

Version 3.1

November 2014

QIAasymphony® Management Console User Manual

For use with software version 4.0



Sample & Assay Technologies

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1 Introduction

1.1 About this user manual

This user manual provides information about the functions and features of the QIAsymphony Management Console (QMC). Please refer to the *QIAsymphony SP/AS User Manuals* for complete information about the proper care, maintenance, and use of the instruments.

This user manual describes the features of the software and associated tools and enables the user to manage files, create Assay Control Sets or Assay Parameter Sets, convert the format of Rack Files or Work List Files, and check that files have not been modified.

Information about the QMC is provided in the following sections:

1. Introduction
2. QIAsymphony Management Console
3. Features of the QIAsymphony Management Console
4. "File Transfer" Tool
5. "Process Definition" editor Tool
6. "Checksum Validator" Tool
7. "CSV Conversion" Tool
8. "Auto Transfer" Tool
9. "IC Calculator" Tool
10. Getting Started
11. Configuration
12. Logging in and Connecting
13. Managing Files
14. Creating and Modifying Process Files
15. Uploading Process Files to the QIAsymphony
16. Troubleshooting

1.2 General information

1.2.1 Technical assistance

At QIAGEN®, we pride ourselves on the quality and availability of our technical support. Our Technical Service Departments are staffed by experienced scientists with extensive practical and theoretical expertise in sample and assay technologies and the use of QIAGEN products. If you have any questions or experience any difficulties regarding the QIA Symphony SP/AS instruments or QIAGEN products in general, please do not hesitate to contact us.

QIAGEN customers are a major source of information regarding advanced or specialized uses of our products. This information is helpful to other scientists as well as to the researchers at QIAGEN. We therefore encourage you to contact us if you have any suggestions about product performance or new applications and techniques.

For technical support and more information, please see our Technical Support Center at www.qiagen.com/goto/TechSupportCenter or call one of the QIAGEN Technical Service Departments or local distributors (see back cover or visit www.qiagen.com).

1.2.2 Policy statement

It is the policy of QIAGEN to improve products as new techniques and components become available. QIAGEN reserves the right to change specifications at any time. In an effort to produce useful and appropriate documentation, we appreciate your comments on this user manual. Please contact QIAGEN Technical Services.

1.2.3 Version management

This document is the *QIA Symphony Management Console User Manual*, version 3.1 (for use with software version 4.0).

2 QIAsymphony Management Console

The QMC is developed exclusively for use with the QIAsymphony SP/AS instruments. This user manual is for use with software version 4.0.

2.1 Available tools

The QMC includes the following tools:

- "File Transfer" tool
- "Process Definition" editor tool
- "Checksum Validator" tool
- "CSV Conversion" tool
- "Automatic File Transfer" tool
- "IC Calculator" tool

For more information about the tools, see "Tool list", page 3-3.

2.2 Controlling the mouse

The following terms for controlling the mouse are used in this user manual.

Term	Action
Click	Click with the left mouse button.
Right-click	Click with the right mouse button.
Double-click	Double click on the left mouse button.
Highlight	Place the pointer over an item and click the left mouse button. The item becomes highlighted.
Select "XXX/xxx"	In the toolbar, select the "xxx" submenu from the "XXX" menu.

2.3 Installing the QIAsymphony Management Console

Note: Failure to follow these instructions may lead to unsuccessful installation of the QMC.

2.3.1 Minimum PC requirements

The table below lists the minimum PC requirements for the QIAsymphony Management Console.

PC feature	Requirements
Supported operating systems	Microsoft® Windows® XP/7
Disk space	25 MB of available hard drive space
Memory	256 MB of RAM (Windows XP/7)
USB port	Available USB port for Mass Storage Devices
Network	Available TCP/IP network (necessary for remote access)
Monitor/color settings	1024 x 768 screen resolution with 256 colors
CD-ROM drive	CD-ROM drive (for software installation only)

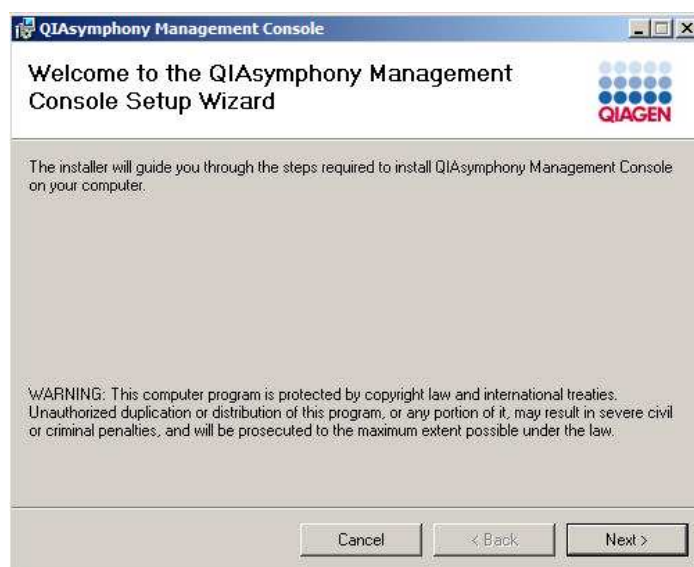
Note: If a firewall is installed on the PC, it may prevent files from being transferred.

Note: A PDF reader is required for use with the "Process Definition" editor and "IC calculator" tools.

2.3.2 Installation

Begin installation of the QMC as follows.

1. Check that the minimum PC requirements (see Section 2.3.1, above) are met.
2. Uninstall any previous versions of the QIAsymphony Management Console on the PC that connects to the QIAsymphony. For more information, see Section 2.4.
3. Insert the QMC installation CD into the CD-ROM drive of the PC.
4. To launch the installation, right-click "Start" and select "Explore". Browse to the CD-ROM drive and the QMC installation files.
5. Double-click the **Setup.exe** file. The InstallShield® Wizard is launched. The wizard installs the necessary components to the PC.



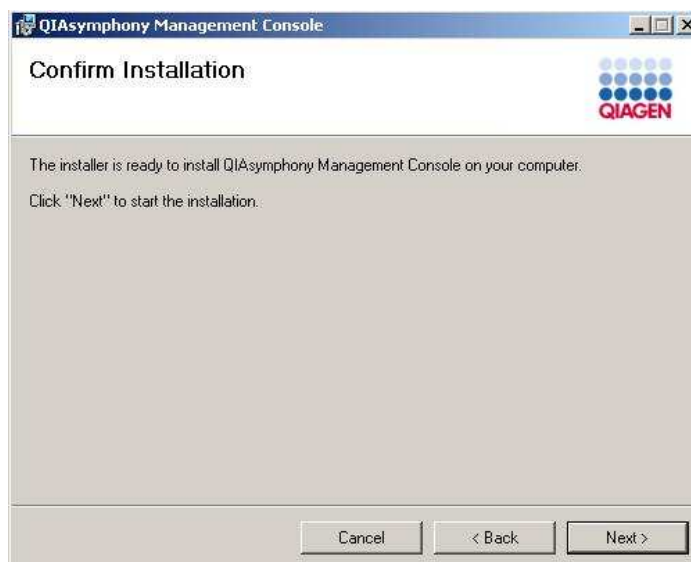
6. Click "Next" to continue.

Note: If an older version of the QMC software is installed on the PC, first remove the old version before proceeding with the installation (for detailed information, see Section 2.4).

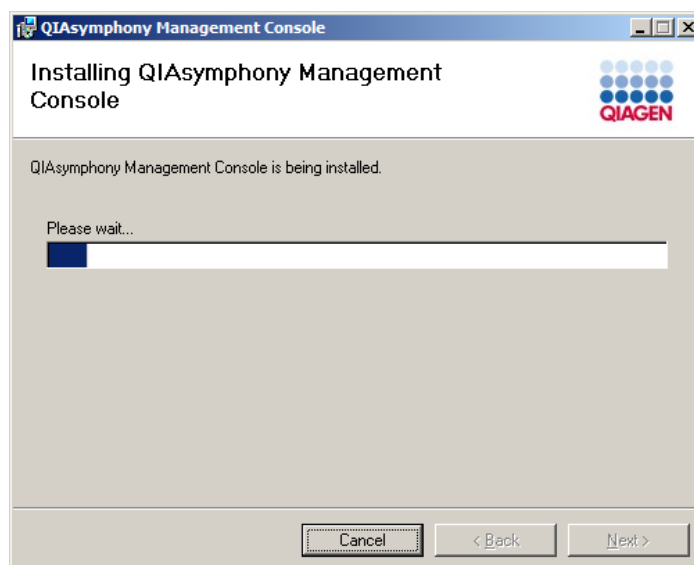
7. Select the installation folder for the QMC by following the instructions in the dialog box. Click "Next" to continue.



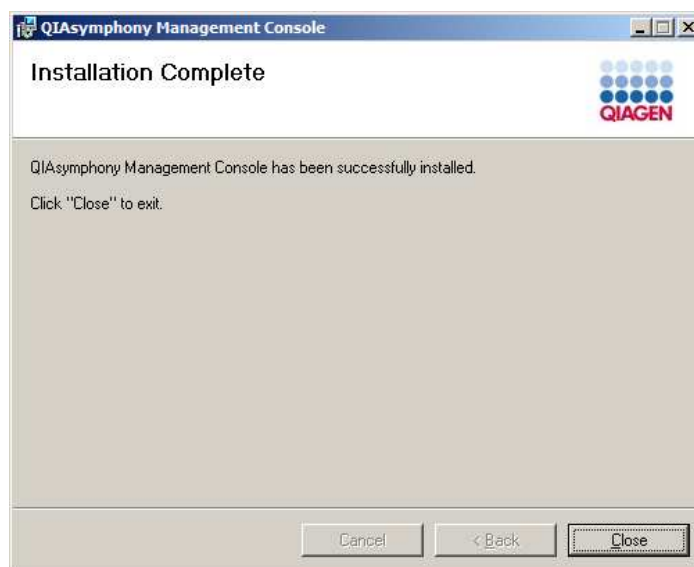
8. Click "Next" to continue.



9. A dialog box opens that shows the progress of the installation procedure.



10. When the installation has finished, click "Close" to exit the installation wizard.



2.4 Uninstalling the QIAsymphony Management Console software

Note: Before installing a new version of the QMC software, save all Result and Log Files in a different folder, and then delete all remaining files and folders from the old software version. A new file/folder structure will need to be created when the new version of the software has been installed.

If you have Windows 7, uninstall the QMC software before installing a newer version as follows:

1. Click "Start".
2. Select "Control Panel".
3. Select "Program Features".
4. Select the "QIAsymphony Management Console" from the list and click "Uninstall".

After the management console has been successfully uninstalled, a newer version can be installed.

Note: All local data will remain on the PC.

2.5 Launching the QIAsymphony Management Console

If you have Windows 7, launch the QMC as follows:

1. Click "Start" and select "All Programs/QIAGEN/QIAsymphony Management Console" from the "Start" menu.
The QMC is launched and the "File Transfer" tool is displayed.
2. If you are launching the QMC for the first time, a dialog box will be displayed that asks you whether the same directories that are on the remote site (QIAsymphony or USB stick) should be created. If you click "Yes", the subdirectories are created in the default main (root) directory (**C:/Program files/QIAGEN/QIAsymphony Management Console**). If you click "No", the data directories will not be created in the default root directory.

The dialog box will also be displayed if QIAsymphony has other subdirectories in addition to those found in the default main (root) directory. Click "Yes" to update the data structure.

If an older version of the QMC was installed and has been uninstalled by following the steps in Section 2.4, the defined root directory for the "File Transfer" tool will be kept. If the dialog box described above is displayed, click "Yes" to update the subdirectories so that they have the same structure as those on the QIAsymphony.

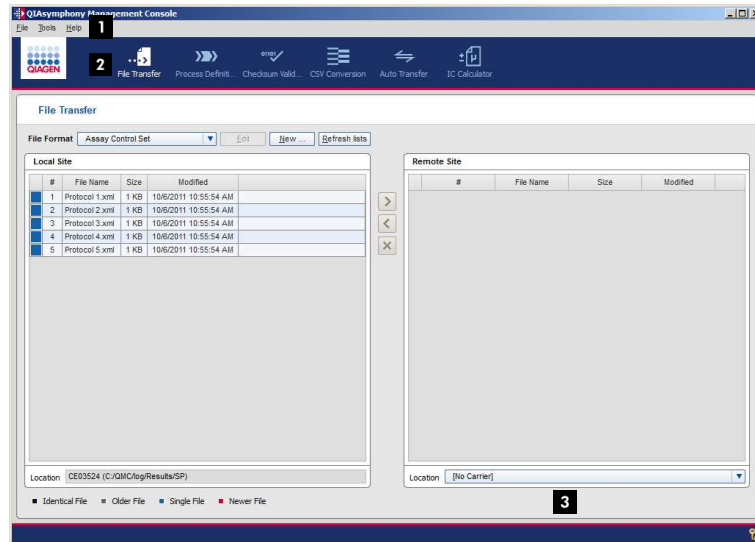
3. When the QMC is launched for the first time, you may need to configure the general options and the options for the "File Transfer", "Checksum Validator", "Process Definition" editor, "CSV Conversion", and "Auto Transfer" tools (for detailed information, see Section 11).
4. To manage files on the QIAsymphony, log in to the QIAsymphony (for detailed information, see Section 12).

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3 Features of the QIAasympyphony Management Console

The main screen of the QMC automatically appears when the QMC is launched. Each screen of the QMC provides:

- A menu bar for selecting various options
- A tools list enabling selection of tools (see Section 2.1)
- An information bar
- An information panel (except in the main screen)



- 1** Menu bar
- 2** Tool bar
- 3** Information bar

QIAasympyphony Management Console main screen.

3.1 Menu bar

The menu bar contains the “File”, “Tools”, and “Help” menus.

The submenus of these drop-down menus are black when enabled and gray when disabled.

3.1.1 File menu

Login The “Single Sign On – Login” dialog box appears (see Section 12.1). This enables the user to connect to the QIAsymphony via a network.

Note: It is not possible to connect to the QIAsymphony if the instrument is switched off.

Note: The QIAsymphony Management Console and the QIAsymphony must have the same software version (i.e., software version 4.0).

Logout This enables the current user to log out and disconnect from the QIAsymphony.

Exit Closes the QMC.

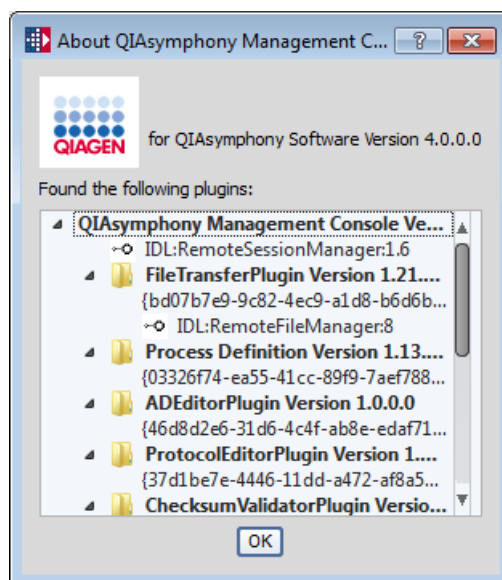
3.1.2 Tools menu

Options The “Options” dialog box appears (see Section 11.1).

List of available tools Opens the selected tool.

3.1.3 Help menu

About The “About QIAsymphony Management Console” dialog box appears and displays information about the management console and tools, including the version numbers.



3.2 Tool list

All available tools are displayed in this list. Currently, the following tools are available:

- "File Transfer" tool
- "Process Definition" editor tool
- "Checksum Validator" tool
- "CSV Conversion" tool
- "Auto Transfer" tool
- "IC Calculator" tool.

Individual tools are described in the following sections.

3.2.1 "File Transfer" tool

The "File Transfer" tool enables file exchange between the QIAsymphony and a predefined local path on an external PC or network, using either a connection or using a USB stick (see Section 13).

3.2.2 “Process Definition” editor tool

The “Process Definition” editor tool enables the creation or modification of process files (e.g., Assay Control Sets or Assay Parameter Sets). For more information, see Section 14.

3.2.3 “Checksum Validator” tool

The “Checksum Validator” tool enables validation of Result Files as well as all protected files on the QIAsymphony (see Section 13.5).

3.2.4 “CSV Conversion” tool

The “CSV Conversion” tool enables the format conversion of files in *.csv and *.xml format (see Section 13.6).

3.2.5 “Auto Transfer” tool


The “Auto Transfer” tool enables automatic transfer of Result, Log, Loading Information, Start Batch Confirmation, and Cycler Files from the QIAsymphony to a predefined directory as well as automatic transfer of Work Lists from the local PC or network to the QIAsymphony (see Section 13.4.2). Newly transferred Result Files and Loading Information Files can also be printed automatically (see Section 13.4).

3.2.6 “IC Calculator” tool

The “IC Calculator” tool assists for calculating the volumes of individual components of the internal control (IC) mix for the QIAsymphony SP (see Section 13.6).

3.3 Information bar

The information bar is located at the bottom of the screen and when a user is logged in it displays information about the name of the current user, date and time of login, and the QIAsymphony host name. In addition, a symbol is displayed enabling the operator to easily see whether a user is currently logged in.

Login: 10/11/2011 1:27:59 PM Account: Operator Host: qssp4584 

Login	Date and time of login is displayed.
Account	The name of the user currently logged in is displayed.
Host	The QIAsymphony host name that has been selected for remote access is displayed. By default, the host name is qsspxxxx, where xxxx is the serial number of the QIAsymphony SP.



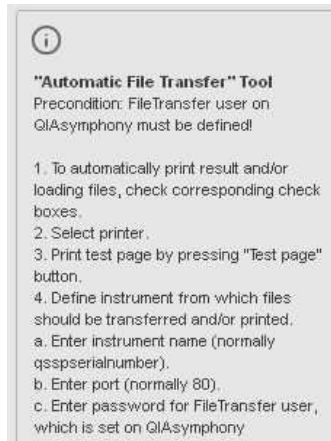
Symbol denotes that a user is currently logged in.



Symbol denotes that no user is currently logged in.

3.3.1 Information panel

The information panel is located on the right side of the screen. This panel provides helpful information about the current screen. Use the up and down arrows to scroll through the text.



Example information panel.

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4 "File Transfer" Tool

Files can be uploaded, downloaded, or deleted using the "File Transfer" tool. Files can be managed via connection to the QIAsymphony or using a USB stick.

The "File Transfer" tool enables the following:

- Exchange of files between the QIAsymphony and a predefined local path on an external PC or network.
- Deletion of files on the predefined local path or network, QIAsymphony, or USB stick.
- Transfer of files from a predefined local path or network to a USB stick.
- Transfer of files from a USB stick to the predefined local path or network.

When using a QIAsymphony connection, the role of the user that established the connection affects the types of files that can be managed, as described in the following table.

Operator	<p>The "Operator" enables transfer of the following file types from the QIAAsymphony to the QMC.</p> <p>Note: Transfer of QIAAsymphony AS files is only an option with the QIAAsymphony AS.</p> <p>QIAAsymphony SP and AS files:</p> <ul style="list-style-type: none">■ Log Files■ Rack Files■ Result Files■ Work Lists■ Instrument Report File <p>QIAAsymphony SP files:</p> <ul style="list-style-type: none">■ Start Batch Confirmation <p>QIAAsymphony AS files:</p> <ul style="list-style-type: none">■ Cyclor Files■ Loading Information■ Concentration Import File AS <p>The "Operator" enables transfer of the following file types from the QMC to the QIAAsymphony.</p> <ul style="list-style-type: none">■ Rack Files■ Work Lists■ Concentration Import File AS
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Supervisor The "Supervisor" enables transfer of the following file types from the QIASymphony to the QMC.

Note: Transfer of QIASymphony AS files is only an option if you have a QIASymphony AS.

QIASymphony SP and AS files:

- Instrument Report Files
- Duration File
- Labware
- Log Files
- Rack Files
- Result Files
- Service Script Maintenance
- Service Scripts Operator
- Work List
- Process Configuration Profile
- User Management

QIASymphony SP files:

- Assay Control Set
- Protocol
- Reagent Definition
- Start Batch Confirmation

QIASymphony AS files:

- Assay Definition
- Assay Parameter Set
- Normalization Definitions AS
- Cyclers Files
- Loading Information
- Concentration Import File AS

The “Supervisor” enables transfer of the following file types from the QMC to the QIAsymphony.

QIAsymphony SP and AS files:

- Labware
- Process Configuration Profile
- Rack Files
- Service Script Maintenance
- Service Script Operator
- Work List
- User Management

QIAsymphony SP files:

- Assay Control Set
- Protocol

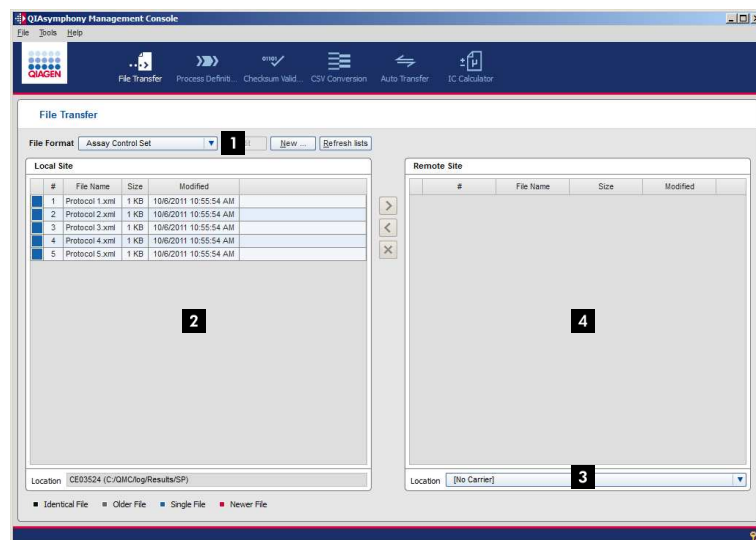
QIAsymphony AS files:

- Assay Definition
- Assay Parameter Set
- Normalization Definitions AS
- Concentration Import File AS

"File Transfer" tool

The "File Transfer" tool displays several features including:

- A "File Format" drop-down menu that enables the type of file to be selected.
- "Edit" and "New" buttons that are enabled when "Assay Control Set" or "Assay Parameter Set" is selected as file type, and the user is logged in as "Supervisor".
- A "Remote Site" selection box that enables selection of the remote site (USB stick or connected QIAsymphony).
- A list of files stored on the predefined local path or network (for more information, see page 11-3), displayed according to selected file type.
- A list of files stored on the remote site, if available, displayed according to selected file type.



1 "File Format" drop-down menu

3 "Remote Site" selection box

2 "Local Site" file list

4 "Remote Site" file list

4.1 "File Format" drop-down menu

Available file types are displayed in the "File Format" selection box. The items displayed in the list vary depending on whether a user is logged in, the user role, and whether a QIAAsymphony AS instrument is connected.

