Tape driver configuration tool 1.1

User's Guide

FUJITSU

Preface

Purpose

This manual explains the supported auto-configuration of tape driver configuration file(st.conf) in Solaris (TM) Operating System.

Intended Readers

This manual targets the system administrator who introduces the system and operates it.

Configuration

The configuration of this manual and the content are as follows.
- "Chapter 1 Product Overview" explains the function of the Tape driver configuration tool.
- "Chapter 2 Command reference" explains the use of the command.
- "Chapter 3 Message" explains the meaning of messages and corrective action.
- "Chapter 4 Appendix" explains concretely configuration of each tape devices.

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Notes

Contents

Chapter1   Product Overview

1.1 Overview

Tape driver configuration tool sets target tape device configuration to /kernel/drv/st.conf automatically.

Tape driver configuration tool supports following function.
- fjcnfset(1M) – adding target tape device configuration automatically.
- fjcnfchk(1M) – checking target tape device configuration.

For more detail, see Chapter 2

fjcnfset(1M) and fjcnfchk(1M) are automatically invoked in package installation.
If no configuration of target tape device is detected, target tape device configuration is added automatically. Otherwise, tape driver configuration file (= /kernel/drv/st.conf) is checked.
New configuration is reflected by reboot .

1.2 Operational Environment

The tape driver configuration tool can be executed in the following environments.

1. Hardware
    - PRIMEPOWER, GP7000F
2. Software
    - Solaris(TM) 2.6 Operating System
    - Solaris(TM) 7 Operating System
    - Solaris(TM) 8 Operating System
    - Solaris(TM) 9 Operating System
    - Solaris(TM) 10 Operating System

1.3 target tape devices

Tape driver configuration tool supports following tape devices.

No.	device name	model
1	DDS-4 drives	PW023DT3, PW023DT4, PW0G3DT1
2	DAT-72 drives	PW023DT5, PW023DT6, PW0R3DT3, PW0G3DT2

Chapter2　　Command reference

2.1 fjcnfset(1M)

[NAME]

fjcnfset – set driver configuration parameter.

[SYNOPSIS]

/opt/FJSVdcnf/bin/fjcnfset st

[DESCRIPTION]

At first fjcnfset(1M) detects target tape devices. If no configuration of target tape device is detected in /kernel/drv/st.conf, target tape device configuration is added automatically. Otherwise, tape driver configuration is checked.

New configuration is reflected by reboot .

[OPELANDS]

set driver's name : st

[EXIT STATUS]

The following exit values are returned.

0   Successful completion.

>0   An error occurred.

For more information, see output-messages(Chapter 3).

[FILES]

/kernel/drv/st.conf

[SEE ALSO]

fjcnfchk(1M)

st(7D)

driver.conf(4)

2.2 fjcnfchk(1M)

[NAME]

　　　fjcnfchk – check driver configuration parameter.

[SYNOPSIS]

　　　/opt/FJSVdcnf/bin/fjcnfchk st

[DESCRIPTION]

　　　fjcnfchk(1M) checks driver configuration file (=/kernel/drv/st.conf).

　　　fjcnfchk(1M) detects target tape device configuration in /kernel/drv/st.conf, and compares the contents of current value and fujitsu recommend value.

　　　The result message will be produced if the configuration value is no identical.

　　　No output will be produced if the configuration value is identical.

[OPELANDS]

　　　set driver's name : st

[EXIT STATUS]

　　　The following exit values are returned.

　　　0　　　　Successful completion.

　　　>0　　　An error occurred.

　　　　　　　For more information, see output-messages(Chapter 3).

[FILES]

　　　/kernel/drv/st.conf

[SEE ALSO]

　　　fjcnfset(1M)

　　　st(7D)

　　　driver.conf(4)

Chapter3   Messages

Tape driver configuration tool output the following messages.

For more /kernel/drv/st.conf parameters, see st(7D) man pages.

[MESSAGES]

    FJSVdcnf: st: notice: ***** /kernel/drv/st.conf auto edit *****

    FJSVdcnf: st: target device = *<device name>*

    FJSVdcnf: st: config value   = *<config value>*

[MEANING]

    Tape driver configuration tool detects the output target tape device, and adds configuration to /kernel/drv/st.conf.

[ACTION]

    Nothing.

[MESSAGES]

    FJSVdcnf: st: warning: ***** current setting not recommend *****

    FJSVdcnf: st: target device   = *<device name>*

    FJSVdcnf: st: current   value = *<value 1>*

    FJSVdcnf: st: recommend value = *<value 2>*

[MEANING]

    Detected difference between current value and recommend value.

[ACTION]

    No operation, If current value is true. Otherwise modify value of data-property.

[MESSAGES]

    FJSVdcnf: st: error: ***** /kernel/drv/st.conf tape-config-list *****

    FJSVdcnf: st: miss configuration -> tape-config-list="...

[MEANING]

    Detected tape-config-list parameter errors.

[ACTION]

    Modify the value of tape-config-list parameter.

[MESSAGES]

    FJSVdcnf: st: error: ***** /kernel/drv/st.conf data-property *****

    FJSVdcnf: st: miss configuration -> *<data-property-name>*= <value1>, ..<value n>

    FJSVdcnf: st: <property-name>   -> *<data-property-name>*

[MEANING]

    Detected *<data-property>* parameter errors.

[ACTION]

    Modify the value of *data-property.*

[MESSAGES]

FJSVdcnf: st: warning: **** target tape device is busy. try again. ****

FJSVdcnf: st: target device= <device name>

[MEANING]

Failed to get information of the output target tape device because the device is busy, and retrying.

[ACTION]

Check the device and execute the command again.

Chapter4　Appendix

4.1　Configuration parameters

This section explains concretely configuration of each target tape devices.

The formal syntax of st.conf is :
tape-config-list="<AAAA>", "<BBBB>", "<CCCC>";
<CCCC>= param1, param2, ..., paramN;

<AAAA> is the string that is returned by the tape device on a SCSI inquiry command.
<BBBB> is used to report the device on the console.
<CCCC> is name of parameters which contains all the tape configuration values.

For more detail, see st(7D) man-pages.

4.1.1 DDS-4 tape drives　　(PW023DT3, PW023DT4, PW0G3DT1)

```
tape-config-list=
"SEAGATE DAT      9SP40-000","SEAGATE_DAT____9SP40-000","SEAGATE_DAT____9SP40-000";
SEAGATE_DAT____9SP40-000=1, 0x34, 0, 0x9639, 4, 0x00, 0x8c, 0x8c, 0x8c, 3;
```

4.1.2 DAT-72 tape drives　　(PW023DT5, PW023DT6, PW0R3DT3, PW0G3DT2)

```
tape-config-list=
"SEAGATE DAT      DAT72-000","SEAGATE_DAT____DAT72-000","SEAGATE_DAT____DAT72-000";
SEAGATE_DAT____DAT72-000=1, 0x34, 0, 0x9639, 4, 0x00, 0x8c, 0x8c, 0x8c, 3;
```