 6500 series of instruments)

Adding a Peripheral Device to a Hardware Profile

Note: Before you can add a device to an existing hardware profile, the profile must be deactivated.

1. Either create a new hardware profile or edit an existing hardware profile.
2. In the Edit Profile or the Create New Hardware Profile dialog, click Add Device.

   The Available Devices dialog appears.
3. In the Device Type list, select the type of device that you want to add.

   The Devices list displays a list of the available devices for the selected type.
4. In the Devices list, select the device that you want to add and then click OK.
5. In the Devices in current profile list, click the device and then click Setup Device.
6. Configure the device and then click OK.
7. In the Create New Hardware Profile dialog, click OK.
8. To activate the hardware profile, on the Hardware Configuration Editor, click the hardware profile and then click Activate Profile.

   A green check mark appears next to the profile.
9. Click Close.

Deleting a Hardware Profile

Note: Before you can delete a hardware profile, the profile must be deactivated.

1. On the Navigation bar, double-click Hardware Configuration.
2. In the Hardware Configuration Editor dialog, select the hardware profile from the Hardware Profiles list and then click Deactivate Profile.
3. Click Delete Profile and then click Close.

Editing an Existing Hardware Profile

Note: Before you can add a device to an existing hardware profile, the profile must be deactivated.

1. On the Navigation bar, double-click Hardware Configuration.
2. In the Hardware Configuration Editor dialog, select the profile you want to edit from the list.
3. If the profile is active, then click Deactivate Profile.
4. Click Edit Profile.
5. Add, delete, or set up devices as required.
6. On the Hardware Configuration Editor dialog, click OK.

About Simulation Mode

Simulation mode is useful for creating batches and methods on a processing workstation. You can access simulation mode through the Advanced Settings dialog for each instrument or device. Each device in the active hardware configuration must be configured to run in simulation mode.

Note: The simulation options are dependent on the type of device that you are trying to simulate.

Configuring Devices

Hardware profiles contain information about the the instrument and one or more peripheral devices that you want to use with your instrument. You can configure the instrument and the devices in the Hardware Configuration Editor.

Configuring the peripheral devices requires two procedures: setting up the physical connections and configuring the software to communicate with the peripheral devices. When the software is installed, the driver required for each peripheral device is also installed. After the peripheral devices are physically connected to the computer, you can set up the appropriate configuration information.

Topics in this section:

Configuring a Mass Spectrometer

Before you can edit an existing hardware profile, you must first deactivate it.

1. **Either create a new hardware profile or edit an existing hardware profile.**
2. **If the hardware profile does not contain a mass spectrometer, click Add Device, and then in the Devices list click Mass Spectrometer.**
3. **In the Devices in current profile list, select the mass spectrometer and then click Setup Device.**

   The Mass Spectrometer dialog appears.
4. **Select the appropriate values for the instrument.**

   Note: We recommend that you do not change the default settings for the GPIB communications.

   If you are configuring an instrument that has an integrated Valco valve or the integrated Harvard syringe pump, select the Use integrated injector/diverter valve check box or the Use integrated syringe pump check box.
5. **If you want to configure the timeouts, command retries, status poll intervals, and simulation mode, on the Communication tab, click Advanced to access the Advanced Settings dialog.**
6. **If you want to restore the device defaults, click Set Defaults.**
7. **To save the instrument configuration, click OK in the Mass Spectrometer dialog.**
8. **To save the changes to the profile, click OK.**

Configuring Peripheral Devices

Configuring peripherals or devices consists of two processes: setting up the physical hardware connections and configuring the software to communicate with the devices. To learn more about setting up specific peripheral devices see the *Peripheral Devices Setup Guide*.

When the software is installed, all the devices required to configure the supported devices are also installed. To activate these devices, you must configure them using the Hardware Configuration Editor.