

Field Stress Tool Reference Guide

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Contributors

Written by Darrin Goss

Illustrated by Darrin Goss

Production by Mike Dixon

Engineering contributions by Siu Man Siu, Imran Pasha, Satish Mirle, and Venkatesh Nayak

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Document Number 108-0152-001**

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About This Guide

This document describes the field stress test tool (FST) which can be used while the IRIX™ operating system is running. The stress tests perform extensive operations to rigorously test the system.

System Support Engineers (SSEs) and Field Engineers (FEs) may use this reference document during training and onsite visits.

This document organizes information into the following chapters:

- Chapter 1, "Introduction to the Field Stress Tool," provides an overview of the field stress tool (FST).
- Chapter 2, "FST User Interface," describes the FST ASCII interface that you can use to run the field stress tool.
- Chapter 3, "Stress Tests," describes the Application and Pandora stress tests that FST uses to perform stress testing.

This document supports version 1.0 of the field stress tool, which is available on the *Internal Support Tools 1.1* CD.

Typographical Conventions

This document uses the following notational conventions:

- Information displayed on the screen is shown in `Courier` type.
- Text that you enter is shown in `Courier bold` type.
- Commands in text, variables, filenames, and directory names are shown in *italic* type.

Introduction to the Field Stress Tool

This chapter introduces the field stress tool (FST).

1.1 About the Field Stress Tool

FST is an application that simulates varying customer application loads on Origin200™, Origin2000™, CRAY® Origin2000, Onyx2™, CHALLENGE®, and Onyx® computer systems to determine the health of these systems. It is a proactive tool that validates a system by running heavy loads on the system. Use it for preventative maintenance to verify that a system will continue to perform without failures.

FST has two main components:

- an ASCII user interface

This common ASCII interface enables you to start the FST stress tests and monitor their progress. Refer to Chapter 2, "FST User Interface," for more information.

Note: This interface is identical to the user interface for the IRIX based field diagnostics. The similarity of the two interfaces provides a common "look and feel" for diagnosing hardware failures.

- two stress test packages (the Application stress test and the Pandora stress test)

The Application stress test includes application programs that stress the system with varying levels of activity. Refer to Section 3.1, "Application Stress Test," for more information.

The Pandora stress test includes a programmable set of processes that test specific hardware. Pandora configures itself before starting any test processes and tests the following hardware components:

- 1 or more CPUs
- 32 MB to 4GB of memory
- I/O hardware (SCSI and MSCSI devices)
- networking hardware (Ethernet, FDDI, and ATM interfaces)
- multiple-pipe graphics subsystem

This test creates five types of test processes: floating-point processes, memory processes, I/O processes, network processes, and graphics processes. These processes generate activity throughout the whole system by using shared resources.

Refer to Section 3.2, "Pandora Stress Test," for more information.

The Application stress test runs on IRIX 5.3, IRIX 6.2, IRIX 6.3, and IRIX 6.4. The Pandora stress test runs only on IRIX 6.4.

1.2 Installing the Field Stress Tool

The Internal Support Tools group releases the field stress tool on the *Internal Support Tools* CDs. Follow the installation instructions in the CD booklet to install FST on your system.

Any future updates to the FST will be available from the Internal Support Tools Web site (http://ist.csd.sgi.com/Tools/Home_pages/products.html) or on future CD releases.

FST User Interface

This chapter describes the FST user interface.

2.1 About the FST User Interface

The FST user interface provides a common ASCII interface that can be used to run and monitor the stress tests included in the field stress tool. This interface is identical to the user interface for the IRIX based field diagnostics. The similarity of the two interfaces provides a common “look and feel” for diagnosing hardware failures.

2.2 Starting the FST User Interface

You must have PERL installed on the system to use FST, and have root privileges to run the FST user interface.

Perform the following procedure from the IRIX prompt to start the FST user interface:

1. Enter the following command to change to the */usr/diags/stress/* directory:

```
cd /usr/diags/stress
```

2. Enter the following command to start the FST user interface:

```
./fst
```

2.3 FST User Interface Components

Figure 2-1 shows the components of the main screen of the FST user interface. The text following the figure describes the components.

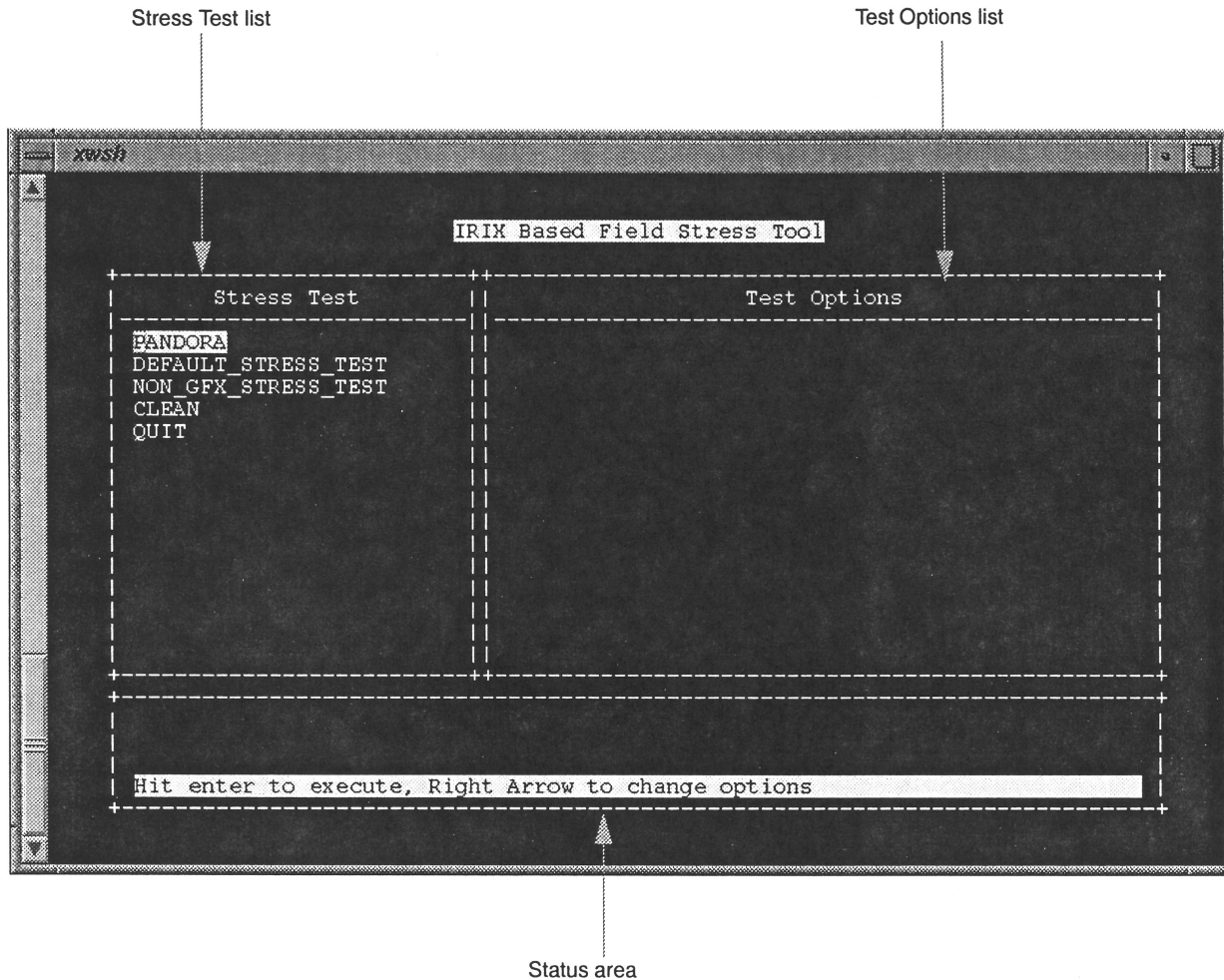


Figure 2-1 FST Interface (Main Screen Components)

The main screen includes the following components:

- Stress Test list
- Test Options list
- status area

When you type Ctrl+T on the main screen, the Test Log Output window appears. This window displays output messages from the current stress test after it completes executing. Figure 2-2 shows the Test Log Output window.

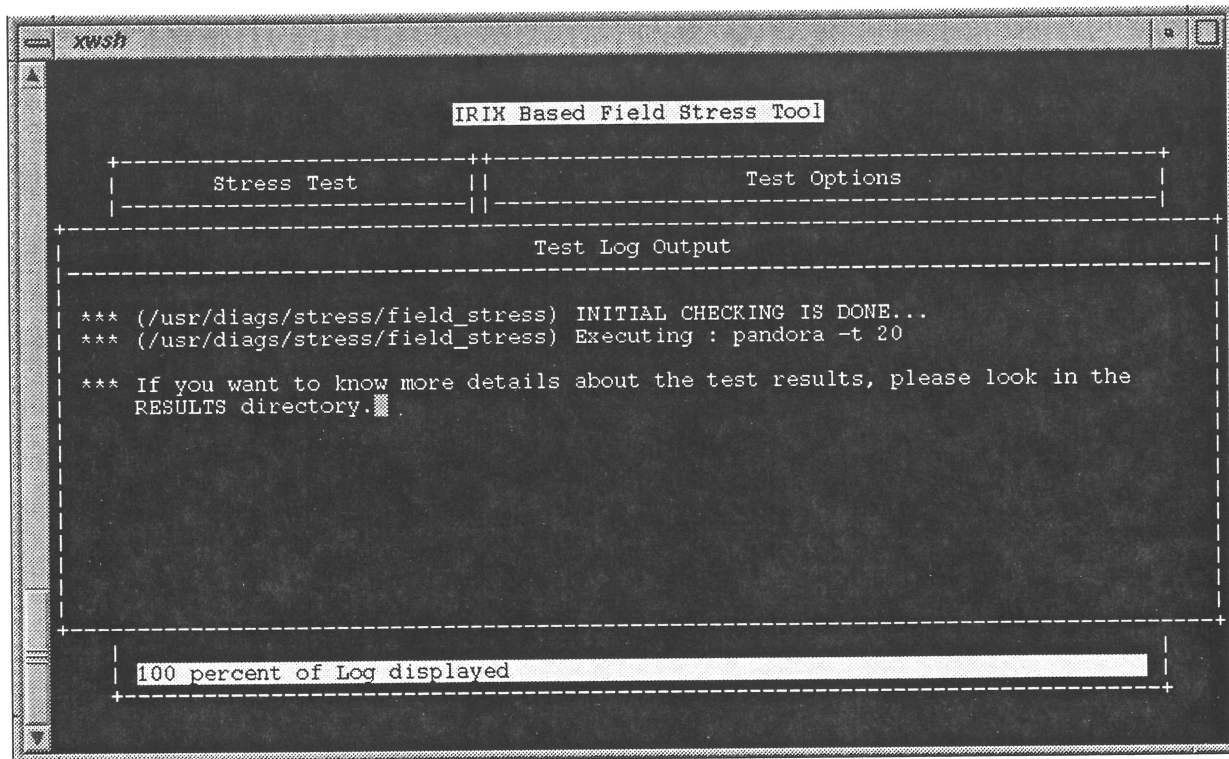


Figure 2-2 FST Interface (Test Log Output Window)

2.3.1 Stress Test List

The Stress Test list contains the names of the tests that you can run from the FST user interface. FST automatically detects the hardware in the system and adjusts this list to display only the stress tests that are available for the hardware in the system.

Table 2-1 describes all of the options in the Stress Test list.

Note: The interface that you use onsite displays only the options that correspond to the hardware in your system.

Table 2-1 Stress Test List Options

Option	Description
PANDORA	Runs the Pandora test for 30 minutes.
DEFAULT_STRESS_TEST	Runs the default Application stress test for 15 minutes (for any system).
GFX_STRESS_TEST	Runs an Application stress test that uses graphics applications for two hours (on graphics systems only).
NON_GFX_STRESS_TEST	Runs an Application stress test that uses nongraphics applications for two hours.

Table 2-1 (continued) Stress Test List Options

Option	Description
CLEAN	Cleans up any processes that FST started.
QUIT	Quits the FST user interface.

The `GFX_STRESS_TEST` (for graphics systems) and `NON_GFX_STRESS_TEST` (for nongraphics systems) run with higher loads and run for longer periods of time than the `DEFAULT_STRESS_TEST`.

Perform any of the following actions to navigate through the Stress Test list:

- Use the up and down arrow keys to move through the tests in the Stress Test list.
- Use the right arrow key to move from the Stress Test list into the Test Options list.
- Use the left arrow key to move from the Test Options list back into the Stress Test list.
- Press the Enter key to run the selected stress test.
- Press the H key to display help messages for the selected test. (Refer to Figure 2-3 to see an example help message.)

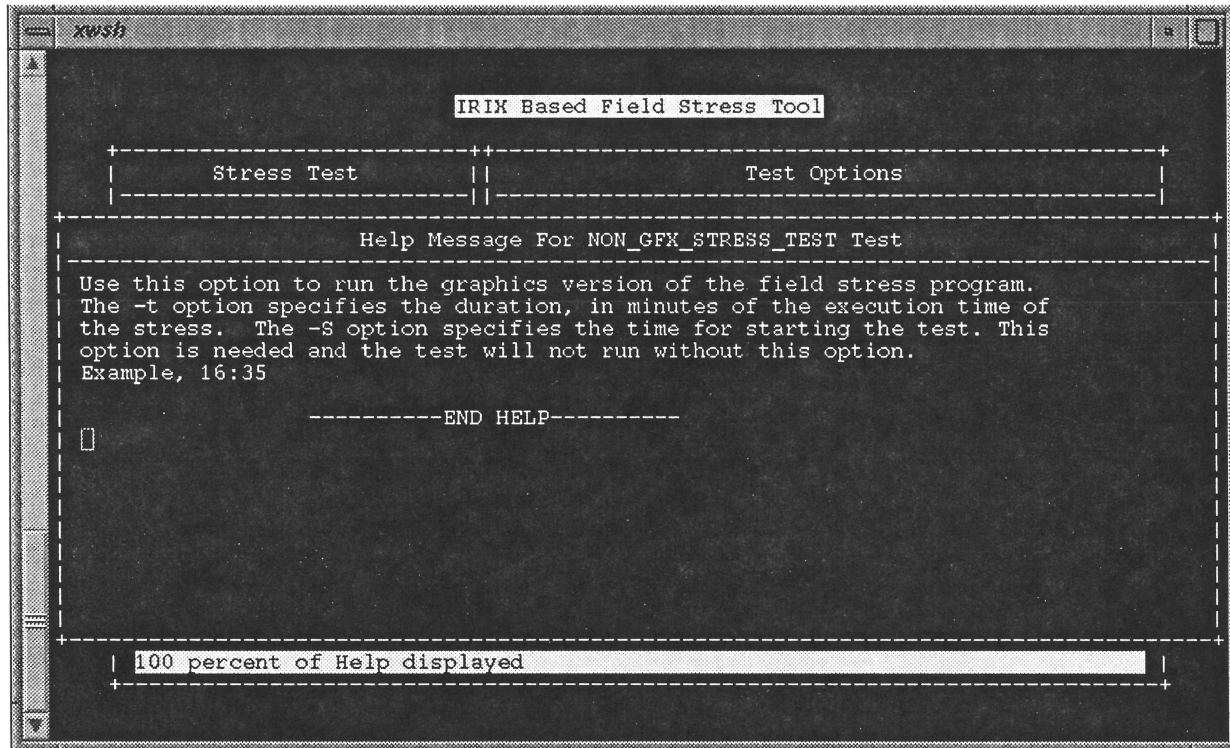


Figure 2-3 Example Help Message for `NON_GFX_STRESS_TEST`

2.3.2 Test Options List

The Test Options list shows the parameters that you can adjust for each test. If nothing appears in this list, the test does not have user-adjustable parameters.

For example, Figure 2-4 shows that the NON_GFX_STRESS_TEST has two parameters that you can adjust: the amount of time that the test should run and the number of minutes that FST should wait before starting the test.

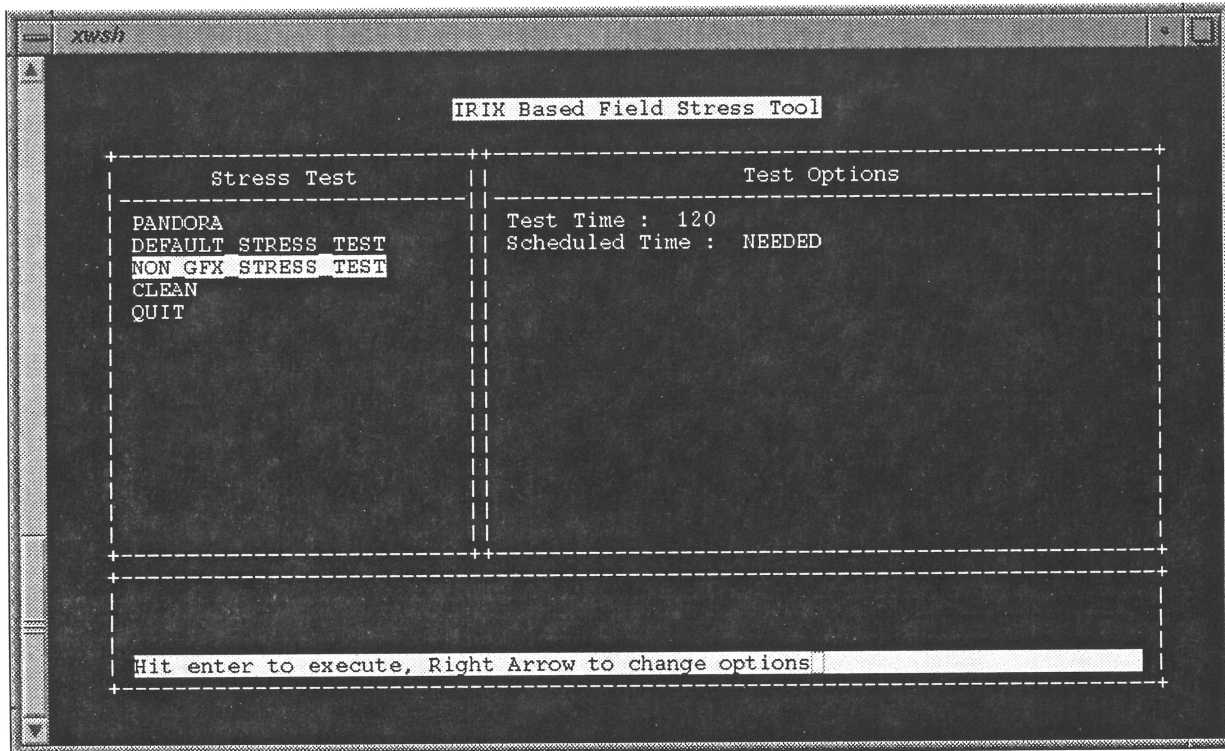


Figure 2-4 Example of Test Options List for NON_GFX_STRESS_TEST

Perform any of the following actions to navigate through the Test Options list:

- Use the up and down arrow keys to move through the parameters in the Test Options list.
- Press the Enter key to select the parameter that you want to change. (When the prompt Enter New Value for the Option appears in the status area, type the new value, and press the Enter key.)
- Use the left arrow key to move from the Test Options list into the Stress Test list.

2.3.3 Status Area

The status area provides information about the current status of the interface and the test that is running. It displays the following information:

- a prompt that indicates what you can do on the current screen (for example, Hit enter to execute, Right Arrow to change options)
- a status line that indicates what action the interface is currently performing (for example, Loading Diags)
- status information about the state of the selected test (for example, Executing : cleanup stress)

2.3.4 Test Log Output Window

The Test Log Output window displays output from the current test after it completes executing. This information includes any error messages that the test generates. If the output contains more than one screen of text, use the up and down arrow keys to scroll through the text. (The status area on the main screen displays the percentage of the output that you have viewed.)

Enter Ctrl+T to toggle the display of this window. Refer again to Figure 2-2 to see an example Test Log Output window.

2.4 Running Tests From the FST User Interface

The following sections describe how to use the FST user interface to run the tests:

- Section 2.4.1, “Using the PANDORA Option”
- Section 2.4.2, “Using the DEFAULT_STRESS_TEST Option”
- Section 2.4.3, “Using the GFX_STRESS_TEST Option”
- Section 2.4.4, “Using the NON_GFX_STRESS_TEST Option”
- Section 2.4.5, “Using the CLEAN Option”

Caution: Make sure that no other applications are running before you run any of the stress tests.

2.4.1 Using the PANDORA Option

The PANDORA option runs the Pandora test for 30 minutes. To use this option, perform the following procedure (refer to Figure 2-5):

1. In the Stress Test list, select the PANDORA option.
2. Press the **Enter** key to start the Pandora test.

The status area displays the message `Executing : pandora` to indicate that the test is running.

Note: After the Pandora test completes testing, use the CLEAN option to clean up any processes that the field stress tool created to run the test. Refer to Section 2.4.5, “Using the CLEAN Option,” for more information.

