

Agilent 3070 Software Update - Tape Release

E9900-96193 Rev. A 06/2003 (3070 05.30p 0603 UX)

CAUTION



Perform this procedure only if knowledgeable in HP-UX system administration.

The current software revision must be 3070 B.03.80 or later. To verify the current revision, log in as root and at a shell window prompt, enter: `/opt/hp3070/bin/version`

Hard-drive space must be available as described in [Changes in the Size of File Systems](#) on page 2.

Review [Package Specifications](#) on page 2.

In this guide. . .

- [Package Specifications](#), 2
- [Installing the Software Package](#), 3
- [Verifying the Software Package Installation](#), 11
- [Verifying the License Installation](#), 11
- [Preparing for Normal Use](#), 11
- [Errors & Notes Logged During swinstall's Install Analysis Phase](#), 12
- [Accessing Documentation](#), 18

Introduction

This Agilent 3070 Software Update - Tape Release installation guide provides step-by-step instructions to install the software package on controllers operating with the HP-UX operating system.

CAUTION



Complete the license conversion process **before** attempting to install the 3070 05.30 software update. Refer to the *License Conversion Procedure* (E9900-90080).

If You Need Help

- **System Administration** — See *Administering Agilent 3070 UNIX Systems* in the online documentation.
- **swinstall** — From a shell prompt enter: `man swinstall`
- **Internet** — Go to www.agilent.com/see/contact_info and select your country.



Package Specifications

Installation Time

Installation time will vary depending on the controller.

Minimum installation time (for a B180 controller) is given in [Table 1](#).

Table 1 Minimum installation time (for a B180 controller)

Task	Approximate Time
Updating from B.03.80	
Analyze	5 minutes
Load	67 minutes
Reboot and configure	13 minutes
Total	1 hour 25 minutes
Updating from 05.00pd	
Analyze	4 minutes
Load	54 minutes
Reboot and configure	8 minutes
Total	1 hour 6 minutes

Changes in the Size of File Systems

The change in size to the testhead controller's file system as a result of installing this software package will vary depending on the testhead controller's pre-existing software revision.

NOTE

During this procedure, swinstall will do an installation analysis.

If required space does not exist, the software package will not be allowed to load.

Check Available Local Drive Space without Disturbing the Testhead

To check if space will be available for the installation:

- 1 Perform [Task 6](#), [Task 7](#), [Task 8](#) and [Task 9](#) in [Table 2](#).
- 2 After the installation analysis runs to completion, in the **Install Analysis** window click **Disk Space...**
The space required will be displayed.
- 3 Close the two windows.

If Logical Volume Space is not Available

- 1 Try freeing space by archiving unnecessary files.
- 2 It is possible that space can be made available by extending a logical volume.

Unsupported instructions for extending logical volumes can be found in [Managing Logical Volumes](#) in Chapter 6 of *Administering Agilent 3070 UNIX Systems (UNIX 10.X)*.

Installing the Software Package

Install the software package as described in [Table 2](#) on page 4.

CAUTION



The software package should be installed at the system console; **DO NOT** install from a PC using X-windows emulation.

Allow no other users on the testhead; YOU should be the only user, logged in as `root`.

Unless specified otherwise, **DO NOT** change the default selection to any given option. The default selections allow `swinstall` to determine what needs to be updated.

CAUTION



Backup the system — Prior to any tape operation, **clean the tape drive with a cleaning tape**. Perform a **complete system backup** and make a **system recovery tape**. These procedures can be found in Chapter 4 of *Administering Agilent 3070 Systems (UNIX Version)*.

If you cannot do a complete system backup, at least backup these critical files (some files* are not on a development system):

`/etc/hosts` — local hostname resolution, networking

`/etc/bootptab` — hardware addresses for the testhead*

`/hp3070/lib/.enable` — codewords*

`/hp3070/diagnostics/th1/config` — testhead hardware configuration*

`/hp3070/standard/config` — testhead resources configuration*

`/agilent3070/boards` — board test programs

Table 2 Install the HP-UX software package

Task	Step
1 Un-boot the testhead.	
2 Log in as <code>root</code>	
3 Disable NFS mount points:	<p>a Open <code>/etc/fstab</code> and check for NFS mount points. If they exist, comment to disable them.</p>
4 Disable the automounter:	<p>a Start SAM:</p> <ol style="list-style-type: none"> 1) In a shell window prompt, enter: <code>sam</code> <p>b After the interface has opened, click the following sequence:</p> <ol style="list-style-type: none"> 1) Networking and Communications. 2) Networked File Systems. 3) Mounted Remote File Systems. 4) From the Actions drop down menu, click Disable Automounter.
5 Reboot:	<p>Rebooting allows changes to the NFS mount points and automounter to take affect.</p> <p>a Enter: <code>shutdown -r</code></p> <p>Allow the system time to reboot.</p>

