

Integrating a Stand-alone SCM

Introduction

The Statistics Collection Manager (SCM) is a GUI-based process that uses the standard trivial file transfer protocol (TFTP) for statistics collection. TFTP provides faster statistics collection with minimal overhead. The Statistics Collection Manager is normally installed as an integral part of StrataView Plus. These notes describe how to install an SCM as a stand-alone product on a Sun SPARCStation and how to integrate the stand-alone SCM with a Sun SPARCStation running StrataView Plus Release 8.2 or higher.

Stand-alone SCM Hardware Minimum Requirements

Currently, for new Sun workstations, the minimum recommended hard disk, memory and monitor configuration consists of two 1-Gigabyte disks, a minimum of 128 Mbytes of memory, and a 19-inch color monitor. Minimum hardware requirements for earlier hardware are as follows:

Minimum Requirements for a Stand-alone SCM SPARCStation

- Sun SPARCStation 20 or 10 with a standard combination of 1-Gbyte and 2-Gbyte disks.
- 64 Mbytes of memory minimum.
- 16-inch color monitor. (A 20-inch color monitor is also supported.)
- A one-quarter-inch tape drive (this tape drive can be shared with the co-located StrataView Plus workstation).

Minimum Requirements for a Sun SPARCstation IPX

- Sun SPARCstation IPX, one of two versions:
 - SPARCstation IPX with internal 424-byte and external 1.05-Gbyte disks.
 - SPARCstation IPX with internal 207-Mbyte and external 1.3-Gbyte disks.
- 64 Mbytes of memory minimum.
- 16-inch color monitor. (A 20-inch color monitor is also supported.)
- A one-quarter-inch tape drive (this tape drive can be shared with the co-located StrataView Plus workstation).

Stand-alone SCM Software Requirements

The stand-alone SCM workstation requires the following software elements:

- SunOS version 4.1.4 software.
- Motif for Sun, version 1.1 software.
- A tape containing a tar file of SCM for StrataView Plus Rel. 8.2.

TCP/IP network support must also be installed on the stand-alone SCM workstation.

Installing Stand-alone SCM on Your Sun SPARCStation

An initial installation of stand-alone SCM includes installing Motif, setting up a StrataView Plus user and group account on the operating system disk, and using the tar command to install the stand-alone SCM application. After you install the stand-alone SCM software, you must configure the statistics collection parameters within SCM.

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

Proceed as follows to perform an initial (first time) installation of stand-alone SCM:

Motif Installation

Prior to the installation of SCM, Motif must be installed. Most of the information in this section is referred to in the *DECwindows Motif for the Sun SPARCstation Installation Guide*.

- 1 Insert the one-quarter-inch Motif tape cartridge and close the door.
- 2 If you're not already logged in as `root`, do so now.
- 3 Type `mkdir /usr/users/motif <RETURN>`
- 4 Type `cd /usr/users/motif <RETURN>`
- 5 Type `tar xvpf /dev/nrst0 <RETURN>`

(The “n” in “nrst0” specifies a non-rewinding tape device.)

Note If you get a message like error I/O drive, check for bad tape or try `tar xvpf /dev/rst0 <RETURN>` if you have a rewinding tape drive.

- 6 Start the installation script by typing `DECW_MOTIF_INSTALL <RETURN>`
- 7 Answer the following questions as indicated:
Press Return to continue: `<RETURN>`
Press Return to continue: `<RETURN>`
Do you want to continue (y|n)? `y <RETURN>`

A list of subset(s) is displayed. The choices are:

Subset	Size	Description
1	8225	Base Product (Libraries, Mwm, and UIL compiler)
2	3600	Examples, (WML and Motif demo programs)
3	5910	DEC windows 75 dpi Fonts
4	7370	DEC windows 100 dpi Fonts
5	1543	Man Pages
6	26648	All of the above
7		None of the above

Which subsets do you wish to install? [6] <RETURN>

These subsets require approximately 26648 kilobytes of disk space. Is this what you want (y|n)?
y <RETURN>

Under which directory do you want to install the kit [/usr/users/motif] <RETURN>

Create symbolic links to /usr/users/motif from /usr (y|n)? [y] <RETURN>

Where are the X11 files located? [/usr/openwin] <RETURN>

Would you like to see what files might be replaced (y|n)? [n] <RETURN>

Are you using a local or remote tape drive (local|remote)? [local] <RETURN>

In what drive is the media installed? [/dev/nrst0] <RETURN>

Press Return when you are ready. <RETURN>

(In about fifteen minutes, the software will be loaded onto your system.)

Open the door and remove the tape cartridge.

Creating the SV+ Group Account

You must create a group name and account number for the svplus user account.