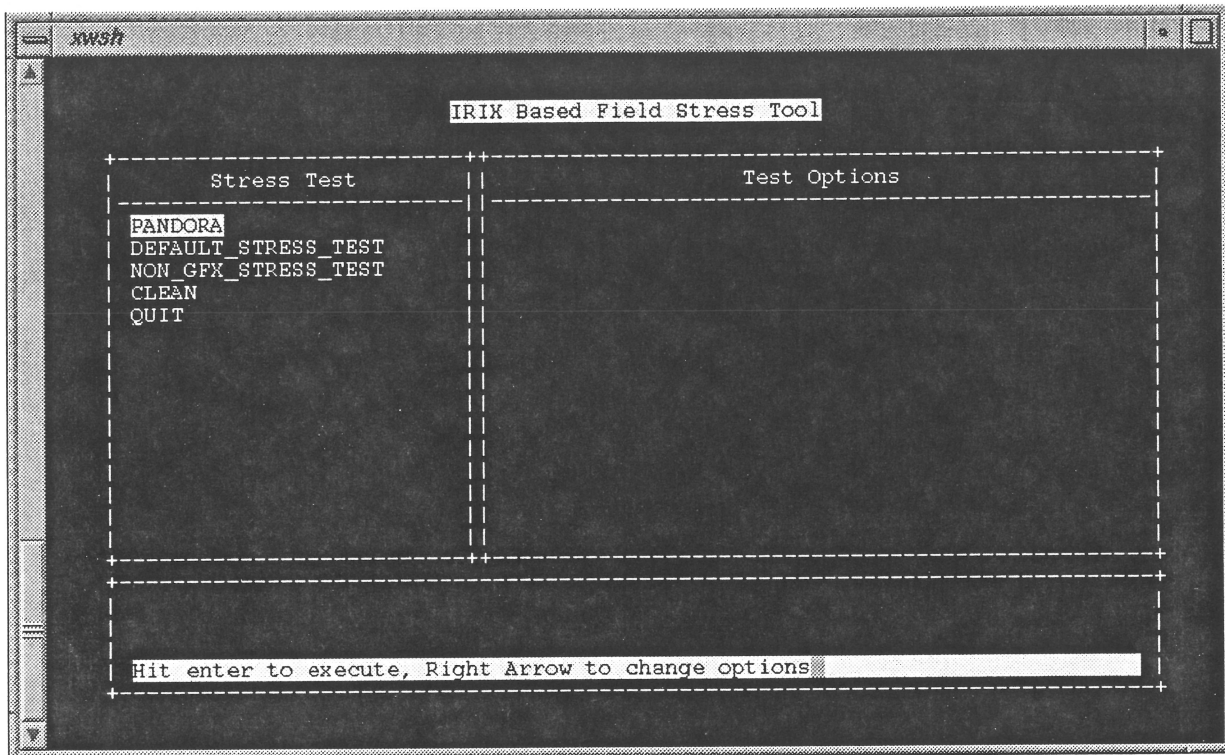


Figure 2-5 Using the PANDORA Option

2.4.2 Using the DEFAULT_STRESS_TEST Option

The DEFAULT_STRESS_TEST option runs a default Application stress test for 15 minutes. To use the DEFAULT_STRESS_TEST option, perform the following procedure (refer to Figure 2-6):

1. In the Stress Test list, select the DEFAULT_STRESS_TEST option.
2. Press the Enter key to start the test.

The status area displays the message Executing : normal stress to indicate that the test is running.

Note: After the default Application stress test completes testing, use the CLEAN option to clean up any processes that the field stress tool created to run the test. Refer to Section 2.4.5, "Using the CLEAN Option," for more information.



Figure 2-6 Using the DEFAULT_STRESS_TEST Option

2.4.3 Using the GFX_STRESS_TEST Option

The GFX_STRESS_TEST runs a graphics Application stress test. (This option is available only for graphics systems.) Perform the following procedure to use the GFX_STRESS_TEST option (refer to Figure 2-7):

1. In the Stress Test list, select the GFX_STRESS_TEST option.
2. Press the right arrow key to enter the Test Options list.
3. For any parameters that you want to modify, perform the following actions:
 - Select the parameter.
 - Press the **Enter** key.
 - At the prompt **Enter New Value for the Option**, enter the new value.
 - Press the **Enter** key.

Table 2-2 describes the parameters that are available.

Table 2-2 GFX_STRESS_TEST User-Adjustable Parameters

Parameter	Description
Test Time	Number of minutes to run the test. (Default is 240.)

Table 2-2 GFX_STRESS_TEST User-Adjustable Parameters

Parameter	Description
Scheduled Time	Number of minutes that FST should wait before starting the test . You must enter this parameter.

4. Press the left arrow key to return to the Stress Test list.
5. Press the Enter key to start the test.

The status area displays the message `Executing : GFX STRESS TEST` to indicate that the test is running.

Note: After the graphics Application stress test completes testing, use the CLEAN option to clean up any processes that the field stress tool created to run the test. Refer to Section 2.4.5, "Using the CLEAN Option," for more information.

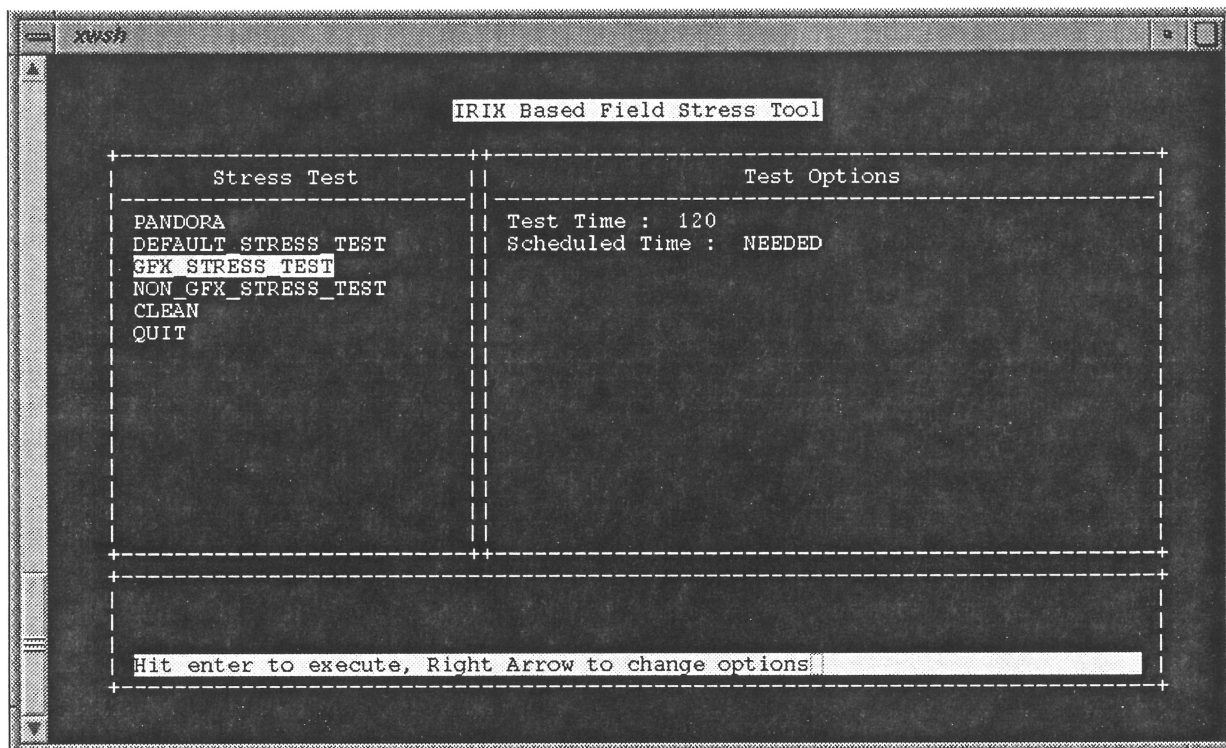


Figure 2-7 Using the GFX_STRESS_TEST Option

2.4.4 Using the NON_GFX_STRESS_TEST Option

The NON_GFX_STRESS_TEST option runs a nongraphics Application stress test. Perform the following procedure to use the NON_GFX_STRESS_TEST option (refer to Figure 2-8):

1. In the Stress Test list, select the NON_GFX_STRESS_TEST option.
2. Press the right arrow key to enter the Test Options list.

3. For any parameters that you want to modify, perform the following actions:
 - Select the parameter.
 - Press the **Enter** key.
 - At the prompt `Enter New Value for the Option`, enter the new value.
 - Press the **Enter** key.

Table 2-3 describes the parameters that are available.

Table 2-3 NON_GFX_STRESS_TEST User-Adjustable Parameters

Parameter	Description
Test Time	Number of minutes to run the test. (Default is 240.)
Scheduled Time	Number of minutes that FST should wait before starting the test. You must enter this parameter.

4. Press the left arrow key to return to the Stress Test list.
5. Press the **Enter** key to start the test.

The status area displays the message `Executing : NON-GFX STRESS TEST` to indicate that the test is running.

Note: After the nongraphics Application stress test completes testing, use the **CLEAN** option to clean up any processes that the field stress tool created to run the test. Refer to Section 2.4.5, “Using the **CLEAN** Option,” for more information.

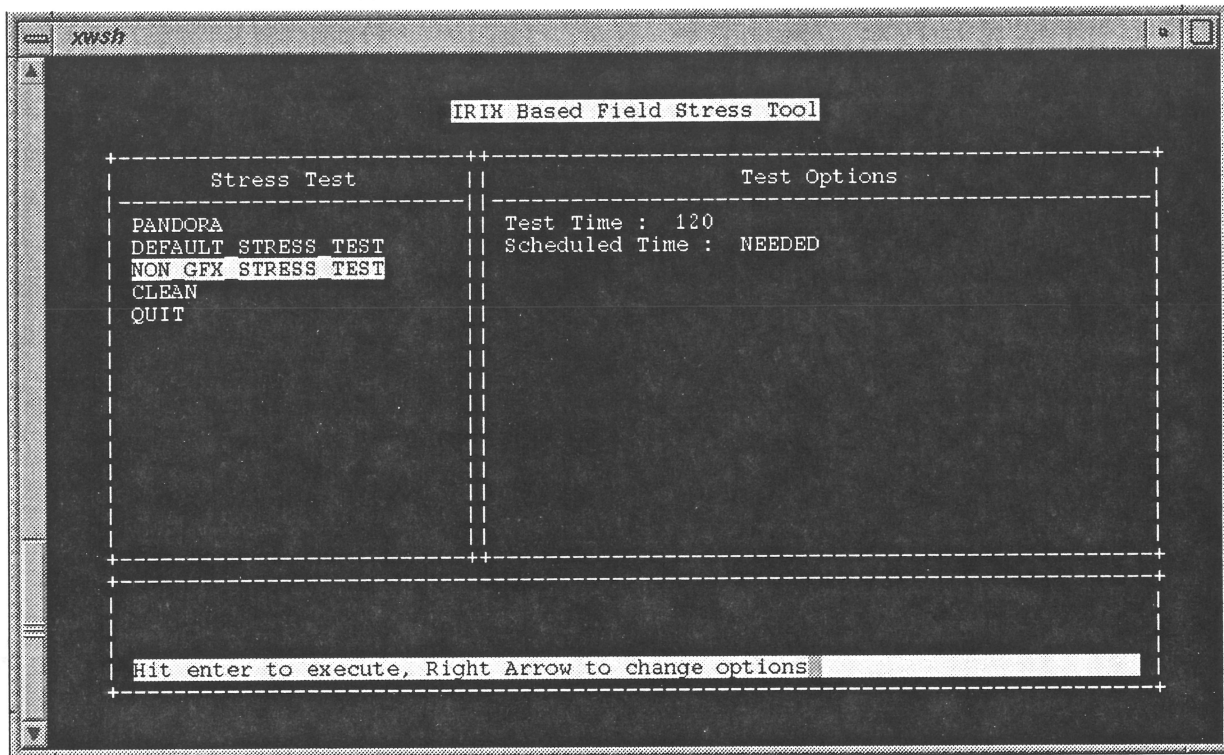


Figure 2-8 Using the NON_GFX_STRESS_TEST Option

2.4.5 Using the CLEAN Option

The CLEAN option deletes any processes that were left running by a previous stress test. Use the CLEAN option after a test completes testing to clean up any processes that the field stress tool created for the test.

Perform the following procedure to use the CLEAN option (refer to Figure 2-9):

1. In the Stress Test list, select the CLEAN option.
2. Press the **Enter** key to start the CLEAN test.

The status area displays the message `Executing : cleanup stress` to indicate that the test is running.

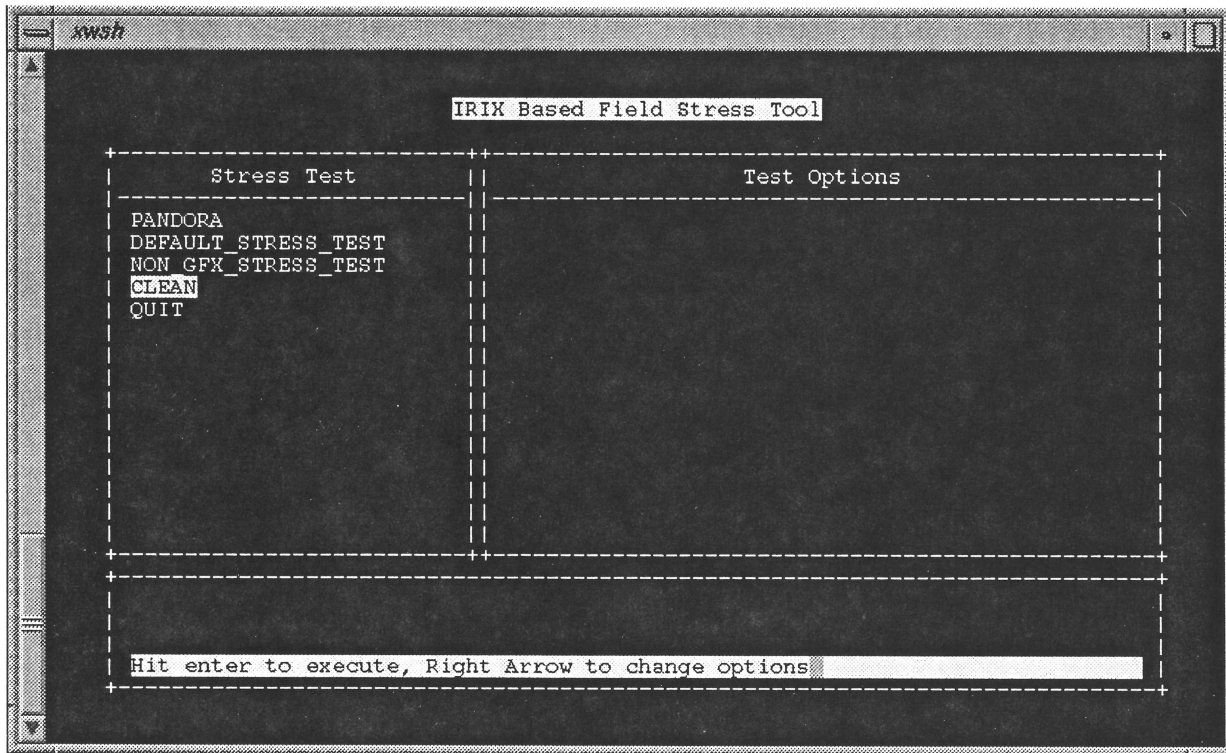


Figure 2-9 Using the CLEAN Option

Stress Tests

This chapter describes the stress tests that you can run from the field stress tool.

3.1 Application Stress Test

The Application stress test runs a package of application programs to stress test a system. These programs can include the following types of applications:

- nongraphic applications (for example, *cat* and *ls*)
- graphic applications (for example, *movieplayer* and *mediaplayer*)
- X Window System™ applications (for example, *xpsview* and *xlogo*)
- demonstration programs (for example, */usr/demos/bin/draw* and */usr/demos/bin/wonderland*)

You must have root privilege to run the Application stress test.

To run the Application stress test from the FST user interface, use the `DEFAULT_STRESS_TEST`, `GFX_STRESS_TEST`, and `NON_GFX_STRESS_TEST` options.

For more information about using these options, refer to the following sections:

- Section 2.4.2, “Using the `DEFAULT_STRESS_TEST` Option”
- Section 2.4.3, “Using the `GFX_STRESS_TEST` Option”
- Section 2.4.4, “Using the `NON_GFX_STRESS_TEST` Option”

3.1.1 Output From the Application Stress Test

All results from the Application stress test are logged in the */usr/diags/stress/RESULTS/* directory structure. The Application stress test generates the following output files:

- */usr/diags/stress/RESULTS/SYSLOG_ALL*

This file contains all relevant messages from SYSLOG; these messages are copied into the *SYSLOG_ALL* file after the test completes running.

- */usr/diags/stress/RESULTS/TEST_MSG_LOG*
This file contains all of the messages that the field stress tool generates. It contains time stamped entries that show which tests were run and which options were used to start them.
- */usr/diags/stress/RESULTS/testcase.LOG.timestamp*
This file contains the hardware configuration information for the system being tested and a message that indicates why the test stopped.

The *testcase* portion of the filename contains the filename of a test case file in the */usr/diags/stress/TEST/* directory structure. The *timestamp* portion contains the date and time at which the test was run. (For example, */usr/diags/stress/RESULTS/APPLICATIONS/ONE_NG_2H.LOG.Mon-Jul-28-06:41:40-1997*)
- */usr/diags/stress/RESULTS/APPLICATIONS/*
This directory contains a log file for each application that the Application stress test runs. The filename format for these log files is: *testcase.LOG.processor_number*.

The *testcase* portion of the filename contains the filename of a test case file in the */usr/diags/stress/TEST/* directory structure. The *processor_number* portion contains the processor on which the test was run.
- */usr/diags/stress/RESULTS/PANDORA/*
This directory contains the log files that the Pandora stress test generates. The filename format for Pandora log files is: *pandora.LOG.processor_number*.

The *processor_number* portion of the filename contains the processor on which the test was run.

3.1.1.1 Successful Completion Output

When the Application stress test completes successfully, it prints the message #####
END ##### in the log file.

3.1.1.2 Unsuccessful Completion Output

The Application stress test does not generate specific error messages. The test fails when one of the following conditions occurs:

- The system hangs: You can ping the system, but you cannot use the *rsh* command or log into the system.

When this happens, check the */usr/diags/stress/RESULTS/SYSLOG_ALL* file (for any useful SYSLOG messages) and the Application stress test log file to determine which application was running when the hang occurred.
- The system takes an unexpected exception.

When this happens, check the */usr/diags/stress/RESULTS/SYSLOG_ALL* file (for any useful SYSLOG messages) and the Application stress test log file to determine which application was running when the hang occurred.

- The system crashes: The kernel core dumps. The test does not print an END message. The system either remains in a PANIC state or hangs and then panics when you reboot the system. The log file contains output similar to the following messages when the system crashes:

```
TIME OF CRASH:
      863627412 Wed May 14 09:30:12 1997
PANIC STRING:
      <0>PANIC: CPU 0: TLBMISS: I/STHREAD FAULT
```

When this happens, check the `/usr/diags/stress/RESULTS/SYSLOG_ALL` file (for any useful SYSLOG messages) and the Application stress test log file to determine which application was running when the crash occurred.

3.1.2 Application Stress Test Examples

The following sections show examples of output from Application stress test log files:

- “Successful Completion” on page 3-3
- “Example Output From a System Crash” on page 3-5
- “Example Output From a System Hang” on page 3-6

3.1.2.1 Successful Completion

The following example shows successful completion of the Application stress test:

```
### SGI Field Stress Version 1.0 ( Wed Jun 11 10:59:23 PDT 1997 )

Mon Jun 16 14:12:20 PDT 1997
total: 0.00k allocated + 88.23m add'l reserved = 88.23m bytes used,
199.74m
bytes available
IRIX nature 6.5-ALPHA-1273856320 05272156 IP22
CPU: MIPS R4400 Processor Chip Revision: 6.0
FPU: MIPS R4000 Floating Point Coprocessor Revision: 0.0
1 250 MHZ IP22 Processor
Main memory size: 128 Mbytes
Secondary unified instruction/data cache size: 2 Mbytes on Processor 0
Instruction cache size: 16 Kbytes
Data cache size: 16 Kbytes
Integral SCSI controller 0: Version WD33C93B, revision D
  Disk drive: unit 1 on SCSI controller 0
Integral SCSI controller 1: Version WD33C93B, revision D
On-board serial ports: 2
On-board bi-directional parallel port
Graphics board: High Impact
Integral Ethernet: ec0, version 1
Iris Audio Processor: version A2 revision 1.1.0
EISA bus: adapter 0
```

NUMBER of LOOPS: 1 on Processor 0

Mon Jun 16 14:13:18 PDT 1997

total: 0.00k allocated + 103.09m add'l reserved = 103.09m bytes used,
184.88m

bytes available

*** THE MINIMUM AVAILABLE SWAP SPACE WAS ~63(m)

total: 0.00k allocated + 86.50m add'l reserved = 86.50m bytes used,
201.47m

bytes available

NUMBER of LOOPS: 2 on Processor 0

Mon Jun 16 14:15:36 PDT 1997

total: 0.00k allocated + 100.99m add'l reserved = 100.99m bytes used,
186.98m

bytes available

*** THE MINIMUM AVAILABLE SWAP SPACE WAS ~65(m)

total: 0.00k allocated + 86.64m add'l reserved = 86.64m bytes used,
201.34m

bytes available

TEST(S) FINISHED in 293 seconds (~ 5 mnitues)

Mon Jun 16 14:17:13 PDT 1997

0 S 0 880 802 0 20 20 * 15690:4038 8887c8a4 ? 19:40
Xsgi

END

The message ##### END ##### indicates that the test completed successfully.

3.1.2.2 Example Output From a System Crash

The following example shows portions of the output from the Application stress test when a system crash occurs while the test is running:

```
TIME OF CRASH:
    863627412 Wed May 14 09:30:12 1997

PANIC STRING:
    <0>PANIC: CPU 0: TLBMISS: I/STHREAD FAULT
...

Wed May 14 09:28:57 PDT 1997

total: 0.00k allocated + 16.31m add'l reserved = 16.31m bytes used,
489.98m bytes available

=====

cat unix_eoe.o.LOG
*** SGI Field Stress (field_stress) Version 1.0 (Sun May  4 07:38:57 PDT
1997)

Wed May 14 09:28:57 PDT 1997
total: 0.00k allocated + 16.70m add'l reserved = 16.70m bytes used,
489.59m
bytes available
IRIX64 octomeow 6.4 02121744 IP30
2 195 MHZ IP30 Processors
CPU: MIPS R10000 Processor Chip Revision: 2.7
FPU: MIPS R10010 Floating Point Chip Revision: 0.0
Main memory size: 384 Mbytes
Instruction cache size: 32 Kbytes
Data cache size: 32 Kbytes
Secondary unified instruction/data cache size: 1 Mbyte
Integral SCSI controller 0: Version QL1040B
    Disk drive: unit 1 on SCSI controller 0
    Disk drive: unit 2 on SCSI controller 0
    Tape drive: unit 3 on SCSI controller 0: DAT
Integral SCSI controller 1: Version QL1040B
IOC3 serial port: tty1
IOC3 serial port: tty2
IOC3 parallel port: plp1
Graphics board: MXI
Integral Fast Ethernet: ef0, version 1
Iris Audio Processor: version RAD revision 12.0, number 1
```

3.1.2.3 Example Output From a System Hang

The following example shows the output from a system hang that occurs while the test is running:

```
*** SGI Field Stress Version 1.0 ( Mon Jun  2 15:33:18 PDT 1997 )

Wed Jun  4 14:05:44 PDT 1997
total: 15.30m allocated + 85.36m add'l reserved = 100.67m bytes used,
188.55m
bytes available
IRIX nature 6.5-ALPHA-1273856320 05272156 IP22
CPU: MIPS R4400 Processor Chip Revision: 6.0
FPU: MIPS R4000 Floating Point Coprocessor Revision: 0.0
1 250 MHZ IP22 Processor
Main memory size: 128 Mbytes
Secondary unified instruction/data cache size: 2 Mbytes on Processor 0
Instruction cache size: 16 Kbytes
Data cache size: 16 Kbytes
Integral SCSI controller 0: Version WD33C93B, revision D
  Disk drive: unit 1 on SCSI controller 0
Integral SCSI controller 1: Version WD33C93B, revision D
On-board serial ports: 2
On-board bi-directional parallel port
Graphics board: High Impact
Integral Ethernet: ec0, version 1
Iris Audio Processor: version A2 revision 1.1.0
EISA bus: adapter 0

### NUMBER of LOOPS: 1 on Processor 0

Wed Jun  4 14:05:46 PDT 1997
total: 15.30m allocated + 83.36m add'l reserved = 98.66m bytes used,
190.55m bytes available

Wed Jun  4 14:10:57 PDT 1997

...

Wed Jun  4 20:16:28 PDT 1997
total: 69.89m allocated + 96.85m add'l reserved = 166.74m bytes used,
122.48m bytes available
```

The output stopped because a hang occurred.

