

Installation Instructions for Unigraphics NX2 at Virginia Tech

Windows 2000 Professional, Windows XP Professional

IMPORTANT NOTES:

- (1) It is strongly suggested that prior versions of Unigraphics first be removed/uninstalled before Unigraphics NX2 (also known as version 20) is installed. One known problem with having two versions installed on the same computer is that Unigraphics gets confused as to which CAST version to use (there might be other problems as well).
- (2) While Unigraphics NX2 can read files generated with earlier releases of Unigraphics, earlier releases cannot work with files generated or touched by Unigraphics NX2. You should therefore back up your Unigraphics files before migrating to Unigraphics NX2, just in case you later decide to revert back to Unigraphics NX.
- (3) If you are exchanging Unigraphics files with other users, then you should plan to migrate together at the same time. In particular, projects that need to collaborate with General Motors should continue to use Unigraphics NX.
- (4) At this time, Unigraphics NX2 is only being distributed via online download. There are no loaner CDs available for checkout from Software Distribution (3240 Torgersen Hall).
- (5) To successfully run Unigraphics NX2, you need to be running Windows 2000 Professional (Service Pack 4) or Windows XP Professional (Service Pack 1), and you need to have Java Runtime Environment (JRE) version 1.4.1_02 or higher installed.
 - a. To upgrade Windows, go to <http://www.microsoft.com>
 - b. To upgrade JRE, go to <http://www.java.com/en/download/manual.jsp>

If you already have Unigraphics NX2 installed and you only need to install the latest maintenance release ("bug fixes"), then skip steps 3 through 8 and complete step 9 only.

1. Log on as "administrator"
2. Make certain that you are connected to the "vt.edu" network domain. **Please review the "Troubleshooting" section at the end of this document for more discussion on this topic.**
3. Insert the CD labeled "**UG Base & Options/Translators Software**" (if using loaner CDs); or map to the Unigraphics network drive (the download site) and double-click on the "**Unigraphics NX2**" folder and then on the "**UG Base & Options & Translator**" folder (if using the online download site)
 - a. If necessary, double-click on the "**Launch**" application to get started
 - b. Click on "**Install Unigraphics NX**"
 - c. Click on "**Next**" to get started
 - d. Select "**Custom**" and click on "**Next**"
 - e. Select all the options and click on "**Next**"

- f. Select **“English”** (default) and click on **“Next”**
 - g. Change the text to: **27000@uglicense.cadlab.vt.edu** and click on **“Next”**

Please review the **“Troubleshooting”** section at the end of this document if you receive an error at this point.
 - h. Click on **“Next”** to start the installation of files
 - i. Click on **“OK”** when the installation is complete
 - j. Click on **“Install Translators”**
 - k. Click on **“Next”** to get started
 - l. Select **“Complete”** (default) and click on **“Next”**
 - m. Click on **“Install”** to start the installation of files
 - n. Click on **“Finish”** when the installation is complete
 - o. Click on **“Exit”**
 - p. Eject the CD (if using loaner CD); or click on **“Back”** to move up one level (if using the online download site)
4. Insert the CD labeled **“Documentation”** (if using loaner CDs); or double-click on the **“Documentation”** folder (if using the online download site)
 - a. If necessary, double-click on the **“ugdoc020”** folder and then on the **“setup”** application
 - b. Click on **“Next”** to get started
 - c. Click on **“Next”** to select destination folder (default is usually OK)
 - d. Click on **“Install”** to start the installation of files
 - e. Click on **“Finish”** when done
 - f. Eject the CD (if using loaner CD); or click on **“Back”** twice to move up two levels (if using the online download site)
5. **OPTIONAL:** Insert the CD labeled **“MoldWizard”** (if using loaner CDs); or double-click on the **“Optional Modules”** folder and then on the **“MoldWizard NX2”** folder (if you are using the online download site)
 - a. If necessary, double-click on the **“moldwizardnx2”** folder and then on the **“Setup”** application
 - b. Click on **“Next”** to get started
 - c. Click on **“Next”** to select the default destination folder
 - d. Select **“Custom”** and click on **“Next”**
 - e. Select all options and click on **“Next”** to begin installation of files
 - f. Click on **“OK”** when done
 - g. Eject the CD (if using loaner CD); or click on **“Back”** three times to move up three levels (if using the online download site)
 - h. Select **“Settings”** and then **“Control Panel”** from the Windows **“Start”** button
 - i. Double-click on the **“System”** icon and select the **“Advanced”** tab
 - j. Select **“Environment Variables...”**
 - k. Under **“System variables”**, select **“New...”**
 - l. Enter the variable name **“MOLDWIZARD_DIR”** and the variable value **“C:\Program Files\EDS\Unigraphics NX 2.0\moldwizard”** (this should be where the wizard was installed), and then click **“OK”** three times