File types displayed in the “File Format” selection box

User	Selectable file types	Action
No user logged in	Assay Control Set	Files saved on the predefined local path on the PC or network are listed in the local path file list.
	Assay Definitions	
	Assay Parameter Set	
	Concentration Import File AS	Files can be deleted from the local path.
	Configuration	
	Cycler Files	Files can be transferred from the local path (root directory) to the USB stick or from the USB stick to the local path.
	Data Recording File	
	Data Recording File AS	
	Duration File	Files on the USB stick can be deleted.
	Duration File AS	
	Instrument Report Files	If “Assay Control Set” or “Assay Parameter Set” is selected as the file type, new Assay Control Sets or Assay Parameter Sets can be created and existing sets can be modified.
	Labware AS	
	Labware SP	
	Loading Information	
	Log Files	
	Normalization Definitions AS	
	Process Configuration Profile	
	Protocol	
	Protocol, Unfinished	
	Rack Files	
	Reagent Definitions	
	Result Files AS	
	Result Files SP	
	Service Script Developer AS	
	Service Script Developer SP	
	Service Script Maintenance AS	
	Service Script Maintenance SP	
	Service Script Operator AS	
	Service Script Operator SP	

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User	Selectable file types	Action
No user logged in	Service Script Service AS Service Script Service SP Start Batch Confirmation User Management Work List Work Table	
"Operator"	Concentration Import File AS Cycler Files Instrument Report Files Loading Information Log Files Rack Files Result Files AS Result Files SP Start Batch Confirmation Work List	Files saved on the predefined local path on the PC or network are listed in the local path file list. Files can be deleted from the local path. Files can be transferred to the USB stick or from the USB stick to the local path. Files on the USB stick can be deleted. All listed file types can be downloaded from the QIAsymphony to the local path. Work List and Rack Files can be uploaded from the local path to the QIAsymphony. All listed file types, except Log Files can be deleted from the QIAsymphony

Table continued on next page

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User	Selectable file types	Action
"Supervisor"	Assay Control Set	Files saved on the predefined local path on the PC or network are listed in the local path file list.
	Assay Definitions	
	Assay Parameter Set	Files can be deleted from the local path.
	Concentration	
	Import File	Files can be transferred to the USB stick or from the USB stick to the local path.
	Cycler Files	
	Duration File	Files on the USB stick can be deleted.
	Duration File AS	
	Instrument Report File	If "Assay Control Set" or "Assay Parameter Set" is selected as file type, new Assay Control Sets or Assay Parameter Sets can be created and existing sets can be modified.
	Labware AS	
	Labware SP	Work Lists, Rack Files, Assay Control Sets, Protocols, Assay Parameter Sets, Assay Definitions, Normalization Definitions, Concentration Import Files, Labware files, Service Scripts, Process Configuration Profiles, and information about Reagent cartridges can be transferred to the QIA Symphony.
	Loading Information	
	Log Files	All listed file types can be downloaded from the QIA Symphony.
	Normalization Definitions AS	
	Process	All listed file types, except Log Files, information about Reagent cartridges, Service Scripts, and User Management Files can be deleted from the QIA Symphony.
	Configuration Profile	
	Protocol	
	Rack Files	
	Reagent Definitions	
	Result Files AS	
	Result Files SP	
	Service Script	
	Maintenance SP	
	Service Script Maintenance AS	

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User	Selectable file types	Action
"Supervisor"	Service Script	
	Operator SP	
	Service Script	
	Operator AS	
	Start Batch	
	Confirmation	
	User Management	
	Work List	

Important: When transferring a new labware package using the QMC, ensure that the set of files that is in the installation package is completely transferred to the QIASymphony. In addition, ensure that any files that are not included in the package (marked blue on the "Remote Site" in the "File Transfer") are removed from the QIASymphony.

4.1.1 Buttons next to "File Format" selection box

Edit	This button is enabled if "Assay Control Set" or "Assay Parameter Set" is selected as file type and one Assay Control Set or Assay Parameter Set is highlighted. Click to modify an existing Assay Control Set or Assay Parameter Set.
New	This button is enabled if "Assay Control Set" or "Assay Parameter Set" is selected as file type. Click to create a new Assay Control Set or Assay Parameter Set.
Refresh lists	Click to update the "Local Site" and "Remote Site" file list

4.2 “Remote Site” selection box

Remote sites are listed in the “Remote Site” selection box. Use this list to select the remote site (QIAsymphony or USB stick) you want to work with. The QMC can either be connected to the QIAsymphony or to a USB stick. Alternatively, the QMC can be used offline.

- To connect to the QIAsymphony, you must first log in.
- To connect to a USB stick, user login is not required.

4.3 “Local Site” and “Remote Site” file lists

Available files on the local path and remote site are displayed in the “Local Site” file list and “Remote Site” file list, respectively. Files are displayed according to the selected file type.

The local path is configured in the “Options” dialog box of the “Tools” menu (see Section 11.1).

4.3.1 Displayed file information

Additional information about the listed files is shown in the following table.




Use of colors

■ Identical File ■ Older File ■ Single File ■ Newer File

- Identical File — the file is identical on the remote and local site
- Older File — the file is older than the other file and exists on both the remote and local site
- Single File — the file exists on either the remote site or the local site, but not on both
- Newer File — the file is newer than the other file and exists on both the remote and local site

# (number)	The number of the file.
File Name	The full file name is displayed.
Size	The size of the file is displayed.
Created	The date and time of file creation are optionally displayed. This information is configured in the "Options" dialog box of the "Tools" menu (see Section 11.1).
Modified	The date and the time at which the file was last modified are optionally displayed. This information is configured in the "Options" dialog box of the "Tools" menu (see Section 11.1).
Read	The date and the time at which the file was last accessed are optionally displayed. This information is configured in the "Options" dialog box of the "Tools" menu (see Section 11.1).
Status	<p>Indicates the checksum status:</p> <ul style="list-style-type: none">■ "Signed" — Checksum is valid and the file has not been modified.■ "Unsigned" — Checksum is invalid indicating that the file was modified without using a suitable editor or the checksum is not available.

4.3.2**Actions**

- Double-click the highlighted file to open the appropriate editor and display the contents of the file.
- Right-click the highlighted file to open the context menu.
- Click  to copy a file from the remote site to the local path.
- Click  to copy a file from the local path to the remote site.
- Click  to delete files on either the local path or remote site, if permitted.

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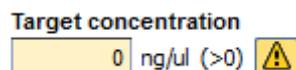
5 "Process Definition" Editor Tool

The "Process Definition" editor tool enables the creation or modification of process files (e.g., Assay Control Sets or Assay Parameter Sets).

5.1 General concepts

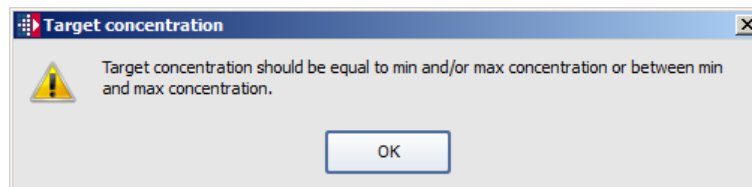
5.1.1 Displaying errors

If an error occurs, the parameter field is displayed in yellow. A warning symbol is also displayed.



Example of an error.

To see detailed information about the error, click the warning symbol.

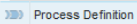


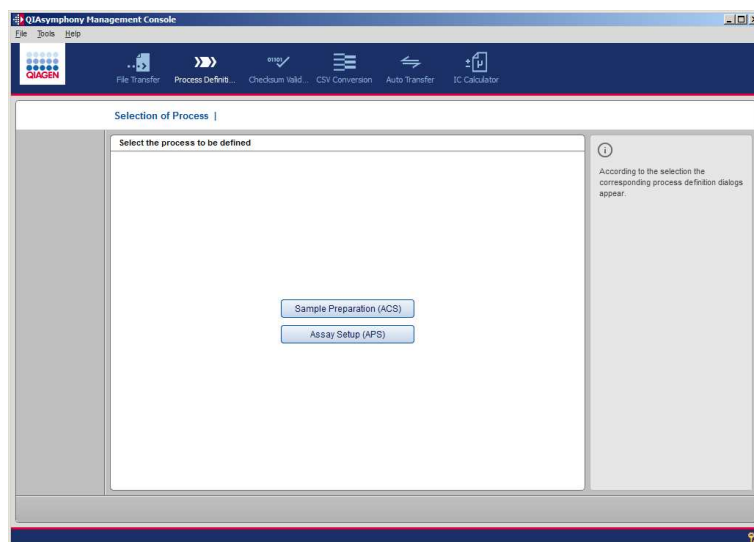
Example of an error message.

As soon as the error has been resolved, the parameter field returns to its original color.

If you are using the wizard to create a new process file, the "Next" button becomes available when all errors have been resolved.

5.1.2 Tool icon in the "Tool" list

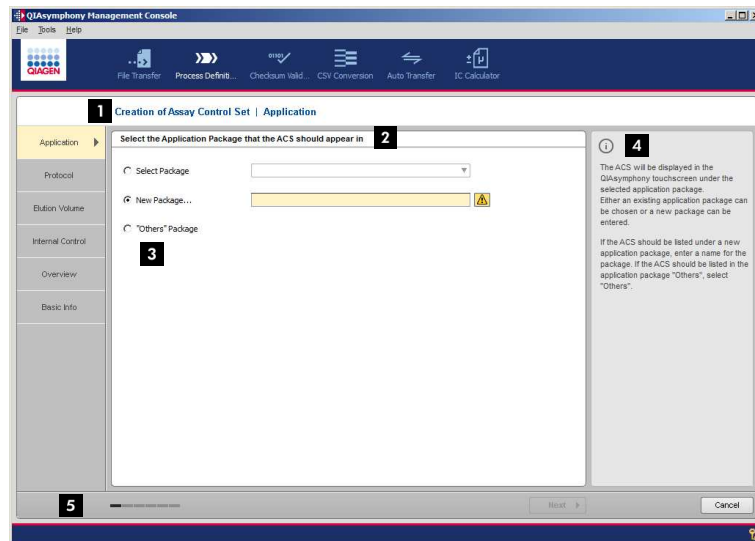
The "Process Definition" editor tool can be accessed using either the corresponding item in the "Tools" list ( Process Definition) or by selecting the appropriate file type in the "File Transfer" tool and pressing "Edit" or "New".



To start defining the process file, select the process to be defined. The corresponding dialog box appears.


5.1.3 Structure of dialog boxes

All dialog boxes in the "Process Definition" editor tool have the same structure.



- | | | | |
|----------|-----------------|----------|-------------------|
| 1 | Dialog box name | 4 | Information panel |
| 2 | Instruction | 5 | Button bar |
| 3 | Parameter input | | |

Example of a dialog box.

Dialog box name	The name of the dialog box is displayed.
Instruction	Displays short instructions.
Parameter input	Parameter input fields enable the requested information to be entered.
Information panel	Displays a short explanation of each parameter.
	
Button bar	The "Back", "Next", "Cancel", "Finish", and "Save" buttons may be displayed.

Back	This button allows you to return to a previous dialog box.
Next	This button allows you to go forward to the next dialog box. The button is enabled only when all required information has been correctly entered.
Cancel	This button allows you to close the dialog box without saving any changes. A message appears asking you to confirm the cancellation. Click "Yes" to close the dialog box.
Finish	<p>If you are using the wizard to create a new process file, this button allows you to save the changes and exit the "Process Definition" editor tool.</p> <p>Note: If the user tries to close the QMC or tries to leave the current editor without having saved the data, there will be a warning message "Data is not saved. Do you want to leave without saving?".</p> <ul style="list-style-type: none">■ Yes: The message box disappears and the software switches to the chosen editor. The user may also close the QMC, although this leads to loss of unsaved data.■ No: The user must finish the dialog before being able to leave the current editor.
Save	This button allows you to save the changes. In contrast to the "Finish" button, the dialog box remains enabled and you can create other new process files.

Progress bar A progress bar is displayed when the corresponding process file is being created using the wizard.

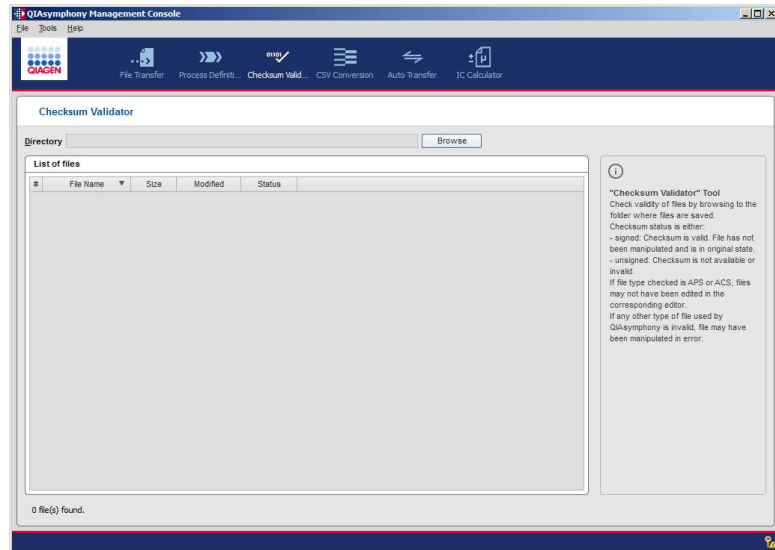
The example below shows that 4 out of 6 steps have been completed.



Page left intentionally blank

6

“Checksum Validator” Tool



The “Checksum Validator” tool.

The “Checksum Validator” tool provides the following for selecting a file.

- Browse Button for opening the “Browse Directory” dialog box, which enables the folder in which the files are located to be selected.
- Directory Field that displays the selected directory.
- x file(s) found Indicates the total number of files listed in the main panel.

The results of the checksum validation for the selected file are displayed in the main panel. The local path is configured in the “Options” dialog box of the “Tools” menu (see Section 11.1).

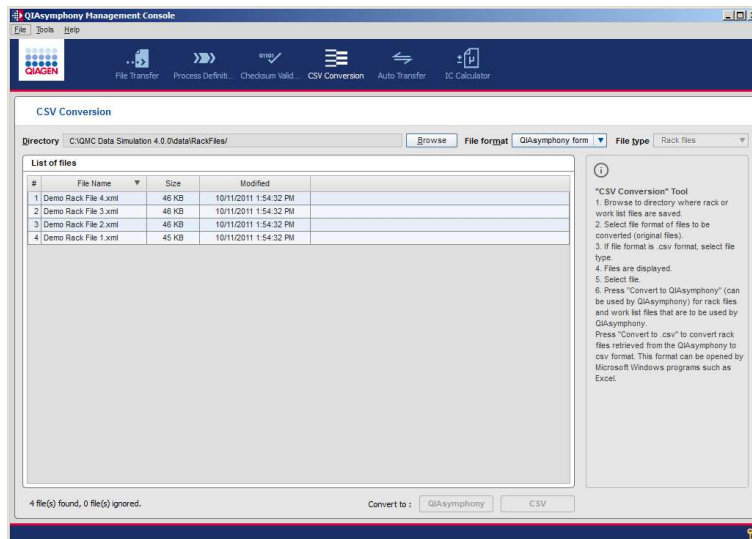
- # The number of the file.
- File Name The full file name is displayed.

Size	The size of the file is displayed.
Created	The date and time of file creation are optionally displayed. This information is configured in the “Options” dialog box of the “Tools” menu (see Section 11.1).
Modified	The date and the time at which the file was last modified are optionally displayed. This information is configured in the “Options” dialog box of the “Tools” menu (see Section 11.1).
Read	The date and the time at which the file was last accessed are optionally displayed. This information is configured in the “Options” dialog box of the “Tools” menu (see Section 11.1).
Status	<p>Indicates the checksum status:</p> <ul style="list-style-type: none">■ “Signed” — Checksum is valid and the file has not been modified.■ “Unsigned” — Checksum is invalid indicating that the file was modified without using a suitable editor or checksum is not available.

7

“CSV Conversion” Tool

The “CSV Conversion” tool enables the format conversion of ***.csv** and ***.xml** files.



“CSV Conversion” screen.

x file(s) found, x file(s) ignored Indicates the number of files that were found to correspond to the search criteria, and the number of files that did not correspond to the search criteria. The “found” files are listed in the main panel.

Directory The selected directory is listed.

Browse Opens the “Browse Directory” dialog box, enabling the user to search for the folder in which the files are located.

“File format” selection box The available file formats are listed. Options for ***.csv** files (e.g., file extension and file delimiter) can be defined in the “Options” dialog box of the “Tools” menu (see Section 11.1).

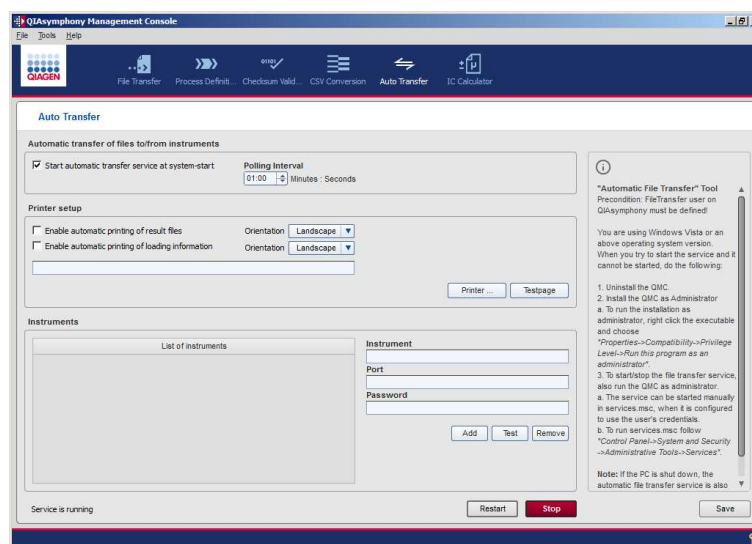
File type	Available file types are listed. It is possible to convert Rack Files to both *.csv and *.xml format and Work List Files from *.csv to *.xml format.
#	The number of the file.
File Name	The full file name is displayed.
Size	The file size is displayed.
Created	The date and time of the file creation are displayed. This optional display is configured in the "Options" dialog box of the "Tools" menu (see Section 11.1).
Modified	The date and time of the last modification of the file are displayed. This optional display is configured in the "Options" dialog box of the "Tools" menu (see Section 11.1).
Read	The date and time the file was last accessed are displayed. This optional display is configured in the "Options" dialog box of the "Tools" menu (see Section 11.1).
Status	The file status is displayed. The status of the file is always unknown.
Convert to: QIAsymphony	Allows you to convert selected files in *.csv format to *.xml format.
Convert to: CSV	Allows you to convert the selected files in *.xml format to *.csv format.

8 “Auto Transfer” Tool

The “Auto Transfer” tool enables the configuration of automatic transfer of Result and Log Files from the QIAsymphony to a predefined directory. Result, Start Batch Confirmation, Loading Information, and Cyclor Files are transferred to the predefined directory. Result, Start Batch Confirmation, and Loading Information Files are deleted after successful transfer. Cyclor Files are not deleted, they remain on the QIAsymphony after transfer. Log Files are transferred to the predefined directory and remain on the QIAsymphony. In addition, the tool enables newly transferred Result and Loading Information Files to be automatically printed.

Note: Do not use the “Desktop” or any of the subdirectories in “My Documents” as the predefined directory. The “Auto Transfer” tool does not have read or write permission for these directories.

Note: To use a network directory, follow the procedure in section 11.7.1. In the default configuration, the “Auto Transfer” tool does not have read or write permission for these directories.



Start automatic transfer service at system start	<p>Check this box to enable the automatic startup of the AutoFileTransfer on starting Windows. By default this parameter should be enabled.</p> <p>Administrator rights are required for Windows XP and Windows 7 to start or stop this service.</p>
Polling Interval	<p>Enter a time for the polling interval. This setting determines how often the QIAsymphony Management Console checks for availability of new files.</p>
Enable automatic transfer of rack files from PC to instrument	<p>Check this box to enable automatic transfer of rack files from PC to instrument</p>
Enable automatic transfer of rack files from instrument to PC	<p>Check this box to enable automatic transfer of rack files from instrument to PC</p>
Enable automatic printing of Result Files	<p>Check this box to enable Result Files to be automatically printed.</p>
Orientation	<p>Select whether to print Result Files in landscape or portrait.</p>
Enable automatic printing of loading information	<p>Check this box to enable Loading Information Files to be automatically printed.</p>

Orientation	Select whether to print Loading Information Files in landscape or portrait.
Printer	Click this button to display the "Print" screen, which contains the list of available printers, and select a printer.
Text field	The selected printer is displayed.
Test page	Click to print a test page on the selected printer.
Instrument	Enter the hostname of the QIAsymphony SP, from which files should be automatically transferred.
Port	Enter the port of the connected QIAsymphony (port 80).
Password	<p>Allows a password to be entered for the "FileTransfer" user. In order to manage the "FileTransfer" user and thus to configure its password:</p> <ul style="list-style-type: none">■ Log in (on the QIAsymphony) as a user with the role "Supervisor".■ Go to "Tools" and select "User Management".■ Select the user "FileTransfer" in the "Activated Users" selection and provide a password for it. <p>Refer to "Getting Started", Section 5.2 of the <i>General Description</i> for detailed information about how to manage the user accounts and how to configure the password.</p> <p>This password does not expire but can be changed if required. The password can only be set by a user with the "Supervisor" user role.</p>

List of instruments	Displays all configured instruments.
Add	Adds the automatic file transfer configuration to the instrument displayed in the "Instruments" dialog field.
Test	Tests the connection to the configured instrument.
Remove	Removes the selected instrument configuration from the list.
Text label	Indicates whether the "QIAGEN File Transfer" service is currently running.
Restart	Restarts the "QIAGEN File Transfer" service (button enabled when service is running)
Start	Starts the "QIAGEN File Transfer" service (button enabled when service is not running).
Stop	Stops the "QIAGEN File Transfer" service (button enabled when service is running).
Save	Saves configuration changes.

Note: After changing the root directory for the "Auto Transfer" tool, the "QIAGEN File Transfer" service must be stopped and restarted (see Section 13.4.3).

Note: In Windows 7 the User Account Control (UAC) prevents use of the "Start/Stop" and "Restart" buttons. In this case, deactivate the UAC (contact Microsoft for more details about how to do this). If it is not possible to deactivate the UAC, or if you choose not to deactivate the UAC, you can start/restart the QIAGEN File Transfer Service from within the Windows service configuration. To do this, the QIAGEN File Transfer Service must be configured with actual user credentials, see Section 11.7.1.

9 "IC Calculator" Tool

The QIAasymphony Internal Control Calculator enables calculation of the volume of reagent required to prepare the internal control-carrier RNA mixture (IC-carrier RNA mixture) in specific tubes (e.g., 2 ml Sarstedt or 14 ml BD Tubes).

Note: If no internal control is used, a carrier RNA-buffer AVE mixture must be used (see "Calculating reagent volumes", Section 9.2).

QIAasymphony Management Console

File Tools Help

File Transfer Process Defin... Checksum Valid... CSV Conversion Auto Transfer IC Calculator

IC Calculator

Input

ACS: Protocol 6 Number of samples: 12 (1..200)

Labware: SARF5524 Tube 16.8x Elution volume: 60 µl

Internal control mode:

☒ Internal Control/Eluate 0.5 µl (0..1.2)

☐ Internal Control/Sample µl

Calculate

Calculation data

Initial elution volume: 80 µl

Volume internal control per sample: 40 µl

Carrier RNA per sample: 2.5 µl

Result

Pipetting scheme

Internal control (µl)	Carrier RNA (µl)	Buffer (µl)	Total volume (µl)
624.0	39.0	897.0	1560.0

Remark

Composition of IC mix in single tube

Number of tubes

1 for IC-Mixture

Print

Instructions:

1. Select an Assay Control Set (ACS).
2. Enter the number of samples.
3. Select the required labware.
4. Select the elution volume. Ensure that the same volume is selected when defining samples on QIAasymphony SP.
5. Enter the required volume of internal control (IC) for the downstream process. See the relevant kit handbook for further details. If IC is not required, enter '0'.
6. Press 'Calculate'.

