This guide describes the steps to set up and manage the MassHunter Productivity App. The Manager view is the only view covered in this guide. Refer to the Quick Start Guide for an overview of the Productivity App and for details on the other views in the program. Visit the Agilent Community at https://community.agilent.com/masshunter-productivity-app for more information.

To configure the Productivity App for a specific SOP, laboratory managers can:

- Manage the acquisition and analysis methods.
- Control the automation options.
- Manage Productivity App features and options, such as sequence templates, filter sets, and custom result tags.
Installation

To install on a MassHunter Data Acquisition computer

You can run Productivity App on a MassHunter Data Acquisition computer (one that controls an Agilent instrument) or an offline computer.

Refer to the Reference Guide for system requirements and supported software versions.

To install on a MassHunter Data Acquisition computer

1. Refer to the installation guides for the instrument and the appropriate MassHunter acquisition software to fully install and verify the system.
2. Run the Productivity App setup program from the installation media and follow the instructions to install the software.

To install on an offline computer

1. Refer to the appropriate installation guide to install the required MassHunter analysis software.

   The MassHunter Quantitative Analysis software must be installed before you install the Productivity App.

2. Run the Productivity App setup program from the installation media and follow the instructions to install the software.
Manager View

To install on an offline computer

Manager View

Use the Manager View to configure methods and control automation options. The Manager View consists of the **Method** and **Miscellaneous** navigation groups.

![Manager View Screenshot](image)

**Method**

- **Run methods**: Control acquisition and analysis methods, peak selection for analysis, concentration threshold, and compound groups.
- **Shutdown method**: Control the shutdown method and sequence.

**Miscellaneous**

- **Data review options**: Manage filter sets and tags.
- **Sequence templates**: Manage sequence templates.
Run methods

Use the Run Methods page to manage the available run methods, configure application-specific method options, manage compound groups, and change the active method. The topics correspond to the numbered areas in Figure 1.

Manage custom methods

The Methods and Details groups are used to add acquisition and analysis methods to the Productivity App.

By default the Productivity App includes a master acquisition method with an associated master analysis method. For more information about the acquisition and LC parameters, please refer to the Reference Guide.

To use a method other than a provided master method, click to add an existing acquisition and analysis method. The methods must meet these requirements:
Manager View
Run methods

- The dMRM acquisition method must be created with the required MassHunter data acquisition software.
- The analysis method must be created with the MassHunter Quantitative Analysis program.
- The compounds and transitions defined in both methods must be identical.

After a method is added to the Productivity App, it can no longer be changed outside of the Productivity App. If a custom method must be changed outside of the Productivity App, you must remove the current method and add the changed method.

To control the currently active method, select the check box next to the method name in the list. Changing the active method changes the compounds displayed in the Select Compounds page.

To remove a method, click × next to the method name. An active method cannot be removed.

When a method is removed, all method configuration will be lost, including compound groups and tuned retention times. To save the method configuration, run a short sequence with the method and retrieve the saved acquisition method from the data files.

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Customize methods

The Options group allows a manager to further customize the focused method in these ways:

Require acquisition of all compounds in the method  This option forces all compounds in the selected method to be acquired. Select this option to ensure that all compounds in the method are acquired and analyzed.

Optimize peak selection and qualifier ratios based on run data  This option enables the automated analysis routine to optimize the target retention times and qualifier ratios based on the calibration sample results in the current run:
- The target retention time based on the retention time of the largest peak in the calibration sample of the highest concentration.
- The target qualifier ratios based on the average of the qualifier ratios across all calibration samples.

This option improves peak selection and identification performance.
Manager View
Run methods

If the sequence does not contain calibration samples, this option does not change the expected retention times and qualifier ratios.

This option cannot be changed for the master acquisition and analysis methods.

**NOTE**

**Define the concentration threshold**  To support faster data review, the Productivity App automatically designates results as being above or below a certain concentration threshold. This designation affects the error status of the result (visit the Agilent Community for details) and also allows users to quickly filter results based on the threshold. You can define the concentration threshold in two ways:

- **Use a percent of lowest calibration level** - changes the threshold for each run based on the calibration.
- **Use the method detection limit (MDL) in the analysis method** - uses a fixed threshold for all runs.

**NOTE**

The label applies to analyzed compounds in all sample types except Calibration, QC, and CC samples. All results in these samples will be labeled as above threshold.

**Manage compound groups**

Compound groups can increase the speed of run setup and review by allowing users to:

- Quickly add compounds to be acquired by selecting all compounds within a group.
- Quickly set up the analysis by applying analysis parameters to all compounds within a group.
- Review only the relevant results on a per-sample basis by adding compound groups to samples in the sequence setup.
Manager View
Run methods

For more information about the use of compound groups, visit the Agilent Community. The options under Groups allows you to create compound groups, change the name of groups, and import lists of compounds to each group. Click these buttons to:

- Add a group.
- Import compound to a group from a CSV file.
- Add compounds from an existing group.
- Remove all compounds from a group.
- Delete a group.

Group n Rename the group. (Click the group name and type a new name.)

View method compounds

Use the list under Compounds to quickly view and search all compounds that are contained in the focused method. You can also verify and edit compound group memberships. Click these buttons to:

- Assign a compound to the group.
- Remove a compound from the group.