6. **OPTIONAL:** Insert the CD labeled “**Progressive Die Wizard**” (if using loaner CDs); or double-click on the “**Optional Modules**” folder and then on the “**Progressive Die Wizard NX2**” folder (if you are using the online download site)
 - a. If necessary, double-click on the “**pdwnx2.0**” folder and then on the “**Setup**” application
 - b. Click on “**Next**” to get started
 - c. Click on “**Next**” to select the default destination folder
 - d. Select “**Custom**” and click on “**Next**”
 - e. Select all options and click on “**Next**” to begin installation of files
 - f. Click on “**OK**” when done
 - g. Eject the CD (if using loaner CD); or click on “**Back**” three times to move up three levels (if using the online download site)
 - h. Select “**Settings**” and then “**Control Panel**” from the Windows “**Start**” button
 - i. Double-click on the “**System**” icon and select the “**Advanced**” tab
 - j. Select “**Environment Variables...**”
 - k. Under “**System variables**”, select “**New...**”
 - l. Enter the variable name “**PDIEWIZARD_DIR**” and the variable value “**C:\Program Files\EDS\Unigraphics NX 2.0\pdiewizard**” (this should be where the wizard was installed), and then click “**OK**” three times
7. **OPTIONAL:** Insert the CD labeled “**Weld Assistant**” (if using loaner CDs); or double-click on the “**Optional Modules**” folder and then on the “**Weld Assistant NX2**” folder (if you are using the online download site)
 - a. If necessary, double-click on the “**Ugweldnx20**” folder and then on the “**Setup**” application
 - b. Click on “**Next**” to get started
 - c. Click on “**Next**” to select the default destination folder
 - d. Click on “**OK**” when done
 - e. Eject the CD (if using loaner CD); or click on “**Back**” three times to move up three levels (if using the online download site)
8. **TUTORIALS:** Insert the CD labeled “**CAST Online**” (if using loaner CDs); or double-click on the “**CAST Online**” folder (if using the online download site)
 - a. If necessary, double-click on the “**AutoPlay**” application
 - b. Click on “**Install CAST**”
 - c. Click on “**Next**” to get started
 - d. Select “**Default**” and click on “**Next**”
 - e. Click on “**Install**” to begin installation of files
 - f. Click on “**Finish**” when done
 - g. Click on “**Exit**”
 - h. Eject the CD (if using loaner CD); or click on “**Back**” to move up one level (if using the online download site)
9. **BUG FIXES:** Insert the CD labeled “**Maintenance Release Version 2.0.2**” (if using loaner CDs); or double-click on the “**Maintenance Release 2.0.2.2**” folder inside the “**Software Update**” folder (if using the online download site)

- a. Double-click on the “**ugs_update0202_02**” folder
 - b. Double-click on the “**ugs_update**” application
 - c. At the prompt “**Press any key to continue...**” hit a key to start updating
 - d. At the prompt “**Press any key to continue...**” hit a key to exit
 - e. Eject the CD (if using loaner CD)
10. Before the first time you run Unigraphics (**each individual user** must do this once):
- a. Select: **Start → Programs → Unigraphics NX 2.0 → FLEXIm Tools → License Options**
 - b. Highlight “**UGACAD**” in “Available Bundles”
 - c. Click “**ADD**” to move it to “Selected Bundles”
 - d. Click “**OK**”
11. To run Unigraphics:
- a. Select: **Start → Programs → Unigraphics NX 2.0 → Unigraphics NX**

TROUBLESHOOTING:

Windows XP without Service Pack 1:

Unigraphics NX2 should be run under either Windows 2000 Professional (Service Pack 4) or Windows XP Professional (Service Pack 1). If you need to run Unigraphics NX2 under Windows XP without Service Pack 1, then you will need to configure Unigraphics NX2 to run in “Windows 2000 Compatibility Mode” due to a Windows XP video problem (the graphics within Unigraphics becomes incredibly sluggish):

12. Activate Windows 2000 Compatibility Mode:
- a. Using Windows Explorer, find the “**ugraf.exe**” image within the **UGII** directory; typically it will be in the **C:\Program Files\EDS\Unigraphics NX 2.0\UGII** directory
 - b. Right-mouse-click on “**ugraf.exe**” and select “**Properties**”
 - c. Click on the “**Compatibility**” tab
 - d. Select the box “**Run this program in compatibility mode for:**”
 - e. Select “**Windows 2000**” from the pull-down list
 - f. Click “**Apply**”
 - g. Click “**OK**”

NEWS GROUP (NNTP):

The following online news group (NNTP) is concerned with issues of installing and operating the Unigraphics CAD/CAM/CAE software system at Virginia Tech:

Server: <news://news.vt.edu>
 Group: vatech.software.pace.unigraphics

NETWORKING PROBLEMS:

During installation, the installation program needs to communicate with the Unigraphics license server (uglicense.cadlab.vt.edu) using ICMP (ping) and TCP (FlexLM; TCP port 27000) network services. At run-time, Unigraphics needs to communicate with its license server (uglicense.cadlab.vt.edu) using TCP (FlexLM; TCP port 27000) network services. If these services are blocked anywhere on the network between your computer and the license server, then the installation and/or execution of Unigraphics will fail.