Note: If required by the protocol, add carrier RNA. See the relevant kit handbook for further details.

9.1 Before using the "IC Calculator" tool

The following steps must be performed to enable the functionality of the "IC Calculator" editor tool.

1. Define the root directory (main directory) in the "File Transfer" tab of the "Options" dialog (page 11-3).
2. Transfer Protocols and existing Assay Control Sets from the QIAasymphony to the corresponding subdirectories of the root directory (page 13-1).

9.2 Calculating reagent volumes

To calculate the required reagent volumes, proceed as follows:

1. Select the Assay Control Set that you want to use for processing the samples.
2. Enter the number of samples to be processed.
3. Select the labware to be used for internal control (IC).
4. Select whether you would like to specify the internal control volume per eluate or the internal control volume per sample.
5. If you chose to specify the internal control volume per eluate, select the elution volume, otherwise skip this step. When selecting the elution volume, ensure that the same volume is selected when defining samples on QIASymphony SP.
6. Enter the required amount of Internal Control (IC) per sample/eluate that is needed for the downstream process. If IC is not required, enter '0'.
Note: Carrier RNA will automatically be added, if it is necessary for the respective protocol.
7. Press the "Calculate" button.
8. (Optional) Print the result of the calculation using the "Print" button to create a pdf that summarizes the calculation data.
9. Prepare the IC-mixture as shown in the result. If multiple IC tubes are required, be sure to first prepare the mixture in one large tube and then dispense that mixture to the individual tubes. This ensures that the ratio of reagents is the same in every IC tube.

9.3 Structure of dialog box

9.3.1 “Input” panel

ACS	Assay Control Set to be used for processing the samples.
Number of samples	Number of samples to be processed with the IC-mixture.
Labware	Labware to be used for internal control (IC).
Elution Volume	Elution volume to be produced by the QIAsymphony SP. Only selectable if “Internal Control/Eluate” is selected.
Internal Control/Eluate	The amount of internal control per eluate required for the downstream process.
Internal Control/Sample	The amount of internal control per eluate required for the downstream process.
Volume internal control per sample	The amount of internal control to be added to each sample by the QIAsymphony SP. Cannot be modified and is shown for information purposes.
Carrier RNA per sample	The amount of carrier RNA that will be added to each sample by the QIAsymphony SP. Cannot be modified and is shown for information purposes.

9.3.2 "Result" panel

Pipetting scheme	Defines the amount of reagents that have to be pipetted for preparation of the IC-mixture.
Remark	Shows additional advice for preparation of IC-mixture.
Total dispense volume per single tube	Also shows the amount of IC-mixture that is to be dispensed into each individual IC tube.
Number of tubes	Defines the number of IC tubes that have to be loaded on the IC carrier.

10 Getting Started

To get the most out of the QMC and the tools included, we recommend that users follow the workflow described below.

Note: When a new version of the QMC is installed, the options settings from the previous version are kept. New tools must be configured separately.

1. Create a directory on your local PC or on the network (if several users need to work with the same data) that will be used as the main (root) directory for the “File Transfer” and “Process Definition” editor tools. We recommend naming the directory according to the host name of your QIAsymphony (default is `qsspxxxx`; where `xxxx` is the serial number of the QIAsymphony SP) to enable you to easily identify the data stored in this directory.

2. Optional: To use the “Auto Transfer” tool and print function, create a directory on your local PC or on the network (if several users need to work with the same data) in which the downloaded files (e.g., Result Files and Trace Files) for individual instruments will be saved.

Note: Do not select the “Desktop” or any of the subdirectories listed in “My Documents” as the predefined directory. The “Auto Transfer” tool does not have read or write permission for these directories.

Note: If you want to use a network directory as the root directory for the “Auto Transfer” tool, see the notes in section 11.7.1.

3. Configure options for the QMC and tools. For more information, see Section 11.

Note: When specifying the root directory for the “File Transfer” and “Auto Transfer” tools, browse to the directory created in step 1.

4. After configuring the options, a dialog box opens that asks whether the same directories as those on the QIAsymphony should be created in the root directory. Click “Yes” to create the same data structure in the root directory.

If the data structure is already available, the dialog box is not displayed.

5. If you want to transfer Result, Loading Information (QIAsymphony AS only), Cyclor (QIAsymphony AS only) or Log Files automatically from the QIAsymphony, or if you want to print the Result and Loading Information (QIAsymphony AS only) Files (only possible if the QIAsymphony is connected to a network), open the "Auto Transfer" tool and enter the required information.

Note: If the PC is shut down, the automatic file transfer service is also shut down. The "File Transfer" service starts again automatically the next time the PC is switched on.

6. Optional: Transfer Protocols (QIAsymphony SP only), Assay Control Sets (QIAsymphony SP only), Assay Definition files (QIAsymphony AS only), Assay Parameter Sets (QIAsymphony AS only), and Labware files from the QIAsymphony to the corresponding subdirectories in the defined root directory.

The "File Transfer" tool can be used for the transfer when the PC is connected to the QIAsymphony. Alternatively, a USB stick can be used if the QIAsymphony is not connected.

Note: If the files are provided on a USB stick, use the "File Transfer" tool to transfer the data to the root directory. For more information, see page 13-2.

7. Close the QMC and launch it again. The QMC is now ready for use.

11 Configuration

The appearance of the QMC and the way that information is displayed can be configured to suit user needs. Various settings for the QMC and associated tools can be configured in the “Options” dialog box of the “Tools” menu.

11.1 “Options” dialog box

To change QMC settings, complete the following steps.

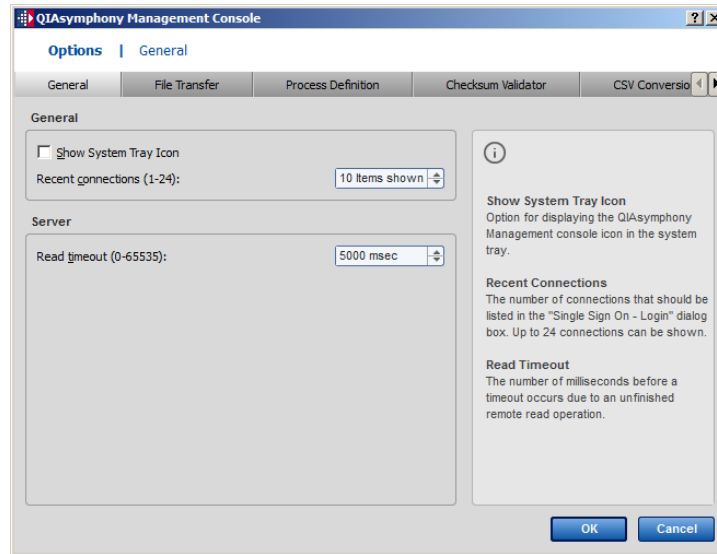
1. Select “Tools/Options”. The “Options” dialog box is displayed.
2. Select the tab of the tool to be configured. The corresponding parameters appear.
3. Change the settings according to your needs.
4. Click “OK”.

The following buttons are available in the “Options” dialog box.

OK	Closes the dialog box and saves the changes.
Cancel	Closes the dialog box without saving the changes.

The “Options” dialog box provides a “General” tab, as well as a tab for each of the available tools (except the IC Calculator). The tabs are described in detail below.

11.2 “General” tab



11.2.1 “General” panel

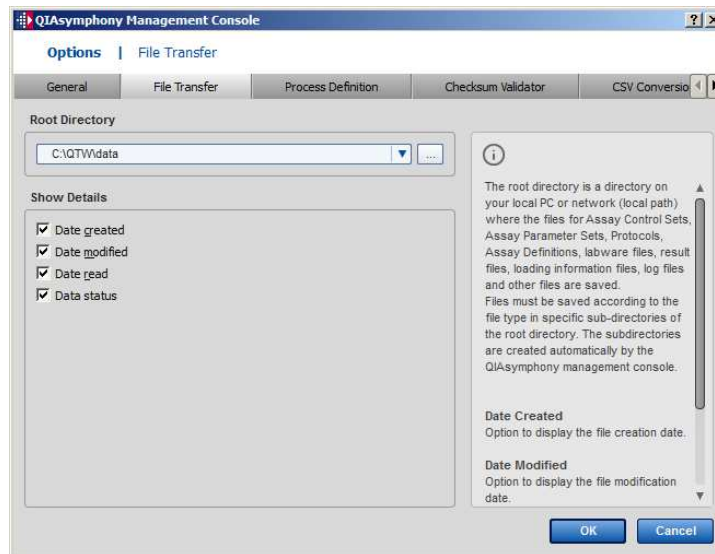
Show System Tray Icon	Checkbox for displaying the QIAsymphony Management Console icon in the system tray.
Recent connections	The number of connections that should be listed in the “Single Sign On – Login” dialog box. Up to 24 connections can be shown.

11.2.2 “Server” panel

Read timeout	The number of milliseconds before a timeout occurs due to an unfinished remote read operation.
--------------	--

11.3 “File Transfer” tab

11.3.1 “Root Directory” panel



Enables the user to browse for a root directory.

The root directory is a directory on your local PC or network (local path) where the files for Assay Control Sets, Assay Parameter Sets, Protocols, Assay Definitions, Labware Files, Result Files, Loading Information Files, Log Files, and other files are saved. Files must be saved according to the file type in specific subdirectories of the root directory (see table on the next page). The subdirectories are created automatically by the QMC.

Note: If the maximum amount of files is exceeded in one of the subfolders, the performance of the QMC may be affected. Therefore, it is recommended to move the files (e.g., Log Files) to a backup folder if many files have been accumulated.

The “Root Directory” panel has the following features:

- A selection box that enables selection of previously used directories for the local path. The selected directory is displayed.
- A browse button that enables the user to search for the root directory (local path).

File folders in the root directory for the “File Transfer” tool

Directory	File type
root\data\AssayControlSets	Assay Control Set
root\data\AssayDefinitions	Assay Definitions
root\data\AssayParameterSets	Assay Parameter Sets
root\data\AssayParameterSetReports	Assay Parameter Set reports
root\data\BioScripts	Protocol
root\data\ConcentrationData	Concentration Files
root\data\config\Profiles	Process Configuration Profiles
root\data\Duration\AS	Duration Files AS
root\data\Duration\SP	Duration Files SP
root\data\ICCalculatorReports	IC Calculator Reports
root\data\Labware\AS	Labware AS
root\data\Labware\SP	Labware SP
root\data\NormalizationDefinitions	Normalization Definitions
root\data\RackFiles	Rack Files
root\data\ReagentDefinitions	Reagent Definitions
root\data\ServiceScripts\AS\Developer	Service Scripts Developer AS
root\data\ServiceScripts\AS\Maintenance	Service Scripts Maintenance AS

Table continued on next page

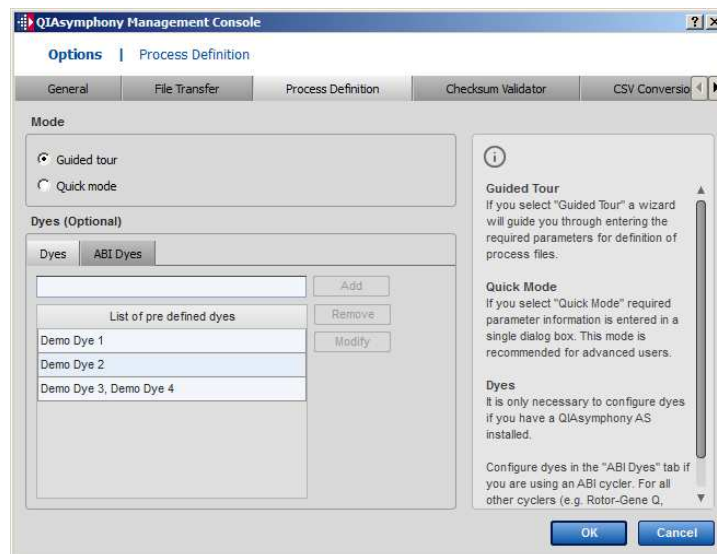
Table continued from previous page

Directory	File type
root\data\ServiceScripts\AS\Operator	Service Scripts Operator AS
root\data\ServiceScripts\AS\Service	Service Scripts Service AS
root\data\ServiceScripts\SP\Developer	Service Scripts Developer SP
root\data\ServiceScripts\SP\Maintenance	Service Scripts Maintenance SP
root\data\ServiceScripts\SP\Operator	Service Scripts Operator SP
root\data\ServiceScripts\SP\Service	Service Scripts Service SP
root\data\Users	User Management
root\data\Worklists	Work List Files
root\log	Log Files
root\log\CyclerExport	Cycler Files
root\log\InstrumentReports	Instrument Report Files
root\log>LoadingInformation	Loading Information Files
root\log\Results\AS	Result Files AS
root\log\Results\SP	Result Files SP
root\log\StartBatchConfirmation	Start Batch Confirmation Files

11.3.2 “Show Details” panel

- Date created Option to display the file creation date.
- Date modified Option to display the file modification date.
- Date read Option to display the file access date.
- Data status Option to validate the listed files and display the validation result.

11.4 “Process Definition” tab



11.4.1 “Mode” panel

Guided Tour Select this option to create new process files using a wizard to guide you through each step.

Quick Mode Select this option to create new process files without using a wizard. This mode is only recommended for advanced users.

11.4.2 “Dyes (Optional)” panel

When using the QIASymphony AS, the following can be configured.

Dyes text fields within "Dyes" and "ABI Dyes" tabs

Enter one or more dye(s).
If using an ABI cycler, configure the dye(s) in the "ABI Dyes" tab. For all other cyclers, configure the dyes in the "Dyes" tab.

Press "Add" to add the dye to the list.

Note: For further information about the ABI cycler models supported, please contact QIAGEN Technical Services.

"Dyes" tab

The table shows a list of all preconfigured dyes. To add a dye, enter one or more dye(s) in the text field and press "Add".

The screenshot shows a software interface titled "Dyes (Optional)". It has two tabs: "Dyes" and "ABI Dyes". The "Dyes" tab is selected. Inside the "Dyes" tab, there is a text input field at the top with an "Add" button to its right. Below the input field is a table with the heading "List of pre defined dyes". The table contains three rows of data: "Demo Dye 1", "Demo Dye 2", and "Demo Dye 3, Demo Dye 4". To the right of the table, there are two buttons: "Remove" and "Modify".

"ABI Dyes" tab To add one or more dyes to the preconfigured dyes in the table, use the entry form to define "Detector" and "Reporter". The entries for "Quencher", "Description", "Comments", and "Sequence" are optional.

The table below the entry form displays the defined dyes.

Detector	Reporter	Quencher	Description	Comments	Quencher
Demo Det 1	Demo Rep 1	Demo Que 1	Demo Desc 1	Demo Com 1	D
Demo Det 2	Demo Rep 2	Demo Que 2			
Demo Det 3	Demo Rep 3				

"Add" button In the "Dyes" tab: Adds text displayed in the "Dyes" text field.

In the "ABI Dyes" tab: Adds the defined form entries to the dyes table stated below.

Note: In both tabs, the "Add" button will be enabled as soon as text is entered in the entry fields in a proper form.

"Remove" button Remove the selected dye text(s) from the list.

"Modify" button Modify the entry for the selected dye(s) displayed in the "Dyes" text field in the "Dyes" tab or in the dyes table in the "ABI Dyes" tab.

Optional when using the QIA Symphony AS, enter dyes used in the assays to be processed.

Steps in the "Dyes" tab

To add a dye:

1. Enter the name(s) of the dye(s) in "Dyes".
Note: If several dyes ("dye combination") should be entered, use a comma to separate the different dyes.
Example: "Dye 1, Dye 2"
2. Press "Add".

To change one of the predefined dyes or dye combinations:

1. Select the dye or dye combination from the list. The corresponding text appears in the text field.
2. Modify the text.
3. Press "Modify". The changed dye or dye combination appears in the list.

To remove predefined dyes or dye combinations:

1. Select the dye or dye combination from the list. The corresponding text appears in the text field.
2. Press "Remove". A dialog box appears, confirming the modification.
3. Press "Yes".

Steps to proceed within the "ABI Dyes" tab

To add a dye:

1. Use the entry form to define one dye's "Detector", and "Reporter". The entries for "Quencher", "Description", "Comments", and "Sequence" are optional.
Note: The entries for "Detector" and "Reporter" must be unique.
2. Press "Add".
3. The table below the entry form displays the defined dye.

To change defined dyes:

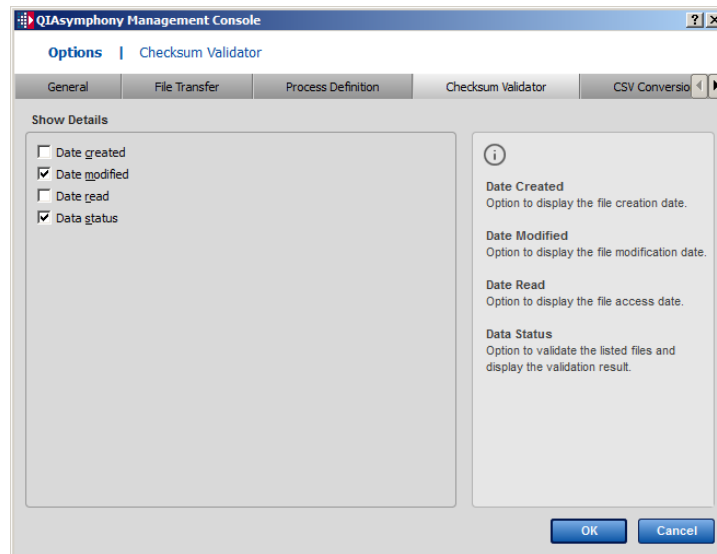
1. Select the dye in the table. The corresponding entries for the selected dye appear in the entry form above the table.
2. Modify the entries within the entry form.
3. Press "Modify".

4. The entries of the selected dye within the table will turn into the values entered in the dedicated form fields.

To remove predefined dyes:

1. Select the table row with the dye to be removed. The corresponding text appears in the entry form.
2. Press "Remove". A dialog box appears, confirming the modification.
3. Press "Yes".

11.5 "Checksum Validator" tab

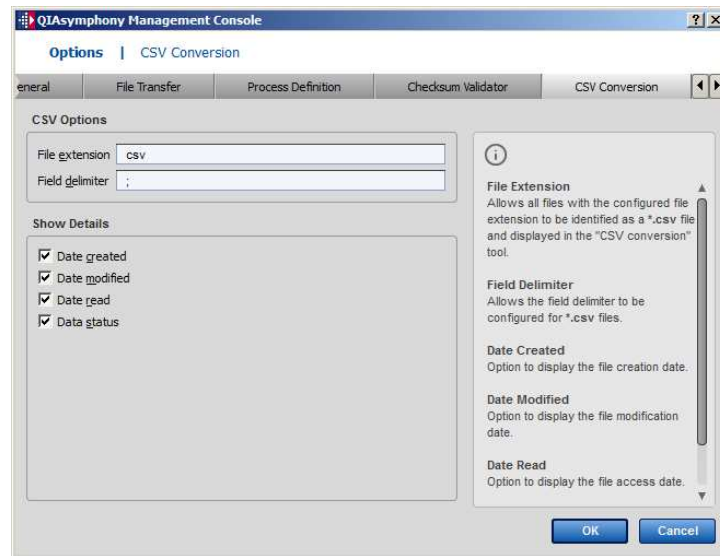


11.5.1 "Show Details" panel

- | | |
|---------------|--|
| Date created | Option to display the file creation date. |
| Date modified | Option to display the file modification date. |
| Date read | Option to display the file access date. |
| Data status | Option to validate the listed files and display the validation result. |

11.6 “CSV Conversion” tab

11.6.1 “CSV Options” panel



File extension Allows all files with the configured file extension to be identified as a ***.csv** file and displayed in the “CSV Conversion” tool.

Field delimiter Allows the field delimiter to be configured for ***.csv** files.

11.6.2 “Show Details” panel

Date created Option to display the file creation date.

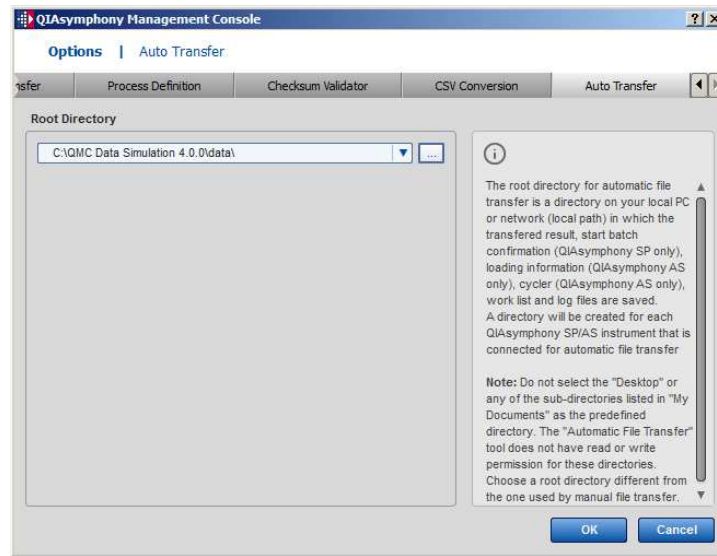
Date modified Option to display the file modification date.

Date read Option to display the file access date.

Data status Option to validate the listed files and display the validation result.

11.7 “Auto Transfer” tab

11.7.1 “Root Directory” panel



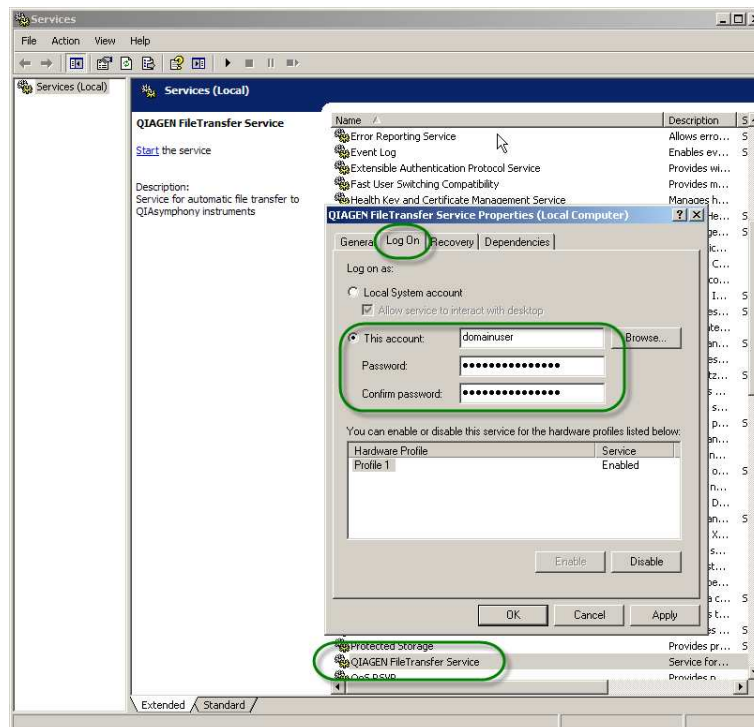
Enables the user to browse for a root directory.

