



MetaXpress[®] 6 Software Guide

Batch Importing and Exporting Images

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Chapter Purpose

The purpose of this chapter is to guide the user through importing and exporting images in plate format using the **Plate Data Utilities** dialog.

Images that are exported using this dialog have a specific naming convention and .HTD database file. The .HTD (text) file details plate information such as plate type, wells acquired, number of sites, wavelengths, etc.

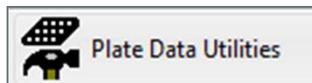
Likewise, images that are imported using this dialog must be named in the MetaXpress naming convention and have a .HTD file associated with the images.

The **MDCStore Xchange** software module can be used to import images of varied naming conventions. Contact your account manager for more details and see corresponding chapters for more information.



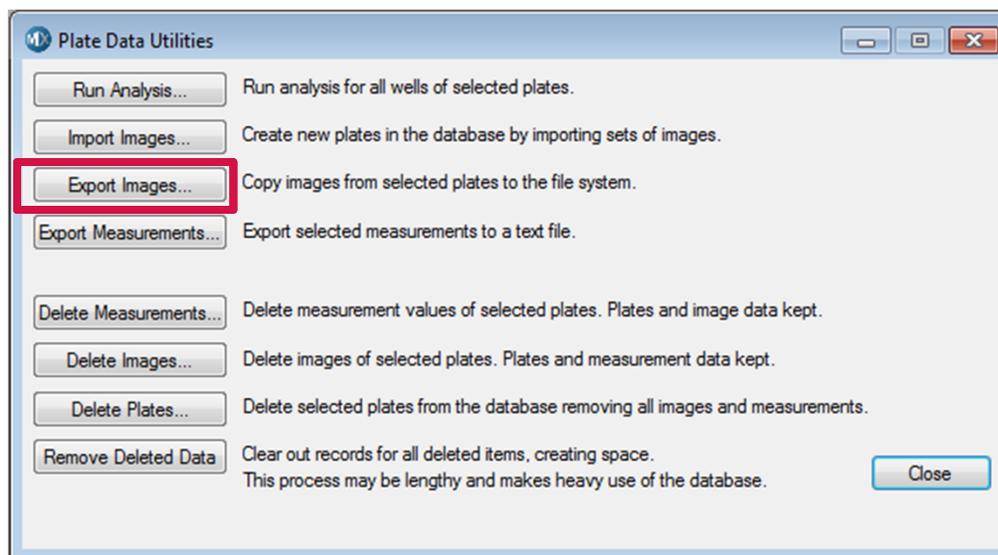
Exporting Images

1. Open **Plate Data Utilities**
 - In the main toolbar click on



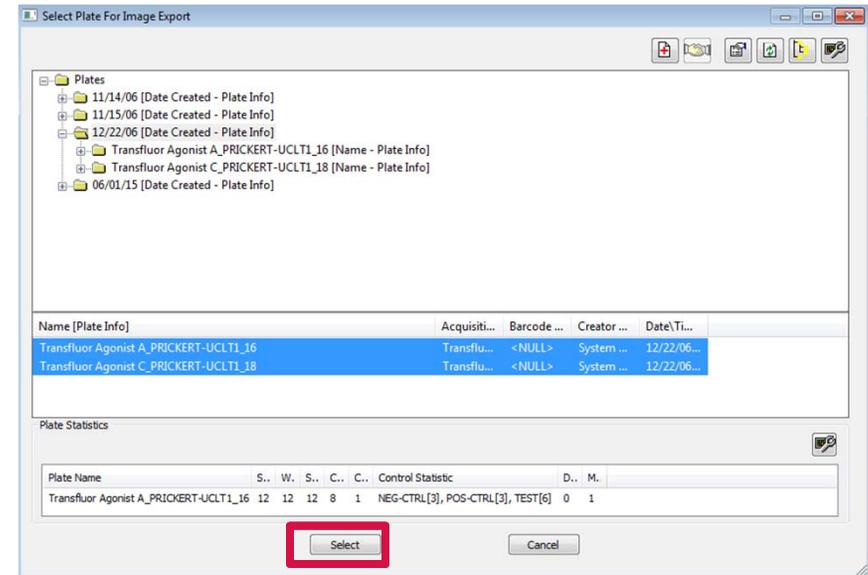
OR

- Under the **Screening** menu, select **Plate Data Utilities**
2. Click on the **Export Images** button