Recently, to suppress the “worms” that were infecting computers, all ICMP traffic was blocked on the residential network (dorms), wireless network, and the VT modem pool. Hence, it was not possible to install Unigraphics on computers that were connecting via these network locations. As of September 5, 2003, the ICMP traffic between these network locations and the Unigraphics license server is no longer blocked, and the installation and execution of Unigraphics should therefore be operational again across campus.

Off-campus users need to connect to the Unigraphics license server using (1) the VT modem pool, or (2) the VT virtual private network (VPN) service. The cost of both these services, as a “remote access” bundle, is currently \$9.90 per month plus a \$6.00 setup charge. See the following site for more information:

<http://www.cns.vt.edu/html/data/vtmp/index.html>

Note that the VPN service is in a pilot stage, and it has not been readily advertised. The creation of the VPN service account might therefore not occur automatically when you purchase this remote access bundle. You may therefore have to make it a point when you contact VT Communications Network Services (CNS) to have both your modem pool and your VPN service activated, if so desired.

CAST (tutorials) DOES NOT SHOW UP INSIDE UNIGRAPHICS:

First off, make certain that you have Java Runtime Environment (JRE) version 1.4.1_02 or higher installed. To download and install the latest version of JRE, go to:

<http://www.java.com/en/download/manual.jsp>

Next, if your installation of Windows 2000 or Windows XP is not up to date, then it might contain an old version of the system installation software. This might cause certain system environmental variables to not be set. For instance, assuming that you have completed installation steps 1-4 and 8-10, you might still find that the CAST tutorials do not show up inside Unigraphics when you click on the “mortarboard” on the right-hand side. If so, then try the following (do not do this if you have not completed steps 8):

13. Set CAST System Environment Variables:

- a. Select “**Settings**” and then “**Control Panel**” from the Windows “**Start**” button
- b. Double-click on the “**System**” icon and select the “**Advanced**” tab
- c. Select “**Environment Variables...**”
- d. Under “**System variables**”, if the variable name “**UGII_CAST_HTML_DIR**” does not exist, then
 1. Select “**New...**”

2. Enter the variable name “**UGII_CAST_HTML_DIR**” and the variable value “**C:\Program Files\EDS\Unigraphics NX\ugcast\html**”, and then click “**OK**” once
- e. Under “**System variables**”, if the variable name “**UGII_CAST_HTML_URL**” does not exist, then
 1. Select “**New...**”
 2. Enter the variable name “**UGII_CAST_HTML_URL**” and the variable value “**C:\Program Files\EDS\Unigraphics NX\ugcast\html\start.html**”, and then click “**OK**” once
- f. Under “**System variables**”, if the variable name “**UGII_CAST_PARTS**” does not exist, then
 1. Select “**New...**”
 2. Enter the variable name “**UGII_CAST_PARTS**” and the variable value “**C:\Program Files\EDS\Unigraphics NX\ugcast\parts**”, and then click “**OK**” once
- g. Click “**OK**” twice to exit the editing of system environmental variables

UNABLE TO FIND THE LICENSE SERVER WHEN STARTING UNIGRAPHICS:

If your installation of Windows 2000 or Windows XP is not up to date, then it might contain an old version of the system installation software. This might cause certain system environmental variables to not be set. For instance, assuming that you have completed installation steps 1-4 and 8-9, you might still be unable to execute steps 10 and/or 11. If so, then try the following (do not complete this if you have not completed step 3):

14. Set CAST System Environment Variables:

- a. Select “**Settings**” and then “**Control Panel**” from the Windows “**Start**” button
- b. Double-click on the “**System**” icon and select the “**Advanced**” tab
- c. Select “**Environment Variables...**”
- d. Under “**System variables**”, if the variable name “**UGII_LICENSE_FILE**” does not exist, then
 1. Select “**New...**”
 2. Enter the variable name “**UGII_LICENSE_FILE**” and the variable value “**27000@uglicense.cadlab.vt.edu**”, and then click “**OK**” three times

UNIGRAPHICS HANGS DURING CNC MACHINING SIMULATIONS:

Unigraphics NX 2.0.1.2 will hang during CNC machining simulations such that the only way out is to kill the program via the task manager. To solve this problem, upgrade to Unigraphics NX 2.0.2.2 (i.e., install the maintenance release in step 9).