

# ***Release 1.9.1***

## ***Maestro Workstation Software***

### ***Installation Instructions***

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#### **Introduction**

This procedure details the installation of the Maestro 1.9.1 software on Silicon Graphics® (SGI) and Hewlett Packard® (HP) workstations. Although the installation procedures on these two platforms are similar, they are not identical. If you are installing Maestro on an HP Workstation, refer to the supplemental instructions contained with the software, part number 21261-M99-00.

Before installing this software, please review the minimum system requirements as provided in the Maestro Release Notes. The Release Notes also detail the new Maestro features and enhancements contained in Release 1.9.1.

**NOTE:** *During the installation of the Maestro 1.9.1 software, you will need to contact 3D Systems to obtain a license key in order to unlock the software for use. Use the License Key procedure provided later in this document to obtain your license key.*

**CAUTION:** *The **partman.cnf**, **\*.srg**, **\*.sty** and **\*.prt** files from Maestro Release 1.7 and 1.8 must not be used with Maestro 1.9.1. There have been significant modifications to the file formats. Any custom modifications to the default parameters must be made to the Release 1.9.1 specific files.*

**WARNING:** *Solid Concepts Bridgeworks software package modifies existing Maestro software when the “slice switcher” is installed. INSTALLATION OF THE MAESTRO SOFTWARE WILL OVERWRITE THIS MODIFICATION. To avoid overwriting the slice switcher, please consult Solid Concepts for assistance with un-installing the slice switcher.*

## Before You Begin

### Verify Your Operating System Version

**ACTION:** Log into the system as any user.

At the shell prompt:

**TYPE:** `uname <spacebar> -sr <Enter>`

*For SGI users, the prompt displays the IRIX™ version currently installed on your workstation. You must be running IRIX 5.3 or greater to use Maestro 1.9.1, and 3D Systems recommends upgrading to IRIX 6.2.*

*For HP users, the prompt displays the HP-UX™ version currently installed on your workstation. If you are not running HP-UX 10.2, you must upgrade to HP-UX 10.2 before continuing with installation of Maestro 1.9.1.*

If necessary, contact your system administrator for assistance.

### Verify Your Inventor™ Version (SGI users only)

At the shell prompt

**TYPE:** `showprods <Enter>`

You will see an alphabetical listing of the installed products on your system. Use the <spacebar> to scroll the list down to the Inventor section. Look for the line:

**Inventor\_eoe <date> Inventor Execution Only Environment, <version>**

Make sure the version is 2.1.1 or greater. If your system does not have Inventor 2.1.1 or greater installed, you must upgrade to at least Inventor 2.1.1 before continuing with installation of Maestro 1.9.1.

Users running IRIX 6.x or greater probably have the correct version of Inventor already installed. Users running IRIX 5.3 probably have an earlier version of Inventor. If you are running IRIX 5.3, 3D Systems recommends you upgrade to IRIX 6.2 which provides the correct version of Inventor. If you are not upgrading to IRIX 6.2, Inventor 2.1.1 can be obtained at no cost for IRIX 5.3 through SGI's website at <http://www.sgi.com/Products/Evaluation>.

If necessary, contact your system administrator for assistance.

TYPE: "q" to quit the installed products listing and return to the shell prompt.

### **Verify Access to Netscape Navigator®**

At the shell prompt:

TYPE: **netscape** <Enter>

If the Netscape Navigator program does not run, load Netscape Navigator 1.1 or greater before continuing with installation of Maestro 1.9.1. Netscape must be accessible from the user's login directory in order to run Maestro's help facility.

If necessary, contact your system administrator for assistance.

### **Verify Access to Your CD ROM Drive**

The format of the Maestro 1.9.1 CD ROM conforms to ISO-9660 with Rockridge extension. Make sure you have access to the CD ROM drive using this format.

If necessary, contact your system administrator for assistance.

## **Installation Setup**

If you are performing an upgrade to an existing Maestro release, skip this section, and continue with the "Preparing to Install Maestro" section below.

On a system where 3D Systems workstation software has not previously been installed, you must set up the workstation environment and configure the workstation network communication to your SLA controller. **3D Systems recommends that your system administrator completes the following set up procedures for new installations.**

If you are performing a new installation setup, log in as root and continue with the following steps:

**ACTION:** Using your Unix editor, open the file **sys\_id** located in the **/etc** directory and verify that it contains your workstation host name.