1 You should be logged in as `root`, if not do so now.

Edit the `/etc/group` file by adding the following line:

Note If the 21 account number is already in use by other than `/usr/users`, contact StrataCom ISC.

```
users:*:21:svplus
```

2 Save the file and exit the editor.

Creating the SV+ Login Account

- 1 Type the following commands to create a user login account:

```
cd /usr/etc/install <RETURN>
```

Note There's a space before /usr/users/svplus in the following entry.

```
add_user svplus 271 21 'StrataView Plus' /usr/users/svplus /bin/csh <RETURN>
```

Note If the 271 uid is being used, contact StrataCom ISC.

- 2 You must then assign a password to the svplus user account.
 - Type `passwd svplus <RETURN>` and follow on-screen directions.
- 3 This completes the creation of the svplus account.

Installing the SCM Files from Tape

- 1 You should be logged in as `root`, if not do so now.

Login as user “root” by entering the following:

```
su
password: superuser password
```

- 2 Insert the SCM Rel. 8.2.X tape in the tape drive.
- 3 Slide the latch to the right.
- 4 Type `cd /usr/users/svplus <RETURN>`
- 5 Type `tar xvpf /dev/nrst0 <RETURN>`
(The "n" in "nrst0" specifies a non-rewinding tape device.)

Note If you get a message like error I/O drive, check for bad tape or try `tar xvpf /dev/rst0 <RETURN>` if you have a rewinding tape drive.

- 6 Type `chmod 755 .openwin-init <RETURN>`

The 755 indicates that the user has read, write, and execute privileges, while the group and others have only read and execute (no write) privileges.

Configuring Your Stand-alone SCM to Share Statistics Files with a StrataView Plus System Using NFS

This section presents the procedures required to configure a stand-alone SCM to share statistics files with one StrataView Plus system using NFS. This allows the statsparser process running on the StrataView Plus system to parse the statistics files on the stand-alone SCM and put the data into the StrataView Plus database just like a co-located StrataView Plus with SCM system does.

Proceed as follows to configure your newly installed stand-alone SCM:

Adding Stand-alone SCM Support to StrataView Plus

- 1 Stop SCM on the StrataView Plus machine. Choose "Stop SV+" in the StrataView Plus menu by entering:

```
2
Welcome to StrataView Plus 8.2
```

```
MAIN MENU
-----
1) Start SV+
2) Stop SV+
3) Start GUI
4) Dump db data
5) Start SNMP Agent
6) Current db name
7) Bulk Statistics
8) Start Stats Mgr GUI
```

```
Enter number or x to exit: 2
```

- 2 Make a new directory for NFS access to the stand-alone SCM workstation in the svplus home directory by entering:

```
svplus% mkdir /usr/users/svplus/NFS.scmhostname
```

- 3 Login as user "root" by entering the following:

```
su
password: superuser password
```

- 4 Add an entry containing the hostname for the stand-alone SCM workstation to the /etc/exports file by entering:

```
vi /etc/exports
```

to begin editing the /etc/exports file.

- 5 Add the following line to the /etc/exports file:

```
/usr/users/svplus/scmhostname<tab>
-access=scmhostname,rw=scmhostname,root=scmhostname
```

Note This entry must be entered on one line, with the actual stand-alone SCM hostname substituted for *scmhostname*. There should be no spaces in this line.

- 6 Reboot the workstation.

Linking StrataView Plus to the Stand-alone SCM Workstation

- 1 Login as user “svplus” on the stand-alone SCM workstation by entering the following:

```
svplus
password: svplus user password
```

- 2 Make a new directory for NFS access to the stand-alone SCM workstation in the svplus home directory by entering:

```
svplus% mkdir /usr/users/svplus/NFS.scmhostname
```

Note Substitute the actual stand-alone SCM hostname for *scmhostname*.

- 3 Login as user “root” on the stand-alone SCM workstation by entering the following:

```
su
password: superuser password
```

- 4 Add an entry containing the hostname for the stand-alone SCM workstation to the */etc/fstab* file by entering:

```
vi /etc/fstab
```

to begin editing the */etc/fstab* file.

- 5 Add the following line to the */etc/fstab* file:

```
svhostname:/usr/users/svplus/NFS.scmhostname /usr/users/svplus/NFS.scmhostname nfs
rw,soft,bg,timeo=15,retrans=15 0 0
```

Note This entry must be entered on one line, with the actual stand-alone SCM hostname substituted for *scmhostname* and the StrataView Plus workstation name substituted for *svhostname*. Do not add any extra spaces to this entry.

- 6 Mount the partition by entering the following command:

```
mount /usr/users/svplus/NFS.scmhostname
```

Note Once again, substitute the actual stand-alone SCM hostname for *scmhostname*.

- 7 Reboot the workstation.