Table 2 Install the HP-UX software package (continued)

Task	Step
6 Start <code>swinstall</code> :	<p>a Login as <code>root</code>.</p> <p>b At a shell window prompt, enter:</p> <pre>umount /net swinstall &</pre>
<p>NOTE</p> <p>An information window may open and display <code>The default source /var/spool/sw does not exist or is not a valid source...</code></p> <p>If so, disregard it and click OK to close the window.</p>	
<hr/> <p>A Specify Source window will open.</p> <hr/>	

Table 2 Install the HP-UX software package (continued)


Task	Step
<p>7 Select a source from which to install the software package:</p>	<p>a In the Specify Source window, click the dash after Source Depot Type.</p> <p>b Choose a source type from the three possibilities below and proceed as directed:</p> <ul style="list-style-type: none"> ■ Click Local Directory if the file was downloaded from the Internet and decompressed to a local drive. <ol style="list-style-type: none"> 1) In the Source Depot Path... field, type the path to the downloaded file including the file name. ■ Click Local Tape. <ol style="list-style-type: none"> 1) The Source Depot Path... field will automatically be filled with the default tape drive. ■ Click Network Directory/CDROM if the file resides in a network location:
<p>CAUTION</p>  <p>Leave the software filter button in the default position.</p>	<p>NOTE</p> <p>If you see a NOTE saying the default source does not exist, click OK.</p> <ol style="list-style-type: none"> 1) In the Source Host Name... field, type the network system hostname or IP address. 2) In the Source Depot Path... field, type the path to the downloaded file including the file name. <p>c Click OK.</p> <p>A SD Install – Software Selection window will open and list available software for installation.</p>

Table 2 Install the HP-UX software package (continued)


Task	Step
<p>8 Select the software bundles to be installed:</p>	<p>a In the SD Install – Software Selection window, select all bundles: click the top item and Shift-click the bottom item. Then right-click the selected list and choose Mark For Install.</p>
<p>NOTE</p> <p>An Error window may appear indicating some selections have requirements that haven't been met or some of the software is already installed.</p> <p>Ignore the error and click OK.</p>	
<p>CAUTION</p> <p> DO NOT force the reinstallation of the entire update! If you do, a software reload of the entire hard-drive could be required.</p>	
<p>All bundles to be installed should now display Yes under the Marked? column.</p>	
<p>9 Begin the installation analysis:</p>	<p>a From the SD Install – Software Selection window menu-bar, click Actions > Install (analysis)....</p> <p>An Install Analysis window will open and the analysis will begin.</p>

Table 2 Install the HP-UX software package (continued)

Task	Step
<p>10 After the installation analysis runs to completion:</p>	<p>In the Install Analysis window, the Status field will display Ready, Ready with warnings, or Ready with errors.</p>
<p>NOTE If the Install Analysis fails, review Changes in the Size of File Systems on page 2.</p>	<p>a Click Logfile... and view the contents to ensure that you do not have any valid errors. For more information, see Errors & Notes Logged During swinstall's Install Analysis Phase on page 12.</p>
	<p>NOTE The Products Scheduled field in the Install Analysis screen will display the number of products to be installed compared to the number initially selected. If the Status box reads Ready with warnings or Ready with errors these numbers will be different. This can be ignored.</p>
	<p>b Click OK.</p> <p>NOTE If there were fatal errors, a message will display indicating which error occurred and that the installation will not be allowed to continue.</p>
	<p>A Confirmation window will appear.</p>

Table 2 Install the HP-UX software package (continued)