The root directory for automatic file transfer is a directory on your local PC or network (local path) in which the transferred files are saved. A directory will be created for each QIAsymphony instrument that is connected for automatic file transfer.

Note: Do not select the “Desktop” or any of the subdirectories listed in “My Documents” as the predefined directory. The “Auto Transfer” tool does not have read or write permission for these directories.

Note: Depending on your local IT setup, it may be necessary to proceed as follows if you want to save transferred files to a network directory.

1. The domain administrator should:
 - Establish an account for a domain user (you may need to contact your local IT administrator).
 - Configure the remote file system to be fully accessible via the domain user.
2. Configure the service to run as the domain user:
 - Open the XP service configuration in “Settings/Control Panel/Administrative Tools/Services”.
 - Locate the “QIAGEN File Transfer” service and open its properties.
 - Enter the user and password of the domain account in the “Log On” tab.



3. Enter the path to the network directory in the form \\<server>\<shared_folder>\<subpath> as root directory in the “Auto transfer” tab of the QMC options dialog.

Note: The shared file system cannot be accessed via the “letter” of a mapped drive (e.g., Z:\), and therefore use the full name of the drive, to be specified in the form \\<server>\<shared_folder>\<subpath>, either manually or by selecting it from the network environment.

Directory	Content
<root directory>\instruments\ <instrument id> \import\Results\AS	Result Files downloaded from the QIASymphony AS that have not yet been printed
<root directory>\instruments\<instrument id> \import\Results\SP	Result Files downloaded from the QIASymphony SP that have not yet been printed
<root directory>\instruments\<instrument id> \import>LoadingInformation	Loading Information Files downloaded from the QIASymphony AS only that have not yet been printed
<root directory>\instruments\<instrument id> \import\Results\AS\printed	Result Files downloaded from the QIASymphony AS only that have been successfully printed
<root directory>\instruments\<instrument id> \import\Results\SP\printed	Result Files downloaded from the QIASymphony SP only that have been successfully printed
<root directory>\instruments\<instrument id> \import>LoadingInformation\printed	Loading Information Files downloaded from the QIASymphony AS that have been successfully printed

Table continued on next page

Table continued from previous page

Directory	Content
<root directory>\instruments\<instrument id> \import\Logfiles	Log Files
<root directory>\instruments\<instrument id> \import\CyclerExport	Cycler Files, exported from the QIAsymphony AS
<root directory>\instruments\<instrument id> \import\StartBatchConfirmation\SP	Start Batch Confirmation files downloaded from the QIAsymphony SP
<root directory>\instruments\<instrument id> \export\Worklists	Work Lists
<root directory>\instruments\<instrument id> \failed	Files for which upload failed
<root directory>\instruments\<instrument id> \sent	Files for which upload succeeded

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12 Logging in and Connecting

To enable remote access to the QIASymphony, you must log in to the QMC and connect with the QIASymphony via the network. The QIASymphony can be connected via the local network or can be connected directly to a stand-alone PC, which is not connected to the local network.

To connect to the QIASymphony using a stand-alone PC, a crossover network cable is required. In addition, the QIASymphony configuration must be modified. This can be done by QIAGEN Field Service or by a user with supervisor rights (the support of a local IT administrator may be required). For more information, see "System settings", Section 6.1.4 of the *General Description*. The network properties of the local PC should be set to:

- Internet protocol — Enter a specific IP address
- Net mask — 255.255.255.0

Note: You can only connect to the QIASymphony when it is switched on.

To log in, complete the following steps.

1. Switch on the QIASymphony and launch the QMC.
For more information, see Section 2.5.
2. Select "File/Login".
The "Single Sign On – Login" dialog box appears.
3. Enter the host name and the port (port 80) for the QIASymphony or, alternatively, select one of the recent connections listed in the dialog box.
4. Enter your user name and password.

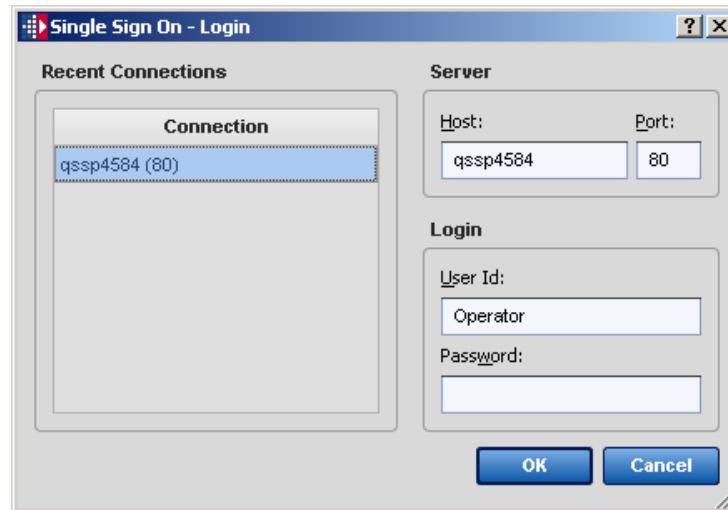
Note: When the QMC is connected to the QIASymphony, the user names and passwords that are valid on the QIASymphony can also be used to log into the QMC.

5. Click "OK".

12.1 “Single Sign On – Login” dialog box

The “Single Sign On – Login” dialog box enables the user to gain access to all tools (except the “Automatic Transfer” tool) by logging in just once.

Note: A separate login procedure must be followed to gain access to the “Auto Transfer” tool (see Section 3.2.4).



The “Single Sign On – Login” dialog box.

12.1.1 “Recent Connections” panel

Connection	Previous connections are displayed. The maximum number of connections displayed is configured in the “Options/General” dialog box of the “Tools” menu (see Section 11.1).
------------	---

12.1.2 “Server” panel

Host	Enter the host name or the IP address of the QIASymphony to which you want to connect.
Port	Enter the number of the connection port (port 80).

12.1.3 “Login” panel

User Id	Enter your user name. The same user ID that is valid on the QIASymphony is also valid for the QMC.
Password	Enter your password. The same password that is valid on the QIASymphony is also valid for the QMC.

12.1.4 Buttons

OK	Closes the dialog box and saves the changes.
Cancel	Closes the dialog box without saving the changes.

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13 Managing Files


13.1 Using the “File Transfer” tool via a connection

The “File Transfer” tool allows files to be transferred between the QIAsymphony and the local path on the PC or network using a connection.

13.1.1 Downloading files from the QIAsymphony

Files can be downloaded from the QIAsymphony to the local path on the PC or network using the “File Transfer” tool.

To download files, complete the following steps.

1. Log in to the QMC and connect to the QIAsymphony using your user account (see Section 12.1).
2. Select the remote site of the QIAsymphony where the files to download are located.
3. Select the type of file to download. All available files of the selected type are listed.
4. Highlight the file(s) to copy to the local path or network, and click . The file that is copied appears in the local path file list.


Note: Result Files and Loading Information Files are stored in zip format on the QIAsymphony. When using the “Auto Transfer” or “File Transfer” tool, they are automatically saved as ***.htm** and ***.xml** files in the appropriate folders.

13.1.2 Uploading files to the QIAsymphony

Files can be uploaded to the QIAsymphony from the local path on the PC or network using the “File Transfer” tool.

To upload files, complete the following steps.

1. Log in to the QMC and connect to the QIAsymphony using your user account (see Section 12.1).
2. Select the remote site of the QIAsymphony where the files will be uploaded.

3. Select the type of file to be uploaded. All available files of the selected type are listed.
4. Highlight the file(s) to be copied to the QIAsymphony, and click . The file that is copied appears in the remote site file list.


13.2 Transferring files using a USB stick

The “File Transfer” tool allows files to be transferred between the local path on the PC or network and a USB stick.

As soon as a USB stick that does not have a data directory is connected to the PC, a message will appear asking whether the same data structure as in the root directory should be created on the USB stick. Click “Yes” to automatically create the data directory with subdirectories on the USB stick.

13.2.1 Uploading files to a USB stick

Files can be transferred from the local path on the PC or network to a USB stick using the “File Transfer” tool.


1. Insert the USB stick into the USB port of the PC.
2. Optional: If a message appears asking whether the data directory should be created, click “Yes”.
3. Select the path of the USB stick in the remote site list.
4. Select the type of file to be uploaded. All available files of the selected type are listed.
5. Highlight the file(s) to be copied to the USB stick in the local path file list, and click . The file is copied to the USB stick and appears in the remote site list.

13.2.2 Downloading files from a USB stick

Files can be downloaded from a USB stick to the local path on the PC or network using the “File Transfer” tool.

Note: Make sure that the defined data directory and subdirectories have been created on the USB stick (see Section 11.3).


1. Insert the USB stick into the USB port of the PC.

2. Select the path of the USB stick as remote site.
3. Select the type of file to download. All available files of the selected type are listed.
4. Highlight the file(s) to be copied from the USB stick in the remote site file list, and click . The file is copied to the local path and appears in the local path file list.

13.3 Deleting files using the “File Transfer” tool

Files can be deleted from a USB stick, the local path or network, or the QIAsymphony using the “File Transfer” tool.

Note: To avoid loss of data, take care when handling files on the QIAsymphony.

1. Log in to the QMC and connect to the QIAsymphony using your user account (see Section 12.1).
2. Select the type of file to be deleted. All available files of the selected type are listed.
3. Highlight the file(s) to be deleted either on the local path or network or the remote site, and click .
A message is displayed to confirm the deletion. After confirmation, the file is deleted from the selected site and no longer appears in the file list.

13.4 Automatic printing and file transfer using the “Auto Transfer” tool

13.4.1 Automatic printing of Result and Loading Information Files

The “Auto Transfer” tool can be configured to automatically print Result and Loading Information Files (QIAsymphony AS only) as soon as they become available. To use this tool, the QIAsymphony must be connected to a network and switched on.

1. Log in to the QMC and connect to the QIAsymphony using your user account. For more information, see Section 12.1.
2. Launch the "Auto Transfer" configuration tool by selecting the corresponding icon in the tools list.
3. Check "Enable automatic printing of result files".
4. Optional: Select whether to print Result Files in landscape or portrait format.
5. When using the QIAsymphony AS, check "Enable automatic printing of loading information".
6. Optional: Select whether to print Loading Information Files in landscape or portrait.
7. Browse to select the printer on which the files should be printed.
8. Optional: Print a test page.
9. Configure the settings for the instrument from which the files should be automatically transferred. Enter the host name, port, and the corresponding password for the "FileTransfer" user.

The password must be configured on the QIAsymphony (see section "Password" in Section 8).

Refer to "Getting Started", Section 5.2 of the *General Description* for detailed information about how to manage the user accounts and how to configure the password.

10. Click "Add".
11. Optional: Test the connection to the QIAsymphony by clicking "Test".

Note: If the PC is shut down, the automatic file transfer service is also shut down. The "File Transfer" service starts again automatically the next time the computer is turned on.

13.4.2 Automatic transfer of files

The “Auto Transfer” tool can be configured to transfer Rack, Result, Loading Information, Cyclor, Start Batch Confirmation, and Log Files automatically to a predefined directory. The zipped files are automatically extracted. In addition, available Work Lists can be uploaded to the QIAsymphony automatically.

1. Log in to the QMC and connect to the QIAsymphony using your user account (see Section 12.1).
2. Launch the “Auto Transfer” tool by selecting the corresponding icon in the tools list.
3. Configure the parameters for the instrument from which the files should be automatically transferred. Enter the host name, port, and the corresponding password for the “FileTransfer” user.
4. Click “Add”.
5. Optional: Test the connection to the QIAsymphony by clicking “Test”.

Note: If the PC is shut down, the automatic file transfer service is also shut down. The “File Transfer” service starts again automatically the next time the computer is turned on”.

Note: If a Work List with the same name already exists, it will be overwritten by the automatic file transfer.

13.4.3 Restarting the “QIAGEN File Transfer” service

After changing the root directory for the “Auto Transfer” tool the user must restart the “QIAGEN File Transfer” service.

To restart the “QIAGEN File Transfer” service:

1. Open the “Auto Transfer” tool.
2. Press “Restart”.

To stop the “QIAGEN File Transfer” service:

1. Open the “Auto Transfer” tool.
2. Press “Stop”.

Note: Shutting down the QMC does not stop the “Auto Transfer” tool. To stop the “Auto Transfer” tool you must either shut down the PC or stop the tool directly in the QMC.

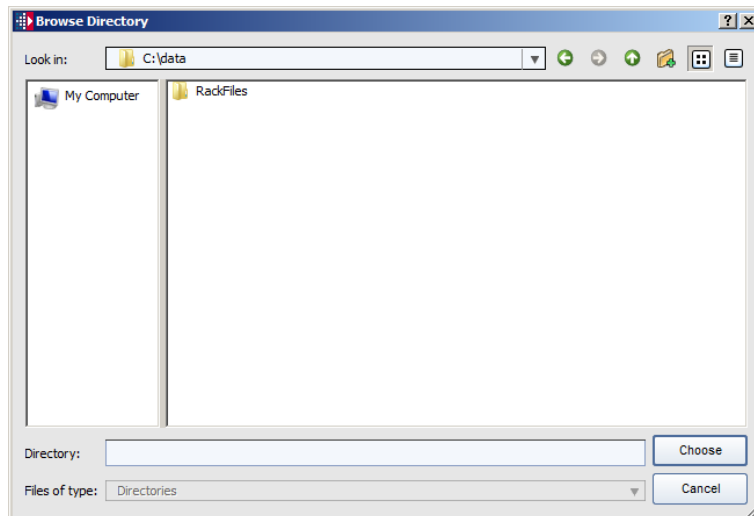
13.5 Checksum validation using the “Checksum Validator” tool

The validity of files is displayed directly in the file list in the “Status” column, when specified in the “File Transfer” tool (see Section 11). Files not located in **root/data/** can be validated using the “Checksum Validator” tool.

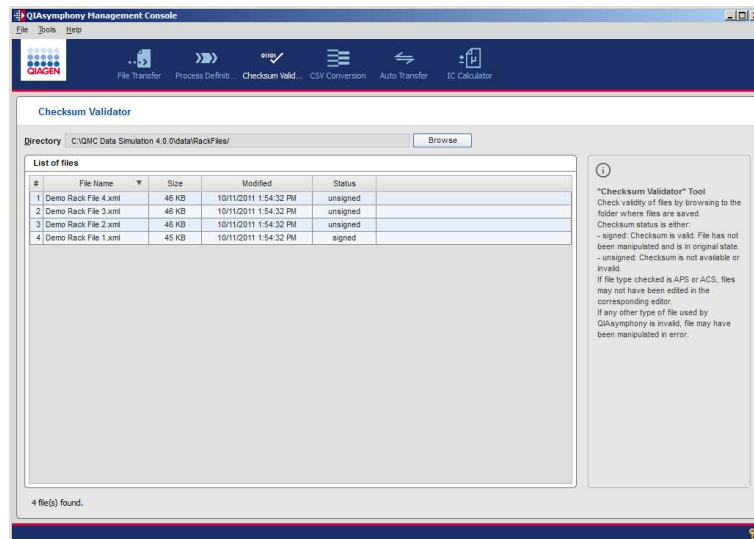
To validate the checksum of a file using the “Checksum Validator” tool, complete the following steps.

1. Select the “Checksum Validator” tool from the tool list.
2. Click “Browse” to search for the directory that contains the files to be checked (e.g., Result Files).

The “Browse Directory” dialog box appears.



3. Select the folder and click “Choose”. All files with checksum are validated. The result is displayed in the list. The column “Status” contains the result of the validation (“signed” or “unsigned”).



13.6 Converting the file format using the “CSV Conversion” tool

The “CSV Conversion” tool is used to convert the format of files in ***.csv** and ***.xml** format. The “CSV Conversion” tool enables:

- Conversion of Rack Files in ***.csv** format to ***.xml** format
- Conversion of Rack Files in ***.xml** format to ***.csv** format
- Conversion of Work List Files in ***.csv** format to ***.xml** format
- Conversion of Concentration Data Files in ***.csv** format to ***.xml** format

Note: Before starting file conversion, ensure that the file extension and file delimiter is correct. To check this, go to “Tools/Options”, and then select “CSV Conversion”.

13.6.1 Converting a Rack File, a Work List File or a Concentration Data File from *.csv to *.xml format

To convert a ***.csv** file to an ***.xml** file that is in a format recognized by QIAAsymphony, complete the following steps.

1. Select the directory where the file to be converted is located. Click "Browse" to search. The "Browse Directory" appears. Select a folder and then click "Choose". We recommend saving the file in the appropriate directory in the root (local path) directory (e.g., Rack Files should be saved in **root\data\RackFiles**. Work Lists in **root\data\Worklists** and Concentration Data Files in **root\data\ConcentrationData**).
2. Select "CSV format" as "File Format".
3. Choose the file type to be converted from the "File type" list.
4. Select the file to be converted.
5. Press "Convert to QIAsymphony". The converted file is saved in the directory selected in step 1.
Note: The converted file (Rack File, Work List File) can be used by the QIAsymphony.

13.6.2 Converting a Rack File from *.xml to *.csv format

Note: It is only possible to convert Rack Files from *.xml format to *.csv format.

1. Select the directory where the file to be converted is located. Click "Browse" to search. The "Browse Directory" appears. Select a folder and then click "Choose". We recommend saving the file in the appropriate directory in the root (local path) directory (e.g., Rack Files should be saved in **root\data\RackFiles**).
2. Select "QIAsymphony format" as "File Format".
3. Select the file to be converted.
4. Press "Convert to CSV". The converted file is saved in the directory selected in step 1.
Note: The *.csv files can be opened by Microsoft Windows programs.

14 Creating and Modifying Process Files

14.1 Process files

Assay Control Sets and Assay Parameter sets can be created and modified by the user. Protocol files and Assay Definition files cannot be created or modified by the user.

QIAsymphony SP process files

Name of process file	Folder where process file is stored	Function of process file
Protocol	root/data/BioScripts	Describes the sample preparation workflow. In addition, pipetting information is defined.
Assay Control Set	root/data/AssayControlSets	Defines combinations of Protocols with internal controls and elution volume. Every sample being processed must be assigned an Assay Control Set.

QIAsymphony AS process files

Name of process file	Folder where process file is stored	Function of process file
Assay Definition	root/data/AssayDefinitions	Describes the pipetting parameters for the assay and defines default assay parameters.
Assay Parameter Set	root/data/AssayParameterSets	Defines which assay is processed together with the assay parameters (e.g., number of replicates, ready-to-use master mix)

14.2 About the “Process Definition” editor tool

When many process files are available in the local path (root), the “Process Definition” editor tool may take a few seconds to start the corresponding dialogs.

Files edited by the “Process Definition” editor tool and saved with a higher version are copied to a backup folder in the root directory:

- Assay Control Sets:
root\data\AssayControlSets_backup
- Assay Parameter Sets:
root\data\AssayParameterSets_backup

In addition to information about version and date, the history of the file can be viewed. Select an Assay Control Set in the “File Transfer” menu, click “Edit”, and then click “History” in the screen that appears. Actions performed with the “Process Definition” editor tool are tracked in the **root\log\ACS_APSEditor.log** file.

Connection to the QIAsymphony is not required for using the “Process Definition” editor tool. In addition, the “Process Definition” editor tool can be used without logging into the QMC.

New process files can be created using either the “Guided Tour” or the “Quick Mode” function. This setting is specified with “Tools/Options/Process Definition” (see Section 5).

14.3 Before using the “Process Definition” editor tool

The following steps must be performed to enable the complete functionality of the “Process Definition” editor tool.

1. Optional: Specify “Process Definition” editor tool options. When using the QIAsymphony AS, frequently used dyes or dye combinations can be preconfigured (see Section 11.4).
2. Define the root directory (main directory) in the “File Transfer” tab of the “Options” dialog (page 11-3).
3. When using the QIAsymphony SP, transfer Protocols and existing Assay Control Sets from the QIAsymphony to the corresponding subdirectories of the root directory (page 13-1).
4. When using the QIAsymphony AS, transfer Assay Definitions, existing Assay Parameter Sets and labware files from the QIAsymphony to the corresponding subdirectories of the root directory (page 13-1).
5. Launch the QMC (page 2-6). When the QMC is launched, the “File Transfer” tool is displayed by default.
6. Select the type of process file to be created or modified, or select the “Process Definition” editor tool from the list.

The following buttons in the following table are available in the "File Transfer" tool.

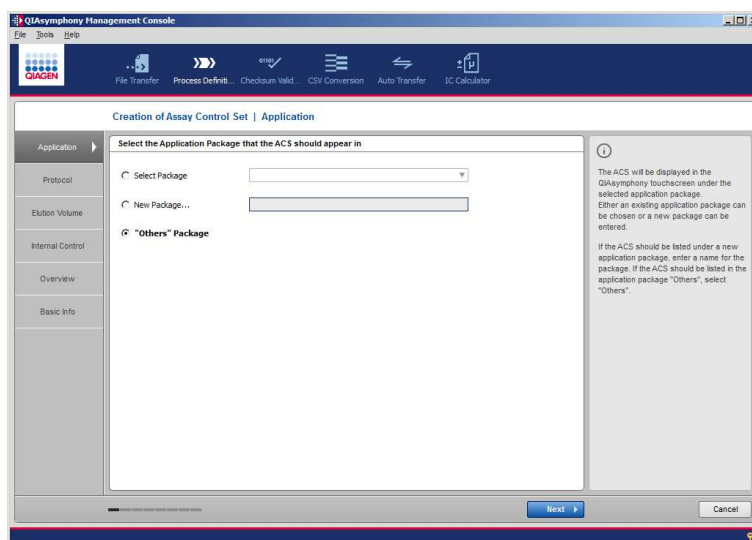
New	This button is always enabled. Click to create a new process file. Depending on the configuration chosen, a dialog box for either the "Quick Mode" or "Guided Tour" functions appears.
Edit	This button becomes enabled when a process file is selected in the "Local Site" list. Click to modify an existing Assay Control Set or Assay Parameter Set.
Refresh lists	This button is always enabled. Click to refresh the file lists on the right and left side.

14.4 Creating a new Assay Control Set

A new Assay Control Set can be created and modified using the "Guided Tour" or "Quick Mode" function of the "Process Definition" editor tool. When using the "Quick Mode" function, all information is entered within one dialog box.

14.4.1 Using the "Guided Tour" function

1. After completing the steps in Section 14.3 and selecting "Assay Control Set" in the File Transfer as the file type, click "New". When the "Guided Tour" function has been selected, the "Creation of Assay Control Set/Application" dialog box appears.



2. Indicate the Application Package in which the Assay Control Set should appear. If the new Assay Control Set should be listed in an existing Application Package, select the "Select Package" radio button. All available Application Packages are displayed in the drop-down list. Select the appropriate package from the list.

Select the Application Package that the ACS should appear in

☒ **Select Package**

☐ New Package...

☐ "Others" Package

If the Assay Control Set should be displayed in a new Application Package, select the "New Package" radio button. The text field then becomes enabled. Enter the name of the new Application Package.