- 8 Login as the StrataView Plus user by entering the following at the Please login: prompt:

```
Please login: svplus
password: *****
```

- 9 Type the following opposite the Sun SPARCstation prompt:

sv+

As a result of entering the **sv+** command, the StrataView Plus Menu Screen is displayed on the Sun SPARCstation:

Welcome to StrataView Plus 8.2

MAIN MENU

1) Start Stats Mgr GUI

Enter number or x to exit:

Verifying Mounting Information on the StrataView Plus Workstation

- 1 Login as user “root” by entering the following:

su

password: **superuser password**

- 2 Verify that the appropriate filesystem for the stand-alone SCM workstation was mounted by entering:

showmount -a

Entering this command should display the following:

scmhostname:/usr/users/svplus/NFS.scmhostname

Note In the example above, the actual stand-alone SCM hostname should appear where the example shows *scmhostname*.

Verifying Mounting Information on the Stand-alone SCM Workstation

- 1 The StrataView Plus Menu Screen is displayed. In response to the statement “enter number or x to exit:”, enter “**x**” to return to the system prompt:

x

Welcome to StrataView Plus 8.2

MAIN MENU

1) Start Stats Mgr GUI

Enter number or x to exit: **x**

%

- 2 Verify that the appropriate filesystem for the stand-alone SCM workstation was mounted by entering:

df /usr/users

Entering this command should display something similar to the following:

```
Filesystem                                kbytes  used   avail  capacity Mounted on
svhostname:/usr/users/svplus/NFS.scmhostname41432  20718  20718   50%
                                           /usr/users/svplus/NFS.scmhostname
```

Note In the example above, the actual stand-alone SCM hostname will be displayed where it shows *scmhostname*.

Configuring Your Stand-alone SCM Software

Configuring the stand-alone SCM requires that you configure the SCM on the co-located StrataView Plus workstation to use the mounted filesystems as the temporary file directory and the incoming file directory. Also, the following parameters must be set the same on both workstations:

- Statistics Collection Period
- Bucket Interval
- Peak Statistics Enable Toggle button
- Number of History Files to Collect
- Purge Old Statistics (Days)
- Purge Old Files (Days)
- Purge Old Files Enable Toggle button

Configuring the SCM on the StrataView Plus Workstation

Proceed as follows to configure the Statistics Collection Manager (SCM) on the co-located StrataView Plus workstation.

- 1 When logged in as svplus on the co-located StrataView Plus workstation, enter the following to display the StrataView Plus main menu:

sv+

- 2 The StrataView Plus Main Menu Screen is displayed. Choose "Start Stats Mgr GUI" in the StrataView Plus menu by entering:

8

```
Welcome to StrataView Plus 8.2
```

```
MAIN MENU
```

```
-----
```

- ```
1) Start SV+
2) Stop SV+
3) Start GUI
4) Dump db data
5) Start SNMP Agent
6) Current db name
7) Bulk Statistics
8) Start Stats Mgr GUI
```