3.2 Pandora Stress Test

The Pandora stress test is a programmable, system-level stress test. This test stresses the entire system, including the following components:

- 1 or more CPUs
- 32 MB to 4 GB of memory
- I/O hardware (SCSI and MSCSI devices)
- networking hardware (Ethernet, FDDI, and ATM interfaces)
- multiple-pipe graphics subsystem

Note: The Pandora stress test is available only for IRIX 6.4.

Pandora creates five types of processes to perform these tests: floating-point processes, memory processes, I/O processes, network processes, and graphics processes. These processes generate activity throughout the whole system by using shared resources.

It uses the following algorithm to configure the tests and control the test processes:

1. It gathers system configuration information. (It generates a *sysinfo* file if one is not available in the directory from which Pandora was started.)
2. It reads the network target systems from the *ntwkinfo* file. (If no *ntwkinfo* file is available, Pandora will not generate network processes in Step 4.)
3. It configures the test with the parameters specified in the *sysinfo* and *ntwkinfo* files.
4. It creates the processes that perform the actual testing. Table 3-1 describes the test processes that Pandora uses.

Table 3-1 Pandora Stress Test Processes

Type	Name	Description
Floating-point processes (test target = FPUs)	FPU_MATRIX_INV	FPU_MATRIX_INV processes check the floating-point units (FPUs) by randomly generating a matrix (10-by-10 to 50-by-50 elements) and computing its inverse on one CPU. Then each process randomly chooses another CPU and calculates the inverse using that CPU. If the calculated inverses are different, the processes report a miscompare between the two CPUs.
	FPU_RAND_GEN	FPU_RAND_GEN processes randomly produce a seed value and then use the seed value to generate 5,000 random floating-point numbers and a checksum on a specific CPU. The processes randomly select another CPU, repeat the process, and then compare the two checksums. If the two checksums are different, the processes report a miscompare between the two CPUs.

Table 3-1 (continued)

Pandora Stress Test Processes

Type	Name	Description
Graphics processes (test target = graphics hardware on the server side)	GFX_PIXEL	GFX_PIXEL processes randomly select a rectangle (up to 500-by-500 pixels) on each graphics pipe and draw random pixels in the rectangle. Each process performs pixel read operations and compares the results to expected values.
I/O Processes (test target = SCSI and MSCSI devices)	DIO_RANDOM	DIO_RANDOM processes perform direct input and output to all available disks in the system that have valid filesystems. These processes use random data. The processes compare the actual data received with expected data and report any mismatches.
	DIO_VECTOR	DIO_VECTOR processes perform input and output directly to all available disks in the system that have valid filesystems. The processes use the following data vectors: 0xffffffff, 0xffff0000, 0xcccccccc, 0aaaaaaaa, 0x55555555, 0x0000ffff, and 0x00000000. These processes compare the actual data with expected data and report any mismatches.
Memory processes (test target = entire storage system)	MEM_RD_ONLY	MEM_RD_ONLY processes create cache coherence-related traffic by false sharing. Pandora allows these processes to acquire exclusive and shared ownership of any of the resources that it creates for other processes.
	MEM_RD_WR	MEM_RD_WR processes test most of the memory that is installed in the system. These processes use the following types of data: <ul style="list-style-type: none"> 1. Vector 2. Random 3. Bias -> 1 4. Bias -> 0 5. Background 1's 6. Background 0's <p>The processes use the following data operand sizes:</p> <ul style="list-style-type: none"> 1. 8 bits 2. 16 bits 3. 32 bits 4. 64 bits <p>The processes use the following address generation schemes:</p> <ul style="list-style-type: none"> 1. Increment by 1. 2. Decrement by 1. 3. Increment by a stride value (a randomly generated offset value). 4. Decrement by a stride value (a randomly generated offset value). 5. Random (addresses are generated randomly). <p>The processes use the following algorithms to generate data and addresses:</p> <ul style="list-style-type: none"> 1. Use predetermined values. 2. Generate values as the test is running.

Table 3-1 (continued) Pandora Stress Test Processes

Type	Name	Description
Network processes (test target = network hardware used for connections to hosts in <i>ntwkinfo</i> file)	NTWK_FLOOD_RX	<p>NTWK_FLOOD_RX processes receive data packets that the NTWK_FLOOD_TX processes transmit.</p> <p>The NETWK_FLOOD_RX processes compare the data received with the data that was transmitted. The processes report any miscompares between received and transmitted data.</p> <p>The processes also detect any damaged, lost, or duplicate packets. To account for errors caused by network overload, congestion, and collision, the tolerance level is set to 100 percent (that is, 100 percent packet loss means there is a hardware failure). The processes report errors if the number of damaged, lost, or duplicate packets reaches the threshold limit.</p>
	NTWK_FLOOD_TX	<p>NTWK_FLOOD_TX processes quickly transmit large numbers of small packets (56 bytes each) across the network to the systems specified in the <i>ntwkinfo</i> file. This test allows a maximum of 2,048 outstanding packets at any time.</p> <p>This test uses all 0's, all 1's, and random data in the data packets.</p>
	NTWK_NORMAL_RX	<p>NTWK_NORMAL_RX process receive data packets that the NTWK_NORMAL_TX processes transmit.</p> <p>The NTWK_NORMAL_RX processes compare the data received with the data that was transmitted. The processes report any miscompares between received and transmitted data.</p> <p>The processes also detect any damaged, lost, or duplicate packets. To account for errors caused by network overload, congestion, and collision, the tolerance level is set to 100 percent (that is, 100 percent packet loss means there is a hardware failure). The processes report errors if the number of damaged, lost, or duplicate packets reaches the threshold limit.</p>
	NTWK_NORMAL_TX	<p>NTWK_NORMAL_TX processes transmit large data packets (up to 50 KB each) at a slow pace. (The processes allow only one outstanding packet per ten seconds of elapsed time.)</p> <p>Network processes check any networking hardware (for example, Ethernet, FDDI, and ATM) that is used to communicate with the target systems specified in the <i>ntwkinfo</i> file.</p>

5. It processes the activity report. The activity report summarizes information about all test processes that Pandora has run. Pandora prints the following message when it starts to process the activity report:

```
PIDpid_number Process activity report
```

6. It prints out the activity report. The following output shows an example of an activity report:

```
PID0x55c2 MEM PROCESS TYPE
PID0x55cb Test loops 47 Process loops 5 MEM_RD_ONLY
PID0x55cc Test loops 3 Process loops 5 MEM_RD_WR
PID0x55cd Test loops 9 Process loops 5 MEM_RD_WR
PID0x55c2 IO PROCESS TYPE
PID0x55ce Test loops 36 Process loops 5 DIO_VECTOR
PID0x55cf Test loops 2 Process loops 5 DIO_RANDOM
```

```

PID0x55d0 Test loops 35 Process loops 5 DIO_VECTOR
PID0x55c2 FPU PROCESS TYPE
PID0x55d1 Test loops 1 Process loops 5 FPU_RAND_GEN
PID0x55d2 Test loops 43 Process loops 5 FPU_MATRIX_INV
PID0x55d3 Test loops 1 Process loops 5 FPU_RAND_GEN
PID0x55c2 GFX PROCESS TYPE
PID0x55d4 Test loops 4 Process loops 5 GFX_PIXEL
PID0x55c2 NTKW PROCESS TYPE
PID0x55d5 Test loops 758 Process loops 5 NTKW_FLOOD_TX
PID0x55d6 Test loops 763 Process loops 5 NTKW_FLOOD_RX
PID0x55d7 Test loops 4 Process loops 5 NTKW_NORMAL_TX
PID0x55d8 Test loops 762 Process loops 5 NTKW_NORMAL_RX
PID0x55c2 Netwok activity report
PID0x55c2 T transmitted R received M miscompare
PID0x55c2 L lost Dup duplicate Dmg damaged
PID0x55c2 target mchine 192.132.196.87
PID0x55d5,0x55d6 T 3787 R 3787 M 0 L 0 Dup 0 Dmg 0 NTKW_FLOOD
PID0x55d7,0x55d8 T 19 R 18 M 1 L 1 Dup 0 Dmg 0 NTKW_NORMAL

```

7. It unmounts any disks that were used for testing.
8. It deletes any temporary files and directories that were created for testing.

Note: You can terminate Pandora execution by typing Ctrl+C at any time. When you do this, Pandora exits after completing the current loop, unmounting any disks it mounted, and removing any directories and files that it created.

3.2.1 Running the Pandora Stress Test

You can run the Pandora stress test from the FST user interface or from the IRIX prompt. You must have root privilege to run the Pandora stress test.

3.2.1.1 From the FST User Interface

To run Pandora from the FST user interface, use the PANDORA option, which runs the Pandora stress test for 30 minutes. (Refer to Section 2.4.1, "Using the PANDORA Option," for more information.)

3.2.1.2 From the IRIX Prompt

If you want to run the Pandora stress test for more than 30 minutes, run it from the IRIX prompt. To run the Pandora stress test from the IRIX prompt:

1. Enter the following command to change to the directory that contains the Pandora stress test:

```
cd /usr/diags/pandora
```
2. Create a new *sysinfo* file or modify the existing *sysinfo* file to match your system configuration, if necessary.

Note: If you do not create a *sysinfo* file, Pandora will generate a default *sysinfo* file.

Table 3-2 shows the contents of the *sysinfo* file. (All “tokens” must appear in the order that Table 3-2 shows. All numbers must be decimal.)

Table 3-2 sysinfo File Contents

Token	Description
DEBUGLEVEL	<p>The amount of debug information that the test prints (default is 3):</p> <ul style="list-style-type: none"> 0 = Print only pass or fail message when testing is completed. 1 = Print miscompare information. 2 = Print an error message if a process exits. 3 = Print a PASSED or FAILED message each time a test process completes. 4 = Print each test loop number. 5 = Print each process loop number. 6 = Print system information. 7 = Print internal state information of the test. 8 = Print an error message when a function fails. 9 = Print loop-specific information. 10 = Print information about any buffer initialization. 11 = Print function-specific information.
DEBUGDATA	<ul style="list-style-type: none"> 0 = Do not use process ID (PID) as data 1 = Use PID as data <p>(default is 0)</p> <p>Note: This setting applies only to I/O test processes.</p>
MEMSIZE	<p>Total amount of memory in the system (in MB)</p> <p>Pandora uses approximately one-half of all available memory.</p>
STACKSIZE	<p>Process stack size (must be a multiple of 1,024; the default is 65,536 bytes)</p>
DISKS	<p>Total number of locally mounted disks, followed by the actual pathnames to the directories in which Pandora can create temporary files.</p> <p>The total number of paths specified must be less than or equal to the total number of locally mounted disks; you should specify only one path per disk.</p> <p>The path is in the following format: <i>/pathname/tmp_pandora</i>.</p> <p>For example:</p> <pre>3 /usr/tmp/tmp_pandora (root disk) /d1/tmp_pandora (optional drive that was already mounted) /usr/tmp/tmpmntx/tmp_pandora (where x = 0, 1, or 2) (drive that Pandora mounted)</pre>
FILESIZE	<p>The maximum file size that each I/O process can use (must be a multiple of 4,096; the default is 409,600 bytes)</p>
TESTTIME	<p>Total number of minutes allowed for test execution (default is 30 minutes)</p> <p>If the system has 32 or fewer CPUs, set TESTTIME to 30 minutes. If the system has more than 32 CPUs, add 15 minutes for each additional group of 32 CPUs.</p>
TESTLOOPS	<p>Maximum number of test loops that Pandora should use (default is 5,000 loops)</p>
PROCLOOPS	<p>Number of times that a unit of work is repeated by a process in a region of shared memory (default is 5 times)</p>

Table 3-2 (continued) sysinfo File Contents

Token	Description
RANDNUMCNT	Maximum number of random numbers generated by the FPU_RAND_GEN processes per process loop (default is 5,000 random numbers)
IOPROCS	Number of I/O processes that Pandora should create
FPUPROCS	Number of floating-point processes that Pandora should create
MEMPROCS	Number of memory processes that Pandora should create
GFXPROCS	Number of graphics processes that Pandora should create
NTWKPROCS	Number of networking processes that Pandora should create (default is 4 processes per network target) The hosts to which network communication can occur are listed in the <i>ntwkinfo</i> file (refer to Figure 3-2).

Figure 3-1 shows an example of a *sysinfo* file.

```

hysteria# cat sysinfo
DEBUGLEVEL
3
DEBUGDATA
0
MEMSIZE
1024
STACKSIZE
65536
DISKS
4
/usr/tmp/tmp_pandora/
/d2/tmp_pandora/
/usr/tmp/tmpmnt0/tmp_pandora/
/usr/tmp/tmpmnt1/tmp_pandora/
FILESIZE
409600
TESTTIME
30
TESTLOOPS
5000
PROCLOOPS
5
RANDNUMCNT
5000
IOPROCS
8
FPUPROCS
18
MEMPROCS
24
GFXPROCS
1
NTWKPROCS
8
seagull.asd.sgi.com
192.82.172.24

```

Figure 3-1 Example of a sysinfo File

3. Create a new *ntwkinfo* file or modify the existing *ntwkinfo* file, if necessary.

Pandora also uses a *ntwkinfo* configuration file in the directory from which you run Pandora. The *ntwkinfo* file contains up to 10 systems that Pandora should use as targets for the network tests that it performs. If no *ntwkinfo* file exists, Pandora does not create any networking processes.

The first line of the file indicates how many target systems to use. The remaining lines provide the system names or Internet Protocol (IP) addresses of the target systems.

Note: If you do not create a *ntwkinfo* file, Pandora will generate a default *ntwkinfo* file.

Figure 3-2 shows an example of an *ntwkinfo* file.

```
hysteria# cat ntwkinfo
2
seagull.asd.sgi.com
192.82.172.24
```

Figure 3-2 Example of a ntwkinfo File

4. Enter the following command to start the Pandora stress test:

```
./pandora [-h | -d | -g | -t time]
```

Note: Enter only one command-line option.

Table 3-3 describes the command-line options.

Table 3-3 Pandora Command-Line Options

Option	Description
-d	Specifies that Pandora should not generate a new <i>sysinfo</i> file.
-g	Specifies that Pandora should generate a new <i>sysinfo</i> file and then exit.
-h	Specifies that Pandora should display help information, which includes a command synopsis and information about the <i>sysinfo</i> file.
-t <i>time</i>	Specifies the test execution time. The <i>time</i> variable specifies the number of minutes that Pandora should run. By default, Pandora runs for 30 minutes.

3.2.2 Output From the Pandora Stress Test

Pandora returns output to a log file in the `/usr/diags/stress/RESULTS/PANDORA/` directory. The messages that you should look for are `PASSED` messages and `FAILED` messages from the test processes.

The filename format for Pandora log files is: `pandora.LOG.processor_number`. The `processor_number` portion of the filename contains the processor on which the test was run.

3.2.2.1 Pass Messages

Each test process prints a `PASSED` message when it completes execution without detecting hardware failures. The following output shows `PASSED` messages:

```
PID0x55d5 NTKW_FLOOD_TX PASSED
PID0x55d7 NTKW_NORMAL_TX PASSED
PID0x55d2 FPU_MATRIX_INV PASSED
PID0x55ce DIO_VECTOR PASSED
PID0x55d6 NTKW_FLOOD_RX PASSED
PID0x55d0 DIO_VECTOR PASSED
PID0x55cb MEM_RD_ONLY PASSED
PID0x55d4 GFX_PIXEL PASSED
PID0x55cc MEM_RD_WR PASSED
PID0x55cf DIO_RANDOM PASSED
PID0x55d8 NTKW_NORMAL_RX PASSED
PID0x55d1 FPU_RAND_GEN PASSED
PID0x55d3 FPU_RAND_GEN PASSED
PID0x55cd MEM_RD_WR PASSED
```

If all test processes complete execution without detecting hardware failures, Pandora prints a Pandora `PASSED` message, as shown in the following output:

```
PID0x55c2 Pandora PASSED
PID0x55c2 Pandora has completed
Pandora end time: Wed Apr 9 11:23:09 1997
```

3.2.2.2 Failure Messages

If a process detects a hardware failure, it prints an `ERROR` message that indicates which test process detected the failure. The following output shows `ERROR` messages:

```
PID0x2ca8 ERROR FPU_RAND_GEN FAILED
PID0x2d29 ERROR FPU_RAND_GEN FAILED
PID0x2f60 ERROR FPU_MATRIX_INV FAILED
```

Pandora continues testing when a test process detects a failure. When all test processes have completed testing, Pandora prints a Pandora `FAILED` message, as shown in the following output:

```
PID0x77e2 Pandora FAILED
PID0x77e2 Pandora has completed
Pandora end time: Wed Apr 16 12:43:09 1997
```

After Pandora completes testing, use FRU Analyzer to determine the failing field-replaceable unit (FRU) to replace. Refer to the *FRU Analyzer Reference Guide* (part number 108-0166-002) for more information.

Table 3-4 provides the general relationship between the Pandora ERROR messages and failing hardware components. The FRU Analyzer indicates the specific FRU(s) to replace.

Table 3-4 Possible Failing Hardware Components for the Pandora Stress Test

Error Message	Failing Component	Failing FRU
ERROR DIO_RANDOM FAILED	SCSI adapter on BaseIO board, MSCSI board, or disk drive	BaseIO board, MSCSI board, or disk drive
ERROR DIO_VECTOR FAILED	SCSI adapter on BaseIO board, MSCSI board, or disk drive	BaseIO board, MSCSI board, or disk drive
ERROR FPU_MATRIX_INV FAILED	CPU	Node board that contains the failing CPU(s)
ERROR FPU_RAND_GEN FAILED	CPU	Node board that contains the failing CPU(s)
ERROR GFX_PIXEL FAILED	Graphics pipe	Graphics subsystem or host
ERROR MEM_RD_ONLY FAILED	Memory DIMM, Node board, Router board, or CPU	Memory DIMM, Node board, or Router board
ERROR MEM_RD_WR FAILED	Memory DIMM, Node board, Router board, or CPU	Memory DIMM, Node board, or Router board
ERROR NTKW_FLOOD_RX FAILED	Network interface	Network interface that corresponds to the connection being tested (Ethernet card, FDDI card, or ATM card)
ERROR NTKW_NORMAL_RX FAILED	Network interface	Network interface that corresponds to the connection being tested (Ethernet card, FDDI card, or ATM card)
ERROR NTKW_NORMAL_TX FAILED	Network interface	Network interface that corresponds to the connection being tested (Ethernet card, FDDI card, or ATM card)
ERROR NTKW_FLOOD_TX FAILED	Network interface	Network interface that corresponds to the connection being tested (Ethernet card, FDDI card, or ATM card)

3.2.3 Examples of Running the Pandora Stress Test

The following sections show example output from the Pandora stress test:

- “Successful Completion” on page 3-17
- “FPU_RAND_GEN Failures” on page 3-18
- “FPU_MATRIX_INV Failures” on page 3-19
- “GFX_PIXEL Failure” on page 3-20
- “DIO_RANDOM Failures” on page 3-20
- “MEM_RD_WR Failures” on page 3-21
- “Network Process Failures” on page 3-22

The first example shows the complete output from Pandora. The other examples show portions of the Pandora output.

3.2.3.1 Successful Completion

In the following example, the test runs on a one-CPU system and completes without errors:

```
hysteria# ./pandora
This pandora version was compiled on Apr  9 1997 @ 10:40:10 hours
Pandora start time: Wed Apr  9 11:17:37 1997
Using existing "sysinfo" file.
PID0x55d5 NTKW_FLOOD_TX PASSED
PID0x55d7 NTKW_NORMAL_TX PASSED
PID0x55d2 FPU_MATRIX_INV PASSED
PID0x55ce DIO_VECTOR PASSED
PID0x55d6 NTKW_FLOOD_RX PASSED
PID0x55d0 DIO_VECTOR PASSED
PID0x55cb MEM_RD_ONLY PASSED
PID0x55d4 GFX_PIXEL PASSED
PID0x55cc MEM_RD_WR PASSED
PID0x55cf DIO_RANDOM PASSED
PID0x55d8 NTKW_NORMAL_RX PASSED
PID0x55d1 FPU_RAND_GEN PASSED
PID0x55d3 FPU_RAND_GEN PASSED
PID0x55cd MEM_RD_WR PASSED
PID0x55c2 Process activity report
PID0x55c2 MEM PROCESS TYPE
PID0x55cb Test loops 47 Process loops 5 MEM_RD_ONLY
PID0x55cc Test loops 3 Process loops 5 MEM_RD_WR
PID0x55cd Test loops 9 Process loops 5 MEM_RD_WR
PID0x55c2 IO PROCESS TYPE
PID0x55ce Test loops 36 Process loops 5 DIO_VECTOR
PID0x55cf Test loops 2 Process loops 5 DIO_RANDOM
PID0x55d0 Test loops 35 Process loops 5 DIO_VECTOR
PID0x55c2 FPU PROCESS TYPE
PID0x55d1 Test loops 1 Process loops 5 FPU_RAND_GEN
PID0x55d2 Test loops 43 Process loops 5 FPU_MATRIX_INV
PID0x55d3 Test loops 1 Process loops 5 FPU_RAND_GEN
PID0x55c2 GFX PROCESS TYPE
PID0x55d4 Test loops 4 Process loops 5 GFX_PIXEL
```

```

PID0x55c2 NTKW PROCESS TYPE
PID0x55d5 Test loops 758 Process loops 5 NTKW_FLOOD_TX
PID0x55d6 Test loops 763 Process loops 5 NTKW_FLOOD_RX
PID0x55d7 Test loops 4 Process loops 5 NTKW_NORMAL_TX
PID0x55d8 Test loops 762 Process loops 5 NTKW_NORMAL_RX
PID0x55c2 Netwok activity report
PID0x55c2 T transmitted R received M miscompare
PID0x55c2 L lost Dup duplicate Dmg damaged
PID0x55c2 target mchine 192.132.196.87
PID0x55d5,0x55d6 T 3787 R 3787 M 0 L 0 Dup 0 Dmg 0 NTKW_FLOOD
PID0x55d7,0x55d8 T 19 R 18 M 1 L 1 Dup 0 Dmg 0 NTKW_NORMAL
PID0x55c2 Pandora PASSED
PID0x55c2 Pandora has completed
Pandora end time: Wed Apr 9 11:23:09 1997

```

3.2.3.2 FPU_RAND_GEN Failures

The following two examples show hardware failures detected by the FPU_RAND_GEN test process.

