# **Upgrade Procedure**

This chapter is a guide to upgrading an existing StrataView Plus installation to Release 8.2.

## **Upgrading StrataView Plus**

When upgrading StrataView Plus from StrataView Plus Rel. 8.0, 7.1 or 7.2, it is only necessary to install the new release of the StrataView Plus program. There should be no need to modify the already resident versions of Motif, Informix, and Wingz. During the initial part of the installation you may choose to save the data from the old database.

The settings from **config.sv** are not saved. If you want to save these, you must save the file in another directory (e.g., do a mkdir /usr/users/svplus/save) then save config.sv back to /usr/users/svplus after the automatic installation. You may just want to make a note of the setup, as this is a short file, with one line for each network or domain.

The SPI script checks that the second disk is partitioned correctly for StrataView Plus, that the correct user accounts are present, and that Motif, Informix, and WingZ are configured correctly for StrataView Plus 8.2. It then proceeds to install StrataView Plus 8.2. At the completion of the SPI installation, it is only necessary to perform the On-Line Help upgrade, configure the workstation to BPX/ IPX interface, and start up StrataView Plus.

Proceed as follows to upgrade StrataView Plus using the SPI.

Note In the procedures that follow, jaguar is used as the hostname. Where jaguar is shown, the hostname of applicable workstation would be displayed.

- 1 Login as svplus.
- **2** Change to user "root" by entering the following:

#### su <RETURN>

password: <superuser password><RETURN>

**3** Enter the following command to change to the root directory:

#### cd /<RETURN>

- 4 Insert the StrataView Plus Rel. 8.2 tape in the tape drive.
- 5 Slide the latch to the right.

#### **6** Enter the command:

#### /usr/etc/extract unbundled<RETURN>

**Note** The following is a partial script.

#### This command results in the following messages:

```
Enter media drive location [local | remote]:1
Enter Device Name (e.g. rst0, rmt0, rfd0c) : /dev/ {You type st0 for /dev/rst0}
**Please mount the release media if you haven't done so already.**
Press return when ready:
```

#### **7** The following is then displayed:

```
The following product will be installed:
2+0 records in
2+0 records out
```

StrataView Plus 8.2

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#### **8** After the copyright banner, the following query displays:

```
Do you want to continue [y|n]? y
/usr/etc/extract_unbundled : Extracting Installation Scripts
x install_unbundled, 2764 bytes, 6 tape blocks
/usr/etc/extract_unbundled : Begin Install Script Execution
Extracting the StrataView Plus Installer packages.
Running the StrataView Plus Installer driver.
*** Starting main driver script at Wed Dec 12 03:09:44 PDT. ***
************************
             Welcome to the StrataView Plus Installer!
         This program will install StrataView Plus software
                       on your workstation.
            Copyright (c) 1994 StrataCom, Inc. All rights reserved.
```

```
************
***** Running pre-checks for main driver. *****
```

```
*** Checking basic setup. ***
Checking that user is root.
Checking core script files
```

9 After the pre-checks, a message displays asking if you want to perform an automatic or manual installation. To perform an upgrade, enter "m".

```
*** Determining type of installation. ***
>> This installer will automatically perform the configuration necessary
>> for StrataView Plus. If you have special configuration needs, you can
>> just load the StrataView Plus files from tape and perform the rest of
>> the configuration manually.
>> What type of installation do you want? [auto|manual] m
Checking that proper OS is installed.
*** Checking required installer script files. ***
*** Checking for current installation of StrataView Plus. ***
StrataView Plus version 7.2 is currently installed.
```

10 A message displays asking if you want to reintialize your statistics or retain your current statistics.

```
When you upgrade StrataView Plus, you can reinitialize the statistics
>> database, or you can retain your current statistics. If you choose
>> to reinitialize, you will loose all your current statistics.
>> Do you want to initialize the statistics database? [yes no] n
```