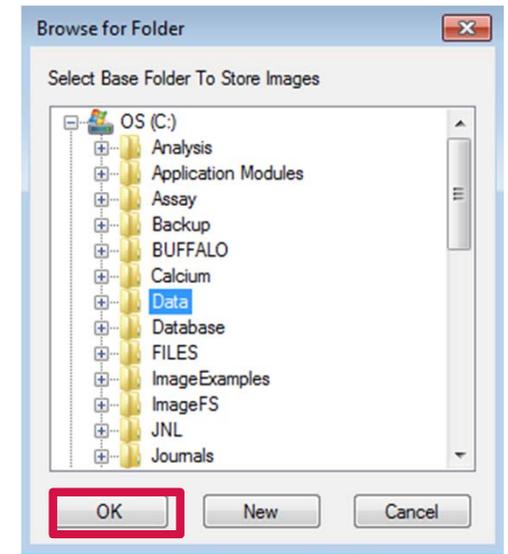


Exporting Images

- Highlight the plate(s) of interest in the **Select Plate for Image Export** dialog
 - Use the SHIFT or CTRL buttons on the keyboard to select multiple plates
 - Click on the **Select** button
- Navigate through Windows to select or create a new folder destination directory
 - Images that will be saved here are copies and will not be deleted from the database
 - Make sure you have enough disk space for all images
 - Click on the **OK** button to start image export



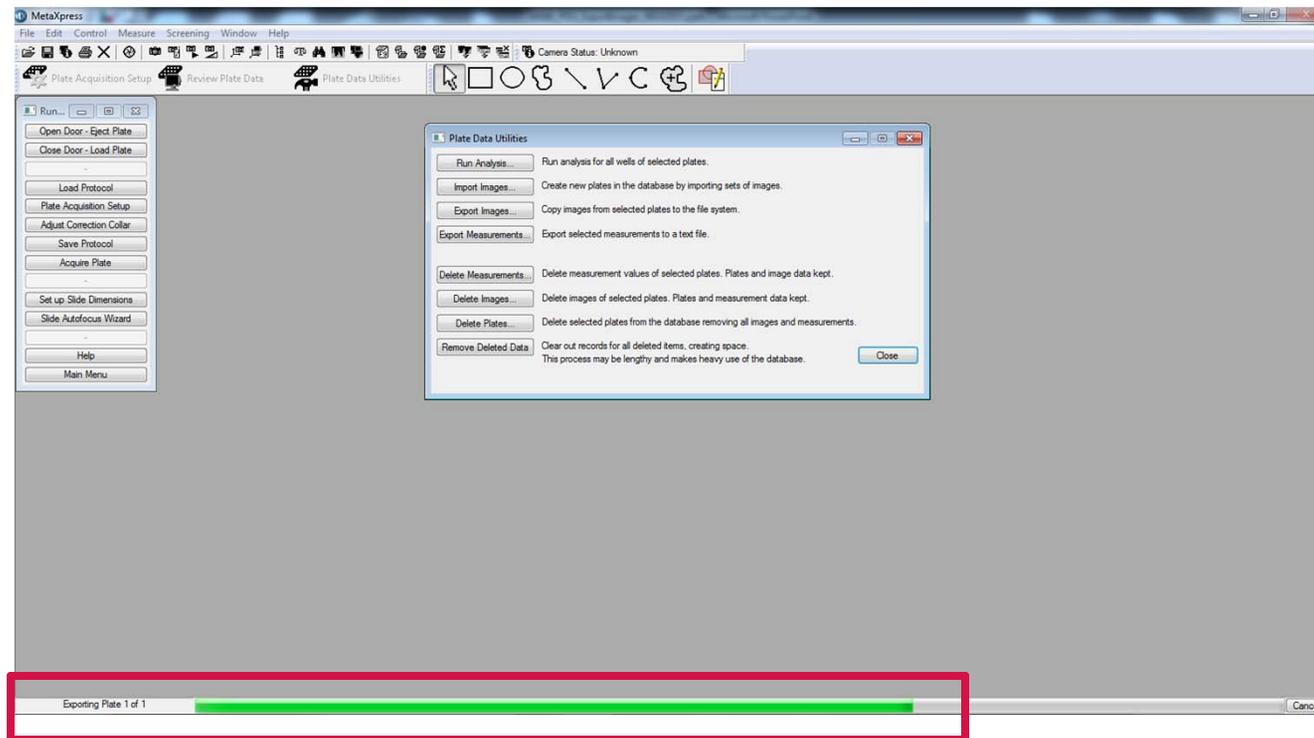
NOTE Molecular Devices does not recommend exporting directly to an USB external drive as this may result in export errors and/or missing images.