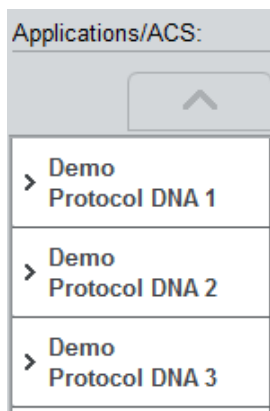
Select the Application Package that the ACS should appear in

☐ Select Package


☒ New Package...

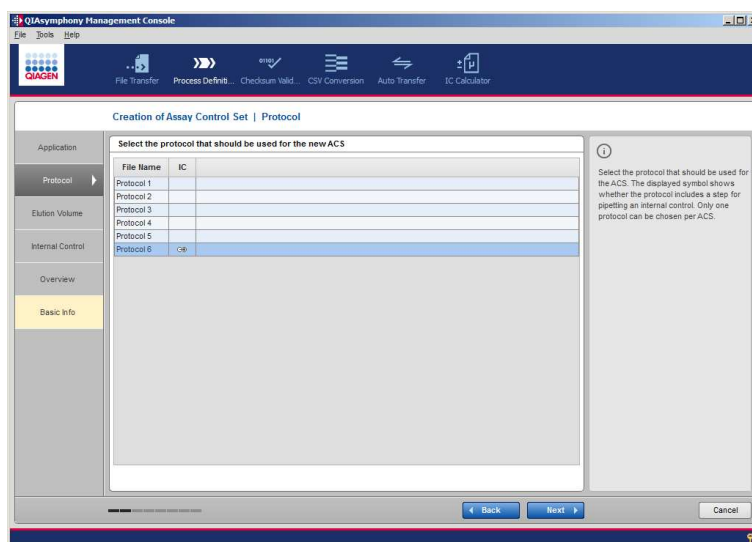
☐ "Others" Package

Note: If the entered text contains spaces, a line break will be introduced after the first space. For example, if "Demo Protocol DNA 1" is entered into the text field, the text will be displayed in the QIAsymphony touchscreen.

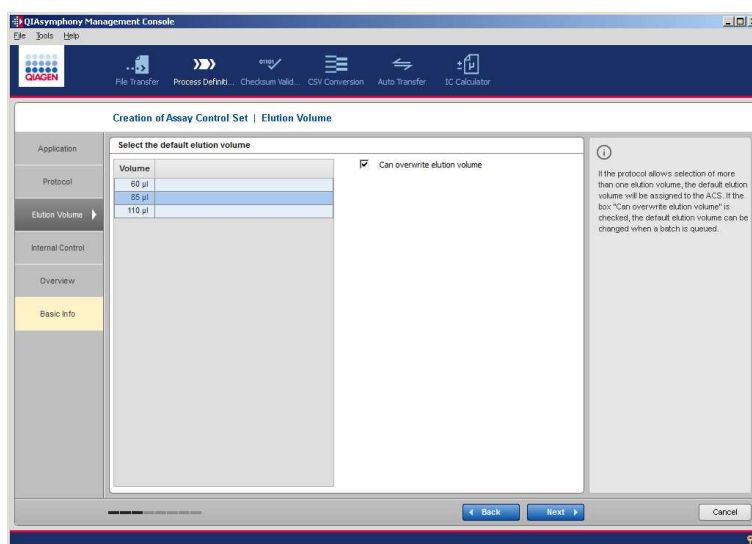


Alternatively, by selecting the ""Others" Package" radio button, the new Assay Control Set will be displayed under the package "Other". When the information has been correctly entered, the "Next" button becomes enabled.

3. Click "Next" to continue. The "Creation of Assay Control Set/Protocol" dialog box appears. A list of all Protocols available in the **root/data/BioScript** directory on the local PC is displayed in this dialog box. If the symbol  appears in the "IC" column, the Protocol uses internal controls.
4. Select the Protocol that should be used for the new Assay Control Set.



- Click "Next" to continue. The "Creation of Assay Control Set/Elution Volume" dialog box appears. A list of elution volumes that can be used with the selected Protocol is displayed in the dialog box.



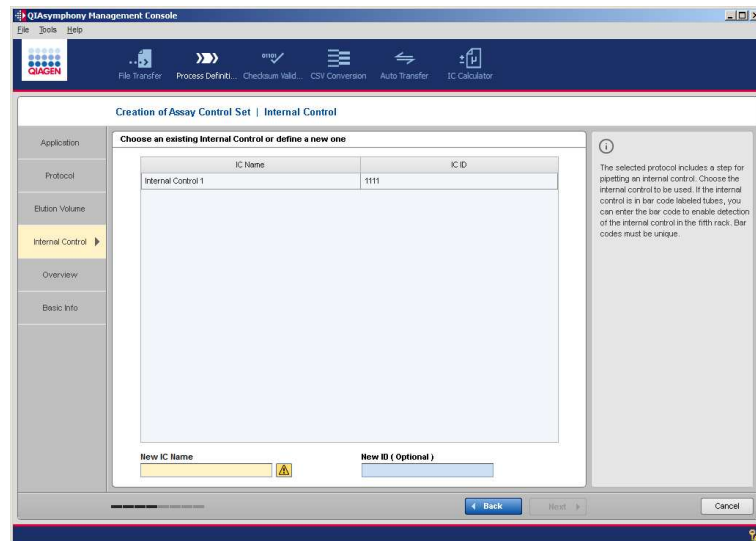
- Select the elution volume that should be used as the default for the Assay Control Set.

Select the default elution volume

Volume	
60 µl	
85 µl	
110 µl	

☒ Can overwrite elution volume

- Choose whether the elution volume can be overwritten (edited) when defining a sample batch on the QIAasympyony SP. If this box is checked, the elution volume can be overwritten when defining a batch. If the box is not checked, the elution volume cannot be edited.
Note: The selected elution volume affects the concentration of the internal control in the eluate. We recommend leaving the box unchecked if the Assay Control Set uses an internal control.
- Click “Next” to continue.
- If the selected Protocol includes addition of internal control, go to step 10. If the Protocol does not include use of an internal control, go to step 11.
- The “Creation of Assay Control Set/Internal Control” dialog box then appears.



11. Choose an existing internal control or define a new one. If the new Assay Control Set uses a previously defined internal control, select the corresponding internal control from the list.

IC Name	IC ID
Internal Control 1	1111
Internal Control 2	2222

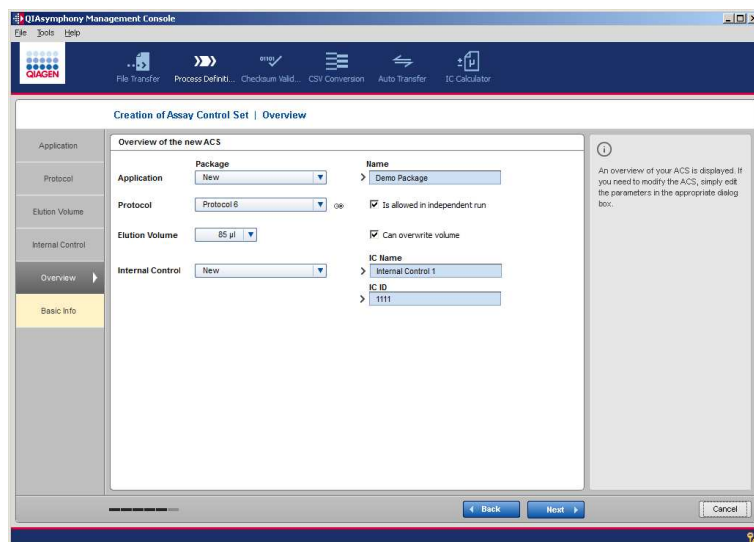
To define a new internal control for this Assay Control Set, enter the name for the new internal control into the text field.

New IC Name

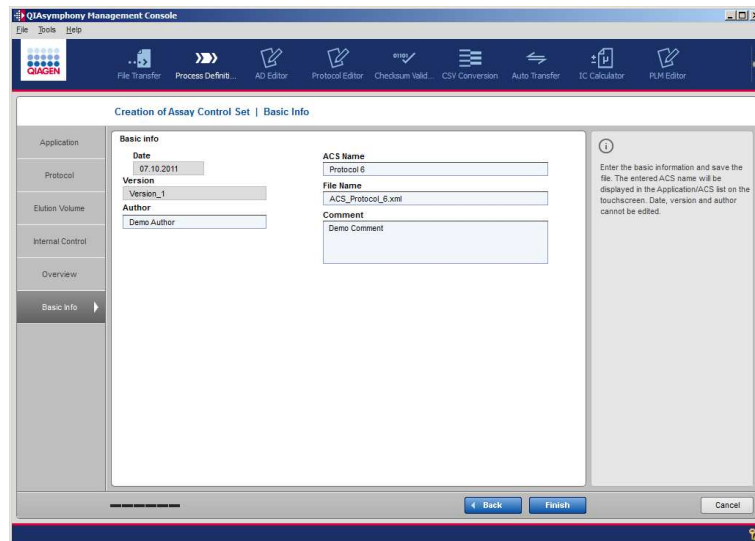
New ID (Optional)

Note: The internal control name will be displayed in the QlAsymphony touchscreen. If the entered text contains spaces, there will be a line break in the drop-down list after the first space. If the complete text does not fit in the position field, the beginning and the end of the text are displayed and "... " appears in the middle.

12. Click "Next" to continue. The "Creation of Assay Control Set/Overview" dialog box appears. If the information entered for all parameters is valid, "Next" is enabled.
13. When parameters have been correctly specified, click "Next" to continue.



14. The “Creation of Assay Control Set/Basic Info” dialog box appears. The “Date”, “Version”, and “Author” fields are completed automatically and cannot be edited by the user. The actual date is displayed in the “Date” field. “Version_1” is automatically displayed in the “Version” field. “Unknown” is displayed in the “Author” field if the user is not logged in to the QIAAsymphony via the QIAAsymphony Management Console. The name of the user that is logged in to the QIAAsymphony is displayed in the “Author” field.



15. If required, enter a comment into the “Comment” field. Text and numerical characters are allowed.
16. The Protocol name appears by default in the “ACS Name” field. The name of the Assay Control Set can be edited, if required.

Note: We recommend incorporating the Protocol name, elution volume, Protocol version, and name of internal control into the Assay Control Set name. For example:

ACS Name
Protocol 6

Note: If the Assay Control Set name contains spaces, a line break is introduced in the drop-down list in the QIAsymphony touchscreen after the first space. Underscore characters in the Protocol name are replaced by default with spaces. We therefore recommend using underscore characters instead of spaces in the Assay Control Set name. We also recommend adding the names of the internal control to the Assay Control Set name, separated by a space.

17. “ACS_ACSName.xml” appears by default in “File Name”. You can edit the file name, if required.

We recommend using the default file name, for example:

File Name
ACS_Protocol_6.xml

18. Click “Finish” to save the Assay Control Set file in the Assay Control Set directory on the local path.
19. To use the new Assay Control Set, the file must first be uploaded to the QIAAsymphony (see Section 3.2.1).

14.4.2 Using the “Quick Mode” function

1. After completing the steps in Section 14.3 and selecting “Assay Control Set” as the file type, click “New”. Alternatively, select the “Process Definition” icon, and then select “Sample Preparation (ACS)”. When the “Quick Mode” function has been selected, the “Creation of Assay Control Set” dialog box appears. This dialog box includes input fields for all required parameters.

The screenshot shows the 'Creation of Assay Control Set' dialog box within the QIAAsymphony Management Console. The dialog is titled 'Create or Edit Assay Control Set' and contains several input fields and checkboxes. The 'Package' dropdown is set to 'Demo Package', and the 'Name' field is 'Demo Package'. The 'Protocol' dropdown is set to 'Protocol 1'. The 'Bution Volume' (likely a typo for 'Button Volume') is set to '200 µl'. There are two checkboxes: 'Is allowed in independent run' and 'Can overwrite volume', both of which are checked. Below these fields is a 'More Info' section with fields for 'Date' (07.10.2011), 'Version' (Version_1), 'Author' (Demo Author), 'ACS Name' (Protocol 6), 'File Name' (ACS_Protocol_6.xml), and 'Comment'. A 'Finish' button is at the bottom right, and a 'Cancel' button is at the bottom left. A help icon (?) is in the top right corner of the dialog, with a note: 'Enter the required information and save the file. Take care to choose a self-explaining ACS Name, Date, Version and Author cannot be edited. The comment is optional.'

2. Enter the information in the following table.

Application Select an existing Application Package from the drop-down list or select “New” if you want to create a new one. If you selected “New”, enter the name of the Application Package that should be displayed in the QIAsymphony touchscreen.

Application Package Name
Demo Package > Demo Package

Protocol Select the Protocol that should be used for the new Assay Control Set. If the symbol (☼) appears after the Protocol name, the selected Protocol uses an internal control.

Protocol Protocol 6 ☼

Elution Volume Select the elution volume for the new Assay Control Set from the drop-down list.

Elution Volume 110 µl

Is allowed in independent run By checking this box, the ACS can be used in an independent run.
 If the box is left unchecked, the ACS may not be used in an independent run.

Note: The box is checked by default.

☒ Is allowed in independent run

Can
overwrite
volume

If this box is checked, the elution volume can be overwritten when defining a batch. If the box is left unchecked, the elution volume cannot be edited.

Note: The selected elution volume affects the concentration of the internal control in the eluate. We recommend leaving the box unchecked if the Assay Control Set uses an internal control.

☒ Can overwrite volume

Internal
Control

Choose an internal control from the drop-down list. This drop-down list, as well as the entry fields "IC Name" and "IC ID", is only displayed if the Protocol uses an internal control.

The screenshot displays the configuration interface for a new Assay Control Set. It includes several fields and checkboxes:

- Application:** A dropdown menu set to "New".
- Package:** A dropdown menu set to "New".
- Name:** A text field containing "Demo Package".
- Protocol:** A dropdown menu set to "Protocol 6".
- Is allowed in independent run:** A checkbox that is checked.
- Elution Volume:** A dropdown menu set to "110 µl".
- Can overwrite volume:** A checkbox that is checked.
- Internal Control:** A dropdown menu set to "New".
- IC Name:** A text field with a yellow background and a magnifying glass icon.
- IC ID:** A text field with a yellow background and a magnifying glass icon.

IC Name

This field is only visible if the selected Protocol uses an internal control.

Enter the name of the internal control that should be used for the new Assay Control Set, or select an existing internal control. The name will appear in the drop-down list of the "Sample Preparation/Internal Controls" screen in the QIAAsymphony touchscreen.

IC Name
> Internal Control 2

IC ID
(optional)

This field is only visible if the selected Protocol uses an internal control. An identifier can optionally be entered for the internal control.

If you use barcodes to identify your internal control, you can enter the unique barcode in this field.

When the tube carrier containing internal controls labeled with barcodes is loaded into "Slot A" of the "Sample" drawer, the QIAAsymphony SP automatically detects which internal control is in each position. If internal controls are not labeled with barcodes, the user must manually assign the internal controls by selecting the corresponding internal controls from the list.

IC ID
> 2222

Date,
Version,
Author

If the user is logged in to the QIAAsymphony the "Author" field is completed automatically (the name of the user is displayed within). The entry field for "Author" is editable.

<p>Date 07.10.2011</p> <p>Version Version_1</p> <p>Author <input type="text"/></p>	<p>ACS Name Protocol 6</p> <p>File Name ACS_Protocol_6.xml</p> <p>Comment <input type="text"/></p>
--	--

<p>Date 07.10.2011</p> <p>Version Version_1</p> <p>Author Demo Author</p>	<p>ACS Name Protocol 7</p> <p>File Name ACS_Protocol_7.xml</p> <p>Comment <input type="text"/></p>
---	--

If no user is logged in to the QIAAsymphony via the QMC, the "Author" field is empty and a warning is displayed aside because the field must not be blank. So the user has to enter an author name for the edited ACS (see Section 12).

Comment A comment composed of text and numerical characters can be entered.

ACS Name The Protocol name appears by default in the “ACS Name” field. The name of the Assay Control Set can be edited, if required.

Note: We recommend incorporating the Protocol name, elution volume, the Protocol version, and name of the internal control into the Assay Control Set name. For example:



ACS Name
Protocol 7

Note: If there are spaces within the Assay Control Set name, a line break will be introduced after the first space. Underscore characters within the Protocol name are replaced by default with spaces. We therefore recommend using underscore characters instead of spaces in the Assay Control Set name. We also recommend adding the names of the internal control to the Assay Control Set name, separated by a space.

File Name “ACS_ACSName.xml” appears by default in “File Name”. You can edit the file name, if required.

We recommend using the default file name, for example:



File Name
ACS_Protocol_7.xml

If all parameters have been correctly entered, the “Save” and “Finish” buttons are enabled.

3. Click “Finish” to save the newly created Assay Control Set. The dialog box will close and the “File Transfer” tool will be displayed. To use the new Assay Control Set, the file must first be uploaded to the QIA Symphony (see Section 3.2.1).

14.5 Modifying an existing Assay Control Set

To modify an existing Assay Control Set, complete the following steps.

1. In the “File Transfer” tool, select “Assay Control Set” as the file format.
2. Select the Assay Control Set to be modified in the “Local Site” list. The “Edit” button becomes enabled.
3. Click “Edit”, or double click on the Assay Control Set file. The “Edit of Assay Control Set” dialog box appears. All relevant information about the Assay Control Set is displayed in this dialog box.

The screenshot shows the 'Edit of Assay Control Set' dialog box within the QIAsymphony Management Console. The dialog is titled 'Edit of Assay Control Set |' and contains the following fields and options:

- Create or Edit Assay Control Set**
 - Package:** Demo Package (dropdown)
 - Application:** Demo Package (dropdown)
 - Protocol:** Protocol 1 (dropdown)
 - Elution Volume:** 200 µl (dropdown)
 - Name:** Demo Package (text field)
 - ☒ Is allowed in independent run
 - ☒ Can overwrite volume
- More Info**
 - Date:** 07.10.2011 (text field)
 - Version:** Version_2 (text field)
 - Author:** Demo Author (text field)
 - ACS Name:** Protocol 9 (text field)
 - File Name:** ACS_protocol_9.xml (text field)
 - Comment:** (text area)
 - History:** (button)


On the right side of the dialog, there is a warning icon and a message: 'Enter the required information and save the file. Take care to choose a self-explaining ACS Name, Date, Version and Author cannot be edited. The comment is optional.'


At the bottom of the dialog, there are three buttons: 'Finish', 'Save', and 'Cancel'.

4. Modify the parameter(s), as required.

Application Select an existing Application Package from the drop-down list or select "New" if you want to create a new one. If you selected "New", enter the name of the Application Package that should be displayed in the QIAAsymphony touchscreen.

Application Package
Demo Package ▼ > Name
Demo Package

Protocol Select the Protocol that should be used for the new Assay Control Set. If the symbol  appears after the Protocol name, the selected Protocol uses an internal control.

Protocol Protocol 6 ▼ 

Elution Volume Select the elution volume for the new Assay Control Set from the drop-down list.

Elution Volume 110 µl ▼

Is allowed in independent run By checking this box, the ACS can be used in an independent run.
If the box is left unchecked, the ACS may not be used in an independent run.

Note: The box is checked by default.

☒ Is allowed in independent run

Can overwrite volume If this box is checked, the elution volume can be overwritten when defining a batch. If the check box is left unchecked, the elution volume cannot be edited.

Note: The selected elution volume affects the concentration of the internal control in the eluate. We recommend leaving the box unchecked if the Assay Control Set uses an internal control.

☒ Can overwrite volume

Internal Control

Choose an internal control from the drop-down list. This drop-down list, as well as the entry fields "IC Name" and "IC ID", is only displayed if the Assay Control Set uses an internal control.

IC Name

This field is only visible if the selected Protocol uses an internal control.

Enter the name of the internal control that should be used for the new Assay Control Set. The name will appear in the drop-down list of the "Sample Preparation/Internal Controls" screen in the QIAAsymphony touchscreen.

IC ID (optional) This field is only visible if the selected Protocol uses an internal control. An identifier can optionally be entered for the internal control.

If barcodes are used to identify the internal control, you can enter the unique barcode in this field.

When the tube carrier containing internal controls labeled with barcodes is loaded into "Slot A" of the "Sample" drawer, the QIAAsymphony SP automatically detects which internal control is in each position. If internal controls are not labeled with barcodes, the user must manually assign the internal controls by selecting the corresponding internal controls from the list.

IC ID
> 2222

Date, Version, Author The "Date" and "Version" fields are completed automatically and cannot be edited by the user.

The actual date is displayed in the "Date" field.

"Version_X" is automatically displayed in the "Version" field, where "X" indicates the version number.

If the user is logged in to the QIAAsymphony the "Author" field is completed automatically (and the name of the user is displayed). The entry field for "Author" is editable.

If no user is logged in to the QIAAsymphony via the QMC, the "Author" field is empty and a warning is displayed since the field must not be blank. The user must enter an author name for the edited ACS.

<p>Date 30.09.2011</p> <p>Version Version_2</p> <p>Author ThLo</p>	<p>ACS Name ACS_MoveConveyor</p> <p>File Name ACS_ACS_MoveConveyor.xml</p> <p>Comment </p> <p style="text-align: right;">History</p> <p style="text-align: right;">History</p>
---	---

For more information, see Section 12.

Comment Text and numerical characters can be entered.

History Click this button to view the history of the Assay Control Set file.

ACS Name The Protocol name appears by default in the “ACS Name” field. The name of the Assay Control Set can be edited, if required.

Note: We recommend incorporating the Protocol name, elution volume, Protocol version, and name of the internal control into the Assay Control Set name. For example:

<p>ACS Name Protocol 7</p>

Note: If there are spaces within the Assay Control Set name, there will be a line break after the first space. Underscore characters within the Protocol name are replaced by default with spaces. We therefore recommend using underscore characters instead of spaces in the Assay Control Set name. We also recommend adding the names of the internal control to the Assay Control Set name, separated by a space.

File Name “ACS_ACSName.xml” appears by default in the “File Name” field. You can edit the file name, if required.

We recommend using the default file name, for example:

File Name
ACS_Protocol_7.xml

5. Click “Save” to save the modified or newly created Assay Control Set. The dialog box will remain open and you can create additional Assay Control Sets. Alternatively, click “Finish” to save the modified or newly created Assay Control Set. The dialog box closes and the “File Transfer” tool will be displayed.

Note: The original file (before the modifications are saved) is saved in a backup directory (**root/data/AssayControlSetsBackup**). The file is renamed as **original file name_date_Version.xml**. To use the modified or new Assay Control Set, the file must first be uploaded to the QIAsymphony (see Section 4).

14.6 Creating a new Assay Parameter Set

A new Assay Parameter Set can be created and modified using the “Guided Tour” or “Quick Mode” function (for more information, see section 11.4.1).