**Note** For most normal upgrades, choose "n" and save the existing statistics database.

11 If you choose to reinitialize the statistics database, a message then displays asking if you want to redo the preliminary preparation.

```
>> When you reinitialize StrataView Plus files, you can also redo
>> the preliminary preparation that was done the first time you installed
>> StrataView Plus. This preliminary preparation involves partitioning
>> the disk drives, setting up user accounts, updating the kernel, and
>> installing the Motif and Wingz software packages.
>> Do you want to redo the preliminary preparation? [yes | no] \, n
```

12 The rest of the script is not shown here. For a sample script of an actual installation, refer to Appendix A. At the completion of the installation, the following is displayed:

```
************
***** Running post-checks for main driver. *****
Installation was successful!
*** Exiting main driver at Wed Oct 12 03:19:08 PDT 1994. ***
jaquar#
```

**13** Exit from root user account by entering:

#### exit <RETURN>

**14** You can verify that you are at /usr/users/svplus by entering:

pwd<RETURN>

### Running the StrataView Plus INSTALL Program

The INSTALL program checks that the second disk is partitioned correctly for StrataView Plus, that the correct user accounts are present, and that Motif, Informix, HP OpenView, and WingZ are configured correctly for StrataView Plus 8.2. It then proceeds to install StrataView Plus 8.2. At the completion of the INSTALL script, it is only necessary to perform the On-Line Help upgrade, configure the workstation to the BPX/ IPX interface, and start up StrataView Plus.

The StrataView Plus INSTALL program performs the following functions:

- Verifies the environment.
- Verifies the presence of necessary files.
- Upgrades file configurations, as necessary.
- Sets file permissions.
- Verifies Informix Database/WingZ.
- Upgrades the database schema as necessary to include new statistics.
- Restarts the database.
- Installs the On-Line Help application (FrameViewer).
- Configures HP OpenView

#### Prerequisites

All of the procedures in Upgrading StrataView Plus must be completed before running the INSTALL program. Additionally, HP OpenView must already be installed on your workstation. For instructions on installing HP OpenView, refer to the HP OpenView Installation Guide.

#### Procedure

The first thing the INSTALL program does is patch the kernel. Type the following to begin this process:

#### mercedes# INSTALL<RETURN>

Welcome to the INSTALLATION of StrataView Plus Release 8.2.

Checking UNIX Kernel for StrataView Plus patches.....

Small UNIX Kernel is installed on this WorkStation: MERCEDES

Copying GENERIC Kernel to SVPLUS\_KERNEL..... Successful

This will take a few minutes....

Building UNIX Kernel with StrataView Plus patches....... Successful

Copying new kernel to root directory...... Successful

===== WARNING: WORKSTATION MUST REBOOT ======

## After the system is rebooted, run INSTALL again... Reboot will display some messages for reboot... Reboot will take a few minutes. Please standby... Press < return > to reboot... 2 After the reboot completes, the Please log in: prompt displays. Login as user "root" by entering the following at the Please log in: prompt: password: <superuser password> **3** Enter the following command to change to the svplus directory: cd /usr/users/svplus **4** Type the following to complete the StrataView Plus upgrade: mercedes# INSTALL<RETURN> **5** The following messages occur as the INSTALL program verifies the environment: Checking UNIX Kernel for StrataView Plus patches ....... Successful Checking existence of the motif window manager...... Successful 6 The following part of the INSTALL program performs a checksum on the StrataView Plus and associated files: 7 The following message displays after the INSTALL script verifies that the Informix database is properly installed: Checking for the existence of Informix...... Successful Checking for the existence of Wingz...... Successful **8** The script prompts you to save any existing configuration files: Do you wish to Restore/Upgrade the saved files(Y/N) (Default is N): y < RETURN> Choose "y" if you saved the previous version's configuration files in the /usr/users/svplus/save directory. The installation will continue. Filtering files.... done 9 The following message displays after the INSTALL script verifies that the Informix database is properly installed: Checking for the existence of Informix.... OK

===== REMOVE ANY TAPE AND/OR CD ROM =======

The script continues, displaying the database installation Welcome screen:

#### DATABASE INSTALLATION

You can create new database or upgrade existing one to 8.2x If you choose to create new database then you can specify new name for database

If you wish to create new database, press 'y' to proceed; otherwise, press 'n' to proceed with upgrade