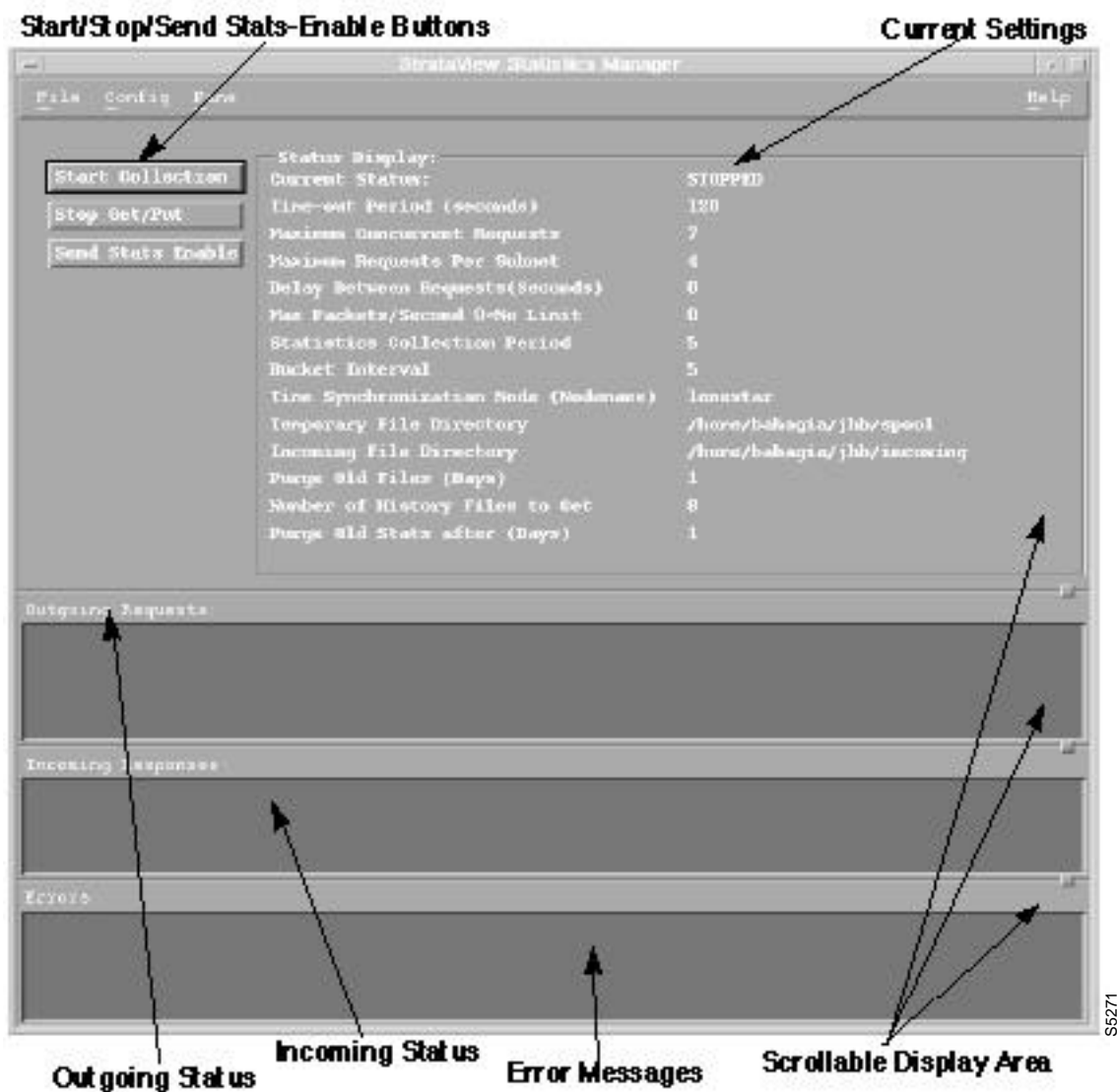
```
Enter number or x to exit: 8
```

The Statistics Manager main window is displayed.



### Statistics Manager Main Window

The Statistics Manager main window is illustrated below. It provides all the configuration, control, and display features for user interface to this process. The table that follows describes the features of this window.



| Window Feature         | Description                                                                                                                                            |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Enable Buttons         | Control (soft) buttons to start statistics collection, to stop a get or put process, or to send a statistics enable table to a node.                   |
| Current Settings panel | Displays the current status of the Statistics Manager. These parameters may be changed by selecting Network Parameters from the Config pull-down menu. |
| Outgoing Status panel  | Displays outgoing messages to the node(s).                                                                                                             |
| Incoming Status panel  | Displays incoming messages from the node(s).                                                                                                           |
| Error Messages panel   | Displays any error conditions in this process.                                                                                                         |

Changing Statistics Parameters

To prepare for collecting statistics from the network, the statistics collection parameters must be reviewed and changed, if desired.

The Status Display field in the Statistics Manager main window lists some, but not all, of the possible parameters that you may want to consider setting. To view all of the possible parameters and to change any of them, select **Network Parameters** from the **Config** pull down menu. The Statistics Parameters dialog box appears. Most of the parameters, described in the table that follows the illustration, can be left at the default. The parameters that you should review are:

Time Synchronization Node      Select the node supplying the master system timing. If your network crosses over time zones, it is important that all nodes in all time zones remain synchronized to a single clock (the clock in the node defined as the Time Synchronization Node in the Statistics Manager main window).



**Caution** Before statistics collection is enabled, use the **cnfdate** or **cnftime** commands to configure all the nodes in your network to the same time as the Time Synchronization Node. Use the **cnftmzn GMT** command to set the node time to GMT (Greenwich Mean Time). Once all the nodes are using the same time as the Time Synchronization Node, you can use the **cnftmzn** command to set the node time to whichever timezone you want, but the time **MUST** come from the Time Synchronization Node

|                                      |                                                                                                                                                                                       |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Peak Statistics Enable Toggle button | This should be left off unless peak statistics are really necessary.                                                                                                                  |
| Statistics Collection Period         | Often called collection interval                                                                                                                                                      |
| Bucket Interval                      | Bucket size must not exceed the collection period.                                                                                                                                    |
| Purge Old Files                      | Recommended unless doing a long-term study on only one or a few statistics.                                                                                                           |
| Temporary File Directory             | The Temporary file directory must be renamed to reflect the StrataView Plus NFS mounted file system. The default is ~svplus/spool. Change this to ~svplus/nfs.scmhostname/spool.      |
| Incoming File Directory              | The Incoming file directory must be renamed to reflect the StrataView Plus NFS mounted file system. The default is ~svplus/incoming. Change this to ~svplus/nfs.scmhostname/incoming. |

These parameters should be configured before any statistics collection is initiated. They can be changed later but the statistics collection process must first be stopped. This dialog box can be iconized if desired.

