MetaMorph

About

MetaMorph is a software package for microscopy automation and image analysis sold by Molecular Devices. At Brandeis, we use it primarily for offline analysis (not microscope control).

The Paradis Lab organized the original network license purchase and the Turrigiano Lab renewed our support contract in 2018. As of October, 2018, we have a total of 7 licenses for Metamorph Offline.

Mailing List

Mailing List is Mandatory
If you use the network license server, consider it mandatory to be on the metamorph-users mailing list.

License Server

- license server is running on psyllid.bio.brandeis.edu

Installation

Installing License Server

- administrators wanting to reinstall should see MetaMorphAdmin

System Requirements

- MetaMorph only runs on Windows.
  - If you have a Mac, consider VMwareFusion or use a different computer
  - the software installer checks the CPU and will refuse to run unless the PC is "Pentium 4 or higher"
  - As of Fall 2018, we have installers for versions 7.5, 7.7 and 7.8 and updates to 7.10.x. Versions 7.5 - 7.7 are compatible with Windows XP - 7, but not Windows 10. Version 7.8 is compatible with Windows XP - 10. Version 7.10 is 64-bit only and compatible with Windows 7 - 10.
  - We also have MetaMorph NX, but it has not been tested.

Installers

- Suzanne has the original version 7.5 installer CD; Steven has the version 7.7 and 7.8 CDs
- Copies of the files from installer CDs for versions 7.5, 7.7 and 7.8 are available from \files.sci.brandeis.edu\metamorph -- ask Steven Karel to make sure you are in metamorph-users in Active Directory so you will have access

Recipe for New Client Computer Installations

Install the license server stuff

1. disconnect any USB license keys from your PC
2. mount \files.sci.brandeis.edu\metamorph
3. run \files.sci.brandeis.edu\metamorph\sentinel driver\Sentinel Protection Installer 7.6.1 for MetaMorph\Sentinel Protection Installer 7.6.1.exe
4. click Next > then accept the license agreement and click Next > again
5. select Custom then click Next >
6. client machines only require the USB System Driver, so disable installation of the Parallel Driver, Sentinel Protection Server and Sentinel Keys Server and Sentinel Security Runtime by clicking each component, then selecting X This feature will not be available from...
the drop-down menu
7. click **Next** then **Install** and follow the prompts
8. a reboot will probably be necessary

**Install the actual software**

1. mount `\files.sci.brandeis.edu\metamorph`
2. open the sub-folder corresponding to the version of MetaMorph you want to install (probably `metamorph 7.8`)
3. run `autorun.exe`
4. choose **Install Meta Imaging Series 7.8** if 32-bit Windows is installed on your PC or **Install Meta Imaging Series 7.8 X64** if you are using 64-bit Windows
   - if you get an error about not finding `SETUP.EXE`, look for the appropriate version of `SETUP.EXE` in the installer image and run that instead
5. click **Next**
6. accept the license agreement (or don't install the software!), then click **Next**
7. a screen showing the status of the Sentinel Protection system will be displayed and should indicate that the necessary driver is already installed, so click **Next**
8. the default 'destination folder' is probably ok, but it may be less confusing to users if the the version number is removed the 'program group' (Meta Imaging Series 7.8 -> Meta Imaging Series) because this label remains fixed even after updates to later versions of MetaMorph are applied
9. in the **Hardware Key Confirmation** dialog, select the radio button for **Network Key Server** and enter `psyllid.bio.brandeis.edu` as the **Server Address**. Having done that, click **Read System ID from Key** and the number will be filled in once the license server is contacted. If that doesn't happen, contact Steven Karel or see the "network troubleshooting" instructions that have yet to be written.
10. Now you should be in the **User Information and Codes** dialog. For the purposes of getting support, Suzanne Paradis is the registered owner and her affiliation is Brandeis University. Click **Using the Internet** to retrieve the Registration and Authorization codes, otherwise talk to Steven or Suzanne about obtaining the codes. Click **Next** then **Install**

**Post-installation configuration**

- at this point metamorph pops up a dialog that looks like the one below. Click **OK** to leave MetaMorph in single-user mode.

**Updating an Existing Installation**

The Meta Imaging Series Updater is capable of applying updates across minor versions within the same processor architecture; for example, 32-bit MetaMorph 7.5 can be updated directly to 32-bit 7.8.13, but 32-bit MetaMorph 7.8 cannot be updated to 64-bit MetaMorph 7.10.2, even on a PC running 64-bit Windows. As of October, 2018, the latest available 32- and 64-bit versions were 7.8.13 and 7.10.2, respectively.

**Before updating MetaMorph, perform a clean install of Sentinel Protection if current version is < 7.6.1**

Although allowing the Meta Imaging Series Updater to bring the installed version of Sentinel Protection to a suitable version to accommodate a new version of MetaMorph may work, Molecular Devices strongly suggests that Sentinel Protection be removed **completely** and reinstalled using the following steps before MetaMorph is updated.

1. remove the currently-installed version of Sentinel Protection Installer the usual way (Control Panel -> Program and Features -> uninstall Sentinel Protection Installer); a reboot will likely be required
2. mount `\files.sci.brandeis.edu\metamorph`
3. remove every last bit of Sentinel Protection by running `\files.sci.brandeis.edu\metamorph\sentinel\driver\Sentinel Protection registry cleaners\SSDCleanup_x32_1.2.0.5\SSDCleanup.exe` if your PC is running 32-bit Windows or `...\SSDCleanup_x64_1.2.0.6\SSDCleanupx64.exe` if you're PC is running 64-bit Windows
4. follow the prompts that appear, entering y to continue and pressing any key to acknowledge that all applications that might be accessing Sentinel Key have been closed
5. allow the cleanup process, which may take several minutes, to complete, then press any key to exit
6. follow the instructions in the Install the license server stuff section of Recipe for New Client Computer Installations above to install Sentinel Protection 7.6.1

**Install the MetaMorph update**

1. download the desired update from `\files.sci.brandeis.edu\metamorph\updates` or `http://www.meta.moleculardevices.com/updates/index.php` (you will need our System ID for the latter; this was revealed during installation or can be obtained from within MetaMorph via the **About MetaMorph Offline**); do **not** attempt to unpack the zip archive
2. run **Start** -> **Meta Imaging Series** -> **Meta Imaging Series Updater** and browse to and select the update file you downloaded. Aside from the fact that the updater may need to update itself and restart, the update process works similarly to MetaMorph installation, so refer to the guidelines above.
Troubleshooting

Suddenly, I am having trouble connecting to the license server! Why?

- Did you install or enable a firewall that blocks outgoing connections?
- Do you have an IP address on the Brandeis network?
  - If you are using wireless, are you on eduroam?

Questions

Can I run this from off-campus or on the campus wireless?

- As a matter of policy, only on-campus connections are supported
- Only the eduroam wireless network is supported. (brandeis_secure will work, but it deprecated)

Do we have maintenance or support on this product?

- Yes and the maintenance contract expires on 11 Oct 2019

What bits did we buy?

We have licenses as follows:

- Metamorph Premier Offline (7 concurrent network users)
- Neurite Outgrowth Application Module
- Angiogenesis Application Module
- Cell Scoring Application Module
- Multiwavelength Cell Scoring App Module
- Cell Cycle Application Module
- Granularity Application Module
- 4D Viewer/3D Measurement Drop-In

Links

- [http://mdc.custhelp.com/app/answers/list/p/13](http://mdc.custhelp.com/app/answers/list/p/13)
- installation instructions