For example:           **WS500** or **WS250**

If the file **sys\_id** does not contain your workstation host name, insert the name within the **sys\_id** file, and save the file.

**ACTION:** Using your Unix editor, open the file **hosts.equiv** located in the **/etc** directory and verify that it contains your workstation and buildstation host names.

For example:           **WS500** and **SLA500**

Make sure that the file **hosts.equiv** lists all of your workstation host names and all of your buildstation host names. If the **hosts.equiv** file contains a “+” symbol, contact your system administrator to ensure that the network server contains the appropriate host names. If the host names are not listed in either situation, insert the lines within the **hosts.equiv** file and save the file.

**ACTION:** Verify that the file **hosts** located in the **/etc** directory contains the IP (Internet) address and host name for each workstation and buildstation.

For example:           **192.0.0.1**           **WS500 ws500**  
                          **192.0.0.2**           **SLA500 sla500**

If the **hosts** file contains a “+” symbol, ensure that the network server contains the appropriate IP address and host names. If the IP address and host names are not listed in either situation, insert the lines within the **hosts** file and save the file.

**ACTION:** If you are using the NFS file transfer system, verify that the file **exports** located in the **/etc** directory contains the user login directory.

For example:           **/usr/people/3dsys**

**NOTE:**           *The preceding step is not necessary if your facility uses the FTP (File Transfer Protocol) program to move build files from the workstation to the SLA buildstation.*

## Setup the 3dsys User Account

3D Systems suggests setting up a new user account specifically for the Maestro user. Throughout this document we will refer to the user's account name as **3dsys** with the home directory **/usr/people/3dsys**. You can create any user name and home directory you wish. On an HP workstation, however, you cannot directly create a user account name that begins with a number. To set up the user account **3dsys** on an HP, you will need to manually edit the **passwd** file located in the **/etc** directory. Contact your system administrator for assistance if necessary.

In any case, substitute your user name and home directory path wherever **3dsys** or **/usr/people/3dsys** occurs in these instructions. Also, these instructions assume that the Maestro 1.9.1 software executable, library and support files will be installed in a directory called **/usr/3d1x9**. Again, if you install the program files in another directory, substitute your directory path wherever **/usr/3d1x9** occurs in these instructions.

**ACTION:** Create a new user account with the user name and home directory suggested above, or ones of your own choosing. Your login group should be **3dsw** or an appropriate group associated with the Maestro user account.

## Preparing to Install Maestro from CD ROM

***NOTE:** If you have an existing Maestro installation from a previous release, 3D Systems strongly recommends that you completely remove all files, including executable, library and other support files, before writing the release 1.9.1 files to the existing directories.*

At the shell prompt:

**ACTION:** Insert the Maestro 1.9.1 CD-ROM into the CD ROM drive.

**ACTION:** Change to the appropriate directory on the CD-ROM. If your CD ROM drive is not mounted as **/CDROM**, substitute the correct file system name in the following commands.

**TYPE:** SGI users: **cd <spacebar> /CDROM/SGI <Enter>**.

HP users: **cd <spacebar> /CDROM/HP <Enter>**.

## Installing Maestro

TYPE: `./install3d` <Enter>

The Maestro Installation main screen appears

**NOTE:** *If a “For Your Information... The destination directory is not writable” message appears, CLICK **OK**.*

CLICK: **Install...** from the button selections on the main installation window.

This brings up the “**Installation Directories**” dialog box.

**NOTE:** *If a “For Your Information... This appears to be an existing installation” message appears, CLICK **OK**.*

At this point, the Source: directory is either:

`/CDROM/xxx`: with **xxx** being either **SGI** or **HP**.

ACTION: Create a new target directory for the program files. As stated before, we will call our example directory `/usr/3d1x9`. You can substitute your own directory name and create the directory wherever you have write permission.

CLICK: Inside the “**Target Directory**” Edit window.

TYPE: `/usr/3d1x9` <Enter>(or your chosen target.)

**NOTE:** *If a “For Your Information...“Directory not found – must be created” appears, CLICK **OK** button, then CLICK **Create Directory** under the Target Directory Edit window.*

The Target: directory should now be `/usr/3d1x9` (or your chosen target directory.)