Example 1

The following output shows a miscompare between the actual and expected checksums for the FPU_RAND_GEN process:

```

PID0x2ca8 ERROR FPU_RAND_GEN FAILED
PID0x2ca8 TLoop 20 PLoop 3
PID0x2ca8 Expected random check sum 1500716.625000
PID0x2ca8 Actual random check sum 1250015.123000
PID0x2ca8 Failing cpu 0

```

In this example, the failing hardware is CPU0. The failing FRU is the Node board that contains CPU0.

Example 2

The following output shows a miscompare between the checksums generated on two different CPUs (CPU3 and CPU18) for the FPU_RAND_GEN process:

```

PID0x2d29 ERROR FPU_RAND_GEN FAILED
PID0x2d29 TLoop 18 PLoop 4
PID0x2d29 Expected random check sum 1500716.625000
PID0x2d29 Actual random check sum 1500716.624000
PID0x2d29 Current cpu 3
PID0x2d29 Previous cpu 18

```

In this example, the failing hardware is the current CPU being tested, which is CPU3. The failing FRU is the Node board that contains the failing CPU.

3.2.3.3 FPU_MATRIX_INV Failures

The following two examples show hardware failures detected by the FPU_MATRIX_INV test process.

Example 1

The following output shows a miscompare between the inverses calculated on the two CPUs (CPU13 and CPU2):

```
PID0x2f60 Matrix (A-1)[13][13] miscompare
PID0x2f60 PAI[11][11] -1.084523e-25 CAI[11][11] -1.084615e-29
PID0x2f60 TLoop 23 PLoop 3
PID0x2f60 Previous cpu 13
PID0x2f60 Current cpu 2
PID0x2f60 fpuCheckResult FAILED
PID0x2f60 ERROR FPU_MATRIX_INV FAILED
```

The PAI value (-1.084523e-25) is the inverse value calculated on the first CPU (CPU13). The CAI value (-1.084615e-29) is the inverse calculated on the current CPU (CPU2).

The failing hardware is either CPU13 or CPU2. The failing FRU is the Node board that contains the failing CPU.

Example 2

The following output shows a miscompare between the identity matrix calculated on the two CPUs (CPU39 and CPU126):

```
PID0x2f7e Matrix (I)[34][34] miscompare
PID0x2f7e PI[23][23] 1.550000e+00 CI[23][23] 1.000000e+00
PID0x2f7e TLoop 15 PLoop 0
PID0x2f7e Previous cpu 39
PID0x2f7e Current cpu 126
PID0x2f7e fpuCheckResult FAILED
PID0x2f7e ERROR FPU_MATRIX_INV FAILED
```

The PI value (1.550000e+00) is the identity matrix value calculated on the first CPU (CPU39). The CI value (1.000000e+00) is the identity matrix value calculated on the current CPU (CPU126).

The failing hardware is either CPU39 or CPU126. The failing FRU is the Node board that contains the failing CPU.

3.2.3.4 GFX_PIXEL Failure

The following output indicates that a GFX_PIXEL process detected a pixel miscompare:

```
PID0x308a gfxPixelCompareResult FAILED
PID0x308a Index 0
PID0x308a TLoop 0 PLoop 5
PID0x308a test type GFX_PIXEL
PID0x308a pixel buff size (floats) 0x44223 279075
PID0x308a Expt[106] 0.396465
PID0x308a Recv[106] 0.397654
PID0x308a Expt buff start vaddr 0x10999a60
PID0x308a Recv buff start vaddr 0x10c76128
PID0x308a Expt buff failing vaddr 0x10999a60
PID0x308a Recv buff failing vaddr 0x10c76128
PID0x308a ERROR GFX_PIXEL FAILED
```

Run FRU Analyzer to determine the failing FRU.

3.2.3.5 DIO_RANDOM Failures

The following two examples show hardware failures detected by the DIO_RANDOM test process.

Example 1

The following output indicates that a DIO_RANDOM process detected mismatches between received and expected data:

```
PID0x314d dioBufCompare FAILED
PID0x314d Index 1
PID0x314d Test file name /d1/pandora/pandora_1
PID0x314d Process type name DIO_RANDOM
PID0x314d Buffer size 0x64000
PID0x314d Expt[0] 0x0000000000000000a
PID0x314d Recv[0] 0xfe077de392728639
PID0x314d Syndrom 0xfe077de392728633
PID0x314d Expt buffer start vaddr 0x11dc9d80
PID0x314d Recv buffer start vaddr 0x11e2de00
PID0x314d Expt buffer failing vaddr 0x11dc9d80
PID0x314d Recv buffer failing vaddr 0x11e2de00
PID0x314d EXPT[0]0x0000000000000000a RECV[0]0xffffffffffffffff
PID0x314d TLoop 0 PLoop 0
PID0x314d ERROR DIO_VECTOR FAILED
```

Run FRU Analyzer to determine the failing FRU.

Example 2

The following output indicates that a DIO_RANDOM process detected mismatches between received and expected data:

```
PID0x314d dioBufCompare FAILED
PID0x314d Index 1
PID0x314d Test file name /dl/pandora/pandora_1
PID0x314d Process type name DIO_RANDOM
PID0x314d Buffer size 0x64000
PID0x314d Expt[0] 0x000000000000000a
PID0x314d Recv[0] 0xfe077de392728639
PID0x314d Syndrom 0xfe077de392728633
PID0x314d Expt buffer start vaddr 0x11dc9d80
PID0x314d Recv buffer start vaddr 0x11e2de00
PID0x314d Expt buffer failing vaddr 0x11dc9d80
PID0x314d Recv buffer failing vaddr 0x11e2de00
PID0x314d EXPT[0]0x000000000000000a RECV[0]0xfe077de392728639
PID0x314d TLoop 0 PLoop 0
PID0x314d ERROR DIO_RANDOM FAILED
```

Run FRU Analyzer to determine the failing FRU.

3.2.3.6 MEM_RD_WR Failures

The following two examples show hardware failures detected by the MEM_RD_WR test process.

Example 1

The following output shows a mismatch between received and expected data for a MEM_RD_WR process:

```
PID0x31a5 Expt 0x3d Recv 0x2
PID0x31a5 Ploop 3
PID0x31a5 tloop 102
PID0x31a5 memIntenseAddrCollision FAILED
PID0x31a5 ERROR MEM_RD_WR FAILED
```

Run the FRU Analyzer to determine the failing FRU.

Example 2

The following output shows a mismatch between expected and received values at address 0x10026a58 for a MEM_RD_WR process:

```
PID0x31ff memOOTFAddrSeqIncDgenRand FAILED
PID0x31ff ulonglong dsize 3
PID0x31ff Saddr 0x10026a50 Addr block size 0x8 Cnt 0
PID0x31ff Addr 0x10026a58 Expt 0x20af7b437a396b7e Recv 0xdc19c358f9108b73
PID0x31ff Syndrome 0xfcb6b81b8329e00d
PID0x31ff mop FAILED
PID0x31ff ploop 0
PID0x31ff memExerciseFunction FAILED
PID0x31ff tloop 1
PID0x31ff ERROR MEM_RD_WR FAILED
```

Run FRU Analyzer to determine the failing FRU.

3.2.3.7 Network Process Failures

The following three examples show failures detected by the network test processes.

Example 1

The following output shows a miscompare between the actual and expected packet data for a network process:

```
PID0x55d8 ntwkComparePacket failed
PID0x55d8 compare type 2
PID0x55d8 Seq_id 8 Count 11549 Expt 0xff Recv 0xbc
```

If the process is a NTKW_FLOOD_RX process, one of the next few lines is

```
PID0x55d8 ERROR NTKW_FLOOD_RX
```

If the process is a NTKW_FLOOD_TX process, one of the next few lines is

```
PID0x55d8 ERROR NTKW_FLOOD_TX
```

If the process is a NTKW_NORMAL_RX process, one of the next few lines is

```
PID0x55d8 ERROR NTKW_NORMAL_RX
```

If the process is a NTKW_NORMAL_TX process, one of the next few lines is

```
PID0x55d8 ERROR NTKW_NORMAL_TX
```

Run FRU Analyzer to determine the failing FRU.

Example 2

The following output shows that 643 data packet miscompares were detected by a NTKW_FLOOD_FX process:

```
PID0x3267 ntwkComparePacket failed
PID0x3267 compare type 0
PID0x3267 Seq_id 641 Count 0 Expt 0x1f Recv 0x1e
PID0x3267 target chiki.mfg.sgi.com
PID0x3267 643 data miscompare packets
PID0x3267 ERROR NTKW_FLOOD_RX FAILED
```

The failing hardware is the network interface or connection to the target system (chiki.mfg.sgi.com in this example). Run FRU Analyzer to determine the failing FRU.

Example 3

The following output shows that two data packet mismatches were detected by a NTKW_NORMAL_RX process:

```
PID0x3269 ntwkComparePacket failed
PID0x3269 compare type 0
PID0x3269 Seq_id 2 Count 0 Expt 0x64 Recv 0x63
PID0x3269 target chiki.mfg.sgi.com
PID0x3269 2 data mismatch packets
PID0x3269 ERROR NTKW_NORMAL_RX FAILED
```

The failing hardware is the network interface or connection to the target system (chiki.mfg.sgi.com in this example). Run FRU Analyzer to determine the failing FRU.

Appendix A

Test Case Files in the Current Diagnostic Release

The appendix includes all test case files that are included in the current diagnostic release.

A.1 Files in the TEST/62/ Directory

The *TEST/62/* directory contains test case files for use with IRIX 5.3 and IRIX 6.2 only.

A.1.1 CFG_TC_ONE

```
#### The first string of the line indicate the swap space(Mbytes), the second
#   string of the line indicate the test cases

# use the same files for all the swap range for now
50     TEST/COM/ONE_NG_15M
```

A.1.2 CFG_TC_ONE_GFX

```
#### The first string of the line indicate the swap space(Mbytes), the second
#   string of the line indicate the test cases

# $$$ note, use the same file for now
200    TEST/62/ONE_200_15M
100    TEST/62/ONE_100_15M
50     TEST/62/ONE_50_15M
```

A.1.3 ONE_50_15M

```
# The test will be run about 15 mins.

# from OS62
./field_stress -s -A -l 1 -w 1 -f TEST/62/one_mix_100.a

# from OS_COM
./field_stress -s -A -l 1 -w 1 -f TEST/COM/one_mix_100.a
```

```
### The PATH will be given at the run time
pandora -t 6
```

A.1.4 ONE_100_15M

```
# The test will be run about 15 mins.

# from OS62
./field_stress -s -A -l 1 -w 1 -f TEST/62/one_mix_100.a

# from OS_COM
./field_stress -s -A -l 1 -w 1 -f TEST/COM/one_mix_100.a

### The PATH will be given at the run time
pandora -t 6
```

A.1.5 ONE_100_2HR

```
# The test will be run about 2 hrs.

# from COM; about 5
./field_stress -s -A -l 1 -w 1 -f TEST/COM/x_ps.a

# about 5 min
./field_stress -s -A -l 1 -w 1 -f TEST/62/img_dsk.a

# about 15
./field_stress -s -A -l 2 -w 2 -f TEST/62/one_mix_100.a

### The PATH will be given at the run time; about 9 min
pandora -t 10

# from COM; about 15
./field_stress -s -A -l 1 -w 8 -f TEST/COM/one_mix_100.a

# about 5
./field_stress -s -A -l 1 -w 1 -f TEST/62/img_dms.a

### The PATH will be given at the run time
pandora -t 10

# from COM; about 10
./field_stress -s -A -l 1 -w 2 -f TEST/COM/unix_eoe.a

# about 5
./field_stress -s -A -l 1 -w 1 -f TEST/62/imgview.a

# about 5
./field_stress -s -A -l 1 -w 1 -f TEST/62/img_prnt.a

# from COM; about 10
./field_stress -s -A -l 1 -w 3 -f TEST/COM/one_mtxp_100.a
```

```
### The PATH will be given at the run time
pandora -t 6

# from COM; about 5
./field_stress -s -A -l 1 -w 2 -f TEST/COM/one_mtxp_100.a

# from COM; about 5
./field_stress -s -A -l 1 -w 2 -f TEST/COM/mv_txcn_x_ps.a
```

A.1.6 ONE_200_15M

```
### the test will run about 15m
./field_stress -s -A -l 1 -w 1 -f TEST/62/img_mix.a
./field_stress -s -A -l 1 -w 1 -f TEST/COM/one_mtxp_180.a

### TESTBIN
pandora -t 6
```

A.1.7 ONE_200_2HR

```
# The test will be run about 2 hrs for one loop.

### The PATH will be given at the run time
pandora -t 15

# about 10
./field_stress -s -A -l 1 -w 2 -f TEST/62/one_mix_200.a

# about 5
./field_stress -s -A -l 1 -w 1 -f TEST/62/img_mix.a

# about 10
./field_stress -s -A -l 2 -w 1 -f TEST/62/one_mix_100.a

### The PATH will be given at the run time; about 10 min
pandora -t 10

# from COM; about 10
./field_stress -s -A -l 1 -w 2 -f TEST/COM/one_mix_100.a

# from COM; about 10
./field_stress -s -A -l 1 -w 2 -f TEST/COM/mv_txcn_x_ps.a

# from COM; about 10
./field_stress -s -A -l 1 -w 2 -f TEST/COM/unix_eoe.a

# about 5
./field_stress -s -A -l 1 -w 1 -f TEST/62/img_sc_wbmg.a
```

```
### The PATH will be given at the run time
pandora -t 6

# about 5
./field_stress -s -A -l 1 -w 1 -f TEST/62/img_sc_prnt.a

# from COM; about 15
./field_stress -s -A -l 1 -w 5 -f TEST/COM/one_mix_200.a

# from COM; about 5
./field_stress -s -A -l 1 -w 1 -f TEST/COM/one_mtxp_180.a
```

A.1.8 img_dms.a

```
### imgview_demos 80M

TESTBIN/sof
imgview /usr/demos/data/images/IndiZone.rgb
imgview /usr/demos/data/images/TechMarketing.rgb
imgview /usr/demos/data/images/flowers2.rgb
imgview /usr/demos/data/images/george.rgb
imgview /usr/demos/data/images/smallmax.rgb
imgview /usr/demos/data/textures/aztecNM.rgb
imgview /usr/demos/data/textures/balmoral.rgb
imgview /usr/demos/data/textures/brick.rgb
imgview /usr/demos/data/textures/brick2.rgb
imgview /usr/demos/data/textures/bushdog.rgb
imgview /usr/demos/data/textures/cafe.rgb
imgview /usr/demos/data/textures/carl.rgb
imgview /usr/demos/data/textures/coke.rgb
imgview /usr/demos/data/textures/contour.rgb
imgview /usr/demos/data/textures/corinth.rgb
imgview /usr/demos/data/textures/cv.rgb
imgview /usr/demos/data/textures/flowers.rgb
imgview /usr/demos/data/textures/guarana.rgb
imgview /usr/demos/data/textures/henry.rgb
imgview /usr/demos/data/textures/marble.rgb
imgview /usr/demos/data/textures/material.rgb
imgview /usr/demos/data/textures/mose.rgb
imgview /usr/demos/data/textures/oak.rgb
imgview /usr/demos/data/textures/paper.rgb
imgview /usr/demos/data/textures/re_coke.rgb
imgview /usr/demos/data/textures/redmar.rgb
imgview /usr/demos/data/textures/sea.rgb
imgview /usr/demos/data/textures/sign.rgb
imgview /usr/demos/data/textures/spotlight.rgb
```

A.1.9 img_dsk.a

```
# imgview_sysadmdesktop 80M

TESTBIN/sof
imgview /usr/Cadmin/images/4D25.sgi
imgview /usr/Cadmin/images/4D35.sgi
imgview /usr/Cadmin/images/Challenge.sgi
imgview /usr/Cadmin/images/Crimson.sgi
imgview /usr/Cadmin/images/Indigo.sgi
imgview /usr/Cadmin/images/Indigo2.sgi
imgview /usr/Cadmin/images/IndigoR4000.sgi
imgview /usr/Cadmin/images/Indy.sgi
imgview /usr/Cadmin/images/Onyx.sgi
imgview /usr/Cadmin/images/PowerChallenge.sgi
imgview /usr/Cadmin/images/bdisk.sgi
imgview /usr/Cadmin/images/cdrom.sgi
imgview /usr/Cadmin/images/cloginlogo.rgb
imgview /usr/Cadmin/images/cpu.sgi
imgview /usr/Cadmin/images/dat.sgi
imgview /usr/Cadmin/images/disk.sgi
imgview /usr/Cadmin/images/floppy.sgi
imgview /usr/Cadmin/images/kaleidoscope.sgi
imgview /usr/Cadmin/images/llogo.sgi
imgview /usr/Cadmin/images/logo.sgi
imgview /usr/Cadmin/images/qic.sgi
imgview /usr/Cadmin/images/user.rgb
```

A.1.10 img_mix.a

```
###imgview_demos_sysadmdesktop_webmagic.o 190M

### imgview_demos 80M

TESTBIN/sof
imgview /usr/demos/data/images/IndiZone.rgb
imgview /usr/demos/data/images/TechMarketing.rgb
imgview /usr/demos/data/images/flowers2.rgb
imgview /usr/demos/data/images/george.rgb
imgview /usr/demos/data/images/smallmax.rgb
imgview /usr/demos/data/textures/aztecNM.rgb
imgview /usr/demos/data/textures/balmoral.rgb
imgview /usr/demos/data/textures/brick.rgb
imgview /usr/demos/data/textures/brick2.rgb
imgview /usr/demos/data/textures/bushdog.rgb
imgview /usr/demos/data/textures/cafe.rgb
imgview /usr/demos/data/textures/carl.rgb
imgview /usr/demos/data/textures/coke.rgb
imgview /usr/demos/data/textures/contour.rgb
imgview /usr/demos/data/textures/corinth.rgb
imgview /usr/demos/data/textures/cv.rgb
imgview /usr/demos/data/textures/flowers.rgb
imgview /usr/demos/data/textures/guarana.rgb
imgview /usr/demos/data/textures/henry.rgb
imgview /usr/demos/data/textures/marble.rgb
```

```
imgview /usr/demos/data/textures/material.rgb
imgview /usr/demos/data/textures/mose.rgb
imgview /usr/demos/data/textures/oak.rgb
imgview /usr/demos/data/textures/paper.rgb
imgview /usr/demos/data/textures/re_coke.rgb
imgview /usr/demos/data/textures/redmar.rgb
imgview /usr/demos/data/textures/sea.rgb
imgview /usr/demos/data/textures/sign.rgb
imgview /usr/demos/data/textures/spotlight.rgb
# imgview_sysadmdesktop 80M
```

```
TESTBIN/sof
imgview /usr/Cadmin/images/4D25.sgi
imgview /usr/Cadmin/images/4D35.sgi
imgview /usr/Cadmin/images/Challenge.sgi
imgview /usr/Cadmin/images/Crimson.sgi
imgview /usr/Cadmin/images/Indigo.sgi
imgview /usr/Cadmin/images/Indigo2.sgi
imgview /usr/Cadmin/images/IndigoR4000.sgi
imgview /usr/Cadmin/images/Indy.sgi
imgview /usr/Cadmin/images/Onyx.sgi
imgview /usr/Cadmin/images/PowerChallenge.sgi
imgview /usr/Cadmin/images/bdisk.sgi
imgview /usr/Cadmin/images/cdrom.sgi
imgview /usr/Cadmin/images/cloginlogo.rgb
imgview /usr/Cadmin/images/cpu.sgi
imgview /usr/Cadmin/images/dat.sgi
imgview /usr/Cadmin/images/disk.sgi
imgview /usr/Cadmin/images/floppy.sgi
imgview /usr/Cadmin/images/kaleidoscope.sgi
imgview /usr/Cadmin/images/llogo.sgi
imgview /usr/Cadmin/images/logo.sgi
imgview /usr/Cadmin/images/qic.sgi
imgview /usr/Cadmin/images/user.rgb
### imgview_webmagic 30M
```

```
TESTBIN/sof
imgview /usr/share/WebMagic/templates/template_images/graphicblue.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicbrown.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicgreen.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicmaroon.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicpurple.rgb
```