14.6.1 Using the “Guided Tour” function

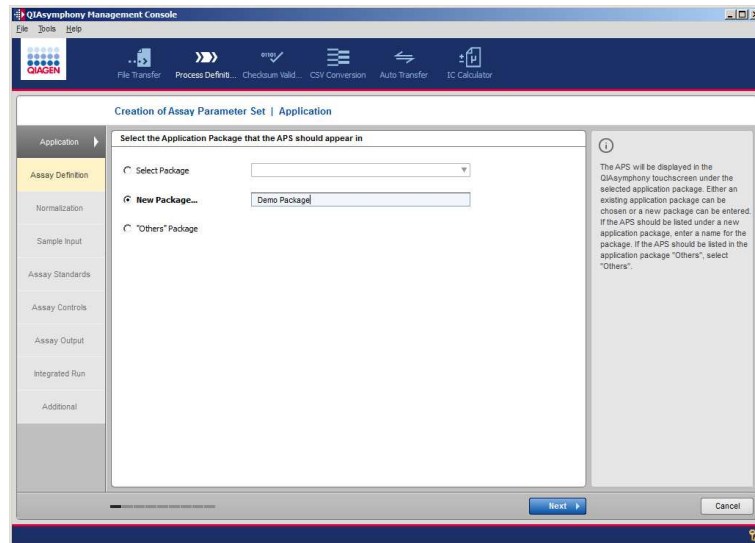
The “Guided Tour” function can be used to create a new Assay Parameter Set.

1. After completing the steps in Section 14.3 and selecting Assay Parameter Set as the file type, click “New” (“File Transfer” tool). Alternatively, select the “Process Definition” icon, and then select “Assay Setup (APS)”.

Sample Preparation (ACS)

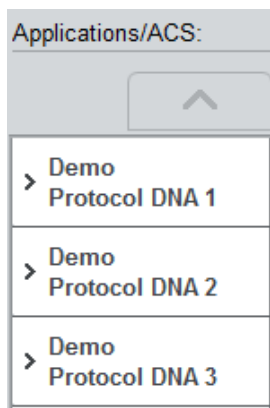
Assay Setup (APS)

The “Creation of Assay Parameter Set/Application” dialog box appears.



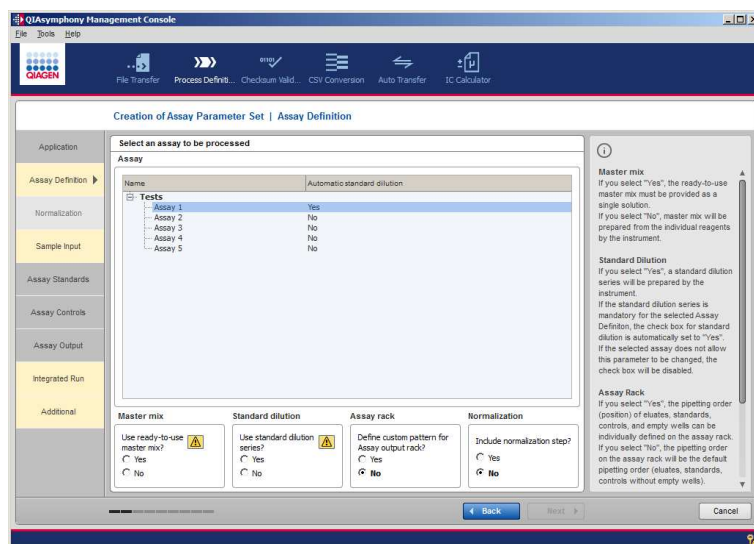
“Creation of Assay Parameter Set/Application”.

2. Indicate the Application Package in which the Assay Parameter Set should appear.
 If the new Assay Parameter Set should be listed in an existing Application Package in the QIAAsymphony touchscreen, select the “Select Package” radio button. All available Application Packages are displayed in the drop-down list. Select the appropriate package from the list.
 If the Assay Parameter Set should be displayed in a new Application Package, select the “New Package” radio button. The text field then becomes enabled. Enter the name of the new Application Package.
Note: If the entered text contains spaces, a line break will be introduced after the first space. For example, if “Demo Protocol DNA 1” is entered into the text field, the text will be displayed in the QIAAsymphony touchscreen.



Alternatively, by selecting the "Others" Package radio button, the new Assay Parameter Set will be displayed under "Others".

When the information has been correctly entered, the "Next" button becomes enabled. After clicking "Next" in the "Creation of Assay Parameter Set/Application" dialog, the "Creation of Assay Parameter Set/Assay Definition" dialog box appears.



"Creation of Assay Parameter Set/Assay Definition".

3. From the "Assay" panel, select the assay for which parameters should be defined. The assays are sorted in different packages, which can be expanded or condensed by clicking the arrow symbols..



Note: Only one assay can be selected from the "Assay" list.

Note: If the selected assay requires a Rotor-Disc for the assay rack, it is not possible to include a normalization step. This is because each Rotor-Disc covers more than one assay slot. If such an assay is selected, the following message appears: "Including a normalization step is not possible for assay definitions that use the rotor gene disc.".

Note: The column "Automatic standard dilution" indicates whether a standard dilution series will be prepared by the instrument for a particular assay.

- Yes: A standard dilution series will be prepared by the instrument. The dilution may be defined via the "Creation of Assay Parameter Set/Assay Standards" dialog.
 - No: The standards must be selected manually by the user in the "Assay Standard" dialog. No standard series will be created by the instrument.
4. In the "Master mix" panel, select whether ready-to-use master mix will be used.
- Note:** This setting is only a default setting and can be changed on the touchscreen when defining a run for the QIAAsymphony AS.
- Yes: A single solution of ready-to-use-master mix must be available on the QIAAsymphony AS.
 - No: The individual components of the master mix must be available on the QIAAsymphony AS and the master mix is set up and mixed by the instrument, as defined in the Assay Definition file.
5. **Optional:** If the Assay Definition supports automatic standard dilution and the standard series is optional, an additional panel "Standard dilution" is displayed and the user can enable or disable creation of a standard series:

- Yes: The APS must contain the relevant parameters. A tab for a standard dilution series will be displayed in the “Assay Standards” dialog.
- No: The APS does not contain the relevant parameters. A tab for standard dilution series will not be displayed in the “Assay Standards” dialog.

Master mix	Standard dilution	Assay rack	Normalization
Use ready-to-use master mix?  <input type="radio"/> Yes <input type="radio"/> No	Use standard dilution series?  <input type="radio"/> Yes <input type="radio"/> No	Define custom pattern for Assay output rack? <input type="radio"/> Yes <input checked="" type="radio"/> No	Include normalization step? <input type="radio"/> Yes <input checked="" type="radio"/> No

6. Select whether to define a custom pattern for the assay rack (“Assay rack” dialog).
 - Yes: The positioning of assays, standards, controls, and empty wells can be individually defined on the assay rack. When “Yes” is selected, the “Creation of Assay Parameter Set/Assay Output” dialog is activated (see step 29).
 - No: The pipetting order on the assay rack will be the default pipetting order (i.e., eluates, standards, controls without empty wells).
7. Select whether a normalization step will be included.
 - Yes: Eluates will be diluted to equal concentrations. A Normalization Definition (ND) file is required for the instrument to perform the normalization step. If “Yes” is selected, the “Normalization” dialog is activated.
 - No: There will be no normalization step.

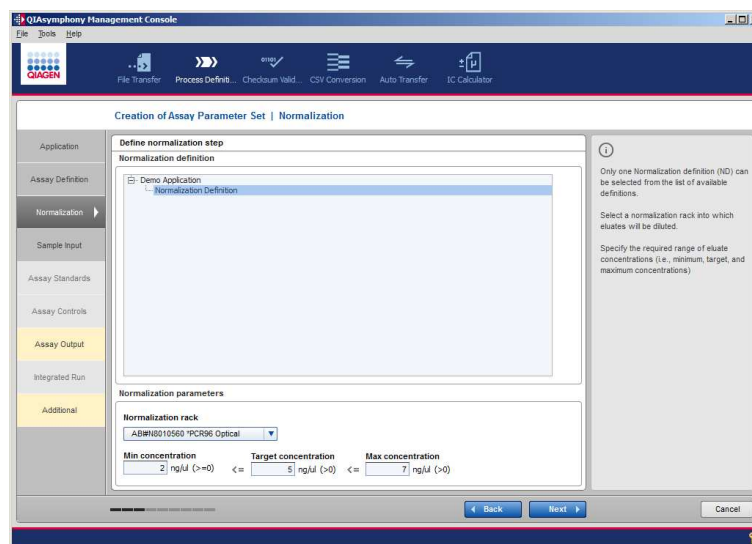
Note: It is not possible to use normalization in an integrated run. As a consequence, the “Creation of Assay Parameter Set/Integrated Run” dialog will not be available if normalization is applied.

Note: The Normalization Definition file is a *.xml file provided by QIAGEN. Please refer to *Operating the QIASymphony AS* for more information about the Normalization Definition.

Note: When using normalization, the QIAAsymphony AS looks for a *.xml Concentration Data File which can be uploaded to the QIAAsymphony via the QMC. For more information see Section 8 in the *General Description*.

8. When information has been correctly entered, the “Next” button is enabled.
9. Click “Next” to continue.

If the Assay Parameter Set will include a normalization step, proceed to step 10. If the Assay Parameter Set will not include a normalization step, proceed to step 15.



“Creation of Assay Parameter Set/Normalization”.

10. The “Creation of Assay Parameter Set/Normalization” dialog appears. Select a Normalization Definition file in the list within the “Normalization definition” panel.
11. Select a normalization rack from the “Normalization rack” drop down menu. Eluates will be diluted in this rack.
12. Define the minimum, target, and maximum eluate concentrations in the “Normalization parameters” panel.

Note: The target concentration value (i.e., the concentration that is produced by the normalization step)

should be within the range defined by the minimum and maximum concentrations. The values of minimum, target, and maximum concentration may be equal. The concentration value may have decimal places.

Note: Samples that already have a concentration that lies between the defined minimum and target concentration will be directly pipetted into the assay rack. In this case, a dilution step will not be performed.

If the concentration of a sample is already below the minimum concentration, or if it is not possible to dilute a sample to below the maximum concentration, the affected sample will not be processed any further on the QIAasymphony AS.

13. When all required information has been entered, the "Next" button is enabled.
14. Click "Next" to continue. The "Sample Input" dialog appears.

The screenshot shows the 'QIAasymphony Management Console' window. The 'Sample Input' tab is active, displaying the 'Enter sample input information' dialog. The dialog is divided into three main sections: 'Samples', 'Extraction controls', and a right-hand sidebar with explanatory text.

Samples Section:

- Number of replicates:** A text box containing '1' with a dropdown arrow and the text '(>= 1)'.
- Do Samples contain an assay specific internal control?** Radio buttons for 'Yes' (selected) and 'No'.

Extraction controls Section:

- Number of replicates EC+:** A text box containing '1' with a dropdown arrow and the text '(>= 1)'.
- Number of replicates EC-:** A text box containing '1' with a dropdown arrow and the text '(>= 1)'.

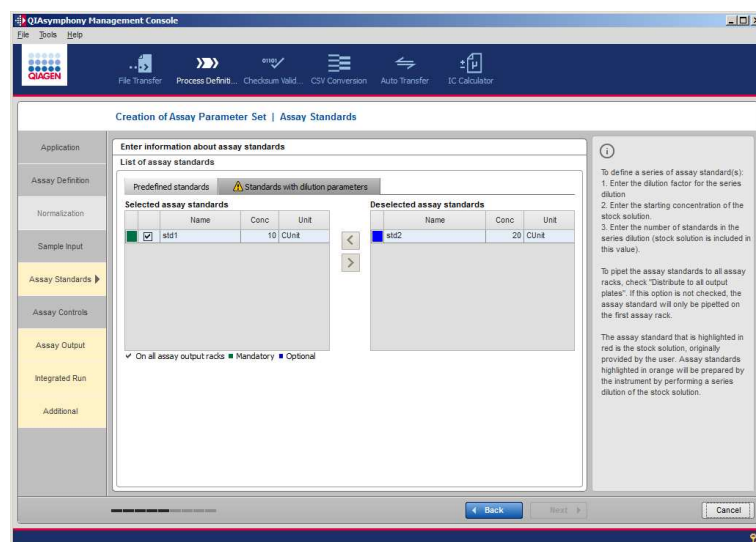
Right-hand Sidebar:

- Replicates:** A note explaining that if the number of replicates is set to 1, the sample will be processed as a unique. If the number is set to 2, the sample will be duplicated, etc.
- Internal Control:** A note explaining that if 'Yes' is selected, a specific internal control will be added to the master mix.
- Extraction Control:** A note explaining that an extraction control is a defined sample that was prepared in parallel with samples during sample preparation.

At the bottom of the dialog are three buttons: 'Back', 'Next', and 'Cancel'.

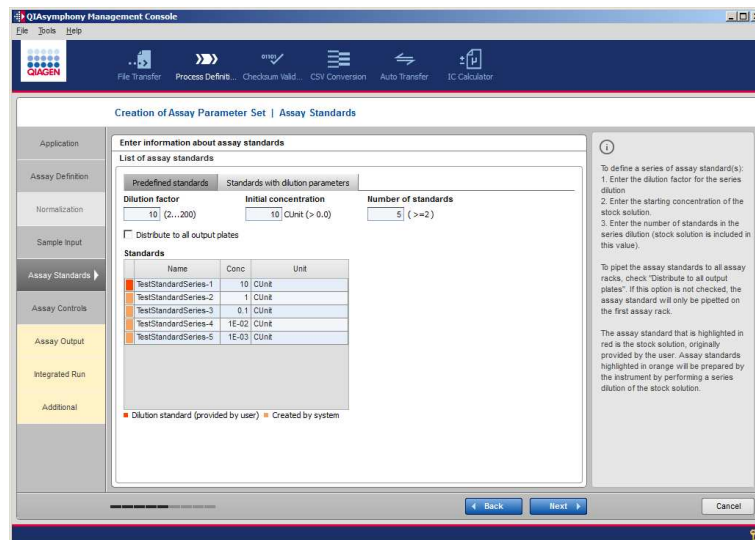
"Creation of Assay Parameter Set/Sample Input".

15. Enter the number of replicates for samples in the "Samples" panel.
Note: To specify processing of just one sample, enter "1"; for duplicates, enter "2"; for triplicates, enter "3" etc.
16. Indicate whether your samples contain an assay-specific internal control by using the radio buttons in the "Samples" panel beside the "Number of replicates" field.
 - Yes: An assay-specific internal control is provided in the samples, but not in the master mix.
Note: An additional master mix containing the internal control will be created for assay standards and assay controls.
 - No: An assay-specific internal control is provided in the master mix, but not in the samples.
17. Enter the number of replicates for the extraction controls in the "Extraction controls" panel.
Note: To specify processing of just one extraction control, enter "1"; for duplicates, enter "2"; for triplicates, enter "3" etc.
Note: Extraction controls are prepared in parallel with samples during sample preparation. The positions for positive extraction controls and negative extraction controls can be set in the Rack File or are automatically available when defined for the Rack File.
18. When the information has been correctly entered, the "Next" button becomes enabled. Click "Next" to continue.
 - If an Assay Definition that supports standard dilution was selected, the "Creation of Assay Parameter Set/Assay Standards" dialog appears. Proceed with step 19.
 - If using predefined standards, go to step 23 without creating a standard dilution series.
 - If the Assay Definition does not require definition of standards, the "Creation of Assay Parameter Set/ Assay Output" dialog appears. Proceed to step 30.



"Creation of Assay Parameter Set/Assay Standards".

19. When using "Standards with dilution parameters", enter the dilution factor for the standard series dilution within the corresponding tab ("Dilution factor" entry field).



“Creation of Assay Parameter Set/Assay Standards” using Assay Definition with automatic standard dilution.

20. Enter the starting concentration of the stock solution (the concentration of the initial dilution standard which is provided by the user) under “Initial concentration”.
21. Enter the number of replicates for assay standards in the “Number of standards” entry field. The stock solution (initial standard) is included in this value.

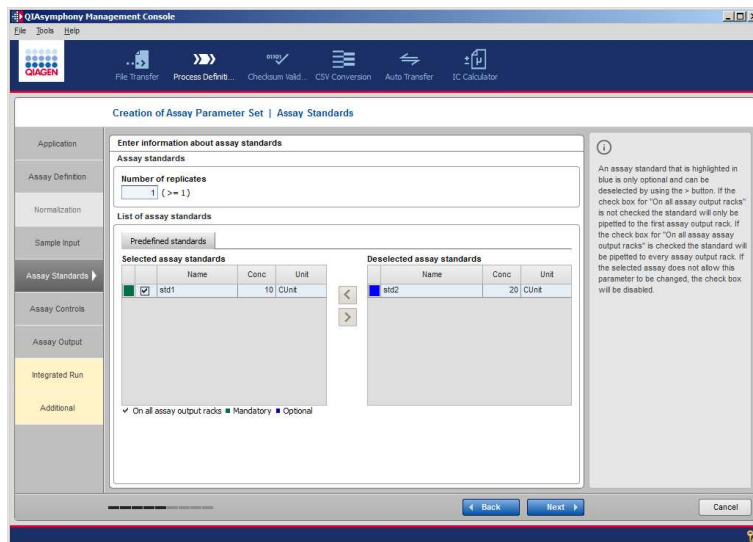
Example: If you define a dilution factor of 10 (i.e., the dilution ratio is 1:10) and an initial concentration of 30 ng/μl. Then, if you set the number of standards to 5, the system will create four new standards based on the stock solution:

- Standard-1 (stock solution) with conc. 30 ng/μl
- Standard-2 with conc. 3 ng/μl
- Standard-3 with conc. 0.3 ng/μl
- Standard-4 with conc. 0.03 ng/μl
- Standard-5 with conc. 0.003 ng/μl

Note: When opening the dialog the standards list is empty. It is updated according to the number of standards.

The standards in the list are named using the following pattern, [Prefix]-[index], e.g., "Standard-1", "Standard-2", "Standard-3", etc.

22. The "Next" button is enabled if all entries are completed correctly. Click "Next" to continue with the "Assay Controls" dialog and proceed to step 25.



"Creation of Assay Parameter Set/Assay Standards" using Assay Definition with predefined standards (i.e., no automatic standard dilution).

23. Adjust the list of assay standards according to requirements. The Assay Definition defines whether a standard is mandatory or optional.
- Optional assay standards are indicated in blue, and they can be deselected from the list, if necessary. To do this, press the arrow in the right direction to move the assay standard to the "Deselected assay standards" table.
 - Mandatory assay standards are indicated in green. Mandatory assay standards must be processed and cannot be deselected from the list.

Specify the “On all assay racks” option by using the checking box next to the standard name.

Note: Depending on the Assay Definition, some standards cannot be checked or unchecked by the user.

- Checked: The corresponding assay standard is distributed to all assay racks, if more than one is required.

Note: At least one assay standard must be distributed to all assay racks.

- Not checked: The corresponding assay standard is only distributed to the first assay rack if more than one is required.

Note: The concentration unit defined in the “Unit” column is defined in the Assay Definition and cannot be adjusted by the user.

- The “Next” button is enabled if all entries are entered correctly. Click “Next” to continue. The “Creation of Assay Parameter Set/Assay Controls” dialog appears.

Creation of Assay Parameter Set | Assay Controls

Enter information about assay controls

Assay controls

No. of positive control replicates: 1 (>= 1)

Number of Neg. Control 1 with IC replicates: 1 (>= 1)

Number of Neg. Control 1 without IC replicates: 0 (>= 0)

List of assay controls

Selected assay controls			Deselected assay controls		
Name	Conc	Unit	Name	Conc	Unit
Neg. Control 1 with IC	0	C Unit	Neg. Control 1 without IC	0	C Unit
Pos. Control 1	0	C Unit			

On all assay output racks: ☒ Mandatory ☐ Optional ☐ Additional

Add/modify or remove assay control

Name: _____ Concentration: _____ Unit: _____

Add Modify Remove

Back Next Cancel

“Creation of Assay Parameter Set/Assay Controls”.

- Enter the number of replicates for the assay controls.

- When a positive assay control is used, enter the number of replicates for the positive control(s).
- If the Assay Definition contains a no template control (NTC), enter the number of replicates for the NTC. The NTC is processed with master mixes that contain internal controls, when one reagent is defined as the internal control in the Assay Definition.

Note: If an assay contains an IC, a NTC with a master mix that contains an internal control must be processed and at least one replicate must be defined. The processing of the NTC with master mixes that do not contain an internal control is optional and can be deselected by entering "0" for the number of replicates.

Note: Regardless of whether the Assay Definition with a no template control contains "Internal Control", the NTC is always processed.

26. When the assay contains predefined assay controls, adjust the assay control list as necessary.
- If the selected assay contains predefined positive assay controls, make sure they are preselected in the "Selected assay controls" list.
 - The Assay Definition also defines whether a predefined assay control is mandatory or optional. Optional assay controls are indicated with blue, and can be deselected from the list if required. To do this, use the arrow in the right direction to move the assay control to the "Deselected assay controls" table. Mandatory assay controls are indicated with green. Mandatory assay controls must be processed and cannot be deselected from the list.
27. Specify the "On all assay racks" option.
- Selected: The corresponding assay control is distributed to all assay racks, if more than one is required.
 - Not selected: The corresponding assay standard is only distributed to the first assay rack if more than one is required.

Note: If the selected assay does not allow this parameter to be changed, the check box will be disabled

Optional (if required and Assay Definition allows it):
Create additional assay controls to be used by the assay (panel "Add/modify or remove assay control").

28. If the selected assay allows the creation of additional assay controls, they can be defined in the "Add/modify or remove assay control" panel.

To add an additional assay control:

- Enter the name in "Name".
- Enter the "Concentration" of the additional control.

Note: The "Unit" entry field is filled automatically and cannot be edited.

- Press "Add". The added assay control is indicated with red in the list of "Selected assay controls".

To change one of the defined assay controls:

- Select the assay control from the list. The corresponding parameters appear.
- Modify the name or concentration as required.
- Press "Modify". The changed assay control appears in the list.

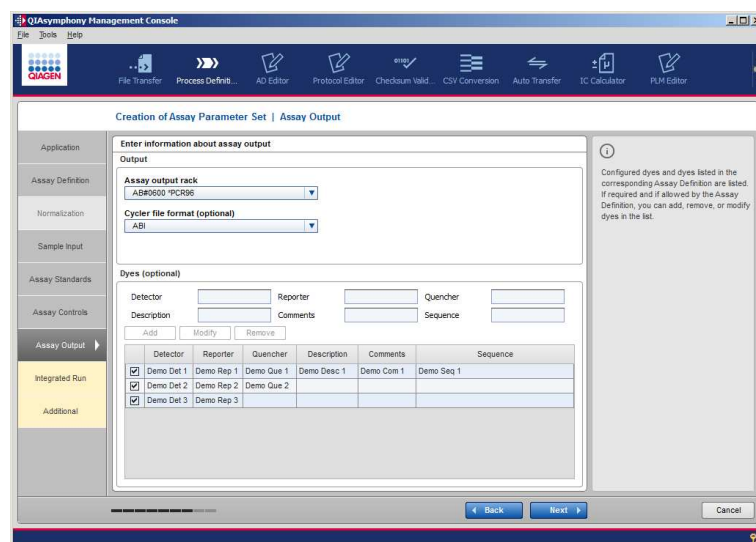
To remove an additional assay control:

- Select the additional assay control from the list. The corresponding parameters appear in the dialog box.
- Press "Remove". A dialog box appears to confirm the removal:

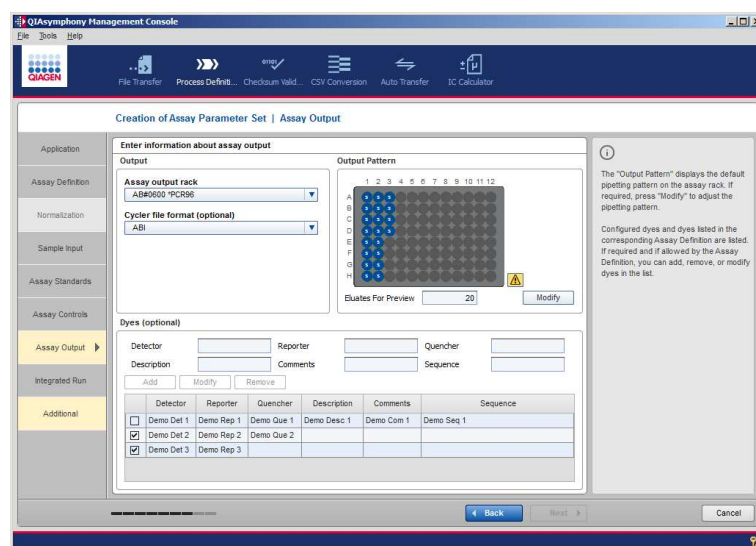
"Yes": The additional assay control is removed from the list of "Selected assay controls".