## Statistics Parameters Dialog Box

The screenshot shows the 'Statistics Parameters' dialog box with the following settings:

- Network Performance:**
  - Maximum Concurrent Requests: 3
  - Maximum Requests Per Subnet: 3
  - Delay Between Requests(Seconds): 0
  - Maximum Packets Per Second(0=No Limit): 0
  - Number of Retries: 3
  - Timeout Period (seconds): 120
  - Use Synchronisation Mode (Nedroneer): [ ]
- Statistics Intervals And Peak Management:**
  - Statistics Collection Period: 5
  - Bucket Interval: 5
  - Peak Statistics Enable Toggle Button: ☐ Enable Peak Statistics
  - Number of History Files To Collect: 5
  - Purge Old Statistics (Days): 30
- File Management:**
  - Temporary File Directory: /tmpool
  - Incoming File Directory: /incoming
  - Purge Old Files (Days): 2
  - Purge Old Files Toggle Button: ☒ Purge Old Files

Buttons at the bottom: OK, Cancel, Help.

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| Parameter                        | Description                                                                                                                                                                                                                           | Range <sup>1</sup> |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Maximum Outstanding Requests     | This field controls the number of child processes that will be created. Since each child process is responsible for one file transfer at a time, it indicates the number of concurrent requests to the network.                       | 1 to 15<br>(3)     |
| Maximum Requests Per Subnet      | This field limits the Number of requests per subnet. It is used to throttle the number of requests being retrieved from the network on a particular access point. Statistics enable files are not considered part of this throttling. | 1 to15<br>(3)      |
| Delay between Requests (Seconds) | This field will cause the child process to sleep for this many seconds before each request.                                                                                                                                           | 0 to 15<br>(0)     |
| Maximum Packets Per Second       | This field limits the maximum packets transmitted from the child process. A packet is fixed at 512 bytes in TFTP specifications. This indicates that a value of 500 will transfer at up to 256K/Second. (0=unlimited transfer rate).  | 1 to 500<br>(0)    |
| Number of Retries in Seconds     | This field defines the number of retries the child process makes in attempting to get files from the network. (Recommend using default of 3).                                                                                         | 1 to 20<br>(3)     |

## Configuring Your Stand-alone SCM to Share Statistics Files with a StrataView Plus System Using NFS

| Parameter                          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Range <sup>1</sup>           |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| Time-out Period                    | This is the time-out (in seconds) for the TFTP GET requests. Increase this value on busy networks.                                                                                                                                                                                                                                                                                                                                                                                   | 30 to 600<br>sec.<br>(120)   |
| Time Synchronization Node          | This is the node that the Statistics Manager uses for time synchronization. It should be set to the node closest to the stand-alone SCM workstation (least number of hops). The node must have NPCs and must be configured in /etc/hosts. Note: Yellow Pages are supported for the /etc/hosts file. If the node is unavailable, the nodes in the Selected Node list will be scanned in ascending alphabetical order. The first reachable node becomes the time synchronization node. | nodename                     |
| Statistics Collection Period       | This is the interval (in minutes) that stats are gathered from the network.                                                                                                                                                                                                                                                                                                                                                                                                          | 5, 10, 15,<br>30, 60<br>(60) |
| Bucket Interval                    | This is the Bucket Interval Period (in minutes) that will be kept for the single bucket on the node.                                                                                                                                                                                                                                                                                                                                                                                 | 5, 10, 15,<br>30, 60<br>(60) |
| Peak Interval Toggle Button        | This button turns on or off peak values on all stats on a network.                                                                                                                                                                                                                                                                                                                                                                                                                   | On/Off<br>(On)               |
| Number of History Files to Collect | The total number of history files to collect. If, for example, a user selects 5, and the interval is set at 60 minutes, then the current hour and the prior 4 hours will be tracked for collection from the network. This is to say, "history" on collection completion or failure will be tracked for 5 files (1 file = 1 collection interval). It is recommended you select at least 5 for this number.                                                                            | 1 to 24<br>(5)               |
| Purge Old Statistics (Days)        | This field identifies the number of days to keep old statistics. Statistics older than the current date/time less this field in days are DELETED from the database, automatically. A value of zero (0) will disable stats deletion. If you choose a value of zero, your database can become full in a very short time.                                                                                                                                                               | 0 to 364<br>(30)             |
| Temporary File Directory           | This is the temporary file directory for incoming files.                                                                                                                                                                                                                                                                                                                                                                                                                             | filename                     |
| Incoming File Directory            | This is the incoming file directory used by the parser to locate incoming files to be parsed. The incoming and temporary directories must be within the same UNIX partition, or NFS mounted partition.                                                                                                                                                                                                                                                                               | filename                     |
| Purge File in Days                 | The file purge file in days is used to purge old statistics files. This parameter will take effect when the disc space in the Incoming partition drops below ten megabytes. The files with a date 'N' days older than today's date will be purged. (0= no purging to be done).                                                                                                                                                                                                       | 0 to 365<br>(2)              |
| Purge Old Files Toggle Button      | This toggle is used to enable purging files as they are parsed from the stats parser. If this field is set to NO PURGE, then files will be moved to the directory ~/save. Currently, the save directory is not configurable. It is recommended that you delete old files.                                                                                                                                                                                                            | On/Off<br>(On)               |