Exporting Images

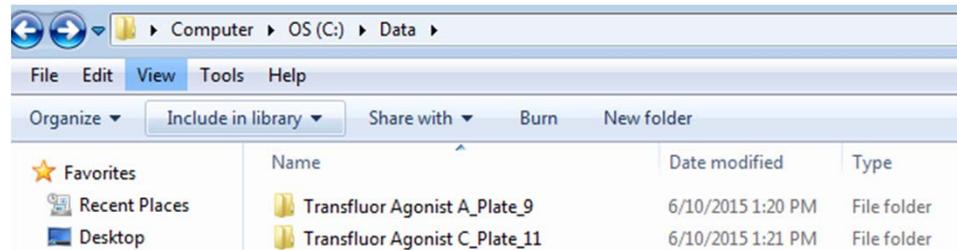
5. As images are exported, a status bar will appear at the bottom of the MetaXpress window

NOTE While exporting images, you cannot do anything else in MetaXpress. If exporting a large plate or multiple plates, plan to export the images when there is sufficient downtime.



File Structure of Exported Images

- Exported plates have a specific folder and naming structure. You should maintain this folder structure if you plan to import images back into MetaXpress or into another MetaXpress database (i.e. collaborator's computer)
 - Each plate is exported as a separate folder:



- Within the folder is a .htd file (database information file describing the experiment) and another folder (Timepoint_1) that contains the images

Name	Date modified	Type
TimePoint_1	6/10/2015 1:20 PM	File folder
Transflur Agonist A	6/10/2015 1:21 PM	HTD File

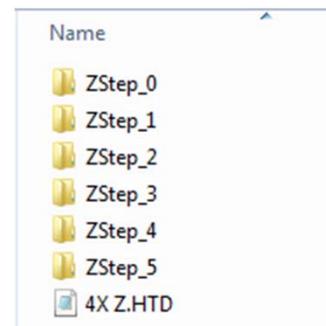
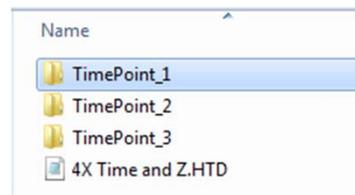


File Structure of Exported Images

7. Within each timepoint folder the images, thumbnail images and another copy of the HTD file are stored. The thumbnail images are not needed and you can delete them to save space.