Task	Step
11 Begin the installation of the selected software bundles	<p>a In the Confirmation window, click Yes. In the second Confirmation window, click Yes again.</p>
<p>NOTE</p> <p>A message may be displayed that the session cannot be saved. Click OK.</p>	
<p>An Install window will appear with progress information as the software loads.</p>	
<p>NOTE</p> <p>The displayed Time Left (minutes) should not be relied upon.</p>	
12 Let the software load run to completion, then:	<p>In the Install window, the Status field will display Ready, Ready with Errors or Ready with Warnings, and the Done button will be enabled.</p>
13 Complete swinstall:	<p>a Click Done for all options stated above.</p>
	<p>a If a message requesting reboot appears, click OK and wait for the controller to reboot. After the reboot, log on as root.</p>
<p>CAUTION</p> <p> It could take longer than 30 minutes for the boot step Configuring all unconfigured filesets... to complete. BE PATIENT! Powering down the controller before the reboot is complete can damage the file system.</p>	
	<p>b Otherwise, close the SD install - Software Selection window.</p>

Table 2 Install the HP-UX software package (continued)

Task	Step
14 Re-enable NFS mount points:	<p>a Open <code>/etc/fstab</code> and remove any comments placed to disable NFS mount points, then close the file.</p> <p>b At a shell window prompt, enter: <code>mount -a</code></p>
15 Re-enable the automounter:	<p>a Start SAM:</p> <p>b After the interface has opened, click the following sequence:</p> <ol style="list-style-type: none"> 1) Networking and Communications. 2) Networked File Systems. 3) Mounted Remote File Systems. 4) From the Actions drop down menu, click Enable Automounter. <div data-bbox="961 792 1961 1068" style="background-color: #e0f0ff; padding: 5px;"> <p>NOTE</p> <p>SAM may not indicate that the automounter is enabled, even though it is. To prove that the automounter is enabled, at a shell window prompt enter: <code>cd /net/<some remote system name></code></p> <p>If a connection is not established, the message <code>not found</code> will be returned.</p> </div>
16 Reboot:	<p>This allows changes to NFS mount points and the automounter to take affect.</p> <p>a Enter: <code>shutdown -r</code></p>

Verifying the Software Package Installation

- 1 Log in as `root`.
- 2 In a shell window prompt, enter:

```
/opt/hp3070/bin/version
```

If the software revision reported is not 05.30p, then the installation has failed (see [Errors & Notes Logged During swinstall's Install Analysis Phase](#) on page 12).

Verifying the License Installation

- 1 Log in as a user (e.g., `user1`, not `root`).
- 2 Open a shell window.
- 3 From the shell window, enter:

```
codeword -l (-el, not -one)
```

Near the top of the screen, you should see:

```
... Software Update Testhead License present.
```

This message should appear for both testhead and development systems.

If you see the error message ...

```
ERROR: "Software Update License" matching  
current software revision not found.
```

... your license files have not been properly installed in the `/var/hp3070/lib` directory:

Preparing for Normal Use

- 1 Logout, then log back in as the appropriate user.
- 2 Boot the testhead and let its temperature stabilize.
- 3 Run **AutoAdjust All**.

Errors & Notes Logged During swinstall's Install Analysis Phase

Introduction

It is unlikely that any valid errors will be logged as a result of installing this software package. However, it is important to click **Logfile...** and view it when asked, so that you do not start the software transfer from a corrupt tape or with a problem tape drive.

NOTE

Installation log files are:

```
/var/adm/sw/swinstall/log and  
/var/adm/sw/swagent.log
```

If you get an error that prevents the installation, check the bottom of these files for the most recent entries.

The Cause of Errors

Duplicate Revision Errors

An extensive list of errors is likely to be logged.

When installing the software package, if a software package element has been previously installed, the element will not be re-installed and an error will be generated. Therefore, the number of errors logged will vary depending on your pre-existing revision of software; a more current pre-existing revision of software will cause more errors to be logged.

Specific Errors that Must be Addressed

swinstall: Failed Due to Space In a Logical Volume:

If this message appears, see [If Logical Volume Space is not Available](#) on page 2.

Specific Errors that Can be Ignored

ERROR: Latest 3D Runtime PHSS_19258 is not on the system. It must be installed.

Types of Errors and Notes that Can Be Ignored

NOTE

Usually, errors similar to the ones listed below can be safely ignored.

NOTE: Could not install the bundle "OS_Patch,r=04.00" because none of its filesets could be installed.

NOTE: The software item "OS_Patch,r=04.00,a=HP-UX_B.10.20_700/800,v=" is a bundle (or a product, subproduct or fileset contained within a bundle).