1. Default settings are shown in parentheses (). Remember that these values (with the exception of the Time Synchronization Node) should match on both workstations.

Save any changes you made to the SCM parameters by clicking the OK button. The Statistics Manager main window is displayed.

Shut down the Statistics Manager by selecting **Exit** from the **File** pull down menu. From now on, all statistics collection will be done on the stand-alone SCM workstation.

The next step is setting the same parameters on the Statistics Collection Manager (SCM) on the stand-alone SCM workstation. This is described in the next section.

### Configuring the SCM on the Stand-alone SCM Workstation

Proceed as follows to configure the Statistics Collection Manager (SCM) on the stand-alone SCM workstation.

- 1 When logged in as svplus on the stand-alone SCM workstation, enter the following to display the StrataView Plus main menu:

```
sv+
```

- 2 The StrataView Plus Main Menu Screen is displayed. Choose "Start Stats Mgr GUI" in the StrataView Plus menu by entering:

```
1
```

```
Welcome to StrataView Plus 8.2
```

```
MAIN MENU
```

```

```

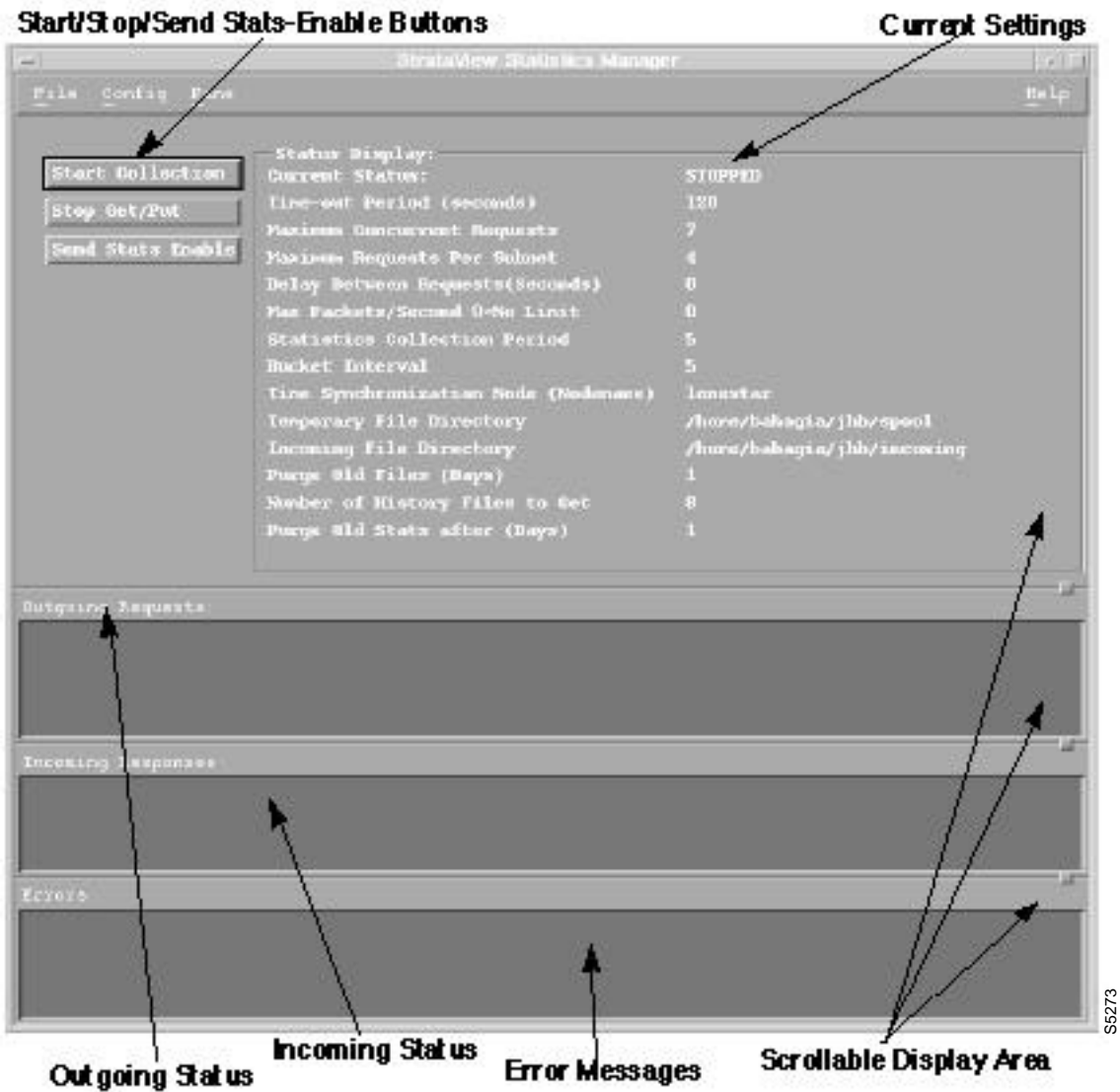
```
1) Start Stats Mgr GUI
```

```
Enter number or x to exit: 1
```