New Database? n<RETURN>

The script prompts you for the release level of StrataView Plus you are upgrading from::

Configuration Files Upgrade to StrataView Plus 8.2

- 1) rel71
- 2) rel72
- 3) rel80

Enter number corresponding to release or x to exit: 2 < RETURN>

If you enter "1", the following confirmation prompt displays:

OK to upgrade SV+ 7.1x to SV+ 8.2 (y/n) ?  $\mathbf{y} < \mathbf{RETURN} >$ 

If you enter "2", the following confirmation prompt displays:

OK to upgrade SV+ 7.2x to SV+ 8.2 (y/n) ?  $\mathbf{y} < \mathbf{RETURN} >$ 

If you enter "3", the following confirmation prompt displays:

OK to upgrade SV+ 8.0x to SV+ 8.2 (y/n)? y < RETURN>

Initializing the Informix database

This will take a few minutes

Shutting down Informix (if necessary)...... Successful

Initializing the Informix database root file..... Successful

Initializing the Informix database mode...... Successful

Preparing the database for StrataView Plus...... Successful

Checking for existence of INS....

Found INS installed in /usr/users/svplus

Creating INS related tables in the Database...... Successful

10 The INSTALL script will now configure StrataView Plus to work with HP OpenView. Proceed to Configuring HP OpenView.

### Configuring HP OpenView

Release 8.2 works within the HP OpenView graphical environment. This section of the INSTALL script configures StrataView Plus to work with HP OpenView.

#### Prerequisites

HP OpenView must already be installed on your workstation. For instructions on installing HP OpenView, refer to the HP OpenView Installation Guide.

#### Procedure

1 The system displays the following:

Checking for existence of HP OpenView....

Found HP OpenView installed in /usr/OV Installing HP OpenView related files.... Saving trapd configuration and merging SV+ trap formats Notifying HP OpenView background processes of config change

Installing nls directory

Proceed to Installation of FrameViewer for On-Line Help to install FrameViewer.

### Installing HP Openview after StrataView Plus is Installed

If HP OpenView is not installed, the section of the INSTALL script for configuringStrataView Plus to work with HP OpenView will not run.

After the entire INSTALL script completes, install HP OpenView by following the instructions in the HP OpenView Installation Guide.

After HP OpenView is installed, complete the following steps to configure StrataView Plus to work with HP OpenView:

**2** Login as user "root" by entering the following:

#### su <RETURN>

password: <superuser password> <RETURN>

**3** Enter the following command to change to the /usr/users/svplus directory:

#### cd /usr/users/svplus <RETURN>

4 You can verify that you are at /usr/users/svplus by entering:

#### pwd<RETURN>

5 Type the following to run the stand-alone StrataView Plus/HP OpenView configuration script:

mercedes# SV+HPOV.install<RETURN>

6 The system displays the following:

Checking for existence of HP OpenView....

Found HP OpenView installed in /usr/OV

Installing HP OpenView related files....

Saving trapd configuration and merging SV+ trap formats

Notifying HP OpenView background processes of config change

Installing nls directory

Proceed to Upgrading BPX/IPX On-Line Help to upgrade the BPX/IPX help file.

### Installation of FrameViewer for On-Line Help

StrataView Plus uses FrameViewer to display the IPX/BPX Online Help files. The INSTALL script adds FrameViewer to your system.

#### **Procedure**

1 The INSTALL script displays the FrameViewer Installation Welcome Screen:

Welcome to the On-Line Help INSTALLATION of StrataView Plus

Checking for the existence of On-Line Help...

Installing Frameviewer...

Reconfiguring user setup files...

Adding Frameviewer environment strings...

./fmusersetup: The FrameMaker user installation program.

This script is used to reconfigure your path setting.

When you are asked a yes or no question below, type the letter 'y' or 'n' and then press Return. Note that the default answer (shown in brackets next to the question) is usually correct. To use the default answer, press Return in response to the question.

Would you like a description of what this script does? [y]: y < RETURN> Checking installation...

FrameMaker is not already installed in your .cshrc file.