This item was successfully marked, but difficulties were encountered while marking some items that it depends on. The messages below show which software items encountered difficulties and exactly what these difficulties were:

Errors & Notes Logged During swinstall's Install Analysis Phase

* The software
"PHKL_20610.PHKL_20610,r=B.10.00.00.AA,a=HP-UX_B.10.20_700,v=HP" was successfully marked, but it depends on the following software items which could not be found in the source.

However, these items may already be in the target.
This will be checked during the Analysis Phase:

PHKL_16750.PHKL_16750

* The software
"PHKL_21594.PHKL_21594,r=B.10.00.00.AA,a=HP-UX_B.10.20_700,v=HP" was successfully marked, but it depends on the following software items which could not be found in the source.

However, these items may already be in the target.
This will be checked during the Analysis Phase:

PHKL_16750.PHKL_16750

* The software
"PHKL_21660.PHKL_21660,r=B.10.00.00.AA,a=HP-UX_B.10.20_700,v=HP" was successfully marked, but it depends on the following software items which could not be found in the source.

However, these items may already be in the target.
This will be checked during the Analysis Phase:

PHKL_16750.PHKL_16750

WARNING: The PATCH_NOSAVE file exists. This will prevent the patch 'PHKL_17359' from being backed off the system.

WARNING: The "preinstall" script for "PHKL_17359" had a warning (exit code "2"). The script location was

"/var/tmp/AAAa02290/catalog/PHKL_17359/pfiles/preinstall".

This message could be repeated with multiple patches.

/var/adm/sw/products/307X.2/3070LB/configure[125]:
/opt/hp3070/etc/HP3070LB/link: Execute permission denied.

ERROR: An error was encountered in configuring the cmos library. Library configuration is not complete.

ERROR: An error was encountered in configuring the ecl library. Library configuration is not complete.

ERROR: An error was encountered in configuring the interface library. Library configuration is not complete.

ERROR: An error was encountered in configuring the linear library. Library configuration is not complete.

ERROR: An error was encountered in configuring the lsi library. Library configuration is not complete.

ERROR: An error was encountered in configuring the setup library. Library configuration is not complete.

ERROR: An error was encountered in configuring the ttl library. Library configuration is not complete.

ERROR: An error was encountered in configuring the supplemental/cmos library. Library configuration is not complete.

ERROR: An error was encountered in configuring the supplemental/ecl library. Library configuration is not complete.

Errors & Notes Logged During swinstall's Install Analysis Phase

ERROR: An error was encountered in configuring the supplemental/flash library. Library configuration is not complete.

ERROR: An error was encountered in configuring the supplemental/interface library. Library configuration is not complete.

ERROR: An error was encountered in configuring the supplemental/linear library. Library configuration is not complete.

ERROR: An error was encountered in configuring the supplemental/lsi library. Library configuration is not complete.

ERROR: An error was encountered in configuring the supplemental/setup library. Library configuration is not complete.

ERROR: An error was encountered in configuring the awaretest/ttl library. Library configuration is not complete.

ERROR: An error was encountered in configuring the awaretest/supplemental/lsi library. Library configuration is not complete.

ERROR: An error was encountered in configuring the awaretest/supplemental/ttl library. Library configuration is not complete.

ERROR: An error was encountered in configuring the awaretest/cmos library. Library configuration is not complete.

ERROR: An error was encountered in configuring the awaretest/ecl library. Library configuration is not complete.

ERROR: An error was encountered in configuring the awaretest/lsi library. Library configuration is not complete.

ERROR: An error was encountered in configuring the awaretest/ttl library. Library configuration is not complete.

ERROR: An error was encountered in configuring the awaretest/supplemental/lsi library. Library configuration is not complete.

ERROR: An error was encountered in configuring the awaretest/supplemental/ttl library. Library configuration is not complete.

`/var/adm/sw/products/307X.2/3070LB/configure[184]:
/opt/hp3070/etc/HP3070LB/mentor_link: Execute
permission denied.`

ERROR: An error was encountered in configuring the mentor library. Library configuration is not complete.

ERROR: The "configure" script for "307X.3070LB" failed (exit code "1"). The script location was "/var/adm/sw/products/307X.2/3070LB/configure".

* This script had errors but the execution of this product will still proceed. Check the above output from the script for further details.

WARNING: The dependencies for fileset "Java-Runtime1-1.JAVA-RUN,l=/opt/java,r=C.01.18.00" cannot be resolved (see previous lines).

Errors & Notes Logged During swinstall's Install Analysis Phase

The operation on this fileset will still be attempted even though there are unresolved dependencies because the "enforce_dependencies" option is set to "false".