The Statistics Manager main window is displayed.

Statistics Manager Main Window

The Statistics Manager main window is illustrated below. It provides all the configuration, control, and display features for user interface to this process. The table that follows describes the features of this window.



| Window Feature         | Description                                                                                                                                            |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Enable Buttons         | Control (soft) buttons to start statistics collection, to stop a get or put process, or to send a statistics enable table to a node.                   |
| Current Settings panel | Displays the current status of the Statistics Manager. These parameters may be changed by selecting Network Parameters from the Config pull-down menu. |
| Outgoing Status panel  | Displays outgoing messages to the node(s).                                                                                                             |
| Incoming Status panel  | Displays incoming messages from the node(s).                                                                                                           |
| Error Messages panel   | Displays any error conditions in this process.                                                                                                         |

## Changing Statistics Parameters

To prepare for collecting statistics from the network, the statistics collection parameters must be reviewed and changed, if desired.

The Status Display field in the Statistics Manager main window lists some, but not all, of the possible parameters that you may want to consider setting. To view all of the possible parameters and to change any of them, select **Network Parameters** from the **Config** pull down menu. The Statistics Parameters dialog box appears. Most of the parameters, described in the table that follows the illustration, can be left at the default. The parameters that you should review are:

|                           |                                                                                                                                                                                                                                                                                             |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Time Synchronization Node | Select the node supplying the master system timing. If your network crosses over time zones, it is important that all nodes in all time zones remain synchronized to a single clock (the clock in the node defined as the Time Synchronization Node in the Statistics Manager main window). |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



**Caution** Before statistics collection is enabled, use the `cnfdate` or `cnftime` commands to configure all the nodes in your network to the same time as the Time Synchronization Node. Use the `cnftmzn GMT` command to set the node time to GMT (Greenwich Mean Time). Once all the nodes are using the same time as the Time Synchronization Node, you can use the `cnftmzn` command to set the node time to whichever timezone you want, but the time **MUST** come from the Time Synchronization Node

|                                      |                                                                                                                                                                                                                   |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Peak Statistics Enable Toggle button | This should be left off unless peak statistics are really necessary.                                                                                                                                              |
| Statistics Collection Period         | Often called collection interval                                                                                                                                                                                  |
| Bucket Interval                      | Bucket size must not exceed the collection period.                                                                                                                                                                |
| Purge Old Files                      | Recommended unless doing a long-term study on only one or a few statistics.                                                                                                                                       |
| Temporary File Directory             | The Temporary file directory must be renamed to reflect the StrataView Plus NFS mounted file system. The default is <code>~svplus/spool</code> . Change this to <code>~svplus/nfs.scmhostname/spool</code> .      |
| Incoming File Directory              | The Incoming file directory must be renamed to reflect the StrataView Plus NFS mounted file system. The default is <code>~svplus/incoming</code> . Change this to <code>~svplus/nfs.scmhostname/incoming</code> . |

These parameters should be configured before any statistics collection is initiated. They can be changed later but the statistics collection process must first be stopped. This dialog box can be iconized if desired

Statistics Parameters Dialog Box.

The screenshot shows a 'Statistics Parameters' dialog box with the following fields and options:

- Network Performance:**
  - Maximum Concurrent Requests: 3
  - Maximum Requests Per Subnet: 3
  - Delay Between Requests(Seconds): 0
  - Maximum Packets Per Second(0=No Limit): 0
  - Number of Retries: 3
  - Timeout Period (seconds): 1000
  - Use Synchronisation Mode (Nedenseer): ☐
- Statistics Intervals And Peak Management:**
  - Statistics Collection Period: 5
  - Bucket Interval: 5
  - Peak Statistics Enable Toggle Button: ☐ Enable Peak Statistics
  - Number of History Files To Collect: 5
  - Purge Old Statistics (Days): 30
- File Management:**
  - Temporary File Directory: /tmp
  - Incoming File Directory: /incoming
  - Purge Old Files (Days): 2
  - Purge Old Files Toggle Button: ☒ Purge Old Files

Buttons at the bottom: OK, Cancel, Help.