Name	Date	Type	Size	T.
 Transfluor Agonist A	6/10/2015 1:20 PM	HTD File	1 KB	
 Transfluor Agonist A_A01_w1	6/10/2015 1:20 PM	TIF File	642 KB	
 Transfluor Agonist A_A01_w1_Thumb	6/10/2015 1:20 PM	TIF File	11 KB	
 Transfluor Agonist A_A01_w2	6/10/2015 1:20 PM	TIF File	642 KB	
 Transfluor Agonist A_A01_w2_Thumb	6/10/2015 1:20 PM	TIF File	11 KB	

8. If you have exported a plate with multiple Time points or Z Series, the folder structure will change accordingly.
 - For Z Series image sets, the ZStep_0 contains the projection images



Importing Images

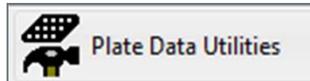
Required format for database import:

- Image name:
 - (Experiment base name)_(well name)_(site #)_(wavelength #).TIF, where
 - **Experiment base name** = the name given the plate during acquisition
 - **Well name** = A01, B01, etc.
 - **Site #** = 1, 2, 3, etc.
 - **Wavelength #** = 1, 2, 3, ...8
- The folder containing the images and .HTD file to be imported must have the exact same name as the experiment base name.
- There must be a separate folder for each time point in the timelapse. The images for each individual time point should be in a sub-folder named TimePoint_1, TimePoint_2, etc.
- There must be a separate folder for each z-step in the Z series. Images for each individual z-step should be in a sub-folder named Zstep_0, Zstep_1, etc.



Importing Images

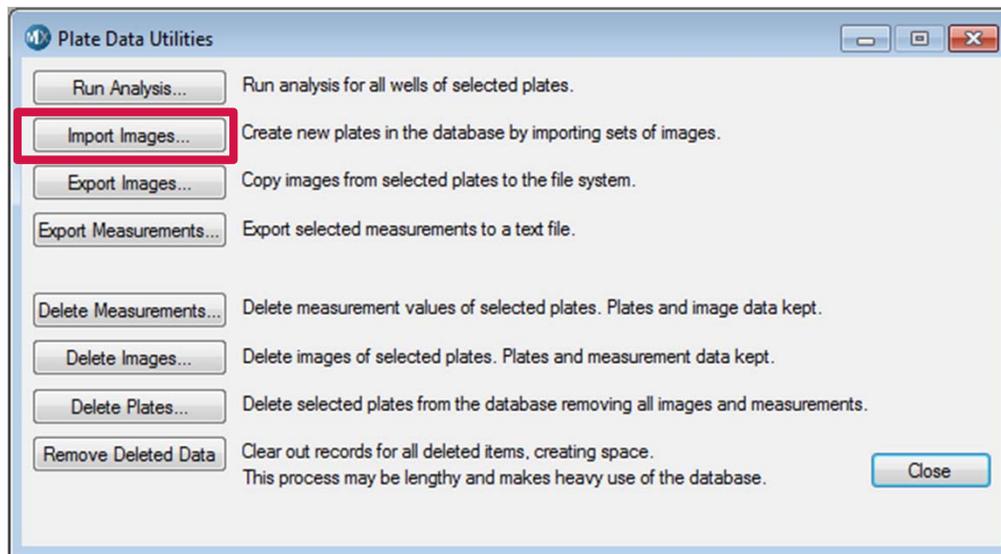
1. Open **Plate Data Utilities**
 - In the main toolbar click on