A.1.11 img_prnt.a

```
### imgview_print 80M
```

```
TESTBIN/sof
imgview /usr/lib/mediaw/mediaw_logo.rgb
imgview /usr/lib/print/images/bw.ps.busted.rgb
imgview /usr/lib/print/images/bw.ps.busy.rgb
imgview /usr/lib/print/images/bw.ps.idle.rgb
imgview /usr/lib/print/images/bw.raster.busted.rgb
imgview /usr/lib/print/images/bw.raster.busy.rgb
imgview /usr/lib/print/images/bw.raster.idle.rgb
```

```

imgview /usr/lib/print/images/color.ps.busted.rgb
imgview /usr/lib/print/images/color.ps.busy.rgb
imgview /usr/lib/print/images/color.ps.idle.rgb
imgview /usr/lib/print/images/color.raster.busted.rgb
imgview /usr/lib/print/images/color.raster.busy.rgb
imgview /usr/lib/print/images/color.raster.idle.rgb
imgview /usr/lib/print/images/dumb.busted.rgb
imgview /usr/lib/print/images/dumb.busy.rgb
imgview /usr/lib/print/images/dumb.color.busted.rgb
imgview /usr/lib/print/images/dumb.color.busy.rgb
imgview /usr/lib/print/images/dumb.color.idle.rgb
imgview /usr/lib/print/images/dumb.idle.rgb
imgview /usr/lib/print/images/mono.ps.busted.rgb
imgview /usr/lib/print/images/mono.ps.busy.rgb
imgview /usr/lib/print/images/mono.ps.idle.rgb
imgview /usr/lib/print/images/plotter.busted.rgb
imgview /usr/lib/print/images/plotter.busy.rgb
imgview /usr/lib/print/images/plotter.idle.rgb

```

A.1.12 img_sc_prnt.a

```

### imgview_showcase_print 170M

```

```

### imgview_showcase 90M
# TESTBIN/use_more_swap 30

```

```

TESTBIN/sof
TESTBIN/sof

```

```

imgview /usr/share/WebMagic/templates/template_images/graphicblue.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicbrown.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicgreen.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicmaroon.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicpurple.rgb

```

```

imgview /usr/share/data/images/TestPattern.rgb
imgview /usr/share/data/textures/reflect/black.marble.room.rgb
imgview /usr/share/data/textures/reflect/cafe.rgb
imgview /usr/share/data/textures/reflect/cathedral.rgb
imgview /usr/share/data/textures/reflect/checkers.rgb
imgview /usr/share/data/textures/reflect/cube.rgb
imgview /usr/share/data/textures/reflect/flowers.rgb
imgview /usr/share/data/textures/reflect/market.rgb
imgview /usr/share/data/textures/reflect/office.rgb
imgview /usr/share/data/textures/reflect/people.rgb
imgview /usr/share/data/textures/reflect/rail.station.rgb
imgview /usr/share/data/textures/reflect/river.rgb
imgview /usr/share/data/textures/reflect/temple.rgb
imgview /usr/share/data/textures/surfaces/abruzzo.rgb
imgview /usr/share/data/textures/surfaces/birch.rgb
imgview /usr/share/data/textures/surfaces/blue.gold.tile.rgb
imgview /usr/share/data/textures/surfaces/blue.tile.rgb
imgview /usr/share/data/textures/surfaces/brick.1.rgb
imgview /usr/share/data/textures/surfaces/brick.2.rgb
imgview /usr/share/data/textures/surfaces/colorful.tile.1.rgb

```

```
imgview /usr/share/data/textures/surfaces/colorful.tile.2.rgb
imgview /usr/share/data/textures/surfaces/fish.tile.rgb
imgview /usr/share/data/textures/surfaces/garnet.rgb
imgview /usr/share/data/textures/surfaces/green.marble.2.rgb
imgview /usr/share/data/textures/surfaces/green.tile.rgb
imgview /usr/share/data/textures/surfaces/oak.rgb
imgview /usr/share/data/textures/surfaces/rock.face.1.rgb
imgview /usr/share/data/textures/surfaces/rock.face.2.rgb
imgview /usr/share/data/textures/surfaces/small.pink.tile.rgb
imgview /usr/share/data/textures/surfaces/tan.tile.rgb
imgview /usr/share/data/textures/surfaces/terra.cotta.rgb
imgview /usr/share/data/textures/surfaces/wood.4.rgb
imgview /usr/share/data/textures/textiles/cotton.rgb
imgview /usr/share/data/textures/textiles/quilt.rgb
imgview /usr/share/data/textures/textiles/speck.paper.rgb
### imgview_print 80M
```

```
TESTBIN/sof
imgview /usr/lib/mediaw/mediaw_logo.rgb
imgview /usr/lib/print/images/bw.ps.busted.rgb
imgview /usr/lib/print/images/bw.ps.busy.rgb
imgview /usr/lib/print/images/bw.ps.idle.rgb
imgview /usr/lib/print/images/bw.raster.busted.rgb
imgview /usr/lib/print/images/bw.raster.busy.rgb
imgview /usr/lib/print/images/bw.raster.idle.rgb
imgview /usr/lib/print/images/color.ps.busted.rgb
imgview /usr/lib/print/images/color.ps.busy.rgb
imgview /usr/lib/print/images/color.ps.idle.rgb
imgview /usr/lib/print/images/color.raster.busted.rgb
imgview /usr/lib/print/images/color.raster.busy.rgb
imgview /usr/lib/print/images/color.raster.idle.rgb
imgview /usr/lib/print/images/dumb.busted.rgb
imgview /usr/lib/print/images/dumb.busy.rgb
imgview /usr/lib/print/images/dumb.color.busted.rgb
imgview /usr/lib/print/images/dumb.color.busy.rgb
imgview /usr/lib/print/images/dumb.color.idle.rgb
imgview /usr/lib/print/images/dumb.idle.rgb
imgview /usr/lib/print/images/mono.ps.busted.rgb
imgview /usr/lib/print/images/mono.ps.busy.rgb
imgview /usr/lib/print/images/mono.ps.idle.rgb
imgview /usr/lib/print/images/plotter.busted.rgb
imgview /usr/lib/print/images/plotter.busy.rgb
imgview /usr/lib/print/images/plotter.idle.rgb
```

A.1.13 img_sc_wbmg.a

```
### totaol 120M
```

```
### imgview_webmagic 30M
```

```
TESTBIN/sof
imgview /usr/share/WebMagic/templates/template_images/graphicblue.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicbrown.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicgreen.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicmaroon.rgb
```

```
imgview /usr/share/WebMagic/templates/template_images/graphicpurple.rgb
### imgview_showcase 90M
```

```
TESTBIN/sof
```

```
imgview /usr/share/WebMagic/templates/template_images/graphicblue.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicbrown.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicgreen.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicmaroon.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicpurple.rgb
```

```
imgview /usr/share/data/images/TestPattern.rgb
imgview /usr/share/data/textures/reflect/black.marble.room.rgb
imgview /usr/share/data/textures/reflect/cafe.rgb
imgview /usr/share/data/textures/reflect/cathedral.rgb
imgview /usr/share/data/textures/reflect/checkers.rgb
imgview /usr/share/data/textures/reflect/cube.rgb
imgview /usr/share/data/textures/reflect/flowers.rgb
imgview /usr/share/data/textures/reflect/market.rgb
imgview /usr/share/data/textures/reflect/office.rgb
imgview /usr/share/data/textures/reflect/people.rgb
imgview /usr/share/data/textures/reflect/rail.station.rgb
imgview /usr/share/data/textures/reflect/river.rgb
imgview /usr/share/data/textures/reflect/temple.rgb
imgview /usr/share/data/textures/surfaces/abruzzo.rgb
imgview /usr/share/data/textures/surfaces/birch.rgb
imgview /usr/share/data/textures/surfaces/blue.gold.tile.rgb
imgview /usr/share/data/textures/surfaces/blue.tile.rgb
imgview /usr/share/data/textures/surfaces/brick.1.rgb
imgview /usr/share/data/textures/surfaces/brick.2.rgb
imgview /usr/share/data/textures/surfaces/colorful.tile.1.rgb
imgview /usr/share/data/textures/surfaces/colorful.tile.2.rgb
imgview /usr/share/data/textures/surfaces/fish.tile.rgb
imgview /usr/share/data/textures/surfaces/garnet.rgb
imgview /usr/share/data/textures/surfaces/green.marble.2.rgb
imgview /usr/share/data/textures/surfaces/green.tile.rgb
imgview /usr/share/data/textures/surfaces/oak.rgb
imgview /usr/share/data/textures/surfaces/rock.face.1.rgb
imgview /usr/share/data/textures/surfaces/rock.face.2.rgb
imgview /usr/share/data/textures/surfaces/small.pink.tile.rgb
imgview /usr/share/data/textures/surfaces/tan.tile.rgb
imgview /usr/share/data/textures/surfaces/terra.cotta.rgb
imgview /usr/share/data/textures/surfaces/wood.4.rgb
imgview /usr/share/data/textures/textiles/cotton.rgb
imgview /usr/share/data/textures/textiles/quilt.rgb
imgview /usr/share/data/textures/textiles/speck.paper.rgb
```

A.1.14 imgview.a

```
### imgview 100M
```

```
TESTBIN/sof
```

```
imgview /usr/Cadmin/images/4D25.sgi
imgview /usr/Cadmin/images/4D35.sgi
imgview /usr/Cadmin/images/Challenge.sgi
```

```
imgview /usr/Cadmin/images/Crimson.sgi
imgview /usr/Cadmin/images/Indigo.sgi
imgview /usr/Cadmin/images/Indigo2.sgi
imgview /usr/Cadmin/images/IndigoR4000.sgi
imgview /usr/Cadmin/images/Indy.sgi
imgview /usr/Cadmin/images/Onyx.sgi
imgview /usr/Cadmin/images/PowerChallenge.sgi
imgview /usr/Cadmin/images/bdisk.sgi
imgview /usr/Cadmin/images/cdrom.sgi
imgview /usr/Cadmin/images/cloginlogo.rgb
imgview /usr/Cadmin/images/cpu.sgi
imgview /usr/Cadmin/images/dat.sgi
imgview /usr/Cadmin/images/disk.sgi
imgview /usr/Cadmin/images/floppy.sgi
imgview /usr/Cadmin/images/kaleidoscope.sgi
imgview /usr/Cadmin/images/llogo.sgi
imgview /usr/Cadmin/images/logo.sgi
imgview /usr/Cadmin/images/qic.sgi
imgview /usr/Cadmin/images/user.rgb

imgview /usr/demos/data/images/IndiZone.rgb
imgview /usr/demos/data/images/TechMarketing.rgb
imgview /usr/demos/data/images/flowers2.rgb
imgview /usr/demos/data/images/george.rgb
imgview /usr/demos/data/images/smallmax.rgb
imgview /usr/demos/data/textures/aztecNM.rgb
imgview /usr/demos/data/textures/balmoral.rgb
imgview /usr/demos/data/textures/brick.rgb
imgview /usr/demos/data/textures/brick2.rgb
imgview /usr/demos/data/textures/bushdog.rgb
imgview /usr/demos/data/textures/cafe.rgb
imgview /usr/demos/data/textures/carl.rgb
imgview /usr/demos/data/textures/coke.rgb
imgview /usr/demos/data/textures/contour.rgb
imgview /usr/demos/data/textures/corinth.rgb
imgview /usr/demos/data/textures/cv.rgb
imgview /usr/demos/data/textures/flowers.rgb
imgview /usr/demos/data/textures/guarana.rgb
imgview /usr/demos/data/textures/henry.rgb
imgview /usr/demos/data/textures/marble.rgb
imgview /usr/demos/data/textures/material.rgb
imgview /usr/demos/data/textures/mose.rgb
imgview /usr/demos/data/textures/oak.rgb
imgview /usr/demos/data/textures/paper.rgb
imgview /usr/demos/data/textures/re_coke.rgb
imgview /usr/demos/data/textures/redmar.rgb
imgview /usr/demos/data/textures/sea.rgb
imgview /usr/demos/data/textures/sign.rgb
imgview /usr/demos/data/textures/spotlight.rgb

imgview /usr/lib/mediaw/mediaw_logo.rgb
imgview /usr/lib/print/images/bw.ps.busted.rgb
imgview /usr/lib/print/images/bw.ps.busy.rgb
imgview /usr/lib/print/images/bw.ps.idle.rgb
imgview /usr/lib/print/images/bw.raster.busted.rgb
imgview /usr/lib/print/images/bw.raster.busy.rgb
imgview /usr/lib/print/images/bw.raster.idle.rgb
```

```

imgview /usr/lib/print/images/color.ps.busted.rgb
imgview /usr/lib/print/images/color.ps.busy.rgb
imgview /usr/lib/print/images/color.ps.idle.rgb
imgview /usr/lib/print/images/color.raster.busted.rgb
imgview /usr/lib/print/images/color.raster.busy.rgb
imgview /usr/lib/print/images/color.raster.idle.rgb
imgview /usr/lib/print/images/dumb.busted.rgb
imgview /usr/lib/print/images/dumb.busy.rgb
imgview /usr/lib/print/images/dumb.color.busted.rgb
imgview /usr/lib/print/images/dumb.color.busy.rgb
imgview /usr/lib/print/images/dumb.color.idle.rgb
imgview /usr/lib/print/images/dumb.idle.rgb
imgview /usr/lib/print/images/mono.ps.busted.rgb
imgview /usr/lib/print/images/mono.ps.busy.rgb
imgview /usr/lib/print/images/mono.ps.idle.rgb
imgview /usr/lib/print/images/plotter.busted.rgb
imgview /usr/lib/print/images/plotter.busy.rgb
imgview /usr/lib/print/images/plotter.idle.rgb

imgview /usr/people/tour/oob/pictures/connect/connections_credit.rgb
imgview /usr/people/tour/oob/pictures/connect/helpConnections.rgb
imgview /usr/people/tour/oob/pictures/earth/earth_credit.rgb
imgview /usr/people/tour/oob/pictures/earth/eec.rgb
imgview /usr/people/tour/oob/pictures/earth/fan0.rgb
imgview /usr/people/tour/oob/pictures/earth/lake.dp.rgb
imgview /usr/people/tour/oob/pictures/earth/mideast.rgb
imgview /usr/people/tour/oob/pictures/earth/p7yfl.f.rgb
imgview /usr/people/tour/oob/pictures/earth/sw.pacific.rgb
imgview /usr/people/tour/oob/pictures/earth/us.mskd.st.sm.rgb
imgview /usr/people/tour/oob/pictures/earth/wyo.rgb
imgview /usr/people/tour/oob/pictures/einstein/eye.rgb
imgview /usr/people/tour/oob/pictures/einstein/eyeIcons.rgb
imgview /usr/people/tour/oob/pictures/pillars/Exit.rgb
imgview /usr/people/tour/oob/pictures/pillars/colonnade_credit.rgb
imgview /usr/people/tour/oob/pictures/stopMotion/helpStopMotion.rgb
imgview /usr/people/tour/oob/pictures/stopMotion/stopMotion.rgb
imgview /usr/people/tour/oob/pictures/stopMotion/stopMotionWait.rgb
imgview /usr/people/tour/oob/pictures/stopMotion/stopMotion_credit.rgb
imgview /usr/people/tour/oob/pictures/video/crash_credit.rgb
imgview /usr/people/tour/oob/pictures/video/gas_credit.rgb
imgview /usr/people/tour/oob/pictures/video/marionette_credit.rgb
imgview /usr/people/tour/oob/pictures/video/rome_credit.rgb
imgview /usr/people/tour/oob/pictures/video/time_credit.rgb
imgview /usr/people/tour/oob/pictures/video/video_credit.rgb

imgview /usr/share/WebMagic/templates/template_images/graphicblue.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicbrown.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicgreen.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicmaroon.rgb
imgview /usr/share/WebMagic/templates/template_images/graphicpurple.rgb

imgview /usr/share/data/images/TestPattern.rgb
imgview /usr/share/data/textures/reflect/black.marble.room.rgb
imgview /usr/share/data/textures/reflect/cafe.rgb
imgview /usr/share/data/textures/reflect/cathedral.rgb
imgview /usr/share/data/textures/reflect/checkers.rgb
imgview /usr/share/data/textures/reflect/cube.rgb

```

```

imgview /usr/share/data/textures/reflect/flowers.rgb
imgview /usr/share/data/textures/reflect/market.rgb
imgview /usr/share/data/textures/reflect/office.rgb
imgview /usr/share/data/textures/reflect/people.rgb
imgview /usr/share/data/textures/reflect/rail.station.rgb
imgview /usr/share/data/textures/reflect/river.rgb
imgview /usr/share/data/textures/reflect/temple.rgb
imgview /usr/share/data/textures/surfaces/abruzzo.rgb
imgview /usr/share/data/textures/surfaces/birch.rgb
imgview /usr/share/data/textures/surfaces/blue.gold.tile.rgb
imgview /usr/share/data/textures/surfaces/blue.tile.rgb
imgview /usr/share/data/textures/surfaces/brick.1.rgb
imgview /usr/share/data/textures/surfaces/brick.2.rgb
imgview /usr/share/data/textures/surfaces/colorful.tile.1.rgb
imgview /usr/share/data/textures/surfaces/colorful.tile.2.rgb
imgview /usr/share/data/textures/surfaces/fish.tile.rgb
imgview /usr/share/data/textures/surfaces/garnet.rgb
imgview /usr/share/data/textures/surfaces/green.marble.2.rgb
imgview /usr/share/data/textures/surfaces/green.tile.rgb
imgview /usr/share/data/textures/surfaces/oak.rgb
imgview /usr/share/data/textures/surfaces/rock.face.1.rgb
imgview /usr/share/data/textures/surfaces/rock.face.2.rgb
imgview /usr/share/data/textures/surfaces/small.pink.tile.rgb
imgview /usr/share/data/textures/surfaces/tan.tile.rgb
imgview /usr/share/data/textures/surfaces/terra.cotta.rgb
imgview /usr/share/data/textures/surfaces/wood.4.rgb
imgview /usr/share/data/textures/textiles/cotton.rgb
imgview /usr/share/data/textures/textiles/quilt.rgb
imgview /usr/share/data/textures/textiles/speck.paper.rgb

```

A.1.15 one_mix_100.a

The mix applications; will use about 100m swap space

```

TESTBIN/sof
TESTBIN/sof

```

```

# demos
/usr/demos/buttonfly
/usr/demos/bin/ideas
/usr/demos/bin/ipaint
/usr/demos/bin/newton
/usr/demos/bin/tex_cube
/usr/demos/bin/mandel
/usr/demos/bin/drip
/usr/demos/bin/atlantis
/usr/demos/bin/backtrace
/usr/demos/bin/bongo
/usr/demos/bin/ep
/usr/demos/bin/fadeflip
/usr/demos/bin/ideas_ogl

```

```

# imgview_demos 80M
imgview /usr/demos/data/images/IndiZone.rgb
imgview /usr/demos/data/images/TechMarketing.rgb

```

```
imgview /usr/demos/data/images/flowers2.rgb
imgview /usr/demos/data/images/george.rgb
imgview /usr/demos/data/images/smallmax.rgb
imgview /usr/demos/data/textures/aztecNM.rgb
imgview /usr/demos/data/textures/balmoral.rgb
imgview /usr/demos/data/textures/brick.rgb
imgview /usr/demos/data/textures/brick2.rgb
imgview /usr/demos/data/textures/bushdog.rgb
imgview /usr/demos/data/textures/cafe.rgb
imgview /usr/demos/data/textures/carl.rgb
imgview /usr/demos/data/textures/coke.rgb
imgview /usr/demos/data/textures/contour.rgb
imgview /usr/demos/data/textures/corinth.rgb
imgview /usr/demos/data/textures/cv.rgb
imgview /usr/demos/data/textures/flowers.rgb
imgview /usr/demos/data/textures/guarana.rgb
imgview /usr/demos/data/textures/henry.rgb
imgview /usr/demos/data/textures/marble.rgb
imgview /usr/demos/data/textures/material.rgb
imgview /usr/demos/data/textures/mose.rgb
imgview /usr/demos/data/textures/oak.rgb
imgview /usr/demos/data/textures/paper.rgb
imgview /usr/demos/data/textures/re_coke.rgb
imgview /usr/demos/data/textures/redmar.rgb
imgview /usr/demos/data/textures/sea.rgb
imgview /usr/demos/data/textures/sign.rgb
imgview /usr/demos/data/textures/spotlight.rgb
```

```
### from OS_COM
```

```
TESTBIN/app_loop chkconfig
```

```
TESTBIN/app_loop date '+DATE: %m/%d/%y%nTIME: %H:%M:%S'\; date -u
```

```
TESTBIN/app_loop df -b\; df -e\; df -f\; df -i\; df -k\; df -l\; df -n\; df -P\; df
-q\; df -r
```

```
TESTBIN/app_loop devnm /usr\; devnm .\; devnm /tmp
```

```
TESTBIN/app_loop diskpatch -v
```

```
TESTBIN/app_loop echo 'WARNING:\07'\; banner testing
```

```
TESTBIN/app_loop env\; printenv
```

```
TESTBIN/app_loop find / -depth
```

```
TESTBIN/app_loop ftimer\; fuser -u /etc/passwd
```

```
TESTBIN/app_loop grep -i -l -n -q -s -v anthing /var/adm/SYSLOG
```

```
TESTBIN/app_loop hinv\; hinv -v\; hinv -c processor
```

```
TESTBIN/app_loop ls -R
```

A.1.16 one_mix_200.a

```
### about 200 m
### some imgview_print 30M
imgview /usr/lib/mediaw/mediaw_logo.rgb
imgview /usr/lib/print/images/bw.ps.busted.rgb
imgview /usr/lib/print/images/bw.raster.busy.rgb
imgview /usr/lib/print/images/color.ps.idle.rgb
imgview /usr/lib/print/images/color.ps.busted.rgb
imgview /usr/lib/print/images/color.ps.busy.rgb
imgview /usr/lib/print/images/color.ps.idle.rgb
imgview /usr/lib/print/images/color.raster.busted.rgb
imgview /usr/lib/print/images/color.raster.busy.rgb
imgview /usr/lib/print/images/color.raster.idle.rgb
imgview /usr/lib/print/images/dumb.busted.rgb
imgview /usr/lib/print/images/mono.ps.busy.rgb
imgview /usr/lib/print/images/plotter.idle.rgb

### some imgview_demos 80M
TESTBIN/sof
imgview /usr/demos/data/images/IndiZone.rgb
imgview /usr/demos/data/images/TechMarketing.rgb
imgview /usr/demos/data/images/flowers2.rgb
imgview /usr/demos/data/images/george.rgb
imgview /usr/demos/data/images/smallmax.rgb
imgview /usr/demos/data/textures/aztecNM.rgb
imgview /usr/demos/data/textures/balmoral.rgb
imgview /usr/demos/data/textures/brick.rgb
imgview /usr/demos/data/textures/brick2.rgb
imgview /usr/demos/data/textures/bushdog.rgb
imgview /usr/demos/data/textures/cafe.rgb
imgview /usr/demos/data/textures/carl.rgb
imgview /usr/demos/data/textures/coke.rgb
imgview /usr/demos/data/textures/contour.rgb
imgview /usr/demos/data/textures/corinth.rgb
imgview /usr/demos/data/textures/cv.rgb
imgview /usr/demos/data/textures/flowers.rgb
imgview /usr/demos/data/textures/guarana.rgb
imgview /usr/demos/data/textures/henry.rgb
imgview /usr/demos/data/textures/marble.rgb
imgview /usr/demos/data/textures/material.rgb
imgview /usr/demos/data/textures/mose.rgb
imgview /usr/demos/data/textures/oak.rgb
imgview /usr/demos/data/textures/paper.rgb
imgview /usr/demos/data/textures/re_coke.rgb
imgview /usr/demos/data/textures/redmar.rgb
imgview /usr/demos/data/textures/sea.rgb
imgview /usr/demos/data/textures/sign.rgb
imgview /usr/demos/data/textures/spotlight.rgb

### some from OS_COM ~ 50
xpsview /usr/lib/DPS/doc/ShowPSReferenceCard.ps
TESTBIN/app_loop xpsview -batch /usr/lib/DPS/doc/ShowPSUserGuide.ps
TESTBIN/texCone
TESTBIN/texCone
movieplayer -f -l 2000 -N /usr/share/data/movies/somersault.movie
```

```

movieplayer -f -l 2000 -z 5 -N /usr/share/data/movies/somersault.movie

movieplayer -l 3000 -z 1.5 -N -S 300,200 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 3 -N -S 300,300 /usr/share/data/movies/somersault.movie
xclock -chime -hl yellow
xclock -digital
xclock -analog -hl blue -hd red
xclock

TESTBIN/app_loop chkconfig

TESTBIN/app_loop date `+DATE: %m/%d/%y%nTIME: %H:%M:%S`\; date -u

TESTBIN/app_loop df -b\; df -e\; df -f\; df -i\; df -k\; df -l\; df -n\; df -P\; df
-q\; df -r

TESTBIN/app_loop devnm /usr\; devnm .\; devnm /tmp

TESTBIN/app_loop diskpatch -v

TESTBIN/app_loop echo `WARNING:\07'\; banner testing

TESTBIN/app_loop env\; printenv

TESTBIN/app_loop find / -depth

TESTBIN/app_loop ftimer\; fuser -u /etc/passwd

TESTBIN/app_loop grep -i -l -n -q -s -v anthing /var/adm/SYSLOG

TESTBIN/app_loop hinv\; hinv -v\; hinv -c processor

TESTBIN/app_loop ls -R

```

A.2 Files in the TEST/65/ Directory

The *TEST/65/* directory contains test case files for use with IRIX 6.3 and IRIX 6.4 only.