**NOTE:** *If the message “/usr/3d1x9 Cannot be created” appears, Click the **OK** button. You can re-enter a different target directory or allow access to the desired target directory.*

When you are sure the **Source:** and **Target:** directories are correct:

CLICK: **OK.**

At this point, the Installation Progress window indicates the progress of the installation. When the installation activity ceases, and the progress window displays “Done! Installation success”:

CLICK: **Continue** to close the Progress window and return to the Main Installation screen.

## Obtain Passkey and Complete the Licensing Procedure

The Maestro passkey can be reused for the same workstation CPU and the same software release. This feature is most useful when there is a need to reload the software. The passkey cannot be reused if the CPU identification or REFERENCE id changes, or when a different version of the software is being loaded.

CLICK: **License...** to open the Licensing Information dialog box.

ACTION: Record the CPU ID and Reference ID numbers as displayed in the dialog box. Also, record the workstation serial number (usually found on the back of the workstation.)

**CPU id** = \_\_\_\_\_

**REFERENCE id** = \_\_\_\_\_

**WORKSTATION Serial#** = \_\_\_\_\_

*NOTE: At this point you must contact 3D Plus+ to receive the software serial number, license key and product ID codes. In the U.S. and Canada, call (800) 793-3669. Be prepared to furnish the CPU ID and Reference ID as recorded in the above step along with customer information as requested.*

**NOTE:** *You may want to exit the installation program at this time until you can obtain your Passkey information. If so, CLICK Cancel on the Licensing Information dialog box, then CLICK Cancel on the main Installation menu.*

*When you receive your Passkey information, restart the Maestro Installation program, ensure you are the same user that performed the installation (e.g. 3dsys), insert the Maestro 1.9.1 CD-ROM, change to the appropriate directory (either /CDROM/SGI or CDROM/HP) and type **install3d**. Verify the Target: directory is correct by clicking on the **Install...** button. Then continue with the Licensing Information dialog box.*

**ACTION:** Write down your Serial, Passkey and Product ID numbers for future reference. Carefully enter the numbers in the license dialogue box.

**Software Serial#** = \_\_\_\_\_

**License key** = \_\_\_\_\_

**Product ID** = \_\_\_\_\_

Enter these codes into the appropriate licensing information boxes. When finished:

**CLICK:** **OK** to close the dialogue box.

**CLICK:** **OK** in the “For Your Information... 3DSystems License Installed” message box.

**CLICK:** **CANCEL** to close the Maestro Installation window.

**ACTION:** Remove the CD-ROM and store it in its protective package supplied with the software.

**NOTE:** *The following section assumes you are using a C shell UNIX environment for your user account. If not, contact your system administrator for assistance with the following steps.*

## Establish the User Environment

**ACTION:** To establish the correct user environment, you must be logged in as the intended user.

From the user's home directory (**/usr/people/3dsys**), run the C shell script **setup3d**.

**TYPE:** `<targetdirectory>/bin/setup3d <Enter>`

If successful, no messages will be displayed and you will be at the next prompt. Running this command adds the file **.setup3d** to your user login directory and appends the line **source ~/ .setup3d** to the end of your **.cshrc** file.

**ACTION:** Copy the **.vista.prefs** file to the user's home directory (**/usr/people/3dsys**).

**TYPE:** `cp /<targetdirectory>/usr_files/.vista.prefs <space> ~/.`

**ACTION:** Copy the 3D supplied **.stl** files to the user's **/parts** directory (**/usr/people/3dsys/parts**).

**TYPE:** `cp /<targetdirectory>/usr_files/* <space> ~/parts`

**NOTE:** *To use these files, the user must have read and write access. Verify that file access is correct.*

**ACTION:** Log out, then log in as the user (3dsys) and execute Maestro to verify the installation of the new software. If you encounter any problems with the installation or execution of Maestro 1.9.1, contact 3D Plus+ at 800-793-3669 for the U.S. and Canadian customers, or your local 3D Systems representative.

This completes the installation of Maestro Release 1.9.1. Please refer to the Maestro 1.9.1 Release Notes and the Maestro Release 1.9.1 User Guide for more information.