* Summary of Analysis Phase:

WARNING: Remove
Java-Runtime1-1.JAVA-RUN,l=/opt/java,r=C.01.18.00
WARNING: 1 of 1 filesets had Warnings.

WARNING: The Analysis Phase had warnings. See the above output for details.

WARNING: "mtdonkey:/": The software dependencies for 1 products or filesets cannot be resolved.

NOTE: The fileset
"PHKL_20357.PHKL_20357,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset
"PHKL_20610.PHKL_20610,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset
"PHKL_20727.PHKL_20727,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset
"PHKL_21594.PHKL_21594,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset
"PHKL_21660.PHKL_21660,r=B.10.00.00.AA" is

already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset
"PHKL_22378.PHKL_22378,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset
"PHKL_23961.PHKL_23961,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset
"PHNE_20892.PHNE_20892,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset
"PHNE_22085.PHNE_22085,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset
"PHNE_22506.PHNE_22506,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset
"PHNE_23863.PHNE_23863,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "HPNP.HPNP-MAN,r=D.06.21" is already installed.

If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "HPNP.HPNP-SL-MIN,r=D.06.21" is already installed.

If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "HPNP.HPNP-SL-AUX,r=D.06.21" is already installed.

If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "HPNP.HPNP-RUN,r=D.06.21" is already installed.

If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "Java-Jre1-1.JAVA-JRE,r=C.01.18.04" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "NS-communicate.NETSCAPE-RUN,r=B.10.20.05" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHCO_21018.PHCO_21018,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHCO_21125.PHCO_21125,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHCO_21853.PHCO_21853,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHCO_22268.PHCO_22268,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHCO_22449.PHCO_22449,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHCO_22768.PHCO_22768,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHCO_23261.ADMN-ENG-A-MAN,r=B.10.01.15" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHCO_23261.C2400-UTIL,r=B.10.01.15" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHCO_23437.PHCO_23437,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHCO_23844.PHCO_23844,r=B.10.00.00.AA" is

Errors & Notes Logged During swinstall's Install Analysis Phase

already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHNE_19299.PHNE_19299,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHNE_20748.PHNE_20748,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHNE_23948.PHNE_23948,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHNE_24161.PHNE_24161,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHSS_20607.PHSS_20607,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHSS_21110.PHSS_21110,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHSS_22354.PHSS_22354,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHSS_23535.PHSS_23535,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The fileset "PHSS_23798.PHSS_23798,r=B.10.00.00.AA" is already installed. If you wish to reinstall this fileset, change the "reinstall" option to "true".

NOTE: The bundle "B5458DA,r=C.01.18.04" is already installed. If you wish to reinstall this bundle, change the "reinstall" option to "true".

NOTE: The bundle "B8342AA,r=B.10.20.05" is already installed. If you wish to reinstall this bundle, change the "reinstall" option to "true".

NOTE: The bundle "J2559C,r=D.06.21" is already installed. If you wish to reinstall this bundle, change the "reinstall" option to "true".

ERROR: A later revision (one with a higher revision number) of bundle "OS_Patch,r=04.00" has already been installed.

Either remove this bundle or change the "allow_downdate" option to "true".

NOTE: The bundle "OS_Patch,r=05.00" is already installed. If you wish to reinstall this bundle, change the "reinstall" option to "true".

NOTE: All products will be skipped because there was a global error.

Accessing Documentation

After installing the software update, you should be able to access the latest 3070 system documentation as follows:

- 1 Click the UP-arrow above the books icon.
- 2 Click **3070 05.30 New and Updated Documentation**. This should open a Netscape window.
- 3 Click on any manual in the list. This should open a PDF file in an Adobe Acrobat Reader window.

If the Reader window fails to open...

- 1 In the Netscape window click **Edit > Preferences**.
- 2 In the Category pane click **Navigator > Applications**.
- 3 Click **New...** and fill out the fields:

Description: Acrobat
MIMEType: application/PDF
Suffixes: PDF

- 4 Click the **Application** button and fill out the field. The field will be the path to the Acrobat Reader. It should be `/opt/Acrobat3/bin/acroread %s`
- 5 Click **OK** to close the window and **OK** to close the previous window to return to the Navigator window.

You should now be able to view PDF files. If this doesn't correct the problem, the `acroread` application may be in a different location on your system. Locate `acroread` on your system and re-enter the path in the Applications window.