A.2.1 CFG_TC_ONE

```

#### The first string of the line indicate the swap space(Mbytes), the second
# string of the line indicate the test cases

# use the same files for all the swap range for now
50 TEST/COM/ONE_NG_15M

```

A.2.2 CFG_TC_ONE_GFX

```

#### The first string of the line indicate the swap space(Mbytes), the second
# string of the line indicate the test cases

```

```
200     TEST/65/ONE_200_15M
100     TEST/65/ONE_100_15M
50      TEST/65/ONE_50_15M
```

A.2.3 ONE_50_15M

```
# assume default path @ /usr/diags/pandora
pandora -t 6

# from OS_COM
./field_stress -A -l 2 -w 1 -f TEST/COM/mv_txcn_50.a
./field_stress -s -A -2 1 -w 1 -f TEST/COM/x_ps.a
```

A.2.4 ONE_100_15M

```
# assume default path @ /usr/diags/pandora
pandora -t 6

# from OS_COM
./field_stress -A -l 2 -w 1 -f TEST/COM/mv_txcn_50.a
./field_stress -s -A -2 1 -w 1 -f TEST/COM/x_ps.a
nature 45% cat ONE_100_15M

# assume default path @ /usr/diags/pandora
pandora -t 6

# from OS65
./field_stress -A -l 1 -w 1 -f TEST/65/dms.a

# from OS_COM
./field_stress -s -A -l 1 -w 1 -f TEST/COM/one_mix_100.a
./field_stress -A -l 1 -w 1 -f TEST/COM/one_mtxp_100.a
./field_stress -A -l 1 -w 1 -f TEST/COM/x_ps.a
```

A.2.5 ONE_100_2HR

```
# The test will be run about 2 hrs.

# about 5
./field_stress -s -A -l 1 -w 1 -f TEST/COM/x_ps.a

# about 5
./field_stress -s -A -l 1 -w 1 -f TEST/COM/dsk.a

# about 5
./field_stress -s -A -l 1 -w 1 -f TEST/COM/mv_txcn_50.a

# about 10
./field_stress -s -A -l 1 -w 3 -f TEST/COM/unix_eoe.a
```

```

### The PATH will be given at the run time; about 9 min
pandora -t 10

# from COM; about 15
./field_stress -s -A -l 1 -w 8 -f TEST/COM/one_mix_100.a

# from COM; about 10
./field_stress -A -l 1 -w 5 -f TEST/COM/one_mix_100.a

### The PATH will be given at the run time
pandora -t 15

# from COM; about 15
./field_stress -s -A -l 1 -w 8 -f TEST/COM/one_mtxp_100.a

### The PATH will be given at the run time
pandora -t 10

# from COM; about 15
./field_stress -s -A -l 2 -w 3 -f TEST/COM/mv_txcn_x_ps.a

```

A.2.6 ONE_200_15M

```

# assume default path @ /usr/diags/pandora
pandora -t 6

# from OS65
./field_stress -s -A -l 1 -w 1 -f TEST/65/dms.a

# from OS_COM
./field_stress -s -A -l 1 -w 1 -f TEST/COM/one_mtxp_180.a
./field_stress -s -A -l 1 -w 1 -f TEST/COM/one_mix_200.a

```

A.2.7 ONE_200_2HR

```

# assume default path @ /usr/diags/pandora
pandora -t 6

# from OS65
./field_stress -s -A -l 1 -w 1 -f TEST/65/dms.a

# from OS_COM
./field_stress -s -A -l 1 -w 1 -f TEST/COM/one_mtxp_180.a
./field_stress -s -A -l 1 -w 1 -f TEST/COM/one_mix_200.a

nature 50% cat ONE_200_2HR
# The test will be run about 2 hrs for one loop.

# from COM; about 10
./field_stress -s -A -l 1 -w 2 -f TEST/COM/mv_txcn_x_ps.a

```

```

# from COM; about 10
./field_stress -s -A -l 1 -w 2 -f TEST/COM/unix_eoe.a

### The PATH will be given at the run time
pandora -t 15

# about 5
./field_stress -s -A -l 1 -w 1 -f TEST/65/dms.a

# about 15
./field_stress -s -A -l 3 -w 2 -f TEST/65/mv_txcn_dms.a

### The PATH will be given at the run time; about 10 min
pandora -t 10

# from COM; about 10
./field_stress -s -A -l 1 -w 5 -f TEST/COM/one_mix_100.a

# from COM; about 15
./field_stress -s -A -l 2 -w 3 -f TEST/COM/one_mix_200.a

### The PATH will be given at the run time
pandora -t 10

# from COM; about 20
./field_stress -s -A -l 3 -w 3 -f TEST/COM/one_mtxp_180.a

```

A.2.8 dms.a

```

### 170M (~140m swap + 30M use)

TESTBIN/sof
### General_Demos (new place in ficus)
/usr/sbin/bongo
/usr/demos/General_Demos/ideas/ideas
/usr/demos/General_Demos/amesh/amesh
/usr/demos/General_Demos/ant/ant
/usr/demos/General_Demos/atlantis/atlantis
/usr/demos/General_Demos/blast/blast
/usr/demos/General_Demos/bzflag/bzflag
/usr/demos/General_Demos/bzflag/RUN
/usr/demos/General_Demos/bzflag/bzflag
/usr/demos/General_Demos/cycles/cycles
/usr/demos/General_Demos/demograph/RUN
/usr/demos/General_Demos/demograph/demograph
/usr/demos/General_Demos/distort/RUN
/usr/demos/General_Demos/distort/distort
/usr/demos/General_Demos/doom/RUN
/usr/demos/General_Demos/flight/RUN
/usr/demos/General_Demos/flight/flight
/usr/demos/General_Demos/gold/RUN
/usr/demos/General_Demos/gold

```

```

/usr/demos/General_Demos/house/RUN
/usr/demos/General_Demos/house
/usr/demos/General_Demos/i3dm/i3dm
/usr/demos/General_Demos/ideas/ideas
/usr/demos/General_Demos/ipaint/RUN
/usr/demos/General_Demos/ipaint/ipaint
/usr/demos/General_Demos/mirrors/RUN
/usr/demos/General_Demos/mview/RUN
/usr/demos/General_Demos/newton/RUN
/usr/demos/General_Demos/pointblank/RUN
/usr/demos/General_Demos/pointblank/pointblank
/usr/demos/General_Demos/polyVideo/RUN
/usr/demos/General_Demos/polyVideo/polyVideo
/usr/demos/General_Demos/powerflip/RUN
/usr/demos/General_Demos/powerflip/powerflip
/usr/demos/General_Demos/solidview/RUN
/usr/demos/General_Demos/solidview/solidview
/usr/demos/General_Demos/space/RUN
/usr/demos/General_Demos/tex_cube/RUN
/usr/demos/General_Demos/tex_cube/tex_cube
/usr/demos/General_Demos/vroom/RUN
/usr/demos/General_Demos/xmj/RUN

```

A.2.9 dms_all.a

```

### 170M (~140m swap + 30M use)

```

```

TESTBIN/sof
### General_Demos (new place in ficus)
/usr/sbin/bongo
# demos
/usr/demos/General_Demos/ideas/ideas
/usr/demos/General_Demos/amesh/amesh
/usr/demos/General_Demos/ant/RUN
/usr/demos/General_Demos/ant/ant
/usr/demos/General_Demos/atlantis/atlantis
/usr/demos/General_Demos/blast/blast
/usr/demos/General_Demos/buttonfly/RUN
/usr/demos/General_Demos/buttonfly/buttonfly
/usr/demos/General_Demos/bz/RUN
/usr/demos/General_Demos/bz/bz
/usr/demos/General_Demos/bzflag/bzflag
/usr/demos/General_Demos/bzflag/RUN
/usr/demos/General_Demos/bzflag/bzflag
/usr/demos/General_Demos/cycles/cycles
/usr/demos/General_Demos/demograph/RUN
/usr/demos/General_Demos/demograph/demograph
/usr/demos/General_Demos/distort/RUN
/usr/demos/General_Demos/distort/distort
/usr/demos/General_Demos/doom/RUN
/usr/demos/General_Demos/flight/RUN
/usr/demos/General_Demos/flight/flight
/usr/demos/General_Demos/gold/RUN
/usr/demos/General_Demos/gold
/usr/demos/General_Demos/house/RUN

```

```

/usr/demos/General_Demos/house
/usr/demos/General_Demos/i3dm/i3dm
/usr/demos/General_Demos/ideas/ideas
/usr/demos/General_Demos/ipaint/RUN
/usr/demos/General_Demos/ipaint/ipaint
/usr/demos/General_Demos/mandel/mandel
/usr/demos/General_Demos/mirrors/RUN
/usr/demos/General_Demos/mirrors/mirrors
/usr/demos/General_Demos/mview/RUN
/usr/demos/General_Demos/mview/mview
/usr/demos/General_Demos/newton/RUN
/usr/demos/General_Demos/newton/newton
/usr/demos/General_Demos/pointblank/RUN
/usr/demos/General_Demos/pointblank/pointblank
/usr/demos/General_Demos/polyVideo/RUN
/usr/demos/General_Demos/polyVideo/polyVideo
/usr/demos/General_Demos/powerflip/RUN
/usr/demos/General_Demos/powerflip/powerflip
/usr/demos/General_Demos/seahaven/seahaven
/usr/demos/General_Demos/skyfly/RUN
### using netscape
/usr/demos/General_Demos/snoop/snoop
/usr/demos/General_Demos/snowflake/snowflake
/usr/demos/General_Demos/solidview/RUN
/usr/demos/General_Demos/solidview/solidview
/usr/demos/General_Demos/space/RUN
/usr/demos/General_Demos/space/space
/usr/demos/General_Demos/tex_cube/RUN
/usr/demos/General_Demos/tex_cube/tex_cube
/usr/demos/General_Demos/vroom/RUN
/usr/demos/General_Demos/vroom/vroom
/usr/demos/General_Demos/xmj/RUN
/usr/demos/General_Demos/xmj/xmj

```

A.2.10 mv_txcn_dms.a

```

### plaid_mv_texCone_demos      200M
movieplayer -f -l 2000 -N /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 1.5 -N -S 300,200 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 2 -N -S 200,100 /usr/share/data/movies/somersault.movie
TESTBIN/texCone
### imgview
imgview /usr/share/data/textures/reflect/black.marble.room.rgb
imgview /usr/share/data/textures/surfaces/abruzzo.rgb
imgview /usr/share/data/textures/surfaces/fish.tile.rgb
imgview /usr/share/data/textures/textiles/speck.paper.rgb
### General_Demos (new place in ficus)
/usr/sbin/bongo
# demos
/usr/demos/General_Demos/ideas/ideas
/usr/demos/General_Demos/amesh/amesh
/usr/demos/General_Demos/ant/RUN
/usr/demos/General_Demos/ant/ant
/usr/demos/General_Demos/atlantis/atlantis
/usr/demos/General_Demos/blast/blast

```

```

/usr/demos/General_Demos/buttonfly/RUN
/usr/demos/General_Demos/buttonfly/buttonfly
/usr/demos/General_Demos/bzflag/bzflag
/usr/demos/General_Demos/bzflag/RUN
/usr/demos/General_Demos/bzflag/bzflag
/usr/demos/General_Demos/cycles/cycles
/usr/demos/General_Demos/demograph/RUN
/usr/demos/General_Demos/demograph/demograph
/usr/demos/General_Demos/distort/RUN
/usr/demos/General_Demos/distort/distort
/usr/demos/General_Demos/doom/RUN
/usr/demos/General_Demos/doom/sgixdoom
/usr/demos/General_Demos/flight/RUN
/usr/demos/General_Demos/flight/flight
/usr/demos/General_Demos/gold/RUN
/usr/demos/General_Demos/gold
/usr/demos/General_Demos/house/RUN
/usr/demos/General_Demos/house
/usr/demos/General_Demos/i3dm/i3dm
/usr/demos/General_Demos/ideas/ideas
/usr/demos/General_Demos/ipaint/RUN
/usr/demos/General_Demos/ipaint/ipaint
/usr/demos/General_Demos/pointblank/RUN
/usr/demos/General_Demos/pointblank/pointblank
/usr/demos/General_Demos/polyVideo/RUN
/usr/demos/General_Demos/polyVideo/polyVideo
/usr/demos/General_Demos/powerflip/RUN
/usr/demos/General_Demos/powerflip/powerflip
### using netscape
/usr/demos/General_Demos/solidview/RUN
/usr/demos/General_Demos/solidview/solidview
/usr/demos/General_Demos/tex_cube/RUN
/usr/demos/General_Demos/tex_cube/tex_cube
TESTBIN/sof
TESTBIN/sof

```

A.3 Files in the TEST/COM/ Directory

The *TEST/COM/* directory contains test case files for use with IRIX 5.3, IRIX 6.2, IRIX 6.3, or IRIX 6.4.

A.3.1 CFG_OS_ONE_TC

```

### the first string indicate the OS

6.2     TEST/62/CFG_TC_ONE

# Note, since OS 6.3, 6.4, 6.5 are similar, all use the same file
6.3     TEST/65/CFG_TC_ONE
6.4     TEST/65/CFG_TC_ONE
6.5     TEST/65/CFG_TC_ONE

```

A.3.2 CFG_OS_ONE_TC_GFX

```
### the first string indicate the OS

6.2     TEST/62/CFG_TC_ONE_GFX

# note, since OS 6.3, 6.4, and 6.5 are similar, all use the same file
6.3     TEST/65/CFG_TC_ONE_GFX
6.4     TEST/65/CFG_TC_ONE_GFX
6.5     TEST/65/CFG_TC_ONE_GFX
```

A.3.3 ONE_NG_15M

```
# the test will run about 15 min.

### note the PATH will be given at run time
pandora -t 8

### from OS_COM
./field_stress -s -A -l 1 -w 1 -f TEST/COM/unix_eoe.a
./field_stress -A -l 1 -w 1 -f TEST/COM/unix_eoe.a
```

A.3.4 ONE_NG_2H

```
# the test will run about 2 hours

### note the PATH will be given at run time
pandora -t 8

# about 30
./field_stress -s -A -l 3 -w 5 -f TEST/COM/unix_eoe.a
./field_stress -A -l 1 -w 1 -f TEST/COM/unix_eoe.a

### note the PATH will be given at run time
pandora -t 15

# about 15
./field_stress -s -A -l 2 -w 5 -f TEST/COM/unix_eoe.a

### note the PATH will be given at run time
pandora -t 20

# about 20
./field_stress -s -A -l 1 -w 15 -f TEST/COM/unix_eoe.a

### note the PATH will be given at run time
pandora -t 10
```

A.3.5 SAMPLE_ALL

```
### run the loop 1 time for 1 minute with swap space filled.
./field_stress -s -A -l 1 -w 1 -f TEST/COM/sample_app.a

### run the pandora test for about 6 mins(the least time to be run);
# PATH will be given at the run time.
pandora -t 6
```

A.3.6 SAMPLE_PANDORA

```
### run the pandora test for about 6 mins(the least time to be run).
# PATH will be give at the run time
pandora -t 6
```

A.3.7 TC_ALL_LISTS

```
### ----- from TESTBIN -----

# try to stack overflow
sof

# run some eoe command for mp system
app_run

# use up rest of the swap space
use_more_swap

# loop the command for ever
app_loop

# Impact demos
texCone

# Pandora stress test
pandora

### some linking applicatons
shows
mediaplayer
screensaver

### demos for 6.3,6.4,6.5
/usr/demos/General_Demos/amesh/amesh
/usr/demos/General_Demos/ant/RUN
/usr/demos/General_Demos/ant/ant
/usr/demos/General_Demos/atlantis/atlantis
/usr/demos/General_Demos/blast/blast
/usr/demos/General_Demos/buttonfly/RUN
/usr/demos/General_Demos/buttonfly/buttonfly
/usr/demos/General_Demos/bz/RUN
/usr/demos/General_Demos/bz/bz
```

```

/usr/demos/General_Demos/bzflag/RUN
/usr/demos/General_Demos/bzflag/bzflag
/usr/demos/General_Demos/cycles/cycles
/usr/demos/General_Demos/demograph/RUN
/usr/demos/General_Demos/demograph/demograph
/usr/demos/General_Demos/distort/RUN
/usr/demos/General_Demos/distort/distort
/usr/demos/General_Demos/doom/RUN
/usr/demos/General_Demos/doom/doom
/usr/demos/General_Demos/doom/sgixdoom
/usr/demos/General_Demos/doom/sndserver
/usr/demos/General_Demos/flight/RUN
/usr/demos/General_Demos/flight/flight
/usr/demos/General_Demos/gold
/usr/demos/General_Demos/gold/RUN
/usr/demos/General_Demos/house
/usr/demos/General_Demos/house/RUN
/usr/demos/General_Demos/i3dm/i3dm
/usr/demos/General_Demos/ideas/ideas
/usr/demos/General_Demos/ipaint/RUN
/usr/demos/General_Demos/ipaint/ipaint
/usr/demos/General_Demos/mandel/mandel
/usr/demos/General_Demos/mirrors/RUN
/usr/demos/General_Demos/mirrors/mirrors
/usr/demos/General_Demos/mview/RUN
/usr/demos/General_Demos/mview/mview
/usr/demos/General_Demos/newton/RUN
/usr/demos/General_Demos/newton/newton
/usr/demos/General_Demos/pointblank/RUN
/usr/demos/General_Demos/pointblank/pointblank
/usr/demos/General_Demos/polyVideo/RUN
/usr/demos/General_Demos/polyVideo/polyVideo
/usr/demos/General_Demos/powerflip/RUN
/usr/demos/General_Demos/powerflip/powerflip
/usr/demos/General_Demos/seahaven/seahaven
/usr/demos/General_Demos/snoop/snoop
/usr/demos/General_Demos/snowflake/snowflake
/usr/demos/General_Demos/solidview/RUN
/usr/demos/General_Demos/solidview/solidview
/usr/demos/General_Demos/space/RUN
/usr/demos/General_Demos/space/space
/usr/demos/General_Demos/tex_cube/RUN
/usr/demos/General_Demos/tex_cube/tex_cube
/usr/demos/General_Demos/vroom/RUN
/usr/demos/General_Demos/vroom/vroom
/usr/demos/General_Demos/xmj/RUN
/usr/demos/General_Demos/xmj/xmj

```

```
# demos for 5.3, 6.2
```

```

/usr/demos/Inventor/SceneViewer
/usr/demos/Inventor/SceneViewer.RUNME
/usr/demos/Inventor/gview
/usr/demos/Inventor/gview.RUNME
/usr/demos/Inventor/noodle
/usr/demos/Inventor/noodle.RUNME
/usr/demos/Inventor/qmorf
/usr/demos/Inventor/qmorf.RUNME