OR

- Under the **Screening** menu, select **Plate Data Utilities**

2. Click on the **Import Images** button

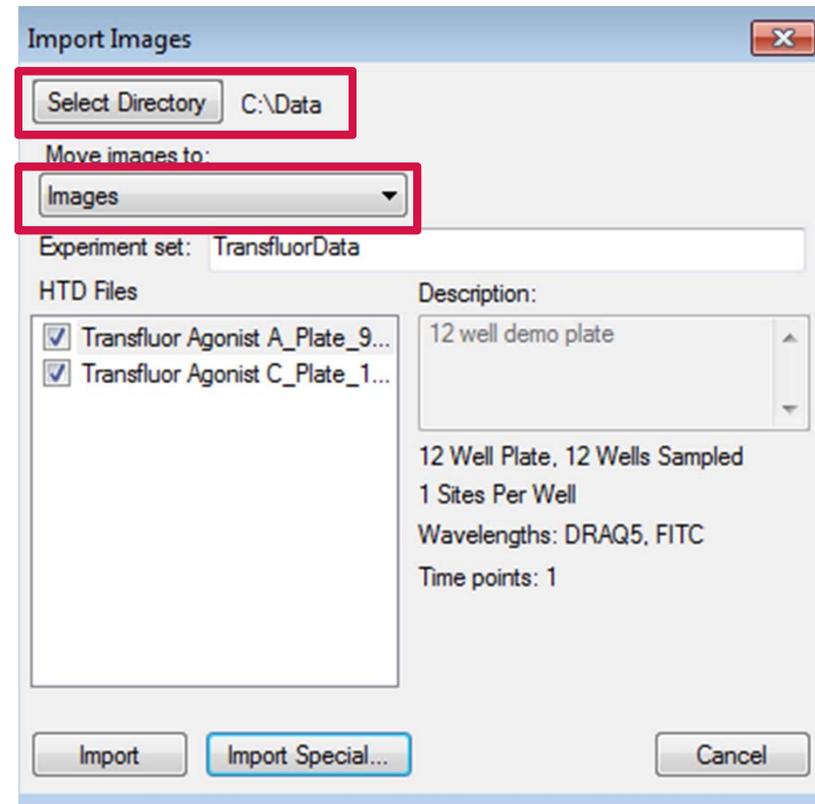


NOTE For this process, images need to be named in the MetaXpress naming convention and there must be a .htd file associated with the images.



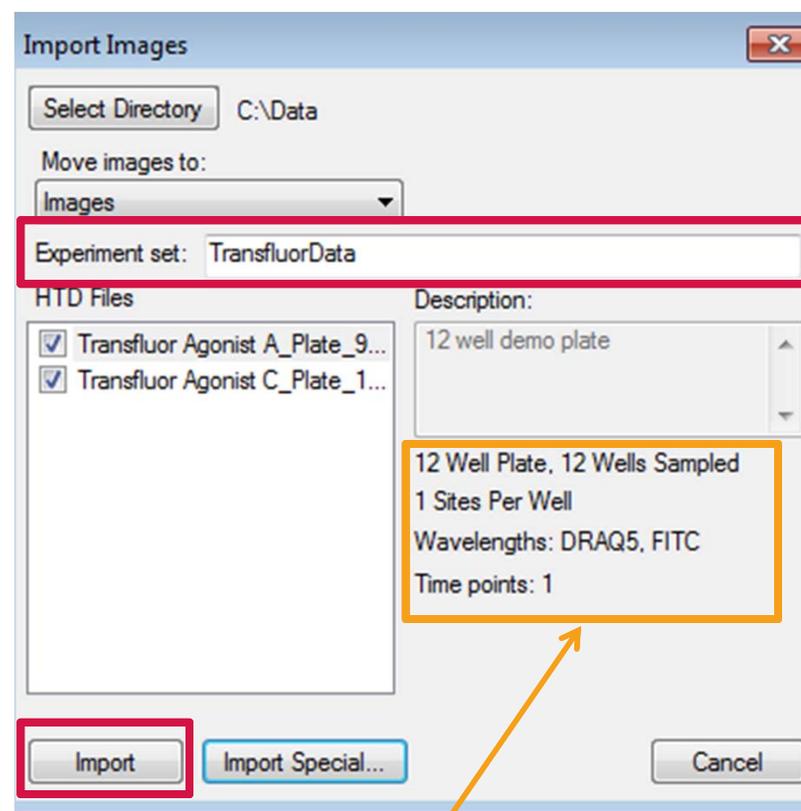
Importing Images

3. Click on the **Select Directory** button and navigate to the location of the images
4. Select the folder containing the .htd file and sub-folder(s) of images. To import multiple plates, select the folder containing all the plates.
5. If necessary, select the location to import images into from the **Move images to** drop-down menu



Importing Images

6. Enter a name for the **Experiment set** (i.e. Project Name)
7. Place a checkmark next to the plate(s) you would like to import under the **HTD Files** section
8. Click on the **Import** button
9. Images will be available for viewing in the **Review Plate Data** dialog once the import completes



