Introduction

Windows XP is no longer being supported by Microsoft after April 8th, 2014. Past this date, Windows XP will become a dangerous operating system (OS) to use due to the lack of security patches. Our customers are encouraged to upgrade their OS to Windows 7 as soon as possible. Possible upgrade options are explained below.

Asylum Research OS Support Statement

Asylum Research develops and tests the AFM software on Windows 7 64-bit. Because of Windows OS strong tradition of compatibility between versions, the AFM software will likely run on other Windows versions. However, Asylum Research may not be able to provide support or bug fixes for versions other than Windows 7 64-bit.

Additionally, Asylum Research discourages the use of Windows 8 due to radical changes to the user interface from previous versions, which can require significant user retraining.

Preferred option: Buy a new computer system directly from Asylum Research

Because of the complexity of upgrading to Windows 7, we highly recommend this path. It allows Asylum Research to fully support the upgrade from start to finish. We will setup the new computer so that all you will have to do is unbox it, connect your AFM to it, and it will be ready to run. Please contact sales for a quote.

Here are the current specs. We will ship this, or better.

- Dell Precision T3610 Workstation
- Microsoft Windows 7 Professional 64 bit
- Intel Four Core Ivy Bridge Xeon (3.7 GHz)
- 8 GB DDR3 RAM
- Two 2 TB SATA Hard Drives (RAID1 mirror)
- 8X DVD+/-RW
- ATI/AMD Radeon R7-260X 2 GB video card
- Hauppauge ImpactVCB-e capture card (MFP-3D™/Origin™ systems)
- 6 USB 2.0 ports, 4 USB 3.0 ports
- 2 FireWire ports (Cypher™ systems)

If your existing monitors are 1600x1200 and you are happy with them, we recommend you keep them and reuse them with the new computer. If not, we can additionally offer you:

- Two 24” LCD Screens (1920 x 1200) – or –
- Two 27” LCD Screens (2560 x 1400)

Do it yourself option

You can purchase the above system directly from Dell or another vendor if the configuration and specifications are similar to our setup. You will have to also buy the video card and capture/FireWire card yourself because Dell won’t sell you those. Please be sure that you or your local IT department have the skills necessary to build and setup the computer. Our Support group at Asylum can help you setup the AFM software, but we cannot further advise you on building a new computer or troubleshooting associated issues.

Note about hard drive size and bios settings

When ordering or upgrading a computer, please note that it is best to keep the primary drive (even in a RAID1 configuration) to be 2 TB or under. Secondary storage sizes can be configured to whatever size you need. For bios settings, it is best to use “legacy bios” mode (not UEFI). If you have a choice, keep the primary drive configured in MBR mode. GPT mode is required for drives with capacities greater than 2 TB. If your secondary storage is greater than 2 TB, you will need GPT.

Below are links to where you can purchase the video/capture/FireWire cards online. The exact manufacturer or model of video card is not important but we are currently running and testing on AMD chipsets. We prefer AMD cards that have dual DVI ports for a multi-monitor setup. Hauppauge is the manufacturer of choice for video capture and FireWire cards (Cypher only) are generic with many different brands that plug-and-play.

- AMD Radeon R7 cards
- Hauppauge ImpactVCB-e or Hauppauge Company Page
- FireWire cards

Below are links to the drivers you will need to install.

- Dell motherboard drivers
- AMD driver page
- Hauppauge Drivers (MFP-3D™ systems)
- Pixelink camera drivers (Cypher only)

The Business of Science*
Below are instructions and links about how to install the Wavemetrics Igor software and the Asylum AFM software.

**Wavemetrics Igor install procedure:**
1. Create a folder off the root called Asylum (i.e. C:\Asylum).
2. Install the latest copy of Igor Pro from Wavemetrics into the Asylum folder (will install to C:\Asylum\Igor Pro Folder). This will prevent issues with UAC privilege levels under Windows 7.
3. This copy of Igor will run as a demo until you enter your existing license and activation key. If this is a transfer of Igor to a new machine and you have misplaced your activation information, contact us to get your registered information.
4. When you enter the license and activation key, do it from a local administrator account and activate it for all users.

**Latest Asylum Release Software (Found at the Asylum Support forum - requires login)**

**Upgrading an existing Dell T3500**
The Dell T3500 shipped from May 2009 to January 2013. It is possible to upgrade this model for compatibility with Windows 7. Upgrades on earlier models should not be attempted.

Upgrading the Dell T3500 is nearly as complex as the “Do It Yourself” option described above. Again, please be sure that you or your local IT department have the skills necessary to build and setup the computer. Our Support group at Asylum can help you setup the AFM software, but we cannot further advise you on building a new computer or troubleshooting associated issues.

**RAM**
Below are links to buying the RAM you need, plus a link to the manual for installing it. The T3500 has a DDR3 triple channel configuration which means it is best to buy 3 sticks of similar RAM. There are 2 banks of triple channel meaning you can fill an additional 3 slots if desired.

- NewEgg.com RAM choice
- Dell T3500 service manual

**Hard drives**
Hard drives should also be considered in the upgrade cycle instead of reusing your current ones. Since the price has dropped and performance has increased over the last several years, it will give you better performance and life expectancy. Windows XP is not directly upgradeable by Windows 7 and a fresh format and re-install will be performed during the upgrade procedure.

The Dell T3500 computers came with a RAID1 (mirrored) setup. To recreate a RAID1 setup on fresh drives, press Ctrl + I during the bios boot sequence to enter the configuration menu to pair the drives together. This must be performed before installing Windows since a RAID setup appears as one drive to the system and cannot be changed afterwards.

**Windows OS**
Below are links to buying Windows 7 Pro 64-bit. Microsoft no longer sells Windows 7 directly but there are other vendors still selling OEM versions. Sales will cease at some point in the future.

- Microsoft Windows 7 Pro 64-bit - from NewEgg.com

You can also download the ISO file to burn to disk or put on a flash drive. Methods for burning to disk or placing on a bootable flash drive are widely available on the internet. You will need an activation key otherwise Windows will prompt you to activate within 30 days of installation.

- Microsoft Windows 7 Pro 64-bit ISO (link may not be available in future)

**Internal Cards**
Since the video and capture cards that were in existing Windows XP systems are considered out of date, it is best to upgrade them. The reason for this has more to do with limited driver compatibility than age but we have seen the capacitors or GPU RAM fail on video cards that are several years old. Please refer to the cards and drivers mentioned above in the ‘Buying a computer’ section.