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| Parameter                        | Description                                                                                                                                                                                                                           | Range <sup>1</sup> |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Maximum Outstanding Requests     | This field controls the number of child processes that will be created. Since each child process is responsible for one file transfer at a time, it indicates the number of concurrent requests to the network.                       | 1 to 15<br>(3)     |
| Maximum Requests Per Subnet      | This field limits the Number of requests per subnet. It is used to throttle the number of requests being retrieved from the network on a particular access point. Statistics enable files are not considered part of this throttling. | 1 to 15<br>(3)     |
| Delay between Requests (Seconds) | This field will cause the child process to sleep for this many seconds before each request.                                                                                                                                           | 0 to 15<br>(0)     |
| Maximum Packets Per Second       | This field limits the maximum packets transmitted from the child process. A packet is fixed at 512 bytes in TFTP specifications. This indicates that a value of 500 will transfer at up to 256K/Second. (0=unlimited transfer rate).  | 1 to 500<br>(0)    |
| Number of Retries in Seconds     | This field defines the number of retries the child process makes in attempting to get files from the network. (Recommend using default of 3).                                                                                         | 1 to 20<br>(3)     |



| Parameter                          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Range <sup>1</sup>           |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| Time-out Period                    | This is the time-out (in seconds) for the TFTP GET requests. Increase this value on busy networks.                                                                                                                                                                                                                                                                                                                                                                                   | 30 to 600<br>sec.<br>(120)   |
| Time Synchronization Node          | This is the node that the Statistics Manager uses for time synchronization. It should be set to the node closest to the stand-alone SCM workstation (least number of hops). The node must have NPCs and must be configured in /etc/hosts. Note: Yellow Pages are supported for the /etc/hosts file. If the node is unavailable, the nodes in the Selected Node list will be scanned in ascending alphabetical order. The first reachable node becomes the time synchronization node. | nodename                     |
| Statistics Collection Period       | This is the interval (in minutes) that stats are gathered from the network.                                                                                                                                                                                                                                                                                                                                                                                                          | 5, 10, 15,<br>30, 60<br>(60) |
| Bucket Interval                    | This is the Bucket Interval Period (in minutes) that will be kept for the single bucket on the node.                                                                                                                                                                                                                                                                                                                                                                                 | 5, 10, 15,<br>30, 60<br>(60) |
| Peak Interval Toggle Button        | This button turns on or off peak values on all stats on a network.                                                                                                                                                                                                                                                                                                                                                                                                                   | On/Off<br>(On)               |
| Number of History Files to Collect | The total number of history files to collect. If, for example, a user selects 5, and the interval is set at 60 minutes, then the current hour and the prior 4 hours will be tracked for collection from the network. This is to say, "history" on collection completion or failure will be tracked for 5 files (1 file = 1 collection interval). It is recommended you select at least 5 for this number.                                                                            | 1 to 24<br>(5)               |
| Purge Old Statistics (Days)        | This field identifies the number of days to keep old statistics. Statistics older than the current date/time less this field in days are DELETED from the database, automatically. A value of zero (0) will disable stats deletion. If you choose a value of zero, your database can become full in a very short time.                                                                                                                                                               | 0 to 364<br>(30)             |
| Temporary File Directory           | This is the temporary file directory for incoming files.                                                                                                                                                                                                                                                                                                                                                                                                                             | filename                     |
| Incoming File Directory            | This is the incoming file directory used by the parser to locate incoming files to be parsed. The incoming and temporary directories must be within the same UNIX partition, or NFS mounted partition.                                                                                                                                                                                                                                                                               | filename                     |
| Purge File in Days                 | The file purge file in days is used to purge old statistics files. This parameter will take effect when the disc space in the Incoming partition drops below ten megabytes. The files with a date 'N' days older than today's date will be purged. (0= no purging to be done).                                                                                                                                                                                                       | 0 to 365<br>(2)              |
| Purge Old Files Toggle Button      | This toggle is used to enable purging files as they are parsed from the stats parser. If this field is set to NO PURGE, then files will be moved to the directory ~/save. Currently, the save directory is not configurable. It is recommended that you delete old files.                                                                                                                                                                                                            | On/Off<br>(On)               |

1. Default settings are shown in parentheses (). Remember that these values (with the exception of the Time Synchronization Node) should match on both workstations.

Save any changes you made to the SCM parameters by clicking the OK button. The Statistics Manager main window is displayed.

Refer to the *Release 8.2 StrataView Plus Operations Guide* for information on setting up node selection lists and statistic collection lists on the stand-alone SCM workstation.