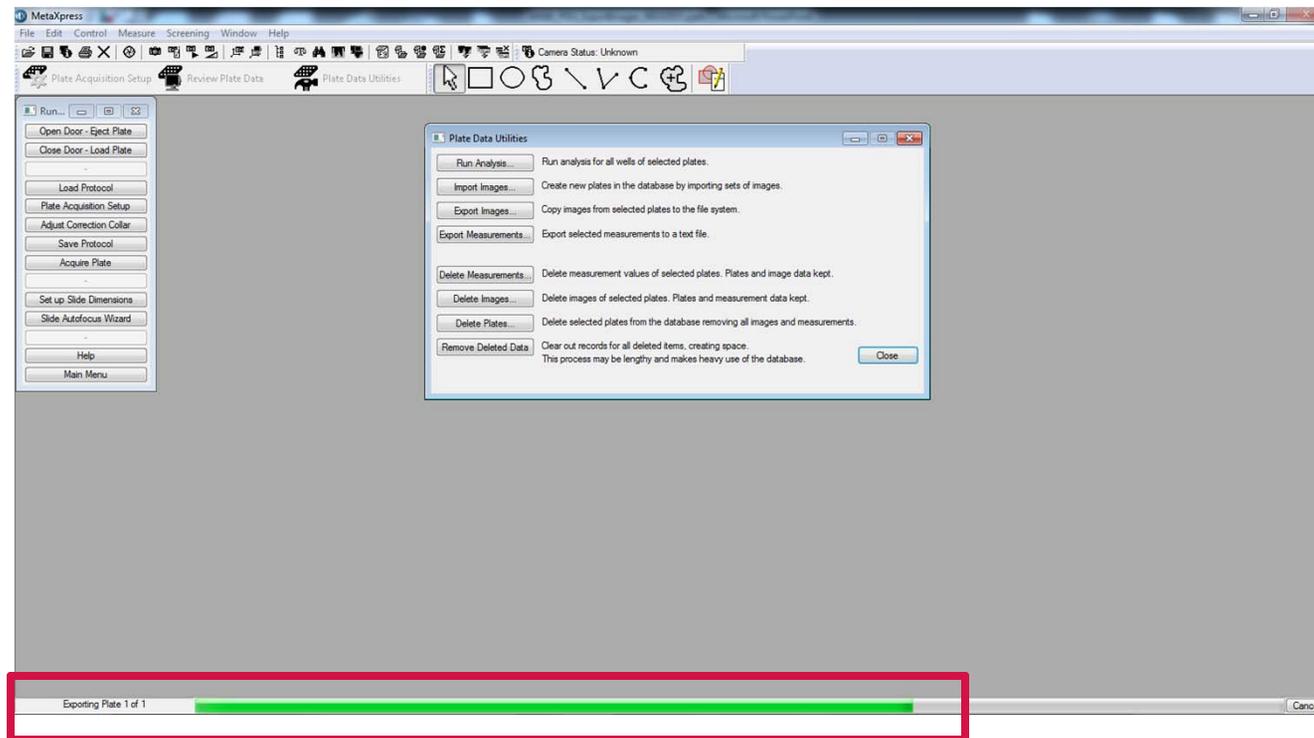
Summary information about the highlighted plate.



Importing Images

10. As images are imported, a status bar will appear at the bottom of the MetaXpress window

NOTE While importing images, you cannot do anything else in MetaXpress. If importing a large plate or multiple plates, plan to import the images when there is sufficient downtime.



Support Resources

- F1 / HELP within MetaXpress® Software
- Support and Knowledge Base: <http://mdc.custhelp.com/>
- User Forum: <http://metamorph.moleculardevices.com/forum/>
- Request Support: <http://mdc.custhelp.com/app/ask>
- Technical Support can also be reached by telephone:
 - 1 (800) 635-5577
 - Select options for Tech Support → Cellular Imaging Products → ImageXpress Instruments





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