"No": The additional assay control stays in the list.

29. Click "Next" to continue. The "Creation of Assay Parameter Set/Assay Output" dialog is displayed. Depending on whether a normalization step was defined, a plate schematic of the "Output Pattern" is also displayed.



“Creation of Assay Parameter Set/Assay Output” using ABI dyes.



“Creation of Assay Parameter Set/Assay Output” when a custom pattern will be defined for the assay rack.

30. Select the assay rack used as the default in the “Output” panel. The selected assay defines which rack category is used. The assay category defines which assay racks can be selected. The assay rack selected is used by default during assay definition. If more than one assay rack belongs to a category, the default assay rack can be overwritten during run definition.

Note: Assay Parameter Sets that are based on the same Assay Definition are always compatible. In a multiple-assay run, these Assay Parameter Sets will be pipetted sequentially onto the same assay rack. To pipet the assays of a multiple-assay run to different assay racks, Assay Parameter Sets must be created from individual Assay Definitions that are incompatible.

31. Optional: Select the Cyclor File format to be created after the run. Depending on the assay rack category, different types of Cyclor Files can be specified. The following Cyclor Files are currently supported:

- Rotor-Gene® Q: Available for use with the Rotor-Gene Q
- ABI: Available for 96-well formats

Item	Description
None	Displayed when no compatible Cyclor File is available. Select if none of the available Cyclor File(s) are required.
Cyclor File format	<p>If the actual software supports only one Cyclor File type for the selected assay rack, this is selected by default.</p> <p>In the current software version, there are two Cyclor File formats which are recognized and assigned to the default selection:</p> <ul style="list-style-type: none"> ■ Rotor-Gene Q ■ ABI

32. Optional: Specify and/or add dyes to be used in the “Dyes” panel. All dyes or dye combinations that have

been predefined with "Options/Process Definition" are listed in the table.

To choose a dye/dye combination, check the checkbox next to the name.

To change a dye specification shown in the table, select an existing dye or dye combination, press "Modify" and make your entries in the given entry fields. If you want to add a new dye or dye combination click "Add" and fill in the dye specifications in the entry fields as well.

Note: Modifications and removal of dyes/dye combinations within the table is not allowed for dyes which are already defined within the stated Assay Definition.

Depending on the chosen assay rack and Cyclor File format, the "Dyes" panel displays the input form for the ABI Cyclor File format as default selection.

- Rotor-Gene Q: To add a dye or dye combination, type in the dye name, then click the "Add" button.

Note: If the Cyclor File format is set to "None", the software provides the "Dyes" panel as described for the Rotor-Gene Q Cyclor File format.

Note: When entering dye combinations, use a comma to separate the different dyes. Dye combinations are only possible for dyes in Rotor-Gene Q Cyclor File format.

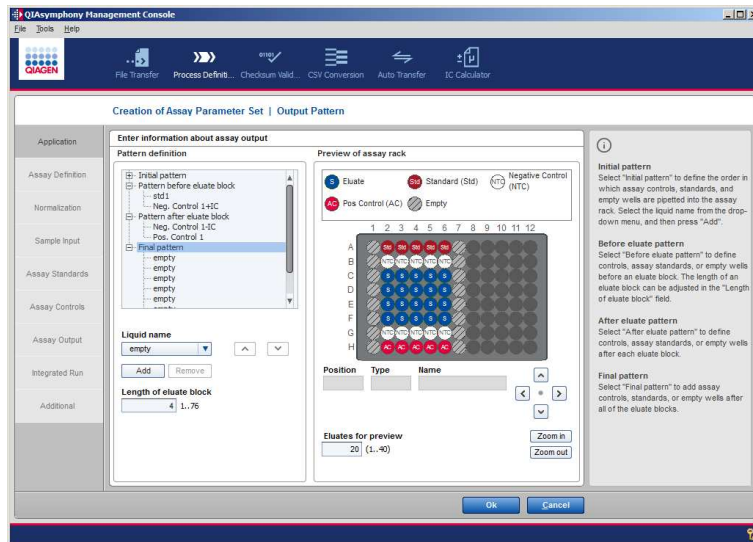
Example: "Demo Dye 1,Demo Dye 2"

- ABI: For ABI Cyclor Files "Detector" (the identifying name) and "Reporter" (the actual dye that is to be detected) must be defined via the entry form. The remaining parameters (Quencher, Description, Comments, and Sequence) are optional specifications.

Note: It is not possible to use the same "Detector" with a different "Reporter". Each dye parameter has to be unique.

33. If a custom output pattern will not be defined, proceed to step 39. If a custom output pattern will be defined, proceed to step 34.

34. Specify the number of eluates to be previewed in the plate schematic in the “Output Pattern” panel. The number of eluates in the plate schematic will be adjusted accordingly.
35. Press the “Modify” in the “Output Pattern” panel to customize the output pattern. A subdialog appears.



“Creation of Assay Parameter Set”. Use the subdialog “Output Pattern” of “Assay Output” dialog to define a custom pattern for the assay rack.

36. Use the “Pattern definition” panel to select a specific layout for the required liquids on the assay rack.
To create a pattern, select the pattern type to be defined in the “Pattern definition” panel (i.e., “Initial pattern”, “Pattern before eluate block”, “Pattern after eluate block”, or “Final eluate pattern”). The active pattern type or liquid name is highlighted dark blue.
Then choose the liquid from the “Liquid name” selection list and click “Add”. Similarly, in order to remove a liquid, select the liquid to be removed within the pattern type list and click the “Remove” button.

In order to change the arrangement of liquids within a pattern type, click on the desired liquid name in the list and use the up and down arrow under the pattern type list.

Define the "Length of eluate block". The software dynamically displays the upper limit of the eluate block size.

Note: A complete pattern consists of at least one and at most four different kinds of patterns which relate to the arrangement of liquids before and after the eluates.

- "Initial pattern": A single-use incidence in front of the "Pattern before eluate block" pattern (if defined) and the first eluate block.
- "Pattern before eluate block": Liquid sequence to be positioned after the initial pattern (if defined) before the first eluate block and at the beginning of each following eluate block.
- "Pattern after eluate block": Liquid sequence to be positioned after each eluate block and before the final pattern (if defined).
- "Final pattern": The complement of the initial pattern, i.e., a pattern which will be applied after the "Pattern after eluate block" pattern (if defined) and the last eluate block.

Note: All liquids given in the "Liquid name" selection list must feature in the output pattern.

Note: The highest possible number of eluates per block depends on the number of positions on the assay rack and the number of already assigned liquid positions within the output pattern. The pattern before/after eluate blocks will be placed between those eluate blocks. A pattern consists of an initial and/or final pattern and one eluate block if the block size complies with the upper limit.

37. There is a caption on top of the "Preview of assay rack" panel showing the different liquid types that occur in an assay output pattern. Below the caption, the chosen assay rack is displayed.

To see details for a specific position on the assay rack, click on the position and look at the text fields "Position", "Type", and "Name" stated below. You can also

navigate stepwise through each documented position on the assay rack by using the arrow buttons next to the information text fields.

In order to magnify or to reduce the preview of the assay rack, use the "Zoom in" or "Zoom out" buttons under the navigation arrow buttons.

To adjust the number of "Eluates for preview", use the analogous entry field next to the last named zoom buttons.

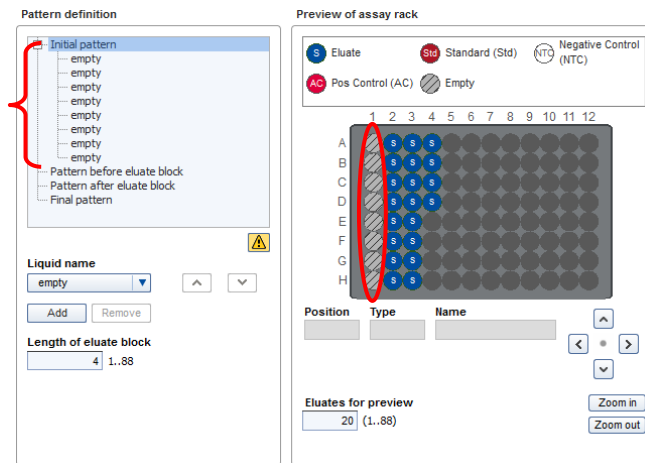
Note: The number of eluates in the "Eluates for preview" field is not related to the actual number of eluates on the rack during an actual run.

38. When the custom output pattern has been defined, click "OK". The original "Assay Output" dialog reappears and the custom output pattern that has been defined is now displayed in the plate schematic.

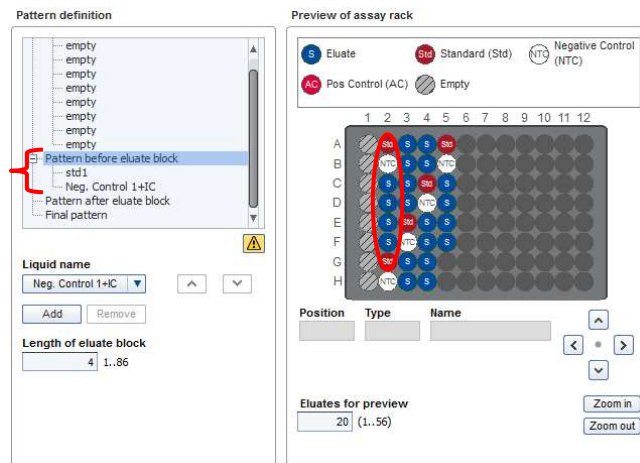
Note: By using user-defined output patterns and specifying eluate blocks and liquid positions, the number of replicates for controls and standards are irrelevant. Thus, the editor dialog ("Assay Standards", "Assay Controls") hides the input fields in order to specify replicates for controls and standards.

Example for defining an output pattern:

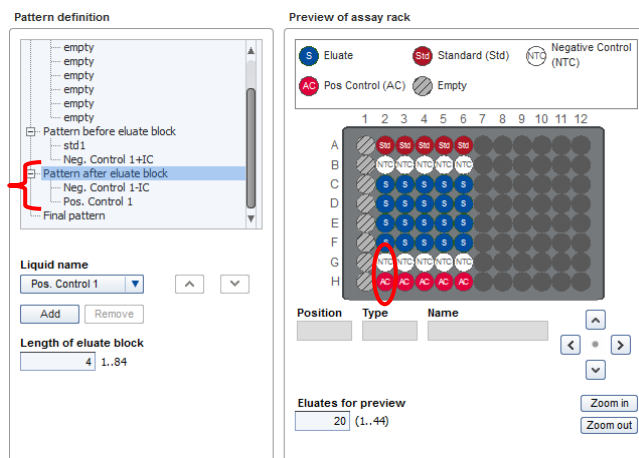
- The first column should not contain any liquids, thus define the "Initial pattern" with "empty" positions for the first column.
- Set the eluate block size to 4 eluates per block.



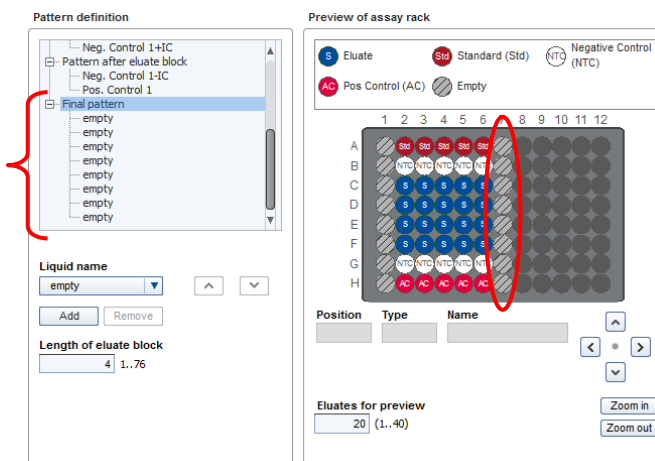
- Before each eluate block there should be control liquids. Therefore, a "Pattern before eluate block" should be defined with the given standard and a negative control.



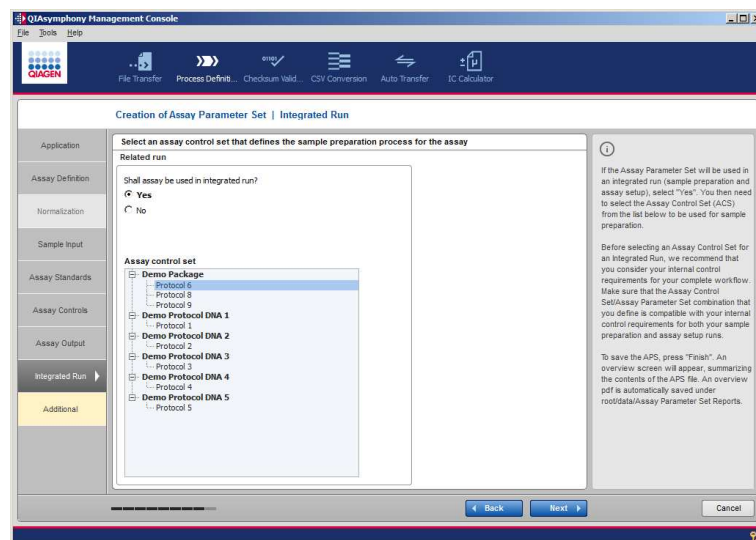
- The remaining control liquids should be placed after each eluate block. Therefore, define a "Pattern after eluate block".



- The last column on the rack also should not contain any liquids, so in the end define a final pattern that consists of empty positions.



39. Click "Next" to continue.
40. If a normalization step has not been included, the "Creation of Assay Parameter Set/ Integrated Run" dialog appears. If a normalization step has been defined, proceed to step 43.

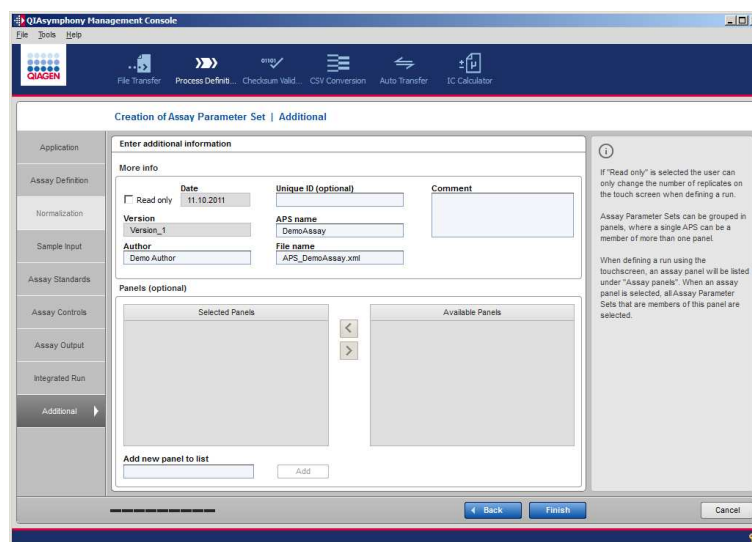


“Creation of Assay Parameter Set/Integrated Run”.

41. To use the Assay Parameter Set in an integrated run, select "Yes". Then select the Assay Control Set (ACS) to be used for sample preparation from the list. If the Assay Parameter Set will not be used in an integrated run, select “No”.

Note: Before selecting an Assay Control Set for an integrated run, we recommend that the user considers the Internal Control requirements for the complete workflow. Ensure that the Assay Control Set/Assay Parameter Set combination defined is compatible with the Internal Control requirements for both the sample preparation and assay setup runs.

42. Click “Next” to continue.
43. The “Creation of Assay Parameter Set/Additional” dialog appears.



“Creation of Assay Parameter Set/Additional”.

44. Enter the required information in the “More info” panel.

Read only	When defining a run, this option ensures that only the number of replicates can be changed using the touchscreen. Do not select this option when all parameters should be modified when defining a run.
Version	The version is automatically displayed and cannot be changed. By default the version number is 1.
Date	The date (dd/mm/yyyy) is automatically displayed and cannot be changed.

Author	<p>If the user is logged in to the QIAsymphony the "Author" field is filled automatically (the name of the user is displayed). The entry field for "Author" is editable.</p> <p>If no user is logged in to the QIAsymphony via the QMC, the "Author" field is empty and a warning is displayed because the field must not be blank. The user must enter an author name for the edited APS.</p> <p>For more information, see Section 12.</p>
Comment	Field for entering any alpha numerical text.
APS name (Assay Parameter Set name)	<p>Enter a unique name.</p> <p>Note: If the entered text contains spaces, a line break will be introduced after the first space.</p>
Unique ID (optional)	Enter a unique alternative identifier (e.g., barcode) for the Assay Parameter Set. This alternative identifier can be used in Work Lists.
File name	<p>The default file name ("Assay_Parameter_Set_name.xml") can be changed if required.</p> <p>Note: Spaces in the Assay Parameter Set name are replaced with the underscore ("_").</p>

45. Optional: Define panel(s) for the Assay Parameter Set.

- Option 1: Select the name of an existing panel into which the new Assay Parameter Set will be sorted. All panels defined in Assay Parameter Sets saved in **root/data/AssayParameterSets** are listed in the "Available Panel(s)" list. If a new Assay Parameter Set should be sorted in an existing panel name, move the panel to the "Selected Panel(s)" list using the left arrow button.
- Option 2: Create a new panel by entering the new panel name in the "Add new panel to list" field, and

then pressing "Add". The new panel appears in the list of "Selected Panels".

Note: If the entered text contains spaces, a line break will be introduced after the first space.

Note: One Assay Parameter Set can be sorted in several panels.

When defining a run on the touchscreen for which Assay Parameter Sets are sorted into panels, the panel names are listed in "Assay Panels". When selecting a panel from the list, all Assay Parameter Sets sorted in this panel are selected and appear in the "Selected Assays" list.

When all parameters have been correctly entered, the "Save" and "Finish" buttons is enabled.

Press "Finish" to save the new Assay Parameter Set. The **"Overview".pdf** file opens, displaying details about the newly created Assay Parameter Set. The overview is automatically saved as **root/data/AssayParameterSetReports/AssayParameterSetName.pdf** and appears in the "File Transfer" tool list.

The overview can be printed.

14.6.2 Using the "Quick Mode" function

The "Quick Mode" function can be used to create a new Assay Parameter Set, with a more streamlined process than the "Guided Tour" function (Section 14.4.1).

1. After completing the steps in "Before using the "Process Definition" editor tool" (Section 14.3) and selecting "Assay Parameter Set" as the file type, click "New". Alternatively, select the "Process Definition" icon and select "Assay Setup (APS)". The "Creation of Assay Parameter Set/Assay/Sample/MM" dialog box appears. This dialog box includes input fields for several parameters.

QIAAsymphony Management Console

File Transfer Process Definition Checksum Valid CSV Conversion Auto Transfer IC Calculator

Creation of Assay Parameter Set | Assay/Sample/MM

Assay/Sample/MM

Enter information about the used assay, samples and master mix

Application

Package: Name:

Assay definition

Assay: Supports automatic std. dilution

Samples

Number of replicates: (>= 1) Do samples contain an assay specific internal control?

Extraction Controls

Number of replicates EC+: (>= 1) Number of replicates EC-: (>= 1)

Master mix

Use ready to use master mix? Use standard dilution series?

Normalization

Include normalization step? Assay rack: Define custom pattern for assay rack?

Cancel

Help

Select options in the left panel to enter information about the corresponding parameters.

Assay/Sample/MM - define parameters for assays, samples, and master mix.

Standards/Controls - define parameters for standards and controls.

Normalization - define parameters for eluate concentrations and dilutions.

Output/Dyes - define parameters for assay racks, cycle files (optional), and dyes (optional).

File Info/Panels - define parameters for file information, panels (optional) and integrated run.

Fields with unresolved warnings or errors are marked with a yellow symbol.

Creation of Assay Parameter Set using the Quick Mode "Assay/Sample/MM".

2. Enter the information in the following table.

Application	Select an existing application package or enter the name of a new package.
-------------	--

Assay Definition

Select an Assay Definition from the list.

Note: If an Assay Definition supports automatic standard dilution a hint will be displayed next to the selected Assay Definition.

Assay definition

Assay 1 Supports automatic std

Note: If the selected assay requires a Rotor-Disc for the assay rack, it is not possible to include a normalization step. This is because each Rotor-Disc covers more than one assay slot. If such an assay is selected, the following message appears: "Including a normalization step is not possible for assay definitions that use the rotor gene disc."

Samples

Enter the number of sample replicates.

Indicate whether your samples contain an assay-specific internal control:

- ☐ "Yes" — An assay-specific internal control is provided in the samples but not in the master mix.

Note: An additional master mix containing the internal control will be created for assay standards and assay controls.

- ☐ "No" — An assay-specific internal control is provided in the master mix but not in the samples.

Note: To specify processing of just one sample, enter "1"; for duplicates, enter "2"; for triplicates, enter "3" etc.

Extraction controls

Enter the number of replicates for the optional extraction controls (positive or negative).

Note: Extraction controls are prepared in parallel with samples during sample preparation.

Master mix

Set the “Ready-to-use master mix” option.

- “Yes” — A single solution of ready-to-use-master mix must be available on the QIAsymphony AS worktable.
- “No” — The individual components of the master mix must be available on the QIAsymphony AS worktable and the master mix is set up and mixed by the instrument.

Standard dilution series

If the Assay Definition supports automatic standard dilution and the standard series is optional, an additional panel “Standard dilution” is displayed and the user can enable or disable creation of a standard series:

- Yes: The APS must contain the relevant parameters. A tab for a standard dilution series will be displayed in the “Assay Standards” dialog.
- No: The APS does not contain the relevant parameters. A tab for a standard dilution series will not be displayed in the “Assay Standards” dialog.