```

```
/usr/demos/Inventor/revo
/usr/demos/Inventor/revo
/usr/demos/bin/atlantis
/usr/demos/bin/backtrace
/usr/demos/bin/bongo
/usr/demos/bin/draw
/usr/demos/bin/drip
/usr/demos/bin/ep
/usr/demos/bin/fadeflip
/usr/demos/bin/ideas
/usr/demos/bin/ideas_ogl
/usr/demos/bin/ipaint
/usr/demos/bin/mandel
/usr/demos/bin/newton
/usr/demos/bin/tex_cube
/usr/demos/bin/wonderland
/usr/demos/buttonfly
```

```
# desktop app.
```

```
/usr/sbin/apanel
/usr/sbin/audiopanel
/usr/sbin/background
/usr/sbin/bongo
/usr/sbin/capture
/usr/sbin/clock
/usr/sbin/colorview
/usr/sbin/compview
/usr/sbin/confidence
/usr/sbin/ical
/usr/sbin/imgview
/usr/sbin/imgworks
/usr/sbin/insight
/usr/sbin/jot
/usr/sbin/keyboard
/usr/sbin/mag
/usr/sbin/mediaconvert
/usr/sbin/mouse
/usr/sbin/movieconvert
/usr/sbin/moviemaker
/usr/sbin/schemebr
/usr/sbin/sgihelp
/usr/sbin/showcase
/usr/sbin/showmap
/usr/sbin/snapshot
/usr/sbin/soundeditor
/usr/sbin/soundfiler
/usr/sbin/soundscheme
/usr/sbin/ssaver
/usr/sbin/syserrpanel
```

```
# x and eoe
```

```
bitmap
bzfs
cat
chkconfig
devnm
diskpatch
```

```
editres
find
ftimer
grep
ico
imgview
ls
maze
mediaplayer
movieplayer
muncher
nslookup
oclock
ping
plaid
plaid
psycho
puzzle
tail
viewres
xbiff
xcalc
xcalendar
xclipboard
xclock
xconfirm
xconsole
xcutsel
xditview
xedit
xfontsel
xlogo
xpsview
xpsview
xterm

### kill one more time just be sure.
### ----- from TESTBIN -----

# try to stack overflow
sof

# run some eoe command for mp system
app_run

# use up rest of the swap space
use_more_swap

# loop the command for ever
app_loop

# Impact demos
texCone

# Pandora stress test
pandora
```

```
### some linking applicatons
showps
```

```
# ===== END =====
```

A.3.8 TWO_100_2HR

```
# about 25 min
./field_stress -s -A -l 2 -w 3 -f TEST/COM/inv_pld_mix.a
```

```
### note the PATH will be given at run time
pandora -t 25
```

```
# about 25 min
./field_stress -s -A -l 3 -w 5 -f TEST/COM/mv_txcn_pld.a
```

```
# about 10 min
./field_stress -s -A -l 1 -w 6 -f TEST/COM/inv_pld.a
```

```
# about 20 min
./field_stress -s -A -l 2 -w 3 -f TEST/COM/one_mix_100.a
```

```
### note the PATH will be given at run time
pandora -t 15
```

A.3.9 TWO_200_2HR

```
### note the PATH will be given at run time
pandora -t 20
```

```
## about 25 min
./field_stress -s -A -l 3 -w 3 -f TEST/COM/inv_mv_pld.a
```

```
# about 15 min
./field_stress -s -A -l 2 -w 2 -f TEST/COM/inv_pld_mix.a
```

```
# about 20 min
./field_stress -s -A -l 2 -w 3 -f TEST/COM/one_mix_200.a
```

```
# about 25 min
./field_stress -s -A -l 3 -w 5 -f TEST/COM/mv_txcn_pld.a
```

```
### note the PATH will be given at run time
pandora -t 15
```

A.3.10 app_ng_pp.a

```
### eoe.sw.unix
```

```
### in loop
TESTBIN/app_loop cat -u /var/adm/SYSLOG
```

```

TESTBIN/app_loop cat -s /var/adm/SYSLOG
TESTBIN/app_loop cat -v /var/adm/SYSLOG
TESTBIN/app_loop cat -t /var/adm/SYSLOG
TESTBIN/app_loop cat -e /var/adm/SYSLOG
TESTBIN/app_loop chkconfig
TESTBIN/app_loop date `+DATE: %m/%d/%y%nTIME: %H:%M:%S'\; date -u
TESTBIN/app_loop df -b\; df -e\; df -f\; df -i\; df -k\; df -l\; df -n\; df -P\; df
-q\; df -r
TESTBIN/app_loop devnm /usr\; devnm .\; devnm /tmp
TESTBIN/app_loop diskpatch -v
TESTBIN/app_loop env\; printenv
TESTBIN/app_loop find / -depth
TESTBIN/app_loop ftimer\; fuser -u /etc/passwd
TESTBIN/app_loop grep -i -l -n -q -s -v anthing /var/adm/SYSLOG
TESTBIN/app_loop hinv\; hinv -v\; hinv -c processor
TESTBIN/app_loop ls -R
TESTBIN/app_loop /usr/etc/ping $SOCKS_SERVER
TESTBIN/app_loop /usr/etc/ping $SOCKS_NS
TESTBIN/app_loop /usr/etc/ping $REMOTEHOST
TESTBIN/app_loop nvram -v
TESTBIN/app_loop pwd
TESTBIN/app_loop sysinfo
TESTBIN/app_loop sleep 5
TESTBIN/app_loop wc -lwcm /var/adm/SYSLOG
TESTBIN/app_loop who
TESTBIN/app_loop whodo
TESTBIN/app_loop banner testing
TESTBIN/app_loop cp /var/adm/SYSLOG /tmp/TMP_pcat \; pack /tmp/TMP_pcat \; unpack
/tmp/TMP_pcat.z \; rm /tmp/TMP_pcat
TESTBIN/app_loop odiff /usr/bin /usr/sbin
TESTBIN/app_loop sort /var/adm/SYSLOG > /tmp/TMP_sort \; rm /tmp/TMP_sort
TESTBIN/app_loop tail -100 /var/adm/SYSLOG
TESTBIN/app_loop uniq /var/adm/SYSLOG
TESTBIN/app_loop ident /var/adm/SYSLOG
TESTBIN/app_loop echo "999.99.99.99" | nslookup
TESTBIN/app_loop playaiiff
/usr/share/data/sounds/soundscheme/soundfiles/24.muted.bong.aifc
TESTBIN/app_loop playaiiff /usr/share/data/sounds/soundscheme/soundfiles/20.zikik.aifc
TESTBIN/app_loop playaiiff
/usr/share/data/sounds/soundscheme/soundfiles/ss3.aifcTESTBIN/app_loop playaiiff
/usr/share/data/sounds/soundscheme/soundfiles/01.buzz.kerchick.aifc
###
# TESTBIN/sof

```

A.3.11 dsk.a

```
### some desktop app.

/usr/sbin/jot
/usr/sbin/showcase
/usr/sbin/insight
/usr/sbin/clock
/usr/sbin/ical
/usr/sbin/snapshot
/usr/sbin/mag
/usr/sbin/showmap
/usr/sbin/colorview
/usr/sbin/sgihelp
/usr/sbin/soundfiler
/usr/sbin/soundeditor
/usr/sbin/movieplayer
/usr/sbin/moviemaker
/usr/sbin/capture
/usr/sbin/imgworks
/usr/sbin/movieconvert
/usr/sbin/compview
/usr/sbin/mediaconvert
/usr/sbin/keyboard
/usr/sbin/schemebr
/usr/sbin/soundscheme
/usr/sbin/audiopanel
/usr/sbin/confidence
/usr/sbin/soundscheme
/usr/sbin/mouse
/usr/sbin/background
/usr/sbin/ssaver
/usr/sbin/syserrpanel
### imgview
imgview /usr/share/data/textures/textiles/quilt.rgb
imgview /usr/share/data/textures/reflect/black.marble.room.rgb
imgview /usr/share/data/textures/surfaces/abruzzo.rgb
imgview /usr/share/data/textures/surfaces/fish.tile.rgb
imgview /usr/share/data/textures/textiles/speck.paper.rgb

TESTBIN/sof
TESTBIN/sof
```

A.3.12 inv_mv_pld.a

```
### inventor_x_gfx_swap128.o
### ~ 128M

### try to stack overflow
TESTBIN/sof

### imgview
imgview /usr/share/data/textures/textiles/quilt.rgb
imgview /usr/share/data/textures/reflect/black.marble.room.rgb
imgview /usr/share/data/textures/surfaces/abruzzo.rgb
```

```
imgview /usr/share/data/textures/surfaces/fish.tile.rgb
imgview /usr/share/data/textures/textiles/speck.paper.rgb
```

```
### inventor
```

```
/usr/demos/Inventor/SceneViewer /usr/demos/data/Inventor/jackInTheBox.iv
/usr/demos/Inventor/SceneViewer /usr/share/data/models/geography/earth.iv
/usr/demos/Inventor/SceneViewer.RUNME
/usr/demos/Inventor/SceneViewer /usr/share/data/models/heart.iv
/usr/demos/Inventor/SceneViewer /usr/share/data/models/machines/coarseGear.iv
/usr/demos/Inventor/SceneViewer
/usr/demos/Inventor/gview.RUNME
/usr/demos/Inventor/gview
/usr/demos/Inventor/noodle.RUNME
/usr/demos/Inventor/noodle
/usr/demos/Inventor/qmorf.RUNME
/usr/demos/Inventor/qmorf
/usr/demos/Inventor/revo /usr/share/data/models/machines/coarseGear.iv
/usr/demos/Inventor/revo /usr/share/data/models/heart.iv
/usr/demos/Inventor/revo
```

```
movieplayer -f -l 2000 -z 4 -N /usr/share/data/movies/somersault.movie
movieplayer -f -l 2000 -z 5 -N /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -N -S 100,100 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -N -S 200,200 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -N -S 300,300 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 3 -N -S 300,300 /usr/share/data/movies/somersault.movi
```

```
plaid -bg green -bd blue -bw 2 -geometry 1800x1800
plaid -bg yellow -bd red -bw 9 -geometry 2800x2800
```

```
TESTBIN/sof
```

A.3.13 inv_pld.a

```
### try to stack overflow
```

```
TESTBIN/sof
```

```
### imgview
```

```
imgview /usr/share/data/textures/textiles/quilt.rgb
imgview /usr/share/data/textures/reflect/black.marble.room.rgb
imgview /usr/share/data/textures/surfaces/abruzzo.rgb
imgview /usr/share/data/textures/surfaces/fish.tile.rgb
imgview /usr/share/data/textures/textiles/speck.paper.rgb
```

```
### inventor
```

```
/usr/demos/Inventor/SceneViewer /usr/demos/data/Inventor/jackInTheBox.iv
/usr/demos/Inventor/SceneViewer /usr/share/data/models/geography/earth.iv
/usr/demos/Inventor/SceneViewer.RUNME
/usr/demos/Inventor/SceneViewer /usr/share/data/models/heart.iv
/usr/demos/Inventor/SceneViewer /usr/share/data/models/machines/coarseGear.iv
/usr/demos/Inventor/SceneViewer
/usr/demos/Inventor/gview.RUNME
/usr/demos/Inventor/gview
```

```

/usr/demos/Inventor/noodle.RUNME
/usr/demos/Inventor/noodle
/usr/demos/Inventor/qmorf.RUNME
/usr/demos/Inventor/qmorf
/usr/demos/Inventor/revo /usr/share/data/models/machines/coarseGear.iv
/usr/demos/Inventor/revo /usr/share/data/models/heart.iv
/usr/demos/Inventor/revo

```

```

plaid -bg green -bd blue -bw 2 -geometry 1800x1800
plaid -bg yellow -bd red -bw 9 -geometry 2800x2800

```

```

TESTBIN/sof

```

A.3.14 inv_pld_mix.a

```

### try to stack overflow
TESTBIN/sof

```

```

### inventor
/usr/demos/Inventor/SceneViewer /usr/demos/data/Inventor/jackInTheBox.iv
/usr/demos/Inventor/SceneViewer /usr/share/data/models/geography/earth.iv
/usr/demos/Inventor/SceneViewer.RUNME
/usr/demos/Inventor/SceneViewer /usr/share/data/models/heart.iv
/usr/demos/Inventor/SceneViewer /usr/share/data/models/machines/coarseGear.iv
/usr/demos/Inventor/SceneViewer
/usr/demos/Inventor/gview.RUNME
/usr/demos/Inventor/gview
/usr/demos/Inventor/noodle.RUNME
/usr/demos/Inventor/noodle
/usr/demos/Inventor/qmorf.RUNME
/usr/demos/Inventor/qmorf
/usr/demos/Inventor/revo /usr/share/data/models/machines/coarseGear.iv
/usr/demos/Inventor/revo /usr/share/data/models/heart.iv
/usr/demos/Inventor/revo
plaid -bg green -bd blue -bw 2 -geometry 1800x1800
plaid -bg yellow -bd red -bw 9 -geometry 2800x2800

```

```

### eoe.sw.unix
TESTBIN/sof
### in loop
TESTBIN/app_loop cat -u /var/adm/SYSLOG
TESTBIN/app_loop cat -s /var/adm/SYSLOG
TESTBIN/app_loop cat -v /var/adm/SYSLOG
TESTBIN/app_loop cat -t /var/adm/SYSLOG
TESTBIN/app_loop cat -e /var/adm/SYSLOG
TESTBIN/app_loop cat /var/adm/SYSLOG /var/adm/SYSLOG > /tmp/SYSLOG.tmp
TESTBIN/app_loop chkconfig
TESTBIN/app_loop cp /var/adm/SYSLOG /tmp/SYSLOG.tmp \; rm -f /tmp/SYSLOG.tmp
TESTBIN/app_loop mkdir /tmp/TMP_cprio\; find ./TEST -depth -print | cpio -pdlmv
/tmp/TMP_cprio \; rm -fr /tmp/TMP_cprio
TESTBIN/app_loop date '+DATE: %m/%d/%y%nTIME: %H:%M:%S'\; date -u
TESTBIN/app_loop df -b\; df -e\; df -f\; df -i\; df -k\; df -l\; df -n\; df -P\; df
-q\; df -r
TESTBIN/app_loop devnm /usr\; devnm .\; devnm /tmp
TESTBIN/app_loop diskpatch -v

```

```

TESTBIN/app_loop echo `WARNING:\07`; banner testing
TESTBIN/app_loop env`; printenv
TESTBIN/app_loop find / -depth
TESTBIN/app_loop ftimer`; fuser -u /etc/passwd
TESTBIN/app_loop grep -i -l -n -q -s -v anthing /var/adm/SYSLOG
TESTBIN/app_loop hinv`; hinv -v`; hinv -c processor
TESTBIN/app_loop ls -R
###
TESTBIN/app_loop ml list
TESTBIN/app_loop nvram -v
TESTBIN/app_loop pwd
TESTBIN/app_loop sysinfo
TESTBIN/app_loop sleep 5
TESTBIN/app_loop wc -lwcm /var/adm/SYSLOG
TESTBIN/app_loop who
TESTBIN/app_loop whodo
TESTBIN/app_loop banner testing
TESTBIN/app_loop rm -fr /tmp/TMP_pcat*`; cp /var/adm/SYSLOG /tmp/TMP_pcat`; pack
/tmp/TMP_pcat`; unpack /tmp/TMP_pcat.z`; rm /tmp/TMP_pcat
TESTBIN/app_loop odiff /usr/bin /usr/sbin
TESTBIN/app_loop sort /var/adm/SYSLOG > /tmp/TMP_sort`; rm /tmp/TMP_sort
TESTBIN/app_loop tail -100 /var/adm/SYSLOG
TESTBIN/app_loop uniq /var/adm/SYSLOG
TESTBIN/app_loop ident /var/adm/SYSLOG
TESTBIN/app_loop echo "999.99.99.99" > /tmp/TMP_nslookup`; cat /tmp/TMP_nslookup |
nslookup`; rm /tmp/TMP_nslookup
###
TESTBIN/app_loop /usr/etc/ping $SOCKS_SERVER
TESTBIN/app_loop /usr/etc/ping $SOCKS_NS
TESTBIN/app_loop /usr/etc/ping $REMOTEHOST

###
TESTBIN/sof

```

A.3.15 mv_txcn_50.a

```

### ~ 80m

### movie_textcone.o

TESTBIN/sof
TESTBIN/sof
TESTBIN/texCone
TESTBIN/texCone
movieplayer -f -l 2000 -N /usr/share/data/movies/somersault.movie
movieplayer -f -l 2000 -z 5 -N /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 1.5 -N -S 300,200 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 3 -N -S 300,300 /usr/share/data/movies/somersault.movie
### imgview
imgview /usr/share/data/textures/textiles/quilt.rgb
imgview /usr/share/data/textures/reflect/black.marble.room.rgb
imgview /usr/share/data/textures/surfaces/fish.tile.rgb

```

A.3.16 mv_txcn_pld.a

```
### ~ 80m

### movie_textcone.o

TESTBIN/sof
TESTBIN/texCone
TESTBIN/texCone
movieplayer -f -l 2000 -N /usr/share/data/movies/somersault.movie
movieplayer -f -l 2000 -z 4 -N /usr/share/data/movies/somersault.movie
movieplayer -f -l 2000 -z 5 -N /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -N -S 100,100 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -N -S 200,200 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 1.5 -N -S 300,200 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 2 -N -S 200,100 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -N -S 300,300 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 3 -N -S 300,300 /usr/share/data/movies/somersault.movie
### imgview
imgview /usr/share/data/textures/textiles/quilt.rgb
imgview /usr/share/data/textures/reflect/black.marble.room.rgb
imgview /usr/share/data/textures/surfaces/fish.tile.rgb
plaid -bg green -bd blue -bw 2 -geometry 1800x1800
plaid -bg yellow -bd red -bw 9 -geometry 2800x2800
TESTBIN/sof
```

A.3.17 mv_txcn_x_ps.a

```
### movie_textcone.o 60M

TESTBIN/texCone
TESTBIN/texCone
movieplayer -f -l 2000 -N /usr/share/data/movies/somersault.movie
movieplayer -f -l 2000 -z 4 -N /usr/share/data/movies/somersault.movie
movieplayer -f -l 2000 -z 5 -N /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -N -S 100,100 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -N -S 200,200 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 1.5 -N -S 300,200 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 2 -N -S 200,100 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -N -S 300,300 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 3 -N -S 300,300 /usr/share/data/movies/somersault.movie
### imgview
imgview /usr/share/data/textures/textiles/quilt.rgb
imgview /usr/share/data/textures/reflect/black.marble.room.rgb
imgview /usr/share/data/textures/surfaces/abruzzo.rgb
imgview /usr/share/data/textures/surfaces/fish.tile.rgb
imgview /usr/share/data/textures/textiles/speck.paper.rgb
### x_ps.o
xpsview -batch /usr/SVP/svp_data_xpsview.ps
xpsview -batch /usr/lib/DPS/doc/ShowPSReferenceCard.ps
xpsview -batch /usr/lib/DPS/doc/ShowPSUserGuide.ps
bitmap
editres
viewres -vertical
xbiff -bg red -bw 8 -fg blue -rv
```

```

xcalc -rpn -geometry 800x800
xcalendar
xclipboard -bg green -bd red -bw 2 -geometry 500x200
xclock -analog -hl blue -hd red
xconfirm -c -b test_x -t x_testing -header xconfirm -useslider
xconsole -bg green -bd red -bw 2 -geometry 500x200
xcutsel -bg green -bd red -bw 2 -geometry 500x200
xditview -bg green -bd red -bw 2 -geometry 500x200 -rv -page 2 -resolution 80
-backingStore
xedit /etc/passwd -bg green -bd red -bw 2 -geometry 500x1200
xfontsel -print -sample text_123456 -bg red -bd blue -bw 2 -geometry 2000x2000
TESTBIN/sof
TESTBIN/sof

```

A.3.18 one_mix_100.a

```

### ~ 80m

### movie_texcone.o

TESTBIN/texCone
movieplayer -f -l 2000 -N /usr/share/data/movies/somersault.movie

movieplayer -l 3000 -z 1.5 -N -S 300,200 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 3 -N -S 300,300 /usr/share/data/movies/somersault.movie

### x_ps; 30m

xpsview /usr/lib/DPS/doc/ShowPSReferenceCard.ps
TESTBIN/app_loop xpsview -batch /usr/lib/DPS/doc/ShowPSUserGuide.ps
TESTBIN/app_loop xpsview -batch /usr/lib/DPS/doc/ShowPSUserGuide.ps
TESTBIN/app_loop xpsview -batch /usr/lib/DPS/doc/ShowPSUserGuide.ps
bitmap
editres
viewres -vertical
xbiff -bg red -bw 8 -fg blue -rv
xcalc -bg green -bd red -bw 2 -geometry 500x200
xcalendar
xclipboard -bg green -bd red -bw 2 -geometry 500x200
xclock -analog -hl blue -hd red
xconfirm -c -geometry 500x500 -useslider
xconsole -verbose -daemon -notify -exitOnFail -bg blue -bd yellow -bw 8 -geometry
500x800
xcutsel -bg green -bd red -bw 2 -geometry 500x200
xditview -bg green -bd red -bw 2 -geometry 500x200 -rv -page 2 -resolution 80
-backingStore
xcutsel
xditview -bg green -bd red -bw 2 -geometry 500x200 -rv -page 2 -resolution 80
-backingStore
xedit /etc/passwd -bg green -bd red -bw 2 -geometry 500x1200
xfontsel -print -sample text_123456 -bg red -bd blue -bw 2 -geometry 2000x2000

### imgview
imgview /usr/share/data/textures/textiles/quilt.rgb
imgview /usr/share/data/textures/reflect/black.marble.room.rgb

```

```

imgview /usr/share/data/textures/surfaces/abruzzo.rgb
imgview /usr/share/data/textures/surfaces/fish.tile.rgb
imgview /usr/share/data/textures/textiles/speck.paper.rgb

### eoe.sw.unix

### in loop
TESTBIN/app_loop cat -u          /var/adm/SYSLOG
TESTBIN/app_loop chkconfig
TESTBIN/app_loop date '+DATE: %m/%d/%y%nTIME: %H:%M:%S'\; date -u
TESTBIN/app_loop df -b\; df -e\; df -f\; df -i\; df -k\; df -l\; df -n\; df -P\; df
-q\; df -r
TESTBIN/app_loop devnm /usr\; devnm .\; devnm /tmp
TESTBIN/app_loop diskpatch -v
TESTBIN/app_loop echo 'WARNING:\07'\; banner testing
TESTBIN/app_loop env\; printenv
TESTBIN/app_loop find / -depth
TESTBIN/app_loop ftimer\; fuser -u /etc/passwd
TESTBIN/app_loop grep -i -l -n -q -s -v anthing /var/adm/SYSLOG
TESTBIN/app_loop hinv\; hinv -v\; hinv -c processor
TESTBIN/app_loop ls -R
TESTBIN/app_loop ml list
TESTBIN/app_loop nvram -v
TESTBIN/app_loop pwd
TESTBIN/app_loop sysinfo
TESTBIN/app_loop sleep 5
TESTBIN/app_loop wc -lwcm /var/adm/SYSLOG
TESTBIN/app_loop who
TESTBIN/app_loop whodo
TESTBIN/app_loop banner testing
TESTBIN/app_loop rm -fr /tmp/TMP_pcat*\; cp /var/adm/SYSLOG /tmp/TMP_pcat\; pack
/tmp/TMP_pcat\; unpack /tmp/TMP_pcat.z\; rm /tmp/TMP_pcat
TESTBIN/app_loop odiff /usr/bin /usr/sbin
TESTBIN/app_loop sort /var/adm/SYSLOG > /tmp/TMP_sort\; rm /tmp/TMP_sort
TESTBIN/app_loop tail -100 /var/adm/SYSLOG
TESTBIN/app_loop uniq /var/adm/SYSLOG
TESTBIN/app_loop ident /var/adm/SYSLOG
TESTBIN/app_loop echo "999.99.99.99" > /tmp/TMP_nslookup\; cat /tmp/TMP_nslookup |
nslookup\; rm /tmp/TMP_nslookup
TESTBIN/app_loop /usr/etc/ping $SOCKS_SERVER
TESTBIN/app_loop /usr/etc/ping $SOCKS_NS
TESTBIN/app_loop /usr/etc/ping $REMOTEHOST

TESTBIN/sof
TESTBIN/sof