View method ISTDs

If ISTD compounds must be used to correctly quantitate compounds of interest, the ISTD compound mapping must be defined in the analysis method prior to importing it into the MassHunter Productivity App.

The list of ISTD compounds in the active acquisition and analysis method will be displayed under ISTDs. If a target compound is assigned to a group, the ISTD compound is assigned to the same group automatically.
Shutdown Method

Use the **Shutdown Method** page to manage the behavior of the Productivity App when a user opts to set the instrument to standby after a successful run. The numbered topics correspond to the numbered areas in Figure 2.

**Figure 2.** Shutdown Method page

1. **Set the shutdown method**

   This option allows users to automatically run a cleanup method before setting the connected instrument to standby. If this option is not selected, the instrument goes into standby mode immediately after a run.

   - **Use default method**  Runs the default shutdown method.

   - **Use custom method**  Run the selected shutdown acquisition method.
Manager View
Report methods

Set the shutdown sequence
This option allows a user to run a shutdown sequence before putting the connected instrument in standby mode. If this option is not selected, the shutdown method runs without an injection.

Allow user to add/remove samples This option allows the user to edit the shutdown sequence at the time the user selects to shut down the instrument after a run.

Report methods
Use the Report Methods page to manage the report methods that a user can choose when generating a report in the Create Report page.

Figure 3. Report Methods page
Manager View
Report methods

Example report methods are included by default. If these methods are not sufficient for the needs of your lab, you can import the appropriate MassHunter reporting methods, with small changes. Click these buttons to:

+ Add a custom report method.
× Remove a method.

• To enable a method, select the box next to the method name.
• To rename a method, type the new Name under Details.

For more information on customizing a report method for use in the MassHunter Productivity App, visit the Agilent Community.
Data Review Options

Use the Data Review Options page to manage the available filter sets and result tags. The numbered topics correspond to the numbered areas in Figure 4.

Figure 4.  Data Review Options page
Manager View
Data Review Options

1. Manage filter sets

Filter sets are a list of selected filters that allow a manager to control and expedite the data review process by defining a specific view into the data. With a defined filter set, the user can quickly select the filter set name from the review page to filter the results in a controlled fashion. Click these buttons to:

- Create a filter set.
- Remove a filter set.

- To add a filter to the selected set, select the box next to the filter name.
- To rename a filter set, type the new **Name** under **Filter Set Properties**.

2. Manage result tags

Result tags include the analysis flags offered by MassHunter Quantitative Analysis program as well as custom tags defined by a manager. When results are opened, select analysis flags are automatically added as tags. (Visit the **Agilent Community** to find out which flags are recognized by the Productivity App.) While reviewing the data, a user can also manually add a custom tag to give more context to the result.

- To create a custom tag, click ➕.
- To rename a custom tag, type the new **Name** under **Tag Properties**.

**Include in report**  For the selected tag, specify whether to include the tag in the report. All tags are sent to the report by default.
Sequence templates

Use the **Sequence Template** page to define the sequence templates available in the **Build Sequence** page. Sequence templates greatly speed the process of building a sequence to run. By applying a template to an existing sequence, whether defined in a sample list CSV or in the sequence table, samples can be organized and added as needed to fit the format of the template. The numbered topics correspond to the numbered areas in **Figure 5**.

![Figure 5. Sequence Template page](image)
Manager View
Sequence templates

1  Create, open, or save a sequence template

Click these buttons to:

- Create a new sequence template.
- Load a sequence template.
- Save the current sequence template.
- Save the current sequence template with new name.

2  Manage the samples at the start of the sequence

The **Start** group defines the samples, other than target samples, that run once at the start of the sequence. Typically, this includes blanks and calibration samples.

Click these buttons to:

- Add a sample to the start of the sequence template.
- Remove a sample from the sequence template.

- To rearrange samples, drag and drop the sample names to the desired location.

3  Manage the samples in the middle of the sequence

The **Cycle** group defines the pattern of samples that appear in the middle part of the sequence. The sample type options are the same as for Start and End, except for the number next to **Sample** to indicate the number of target samples to include in the sequence before moving on to the next sample type.

Unlike the Start and End groups, the Cycle group is repeated until all target samples are included in the final sequence. For example, if the template is applied to a list with 15 target samples, and the number of Samples is 5, three cycles will be run to include all target samples.

4  Manage samples at the end of the sequence

The **End** group defines the samples, other than target samples, that run once at the end of the sequence. The options are the same as for the Start group.
Sample properties

This pane shows the sample options for the selected sample entry. You can set the sample type, name, injection volume, number of injections per sample, sample position, and level (if applicable).

When the template is applied to an existing sequence, the values defined in the sequence overwrites the values in the template. Practically, this means that the application will attempt to use the information in the existing samples. Samples are matched according to their type and level (if applicable). For example, if the template specifies a calibration sample of level 2 and the sequence includes a calibration of level 2, when the template is applied to the sequence, the name, position, volume, and injections per sample that are already defined in the original sequence are persisted in the final sequence.
In This Book

This Quick Start Guide gives an overview of the MassHunter Productivity App.

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