Standard dilution series



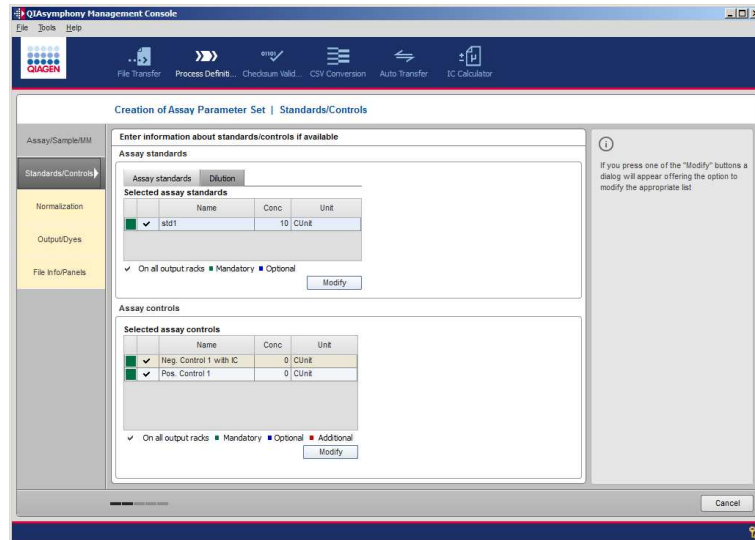
Use standard dilution series?
Select ▼ ⚠

Normalization

Select whether a normalization step should be defined.

Assay Rack Set the option to “Yes” if you want to define a custom output pattern for the assay rack.

3. Press “Standards/Controls” on the left hand side. The “Creation of Assay Parameter Set/Standards/Controls” dialog box appears.



Creation of Assay Parameter Set using the Quick Mode “Standards/Controls”.

4. Enter the information in the following panels.

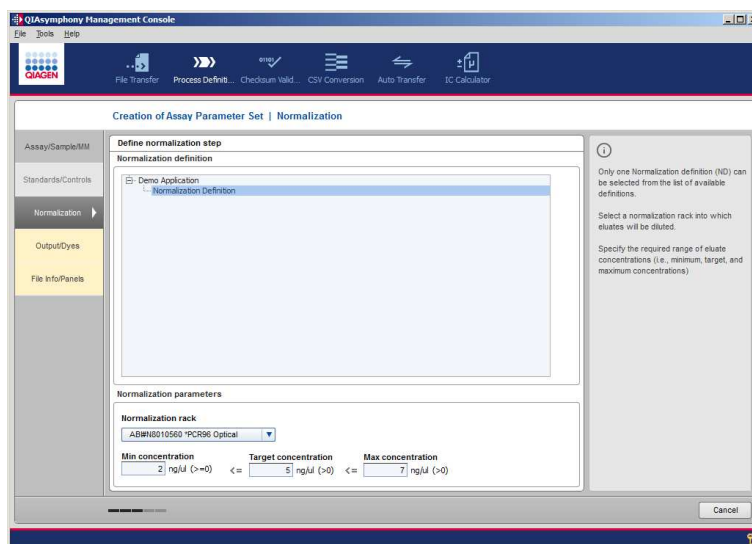
Assay standards	<p>This panel is only displayed when the selected assay contains assay standards.</p> <p>If the assay supports predefined standards, there will be an "Assay standards" tab within the "Assay standards" panel. If the assay provides standard dilution, an additional tab for "Dilution" will be available.</p> <p>Adjust the "Selected assay standards" list as required. To do so, press the "Modify" button and "Enter information about assay standards".</p> <p>Select and deselect the predefined standards within the "Predefined standards" tab.</p> <p>Press "OK" to return to the "Assay standards" panel.</p> <p>Enter the number of replicates for assay standards.</p>
Assay Controls	<p>Enter the replicates for the assay controls.</p> <ul style="list-style-type: none">■ Enter the number of replicates for the positive controls, when a positive assay control is used.■ If the Assay Definition contains a no template control (NTC), enter the number of NTC replicates. The NTC is processed with master mixes that contain internal controls, when one reagent is defined as the internal control in the Assay Definition. <p>Note: If an assay contains an IC, a NTC with a master mix that contains an internal control must be processed and at least one replicate must be defined. The processing of the NTC with master mixes that do not contain an internal control is optional and can be deselected by entering "0" for the number of replicates.</p>

Note: Regardless of whether the Assay Definition with a no template control contains “Internal Control”, the NTC is always processed.

If replicates for a negative assay control are processed with master mix without an internal control, specify the “On all assay racks” option.

Adjust “Selected assay controls” list as necessary by pressing “Modify”. A new screen appears, adjust the assay control, and then press “OK”.

- Click “Normalization” on the left hand side. The “Creation of Assay Parameter Set/Normalization” dialog appears.



Creation of Assay Parameter Set using the Quick Mode “Normalization”.

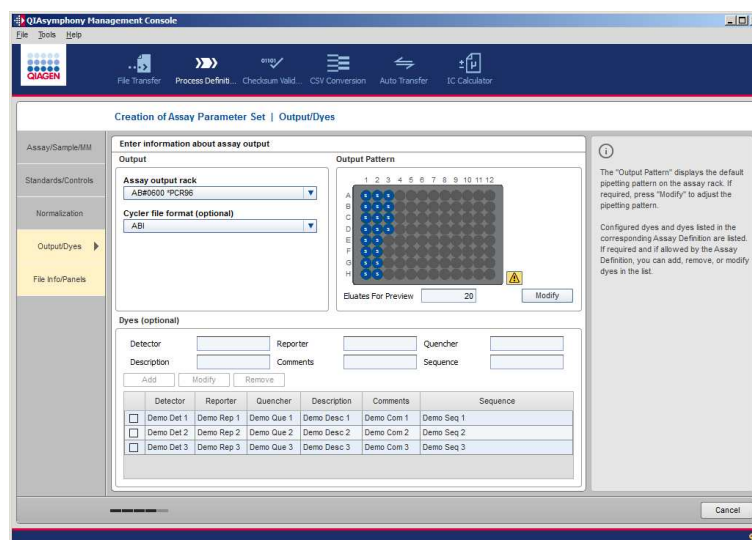
- Choose a Normalization Definition file in the list within the “Normalization definition” panel and proceed with steps 11–13 described in Section 14.4.1.

- Click "Output/Dyes" on the left hand side. The "Creation of Assay Parameter Set/Output/Dyes" dialog box appears. Depending on whether a custom output pattern will be defined, a schematic plate of the output rack appears in the "Output Pattern" panel.

The screenshot shows the QIAasympthy Management Console interface. The left sidebar has a menu with 'Assay/Sample/Mt', 'Standards/Controls', 'Normalization', 'Output/Dyes' (selected), and 'File Info/Panels'. The main window is titled 'Creation of Assay Parameter Set | Output/Dyes'. It contains a 'Dyes (optional)' section with a table of dye configurations. The table has columns for Detector, Reporter, Quencher, Description, Comments, and Sequence. There are three rows of demo data. A 'Cancel' button is at the bottom right.

Detector	Reporter	Quencher	Description	Comments	Sequence
<input type="checkbox"/> Demo Det 1	Demo Rep 1	Demo Que 1	Demo Desc 1	Demo Com 1	Demo Seq 1
<input type="checkbox"/> Demo Det 2	Demo Rep 2	Demo Que 2	Demo Desc 2	Demo Com 2	Demo Seq 2
<input type="checkbox"/> Demo Det 3	Demo Rep 3	Demo Que 3	Demo Desc 3	Demo Com 3	Demo Seq 3

Creation of Assay Parameter Set using the Quick Mode "Output/Dyes".



Creation of Assay Parameter Set using the Quick Mode “Output/Dyes” where custom patterns for the assay rack must be defined.

8. Enter the following information.

Assay rack Select the assay rack type from the drop-down list.

Cyclex File Select the type of Cyclex File to be created after the format assay run from the drop-down list.

(optional) Depending on the assay rack category, different types of Cyclex Files can be selected.

See page 14-37 for details about which types of Cyclex Files are available.

Dyes Specify dyes to be used.

(optional) All dyes or dye combinations predefined with “Options/ProcessDefinition” are listed. Either select an existing dye or dye combination or select “Other”. If “Other” is selected, additional dyes or dye combinations can be entered.

Note: When entering dye combinations, use a comma to separate the different dyes.

Example: "Demo Dye 3,Demo Dye 4"

Dyes (optional)

<input type="text"/>	<input type="button" value="Add"/>
<input checked="" type="checkbox"/> Demo Dye 1	<input type="button" value="Remove"/>
<input checked="" type="checkbox"/> Demo Dye 2	<input type="button" value="Modify"/>
<input checked="" type="checkbox"/> Demo Dye 3,Demo Dye 4	
<input type="text"/>	

When using an ABI instrument, the dialog will display another table (compare details above and below). For ABI Cyclers Files "Detector" (the identifying name) and "Reporter" (the actual dye that is to be detected) must be defined via the entry form. The remaining parameters (Quencher, Description, Comments, and Sequence) are optional specifications.

Note: It is not possible to use the same "Detector" with different "Reporter". Each dye parameter must be unique.

Dyes (optional)

Detector	<input type="text"/>	Reporter	<input type="text"/>	Quencher	<input type="text"/>
Description	<input type="text"/>	Comments	<input type="text"/>	Sequence	<input type="text"/>
<input type="button" value="Add"/> <input type="button" value="Modify"/> <input type="button" value="Remove"/>					
Detector	Reporter	Quencher	Description	Comments	Sequence
<input checked="" type="checkbox"/> Demo Det 1	Demo Rep 1	Demo Que 1	Demo Desc 1	Demo Com 1	Demo Seq 1
<input checked="" type="checkbox"/> Demo Det 2	Demo Rep 2	Demo Que 2			
<input checked="" type="checkbox"/> Demo Det 3	Demo Rep 3				

9. To define a custom output pattern, follow steps 35–39 Section 14.6.1.
10. Click "File Infos/Panels" on the left hand side. The "Creation of Assay Parameter Set/File Infos/Panels" dialog box opens.

QIAAsymphony Management Console

File Info/Panels

Creation of Assay Parameter Set | File Info/Panels

Enter additional information

☐ Read only Date: 06/10/2011 Unique ID (optional): Comment:

Version: APS name: File name: Author: APS_Assay_1.xml

Integrated Run

Shall assay be used in integrated run? ☐ Yes ☐ No Assay Control Set:

Panels (optional)

Selected Panels: Available Panels: Add new panel to list: Add

Finish

Cancel

If "Read only" is selected the user can only change the number of replicates on the touch screen when defining a run.

If the Assay Parameter Set will be used in an integrated run (sample preparation and assay setup), select "Yes". You then need to select the Assay Control Set (ACS) from the list below to be used for sample preparation.

Before selecting an Assay Control Set for an Integrated Run, we recommend that you consider your internal control requirements for your complete workflow. Make sure that the Assay Control Set/Assay Parameter Set combination that you define is compatible with your internal control requirements for both your sample preparation and assay setup runs.

Assay Parameter Sets can be grouped in panels, where a single APS can be a member of more than one panel.

When defining a run using the

Creation of Assay Parameter Set using the Quick Mode "File Info/Panels".

11. Enter the following information.

More Info

- “Read only” — When defining a run, this option ensures that only the number of replicates can be changed using the touchscreen. Do not select this option when all parameters should be modified when defining a run.
- “Comment” — Field for entering any alpha numerical text.
- The “Date” and “Version” fields are automatically displayed and cannot be changed.
- If the user is logged in to the QIASymphony the “Author” field is completed automatically (the name of the user is displayed). If no user is logged in to the QIASymphony via the QMC, the “Author” field is empty and a warning is displayed since the field must not be blank. The entry field for “Author” is editable.
- “APS name (Assay Parameter Set name)” — Enter a unique name.
Note: If the entered text contains spaces, a line break will be introduced after the first space.
- “Unique ID (optional)” — Enter a unique alternative identifier (e.g., barcode) for the Assay Parameter Set. This alternative identifier can be used in Work Lists.
- “File name” — The default (“Assay_Parameter_Set_name.xml”) can be changed if required.
Note: Spaces in the Assay Parameter Set name are replaced with the underscore (“_”).

Integrated Run	<p>If the Assay Parameter Set will be used in an integrated run, select "Yes". Then select the Assay Control Set (ACS) to be used for sample preparation from the list.</p> <p>Note: Before selecting an Assay Control Set for an integrated run, we recommend that the user considers the Internal Control requirements for the complete workflow. Make sure that the Assay Control Set/Assay Parameter Set combination defined is compatible with the Internal Control requirements for both the sample preparation and assay setup runs.</p>
Panels (optional)	<ul style="list-style-type: none"> ■ "Option 1" — Select the name of an existing panel into which the new Assay Parameter Set will be sorted. All panels defined in Assay Parameter Sets saved in root/data/AssayParameterSets are listed in the "Available Panels" list. If a new Assay Parameter Set should be sorted under an existing panel name, move the panel to the "Selected Panels" list. ■ "Option 2" — Create a new panel by entering the new panel name in the "Add new panel to list" field, and pressing "Add". The new panel appears in the list of "Selected Panels". <p>Note: If the entered text contains spaces, a line break will be introduced after the first space.</p> <p>Note: One Assay Parameter Set can be sorted under several panels.</p>

When defining a run on the touchscreen for which Assay Parameter Sets are sorted into panels, the panel names are listed under "Assay Panels". When selecting a panel from the list, all Assay Parameter Sets sorted in this panel are selected and appear in the "Selected Assays" list.

When all parameters have been correctly entered, the "Finish" button is enabled.

Click "Finish" to save the newly created Assay Parameter Set. The "Overview".pdf file opens, displaying details about the newly created Assay Parameter Set. The overview is automatically saved as **root/data/AssayParameterSetReports/AssayParameterSetName.pdf** and appears in the "File Transfer" tool list.

The overview can be printed.

14.7 Modifying an existing Assay Parameter Set

To modify an existing Assay Parameter Set, complete the following steps.

1. In the "File Transfer" tool, select "Assay Parameter Set" as the file type.
2. Select the Assay Parameter Set to be modified in the file list of the local path or network. The "Edit" button is enabled.
3. Click "Edit".
4. Modify parameters as necessary, see Section 14.6. In addition, see "Descriptions of Assay Parameter Set parameters" under the "User Support" tab at www.qiagen.com/goto/QIASymphony.
5. Click "Save" to save the newly created Assay Parameter Set. The dialog box will remain open and you can create additional Assay Parameter Sets, if required.

Click "Finish" to save the newly created Assay Parameter Set. The **"Overview".pdf** file opens, displaying details about the newly created Assay Parameter Set. The overview is automatically saved as **root/data/AssayParameterSetReports/AssayParameterSetName.pdf** and appears in the "File Transfer" tool list. The overview can be printed.

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15 Uploading Process Files to the QIAsymphony

Before modified process files can be used, the files must be uploaded to the QIAsymphony. Files can be uploaded using one of the following methods:

- When the PC is not connected to the QIAsymphony, using the USB stick (see Section 13.2.1)
- When the PC is connected to the QIAsymphony, using direct file transfer (see Section 13.1.2).

To upload process files using a USB stick, complete the following steps.

1. Transfer files to the USB stick using the “File Transfer” tool of the QMC (for more information, see Section 13.2.1).
2. Insert the USB stick into a USB port at the front of the QIAsymphony SP.
3. Transfer files to the QIAsymphony using the USB stick. For more information, see Section 8 of the *General Description*.
4. All corresponding new process files in the corresponding directory on the USB stick will be transferred to the QIAsymphony.

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16 Troubleshooting

Comments and suggestions

Connection errors

- | | |
|--|---|
| a) Invalid user name or password | Check whether the user name is correct. Make sure to enter the correct password. |
| b) Invalid session ID | If you restarted the QIASymphony, be sure to reconnect to the instrument via the QIASymphony Management Console. |
| c) Connection could not be established | <p>Check the connection between the PC and the QIASymphony. Make sure that the QIASymphony is switched on.</p> <p>If a firewall is installed, make sure that it does not prevent connection to the QIASymphony.</p> <p>Certain Antivirus Software has functionality to monitor and filter communication on port 80 (HTTP). This may lead to communication problems between the QMC and the instrument.</p> <p>Possible solutions:</p> <ul style="list-style-type: none"> ■ - Change the communications port on the instrument from port 80 to another port. This should be performed by a service technician. ■ Disable the HTTP port filtering function in the Antivirus Software. |

File errors

- | | |
|--------------------------|--|
| a) Type version mismatch | Software version of the QMC is not compatible with the application software version. |
| b) Unable to remove file | The file to be removed may be in use. Make sure that the file is not in use. |

- c) Unable to open file The file to be opened may be in use. Make sure that the file is not in use.

Process definition — Assay Control Set errors

- a) Package name is invalid The text before or after the first space is too long to be displayed in the touchscreen. Enter a shorter text before or after the first space.
- b) There are no Protocols saved on the local path To define or modify an Assay Control Set, save the Protocol on your local path, and start the procedure from the beginning again.

No Protocols are saved in **root/data/BioScripts**. To be able to create or modify Assay Control Sets, the Protocols for the Assay Control Sets must be saved in the "BioScript" directory on the local path. Copy the necessary files to **root/data/BioScripts**.
- c) Internal control name is not unique Enter a unique name for the internal control. If you want to use an existing internal control, select this from the available list. If you want to use a new internal control, enter a unique name.
- d) Internal control name is invalid The text before or after the first space is too long to be displayed in the touchscreen. Enter a shorter text before or after the first space.
- e) Invalid internal control ID The internal control identifier is invalid. A valid internal control identifier must contain at least 4 characters and a maximum of 44 characters. Enter a valid identifier.
- f) Duplicate internal control ID Internal control identifier is already in use; enter a unique identifier.
- g) Assay Control Set name is invalid The text before or after the first space is too long to be displayed in the touchscreen. Enter a shorter text before or after the first space.
- h) Assay Control Set name is not unique The Assay Control Set name is already in use. Enter a unique name.

- i) Invalid file name The file name is already in use. Enter a unique name.

Process definition — Assay Parameter Set errors

- a) Package name is invalid The text before or after the first space is too long to be displayed in the touchscreen. Enter a shorter text before or after the first space.
- b) There are no Protocols saved on the local path To define or modify an Assay Parameter Set, save the Protocol on your local path, and start the procedure from the beginning again.

No Protocols are saved in **root/data/AssayParameterSets**. To be able to create or modify Assay Parameter Sets, the Protocols for the Assay Parameter Sets must be saved in the "AssayParameterSets" directory on the local path. Copy the necessary files to **root/data/AssayParameterSets**.
- c) Master mix not selected Select whether a ready-to-use master mix should be used ("Yes") or whether the individual components of the master mix shall be mixed by the QIAsymphony AS ("No").
- d) Invalid Replicates Number of replicates: The entered value is out of range. Enter a value between 1 and 50.
- e) Select whether the samples processed with this APS will contain an assay specific internal control ("Yes") or whether the internal control shall be added to the master mix There is no information about whether the samples do contain an assay specific internal control. Select whether they contain a specific internal control or not.

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| f) Define at least one assay standard which is pipetted to all assay racks (Check box "On all assay racks") | It is required that at least one assay standard is distributed on each assay rack. Check the box for one of the selected assay standards. |
| g) Following standard(s) are not present in Assay Definition: XY | The defined assay standard in the Assay Parameter Set is not available in the selected Assay Definition. Remove the assay standard from the list. To do this press "Modify" and afterwards select the standard and press "Remove". |
| h) Following Assay Control(s) are not present in Assay Definition: XY | The defined assay control in the Assay Parameter Set is not available in the selected Assay Definition. Remove the assay control from the list. To do this, press "Modify" and afterwards select the control and press "Remove". |
| i) The comment is invalid. Valid comments contain up to 200 arbitrary characters. | Enter a comment of up to 200 characters. |
| j) Assay Parameter Set name already exists. | The Assay Parameter Set name is already in use. Enter a unique name. |
| k) File with higher version is available. | An Assay Parameter Set file with a higher version is available. |
| l) UID already exists in XY | The entered alternative unique identifier already exists in the displayed Assay Parameter Set. Enter a new unique identifier. |
| m) Unknown output format: XY | The selected Assay Parameter Set contains an unused output format. Select an available assay output format. |

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| n) Invalid Cyclor File format | The selected Assay Parameter Set contains an invalid Cyclor File format. Either select "None", or assign a compatible Cyclor File. |
| o) Invalid panel list: Panel list contains invalid panel | The selected Assay Parameter Set contains an invalid panel. Remove the panel from the list. |

"QIAGEN File Transfer" service errors

- | | |
|---|---|
| a) No printer selected | To print a test page, make sure to select a printer. If printing is successful, "Test page sent to printer" will be displayed. |
| b) Failed to send test page to printer | The test page was not printed on the selected printer. Check that the printer is correctly connected. |
| c) Cannot add instrument. Please fill out the instrument field | The user pressed the "Add" button but did not enter the host name of the instrument into the "Instrument" field. Make sure to add the host name. |
| d) Invalid port number. Please enter a numeric port number between 1 and 65535 (inclusive) | The user pressed the "Add" button and entered an incorrect port number. Enter a port number between 1 and 65535 (inclusive) or leave the "Port" field empty. |
| e) Test connection. No instruments to be checked | The user pressed the "Test" button but did not select the instrument to be tested. To test the connection, make sure to select an instrument. |
| f) Saving failed. Could not save configuration to file. See the Log File for detailed information | The user pressed "Save" but the file was not successfully saved. See the Log File for the reasons for the failure (root\log\Plugin FileTransferConfiguration.log). |

- | | |
|--|---|
| g) Error when reading from file. File transfer is not processed | File transfer was unsuccessful. The "QIAGEN File Transfer" service will wait for one minute and will then try to read the configuration file again as long as no action is performed. If the problem persists, contact QIAGEN Technical Services. |
| h) Directory X referenced in file Y does not exist. File transfer is not processed | File transfer was unsuccessful. After the interval specified in the configuration file, the "QIAGEN File Transfer" service tries to reload the configuration file and to validate it. Check whether the directory was deleted. |
| i) Connection to instrument X failed | Connection to the selected instrument was unsuccessful. The PC will try to connect to the instrument again based on the time set in the "Polling Interval" field. |
| j) File X was not received by Y. Transfer of file X to Y failed | Data transfer from the QIAsymphony to the PC or from the PC to the instruments was unsuccessful. Transfer the file manually. |
| k) File X could not be deleted on Y | The file was successfully transferred from the QIAsymphony to the PC or the PC to the instrument but could not be deleted from the instruments. Delete the file manually. |
| l) File X was received from Y but unzipping on PC failed | The file was successfully transferred to the PC but could not be unzipped. Unzip the file manually. |

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www.qiagen.com

Australia ■ techservice-au@qiagen.com

Austria ■ techservice-at@qiagen.com

Belgium ■ techservice-bnl@qiagen.com

Brazil ■ suportetecnico.brasil@qiagen.com

Canada ■ techservice-ca@qiagen.com

China ■ techservice-cn@qiagen.com

Denmark ■ techservice-nordic@qiagen.com

Finland ■ techservice-nordic@qiagen.com

France ■ techservice-fr@qiagen.com

Germany ■ techservice-de@qiagen.com

Hong Kong ■ techservice-hk@qiagen.com

India ■ techservice-india@qiagen.com

Ireland ■ techservice-uk@qiagen.com

Italy ■ techservice-it@qiagen.com

Japan ■ techservice-jp@qiagen.com

Korea (South) ■ techservice-kr@qiagen.com

Luxembourg ■ techservice-bnl@qiagen.com

Mexico ■ techservice-mx@qiagen.com

The Netherlands ■ techservice-bnl@qiagen.com

Norway ■ techservice-nordic@qiagen.com

Singapore ■ techservice-sg@qiagen.com

Sweden ■ techservice-nordic@qiagen.com

Switzerland ■ techservice-ch@qiagen.com

UK ■ techservice-uk@qiagen.com

USA ■ techservice-us@qiagen.com