```

A.3.19 one_mix_200.a

```

### ~ 80m

### movie_texcone.o

TESTBIN/texCone
movieplayer -f -l 2000 -N /usr/share/data/movies/somersault.movie

```

```

movieplayer -l 3000 -z 1.5 -N -S 300,200 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 3 -N -S 300,300 /usr/share/data/movies/somersault.movie

### x_ps; 30m

xpsview /usr/lib/DPS/doc/ShowPSReferenceCard.ps
TESTBIN/app_loop xpsview -batch /usr/lib/DPS/doc/ShowPSUserGuide.ps
TESTBIN/app_loop xpsview -batch /usr/lib/DPS/doc/ShowPSUserGuide.ps
TESTBIN/app_loop xpsview -batch /usr/lib/DPS/doc/ShowPSUserGuide.ps
bitmap
editres
viewres -vertical
xbiff -bg red -bw 8 -fg blue -rv
xcalc -bg green -bd red -bw 2 -geometry 500x200
xcalendar
xclipboard -bg green -bd red -bw 2 -geometry 500x200
xclock -analog -hl blue -hd red
xconfirm -c -geometry 500x500 -useslider
xconsole -verbose -daemon -notify -exitOnFail -bg blue -bd yellow -bw 8 -geometry
500x800
xcutsel -bg green -bd red -bw 2 -geometry 500x200
xditview -bg green -bd red -bw 2 -geometry 500x200 -rv -page 2 -resolution 80
-backingStore
xcutsel
xditview -bg green -bd red -bw 2 -geometry 500x200 -rv -page 2 -resolution 80
-backingStore
xedit /etc/passwd -bg green -bd red -bw 2 -geometry 500x1200
xfontsel -print -sample text_123456 -bg red -bd blue -bw 2 -geometry 2000x2000
nature 87% cat one_mix_200.a

### movie_texcone.o 180M (60M swap + 120 use

# TESTBIN/use_more_swap 120
TESTBIN/texCone
TESTBIN/texCone
movieplayer -f -l 2000 -N /usr/share/data/movies/somersault.movie
movieplayer -f -l 2000 -z 4 -N /usr/share/data/movies/somersault.movie
movieplayer -f -l 2000 -z 5 -N /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 3 -N -S 300,300 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -N -S 200,200 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 1.5 -N -S 300,200 /usr/share/data/movies/somersault.movie

### imgview
imgview /usr/share/data/textures/textiles/quilt.rgb
imgview /usr/share/data/textures/reflect/black.marble.room.rgb
imgview /usr/share/data/textures/surfaces/abruzzo.rgb
imgview /usr/share/data/textures/surfaces/fish.tile.rgb
imgview /usr/share/data/textures/textiles/speck.paper.rgb

### x_ps.o
xpsview -batch /usr/SVP/svp_data_xpsview.ps
xpsview /usr/lib/DPS/doc/ShowPSReferenceCard.ps
xpsview -batch /usr/lib/DPS/doc/ShowPSUserGuide.ps
bitmap
editres
viewres -vertical
xbiff -bg red -bw 8 -fg blue -rv

```

```

xcalc -bg green -bd red -bw 2 -geometry 500x200
xcalendar
xclipboard -bg green -bd red -bw 2 -geometry 500x200
xclock -digital
xconfirm -c -b test_x -t x_testing -header xconfirm -useslider
xconsole -bg green -bd red -bw 2 -geometry 500x200
xcutsel -bg green -bd red -bw 2 -geometry 500x200
xditview -bg green -bd red -bw 2 -geometry 500x200 -rv -page 2 -resolution 80
-backingStore
xcutsel
xditview -bg green -bd red -bw 2 -geometry 500x200 -rv -page 2 -resolution 80
-backingStore
xditview
xedit /etc/passwd -bg green -bd red -bw 2 -geometry 500x1200
xfontsel -print -sample text_123456 -bg red -bd blue -bw 2 -geometry 2000x2000

```

```

### some desktop app.

```

```

/usr/sbin/jot
/usr/sbin/showcase
/usr/sbin/insight
/usr/sbin/clock
/usr/sbin/ical
/usr/sbin/snapshot
/usr/sbin/mag
/usr/sbin/showmap
/usr/sbin/colorview
/usr/sbin/sgihelp
/usr/sbin/soundfiler
/usr/sbin/soundeditor
/usr/sbin/movieplayer
/usr/sbin/moviemaker
/usr/sbin/capture
/usr/sbin/imgview
/usr/sbin/imgworks
/usr/sbin/movieconvert
/usr/sbin/compview
/usr/sbin/mediaconvert
/usr/sbin/keyboard
/usr/sbin/schemebr
/usr/sbin/soundscheme
/usr/sbin/audiopanel
/usr/sbin/confidence
/usr/sbin/soundscheme
/usr/sbin/mouse
/usr/sbin/background
/usr/sbin/ssaver
/usr/sbin/syserrpanel

```

```

###

```

```

### eoe.sw.unix

```

```

### in loop
TESTBIN/app_loop cat -u /var/adm/SYSLOG
TESTBIN/app_loop chkconfig
TESTBIN/app_loop date `+DATE: %m/%d/%y%nTIME: %H:%M:%S'\; date -u

```

```

TESTBIN/app_loop df -b\; df -e\; df -f\; df -i\; df -k\; df -l\; df -n\; df -P\; df
-q\; df -r
TESTBIN/app_loop devnm /usr\; devnm .\; devnm /tmp
TESTBIN/app_loop diskpatch -v
TESTBIN/app_loop echo 'WARNING:\07'\; banner testing
TESTBIN/app_loop env\; printenv
TESTBIN/app_loop find / -depth
TESTBIN/app_loop ftimer\; fuser -u /etc/passwd
TESTBIN/app_loop grep -i -l -n -q -s -v anthing /var/adm/SYSLOG
TESTBIN/app_loop hin\; hinv -v\; hinv -c processor
TESTBIN/app_loop ls -R
TESTBIN/app_loop ml list
TESTBIN/app_loop nvram -v
TESTBIN/app_loop pwd
TESTBIN/app_loop sysinfo
TESTBIN/app_loop sleep 5
TESTBIN/app_loop wc -lwcm /var/adm/SYSLOG
TESTBIN/app_loop who
TESTBIN/app_loop whodo
TESTBIN/app_loop banner testing
TESTBIN/app_loop rm -fr /tmp/TMP_pcat*\; cp /var/adm/SYSLOG /tmp/TMP_pcat\; pack
/tmp/TMP_pcat\; unpack /tmp/TMP_pcat.z\; rm /tmp/TMP_pcat
TESTBIN/app_loop odiff /usr/bin /usr/sbin
TESTBIN/app_loop sort /var/adm/SYSLOG > /tmp/TMP_sort\; rm /tmp/TMP_sort
TESTBIN/app_loop tail -100 /var/adm/SYSLOG
TESTBIN/app_loop uniq /var/adm/SYSLOG
TESTBIN/app_loop ident /var/adm/SYSLOG
TESTBIN/app_loop echo "999.99.99.99" > /tmp/TMP_nslookup\; cat /tmp/TMP_nslookup |
nslookup\; rm /tmp/TMP_nslookup
###
TESTBIN/app_loop /usr/etc/ping $SOCKS_SERVER
TESTBIN/app_loop /usr/etc/ping $SOCKS_NS
TESTBIN/app_loop /usr/etc/ping $REMOTEHOST

TESTBIN/sof
TESTBIN/sof

```

A.3.20 one_mtxp_100.a

```

###

### x_ps.o

TESTBIN/texCone
TESTBIN/texCone
### imgview
imgview /usr/share/data/textures/textiles/quilt.rgb
imgview /usr/share/data/textures/reflect/black.marble.room.rgb
imgview /usr/share/data/textures/surfaces/abruzzo.rgb
imgview /usr/share/data/textures/surfaces/fish.tile.rgb
imgview /usr/share/data/textures/textiles/speck.paper.rgb

xpsview /usr/lib/DPS/doc/ShowPSReferenceCard.ps
TESTBIN/app_loop xpsview -batch /usr/lib/DPS/doc/ShowPSUserGuide.ps
TESTBIN/app_loop xpsview -batch /usr/lib/DPS/doc/ShowPSUserGuide.ps

```

```

TESTBIN/app_loop xpsview -batch /usr/lib/DPS/doc/ShowPSUserGuide.ps
bitmap
editres
viewres -vertical
xbiff -bg red -bw 8 -fg blue -rv
xcalc -bg green -bd red -bw 2 -geometry 500x200
xcalendar
xclipboard -bg green -bd red -bw 2 -geometry 500x200
xclock -analog -hl blue -hd red
xconfirm -c -geometry 500x500 -useslider
xconsole -verbose -daemon -notify -exitOnFail -bg blue -bd yellow -bw 8 -geometry
500x800
xcutsel -bg green -bd red -bw 2 -geometry 500x200
xditview -bg green -bd red -bw 2 -geometry 500x200 -rv -page 2 -resolution 80
-backingStore
xditview -bg green -bd red -bw 2 -geometry 500x200 -rv -page 2 -resolution 80
-backingStore
xedit /etc/passwd -bg green -bd red -bw 2 -geometry 500x1200
xfontsel -print -sample16 text16_12456 -bg green -bd red -bw 2 -geometry 220x1200

###

### movie_texcone.o
movieplayer -f -l 2000 -N /usr/share/data/movies/somersault.movie
movieplayer -f -l 2000 -z 5 -N /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 1.5 -N -S 300,200 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 3 -N -S 300,300 /usr/share/data/movies/somersault.movie

TESTBIN/sof
TESTBIN/sof

```

A.3.21 one_mtxp_180.a

```

### movie_texcone.o 180M (60M swap + 120 use

# TESTBIN/use_more_swap 120
TESTBIN/texCone
TESTBIN/texCone
movieplayer -f -l 2000 -N /usr/share/data/movies/somersault.movie
movieplayer -f -l 2000 -z 4 -N /usr/share/data/movies/somersault.movie
movieplayer -f -l 2000 -z 5 -N /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -N -S 100,100 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -N -S 200,200 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 1.5 -N -S 300,200 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 2 -N -S 200,100 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -N -S 300,300 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 3 -N -S 300,300 /usr/share/data/movies/somersault.movie
TESTBIN/texCone
TESTBIN/texCone
movieplayer -f -l 2000 -N /usr/share/data/movies/somersault.movie
movieplayer -f -l 2000 -z 4 -N /usr/share/data/movies/somersault.movie
movieplayer -f -l 2000 -z 5 -N /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -N -S 100,100 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -N -S 200,200 /usr/share/data/movies/somersault.movie
movieplayer -l 3000 -z 1.5 -N -S 300,200 /usr/share/data/movies/somersault.movie

```

```

### imgview
imgview /usr/share/data/textures/reflect/black.marble.room.rgb
imgview /usr/share/data/textures/surfaces/abruzzo.rgb
imgview /usr/share/data/textures/surfaces/fish.tile.rgb
imgview /usr/share/data/textures/textiles/speck.paper.rgb
### x_ps.o
xpsview -batch /usr/SVP/svp_data_xpsview.ps
xpsview /usr/lib/DPS/doc/ShowPSReferenceCard.ps
xpsview -batch /usr/lib/DPS/doc/ShowPSUserGuide.ps
bitmap
editres
viewres -vertical
xbiff -bg red -bw 8 -fg blue -rv
xcalc -bg green -bd red -bw 2 -geometry 500x200
xcalendar
xclipboard -bg green -bd red -bw 2 -geometry 500x200
xclock -chime -hl yellow
xconfirm -c -b test_x -t x_testing -header xconfirm -useslider
xconsole -bg green -bd red -bw 2 -geometry 500x200
xcutsel -bg green -bd red -bw 2 -geometry 500x200
xcutsel
xditview -bg green -bd red -bw 2 -geometry 500x200 -rv -page 2 -resolution 80
-backingStore
xedit /etc/passwd -bg green -bd red -bw 2 -geometry 500x1200
xfontsel -print -sample text_123456 -bg red -bd blue -bw 2 -geometry 2000x2000
TESTBIN/sof
TESTBIN/sof

```

A.3.22 sample_app.a

```

## some examples of gfx or non-gfx applications, command, demos, etc.
## Note, if the system is not gfx, some gfx will not run.

```

```

TESTBIN/sof
xpsview /usr/lib/DPS/doc/ShowPSReferenceCard.ps
TESTBIN/app_loop xpsview -batch /usr/lib/DPS/doc/ShowPSUserGuide.ps
xclock -analog -hl blue -hd red
xcalc -bg green -bd red -bw 2 -geometry 500x200
imgview /usr/Cadmin/images/cloginlogo.rgb
imgview /usr/share/data/textures/textiles/quilt.rgb
imgview /usr/share/data/textures/reflect/black.marble.room.rgb
imgview /usr/share/data/textures/surfaces/abruzzo.rgb
imgview /usr/share/data/textures/surfaces/fish.tile.rgb
imgview /usr/share/data/textures/textiles/speck.paper.rgb

TESTBIN/app_loop cat /var/adm/SYSLOG /var/adm/SYSLOG > /tmp/SYSLOG.tmp
TESTBIN/app_loop env\; printenv
TESTBIN/app_loop find / -depth
TESTBIN/app_loop chkconfig
TESTBIN/app_loop diskpatch -v
TESTBIN/app_loop hinv\; hinv -v\; hinv -c processor
TESTBIN/app_loop ls -R
TESTBIN/app_loop /usr/etc/ping $SOCKS_SERVER
TESTBIN/app_loop /usr/etc/ping $SOCKS_NS
TESTBIN/app_loop /usr/etc/ping $REMOTEHOST

```

```

TESTBIN/app_loop  nvrnm -v
TESTBIN/app_loop  pwd
TESTBIN/app_loop  sysinfo
TESTBIN/app_loop  sleep 5
TESTBIN/app_loop  wc -lwc /var/adm/SYSLOG
TESTBIN/app_loop  who
TESTBIN/app_loop  whodo
TESTBIN/app_loop  banner testing
TESTBIN/app_loop  cp /var/adm/SYSLOG /tmp/TMP_pcat \; pack /tmp/TMP_pcat \; unpack
/tmp/TMP_pcat.z \; rm /tmp/TMP_pcat
TESTBIN/app_loop  odiff /usr/bin /usr/sbin
TESTBIN/app_loop  sort /var/adm/SYSLOG > /tmp/TMP_sort \; rm /tmp/TMP_sort
TESTBIN/app_loop  tail -100 /var/adm/SYSLOG
TESTBIN/app_loop  uniq /var/adm/SYSLOG
TESTBIN/app_loop  ident /var/adm/SYSLOG
TESTBIN/app_loop  echo "999.99.99.99" | nslookup
TESTBIN/app_loop  playaiiff
/usr/share/data/sounds/soundscheme/soundfiles/24.muted.bong.aifc
TESTBIN/app_loop  playaiiff /usr/share/data/sounds/soundscheme/soundfiles/20.zikik.aifc
TESTBIN/app_loop  playaiiff
/usr/share/data/sounds/soundscheme/soundfiles/ss3.aifcTESTBIN/app_loop  playaiiff
/usr/share/data/sounds/soundscheme/soundfiles/01.buzz.kerchick.aifc

```

A.3.23 unix_eoe.a

```

TESTBIN/sof
TESTBIN/sof
### eoe.sw.unix (in loop)
TESTBIN/app_loop  cat -u          /var/adm/SYSLOG
TESTBIN/app_loop  cat -s          /var/adm/SYSLOG
TESTBIN/app_loop  cat -v          /var/adm/SYSLOG
TESTBIN/app_loop  cat -t          /var/adm/SYSLOG
TESTBIN/app_loop  cat -e          /var/adm/SYSLOG
TESTBIN/app_loop  cat /var/adm/SYSLOG /var/adm/SYSLOG > /tmp/SYSLOG.tmp
TESTBIN/app_loop  chkconfig
TESTBIN/app_loop  rm -f /tmp/SYSLOG.tmp \; cp /var/adm/SYSLOG /tmp/SYSLOG.tmp
TESTBIN/app_loop  rm -fr /tmp/TMP_cpio\; mkdir /tmp/TMP_cpio\; find ./TESTCASE -depth
-print | cpio -pdlmv /tmp/TMP_cpio
TESTBIN/app_loop  date '+DATE: %m/%d/%y%nTIME: %H:%M:%S'\; date -u
TESTBIN/app_loop  df -b\; df -e\; df -f\; df -i\; df -k\; df -l\; df -n\; df -P\; df
-q\; df -r
TESTBIN/app_loop  devnm /usr\; devnm .\; devnm /tmp
TESTBIN/app_loop  diskpatch -v
TESTBIN/app_loop  echo 'WARNING:\07'\; banner testing
TESTBIN/app_loop  env\; printenv
TESTBIN/app_loop  find / -depth
TESTBIN/app_loop  ftimer\; fuser -u /etc/passwd
TESTBIN/app_loop  grep -i -l -n -q -s -v anything /var/adm/SYSLOG
TESTBIN/app_loop  hinv\; hinv -v\; hinv -c processor
TESTBIN/app_loop  ls -R
TESTBIN/app_loop  ml list
TESTBIN/app_loop  nvrnm -v
TESTBIN/app_loop  pwd
TESTBIN/app_loop  sysinfo
TESTBIN/app_loop  sleep 5

```

```

TESTBIN/app_loop wc -lwc /var/adm/SYSLOG
TESTBIN/app_loop who
TESTBIN/app_loop whodo
TESTBIN/app_loop banner testing
TESTBIN/app_loop cp /var/adm/SYSLOG /tmp/TMP_pcat \; pack /tmp/TMP_pcat \; unpack
/tmp/TMP_pcat.z \; rm /tmp/TMP_pcat
TESTBIN/app_loop odiff /usr/bin /usr/sbin
TESTBIN/app_loop sort /var/adm/SYSLOG > /tmp/TMP_sort \; rm /tmp/TMP_sort
TESTBIN/app_loop tail -100 /var/adm/SYSLOG
TESTBIN/app_loop uniq /var/adm/SYSLOG
TESTBIN/app_loop ident /var/adm/SYSLOG
TESTBIN/app_loop echo "999.99.99.99" | nslookup
TESTBIN/app_loop /usr/etc/ping $SOCKS_SERVER
TESTBIN/app_loop /usr/etc/ping $SOCKS_NS
TESTBIN/app_loop /usr/etc/ping $REMOTEHOST
### playaiiff (sounds)
TESTBIN/app_loop playaiiff
/usr/share/data/sounds/soundscheme/soundfiles/24.muted.bong.aifc
TESTBIN/app_loop playaiiff /usr/share/data/sounds/soundscheme/soundfiles/20.zikik.aifc
TESTBIN/app_loop playaiiff /usr/share/data/sounds/soundscheme/soundfiles/ss3.aifc
TESTBIN/app_loop playaiiff
/usr/share/data/sounds/soundscheme/soundfiles/01.buzz.kerchick.aifc

TESTBIN/sof

```

A.3.24 x_ps.a

```

### ~ 30m x_ps.o
xpsview /usr/lib/DPS/doc/ShowPSReferenceCard.ps
TESTBIN/app_loop xpsview -batch /usr/lib/DPS/doc/ShowPSUserGuide.ps
TESTBIN/app_loop xpsview -batch /usr/lib/DPS/doc/ShowPSUserGuide.ps
TESTBIN/app_loop xpsview -batch /usr/lib/DPS/doc/ShowPSUserGuide.ps
bitmap
editres
viewres -vertical
viewres
xbiff -bg red -bw 8 -fg blue -rv
xbiff
xcalc -stipple
xcalc -rpn
xcalc -rpn -geometry 800x800
xcalc -bg green -bd red -bw 2 -geometry 500x200
xcalc -stipple -geometry 1200x1000
xcalc
xcalendar
xclipboard -bg green -bd red -bw 2 -geometry 500x200
xclipboard
xclock -chime -hl yellow
xclock -digital
xclock -analog -hl blue -hd red
xclock
xconfirm -c -b test_x -t x_testing -header xconfirm -useslider
xconfirm -c -geometry 500x500 -useslider
xconfirm
xconsole -bg green -bd red -bw 2 -geometry 500x200

```

```
xconsole -verbose -daemon -notify
xconsole -verbose -daemon -notify -exitOnFail -bg blue -bd yellow -bw 8 -geometry
500x800
xconsole
xcutsel -bg green -bd red -bw 2 -geometry 500x200
xcutsel
xditview -bg green -bd red -bw 2 -geometry 500x200 -rv -page 2 -resolution 80
-backingStore
xcutsel
xditview -bg green -bd red -bw 2 -geometry 500x200 -rv -page 2 -resolution 80
-backingStore
xditview
xedit /etc/passwd -bg green -bd red -bw 2 -geometry 500x1200
xedit
xfontsel -print -sample text_123456 -bg red -bd blue -bw 2 -geometry 2000x2000
xfontsel -print -sample16 text16_12456 -bg green -bd red -bw 2 -geometry 220x1200
xfontsel
TESTBIN/sof
TESTBIN/sof
```