OK to add these two lines:

# FMHOME line added by the FrameMaker user's setup program setenv FMHOME /files/users/svplus/frame; set path=( \$FMHOME/bin \$path )

to /usr/users/svplus/.cshrc? [y]: y <RETURN>

OK. Adding the lines to the end of your .cshrc file

Original version of .cshrc saved in /usr/users/svplus/.cshrc.fmsave.

FrameMaker installation in your .cshrc is now complete.

Press Return to continue.

(You may want to remove old or redundant copies of FrameMaker)

#### IMPORTANT:

In order for the changes in your login file to take effect, you MUST exit

X windows and log out \*completely\* (until you see the UNIX 'login:' prompt).

Then log in and start X windows. From then on, you can start FrameMaker

from any X windows window by typing: maker

-----Please exit X windows and log out and back in again.

\_\_\_\_\_

Please be sure that each person who wishes to use FrameMaker runs this installation script (./fmusersetup).

If any files were changed by this script there will a corresponding .fmsave file produced that contains the original version of the file. To be sure that this script changed things appropiately, you should diff the files.

IMPORTANT: Don't forget to log out completely now so that the changes to your login file will take effect.

**2** The script licenses FrameViewer for your use:

Licensing Frameviewer..

Frameviewer has already been licensed ..

3 The INSTALL script then asks you if you wish to verify the Frameviewer installation:

Do you wish to verify the Frameviewer installation (y/n)? **n<RETURN>** 

Normally, "n" is chosen, as verification of FrameViewer takes considerable time, and successful installation of FrameViewer is verified by the satisfactory operation of the IPX/BPX On-Line

The following message is displayed:

Bypassing On-Line Help Installation Verification

INSTALLATION has completed!

4 The installation is completed with the "INSTALLATION has completed!" message. Perform the On-Line Help upgrade (proceed to the next section).

### **Upgrading BPX/IPX On-Line Help**

The BPX/IPX On-Line Help files for StrataView Plus come on a separate tape that is installed after StrataView Plus has been installed.

#### **Prerequisites**

Make sure you have the tape labelled StrataView Plus BPX/IPX Help Files.

#### Procedure

Proceed as follows to install the IPX On-Line Help files:

- 1 If you are not already logged in as syplus, login as syplus.
- 2 Enter the following command to verify that you are at the /usr/users/svplus/online help directory:

pwd <RETURN>

3 If StrataView Plus is running, enter the following in the SV+ Menu to stop StrataView Plus:

#### 2 < RETURN>

**4** Enter the following command to change to the "onlinehelp" directory:

#### cd onlinehelp <RETURN>

5 Enter the following command to verify that you are at the /usr/users/svplus/onlinehelp directory:

```
pwd <RETURN>
```

- 6 Load the StrataView Plus Help cartridge and close the door.
- 7 Enter:

#### tar xvpf /dev/rst0 <RETURN>

For a Sun workstation; the "0" in /dev/rst0 is a zero.

**8** Enter the following command to change back to the svplus directory:

**9** Proceed to the next section.

### **Configuring Statistics Collection Manager**

The Statistics Collection Manager (SCM) files for StrataView Plus are installed by SPI after StrataView Plus has been installed. If there are multiple NMS workstations used to control the network or if this is a structured network, you must install StrataView Plus and SCM on each NMS workstation. Proceed as follows to configure the network for management by SCM:

- Change directory to /etc.
- 2 If your workstation is not running NIS, edit the /etc/hosts file of the local StrataView Plus workstation. Make a list with a single line with the nodename and IP address for each node in the network to which this SCM is to connect to. For example, to add an IPX node named alpha enter:

#### alpha 192.187.207.1

- 3 If you have a workstation that is running NIS, do step 2 on the NIS server instead of the local StrataView Plus machine, and remake the NIS maps.
- Enter the following command to change back to the svplus directory:

exit

**5** Proceed to the next section.

## Modifying config.sv after an Upgrade

If you are performing an upgrade, and your original config.sv file was configured for a LAN connection to a BPX/IPX node, you will need to use the vi command to edit the config.sv to your prior configuration or, if you saved the original file, you can proceed as follows to restore the saved file:

**Note** The default setting of the **config.sv** file is a single line with a serial port selection of gateway and a baud rate of 9600.

