
MTSRD for UnixWare 7

MTSRD V1.00.i7 package has been modified so it can be installed on SCO UnixWare 7. The basic code is the same but changes were made to the package information and the way devices are configured. This document is to be used in conjunction with the SCO UnixWare 2.x MTSRD release note.

Installation

No changes have been made to the installation method.

Device Setup

The mtsm and tty devices are create using the same method as before (mtsinit). The first 16 have already been added to /dev/term.

MTSM Demon Configuration

The mtsm demons have to added manually to the /etc/inittab file before the /usr/lib/saf/sac is started. The example bellow shows part of the /etc/inittab and where the mtsm devices are to be added. The format of the command is described in MTSRD for UnixWare 2.x release note.

```
rb:6:wait:/sbin/uadmin 2 1 >/dev/console 2>&1 </dev/console
li:23:wait:/usr/bin/ln /dev/systty /dev/syscon >/dev/null 2>&1
m000:23:respawn:/etc/mts/mtsrld /dev/term/mtsm000 10000
m001:23:respawn:/etc/mts/mtsrld /dev/term/mtsm001 10001
sc:234:respawn:/usr/lib/saf/sac -t 300
co:12345:respawn:/usr/lib/saf/ttymon -g -p "Console Login: " -d
/dev/console -l console
```

TTY Configuration

A unix script has been supplied to config the terminal entries called spxadmport. This needs to be transferred to the UnixWare system and placed in the /bin directory. See the Step-by-Step instructions and the SPXADMPORT document for information on using the utility.

Step-by-Step Guide to setting up a terminal

These are the step required to setup a terminal on one of the first 16 MTSRD devices.

1. Create the MTSRD drivers disk and install using the command:

```
pkgadd -d diskette1 mtsrd
```

Now reboot the system.

2. The first 16 devices have been created already for mtsm000 – mtsm015, tty000 - tty015 and ttym000 – ttym015. These devices are setup to use the tcp port numbers 10000 to 10015. To start the mtsm demon modify the /etc/inittab file to include the mtsm demon before the sac demon.

```
e.g. li:23:wait:/usr/bin/ln /dev/systty /dev/syscon >/dev/null 2>&1
m000:23:respawn:/etc/mts/mtsrld /dev/term/mtsm000 10000
sc:234:respawn:/usr/lib/saf/sac -t 300
```

Now reboot to ensure the mtsm demon is available for the sac process.

3. To add the port service use spxadmport as follows:


```
spxadmport add tty000 9600_8N
```

Adding additional devices

Extra devices have to be added manually as follows:

1. Modify `/etc/inittab` as described before.
2. Update master device file `/etc/conf/node.d/mtsm` as described in the release note (Section 4.2.1.1)
3. Update slave device file `/etc/conf/node.d/mtss` as described in the release note (Section 4.2.1.2)
4. Run `/etc/conf/bin/idmknod` to build the new devices into the kernel and create the `/dev/term` entries.

SPXADMPort on UnixWare 7

The UnixWare 2.x drivers will run on UnixWare 7 without any user modifications. However OA&M is not part of UnixWare 7 consequently the UnixWare 2 Specialix configuration utilities will not work. The script `spxadmport` was created to get around this problem. This script is installed by default on UnixWare 7 machines and has options for adding, removing, enabling, disabling and listing port monitors (logins).

The `spxadmport` command is as follows:

```
/etc/spxadmport command svctag [label] [owner]
```

```

command:  add/enable/disable/remove
svctag:   device number from /dev/term
          RIO    r001-rxxx
           R001-Rxxx

          SX     a001-axxx
           A001-Axxx

          IO8    i01-i08
           I01-I08

          MTSRD  ttym000-ttymxxx
label:    /etc/ttydefs entry e.g. 9600R
owner:    UnixWare 7.01 defaults to root as the owner, but in order not to
          compromise system security you are advised to change this to another
          user id.
```

Problems have been found with the Port monitor service on UnixWare 7.01 in that disable and remove operations are not acted on immediately. If an operation is not acted on then the port monitor service will need to be stopped and restarted. To stop and start the port monitor service use the following commands:

```
sacadm -k -p riomon
sacadm -s -p riomon
```

Examples

Adding a login process for a terminal (9600, 81N) on RIO port r001.

```
/etc/spxadmport add r001 9600R root
```

Disabling a login process

```
/etc/spxadmport disable r001
```

Enable a login process

```
/etc/spxadmport enable r001
```

Remove a login process

```
/etc/spxadmport remove r001
```

Modify a login process

This requires that the login have to be removed and then added.

```
/etc/spxadmport remove r001  
/etc/spxadmport add r001 19200R root
```

A new version of the `spxadmport` utility is available from ftp.specialix.co.uk . This new version includes a "list" option.

```
/etc/spxadmport list p
```

Lists all logins configured.

```
/etc/spxadmport list s
```

Lists all port services configured (e.g. riomon).

```
/etc/spxadmport list
```

Lists both the above.