- 1 If you are not already logged in as svplus, do so now.
- 2 Enter the following command to verify that you are at the /usr/users/syplus directory:

pwd

**3** Enter the following command to copy **config.sv** back to the svplus home directory:

cp save/config.sv

The "." is a shortcut notation for the current directory and must be included.

### Configuring the StrataView Plus System for a BPX/IPX LAN Port

**Note** Configure the BPX/IPX node LAN parameters before connecting it to a LAN.

- Obtain IP addresses for your workstation and for the BPX/IPX node you are going to configure.
- 2 Normally, the System Administrator will update the NIS database, as applicable (if an NIS is used), and will add the IP addresses for the workstation and node to the NIS database.

If the System Administrator takes care of the addressing for the workstation, including the /etc/services file, proceed to step 3. If not, and an NIS is not being used, do the following:

— Edit the **/etc/hosts** file in your workstation, and add the following lines if they do not already appear there. The addresses shown are just examples. Use the addresses obtained from your System Administrator. (This example is for a workstation named "hedgehog" at address 192.187.207.200. It also assumes that the BPR/IPX node LAN port for node sanfran has been assigned an IP address of 192.187.210.30 and a hostname of sanfran. Your own host name and addresses will be different.)

192.187.207.200 hedgehog 192.187.210.30 sanfran

— Edit the /etc/services file in your workstation and add the following:

IPX\_PORT 5120/tcp ipx\_port

Note If an NIS is being used (e.g., corporate network), you will need to contact the System Administrator.

**Note** 5120 is used for the LAN ports on all BPX/IPX ports.

- Reboot the workstation so that the changes to the /etc/services file to take effect.
- 3 Modify the config.sv file for the network configuration by changing the third field to the node's LAN port hostname, e.g., sanfran as follows:

#### 0|Network1|sanfran|19200|0|7|3|0|30|256|8.2|

Leave the other fields as is. For example, the baud rate of 19200 does not apply to a LAN connection.

4 Next, configure the LAN port on the BPX/IPX node using a dumb terminal or an RS-232 connection via the workstation (using the vt command, as applicable) to enter the appropriate cnflan parameters.

The **cnflan** command configures the node's communication parameters so that the node can communicate with a StrataView Plus terminal over an Ethernet LAN using the TCP/IP protocol. The parameters contain address information about the Ethernet TCP/IP network that is used to connect the StrataView Plus station to an IPX or BPX node. The values used must conform to those of the network and should be supplied by the Ethernet network administrator.

The **cnflan** command has the following parameters:

- **IPAddr** is the Internet Protocol address of the node used in the TCP/IP protocol.
- IPSubnetMask is a 32-bit mask. The default for a Class C LAN network is 255.255.255.0.
- TCPServicePort is the BPX/IPX LAN port number entered in the /etc/service file on the workstation. It is 5120 for all BPX/IPX nodes.
- GatewayIPAddr is the Internet gateway address. This is the gateway that traffic is routed through if the BPX/IPX node and workstation are on different networks. If they are on the same network, the gateway is not used. The default "none" is displayed in this case. If a gateway IP is entered and later you want to remove it, enter 192.0.0.0 opposite the prompt and "none" will again be displayed.

A **cnflan** screen is shown in Figure 3-1. The active IP address for the workstation has been entered as the IP address selected previously for the node, 192.187.207.21. The IP Subnet mask is entered as 255.255.255.0 for a Class C LAN network. The TCP service port is entered as 5120. Since the workstation and node are on different networks in this example, a gateway address of 192.187.207.1, which must be obtained from your System Administrator, has been entered. If the workstation and node are both on the same network, no gateway address is needed. The "Maximum LAN Transmit Unit" and "Ethernet Address" parameters are not configurable by the cnflan command. The "Ethernet Address" is different for every BPX/IPX control port.

5 Verify that the IPX node contains an SCC-B backcard and an NPC card (required for LAN connection to IPX). Also, if the node is an IPX 8 or 16 single shelf unit, verify that the utility bus has been upgraded to a UBS-2, model 550058. Refer to the IPX Reference Manual for further information on upgrading these components.

Figure 3-1 Configuring the Parameters on a Node's Control Port

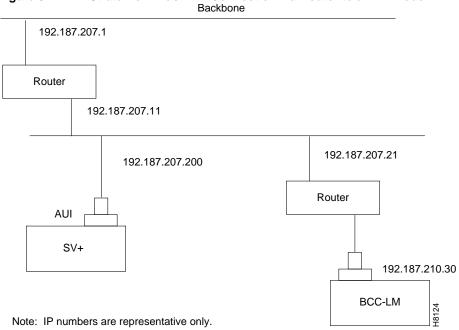
```
Feb. 27 1995 14:23 PST
D2.cb1
                   StrataCom
                                    IPX 32
                                              8.2.G
                                      192.187.207.21
Active IP Address:
                                      255.255.255.0
IP Subnet Mask:
TCP Service Port:
                                     5130
Default Gateway IP Address:
                                    192.187.207.1
Maximum LAN Transmit Unit:
                                    1500
                                      00.55.43.00.04.55
Ethernet Address:
Control Socket - Ready
Base Socket Descriptor - 1
Socket Closed
Last Command: cnflan
Next Command:
```

- 6 Set all eight switches on the switch module on the NPC to "ON". (switches toggled toward the edge of the card). The "OFF" setting is for a serial connection.
- 7 Connect the StrataView Plus workstation and the BPX/IPX node to a LAN network. Examples are shown in Figure 3-2 and Figure 3-3. The LAN port on the BPX/IPX node provides a DB-15 connector for an AUI.
- To test that a LAN connection to the IPX/BPX port is okay, for example, for a hostname of "sanfran" entered in the config.sv file, you could enter the following:

ping sanfran

9 Once the workstation and BPX/IPX node interface has been set up, StrataView Plus can be started. Figure 3-4 shows the **dsplan** screen after StrataView Plus has been started and the communication sockets are active.

Note "Sockets" is the BSD Unix name for connections between processes, typically used in network communication.



StrataView Plus LAN Connection via Router to a BPX Node Backbone Figure 3-2

Figure 3-3 StrataView Plus LAN Connection to an IPX Node (no gateway)

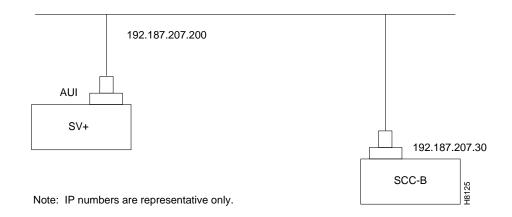


Figure 3-4 dsplan after StrataView Plus Startup

D2.cb1 LAN StrataCom IPX 32 8.2.G Feb. 27 1995 14:27 PST 192.187.207.21 Active IP Address: IP Subnet Mask: 255.255.255.0 TCP Service Port: 5130 192.187.207.1 Default Gateway IP Address: 1500 Maximum LAN Transmit Unit: 00.55.43.00.04.55 Ethernet Address: Control Socket - Ready Base Socket Descriptor - 1 Open Socket Descriptor - 2 Last Command: dsplan Next Command:

## **Startup of StrataView Plus**

When StrataView Plus is started, it obtains the current network topology information and enables default trunkand circuit line statistics that you had set up for your previous version of StrataView Plus software.

#### **Prerequisites**

Before starting up StrataView Plus, you need to plan the statistics types that you want to enable automatically and enable these using the SCM program. Refer to Chapter 5 of the StrataView Plus Operations Guide for information on enabling statistics using SCM.

#### Procedure

Start up StrataView Plus as follows:

1 Enter the following command to display the SV+ main menu:

SV+

**2** Select option 1 (Start Core) to start StrataView Plus.

**Note** Two messages that may appear during the initial part of the startup process are: "IPC: connect failed: Connection refused" and "symain: L4 send to Application Layer failed." These indicate a temporary condition and may be ignored. If these messages continue, call StrataCom ISC.

Startu	p of	Strata'	View	Plus
--------	------	---------	------	------