

PowerEdge T440 System  
LTO8 Tape Backup Device  
Simple Operation Manual

Dell Technologies, Inc.

Nippon COMSYS Corporation

03-November-2020

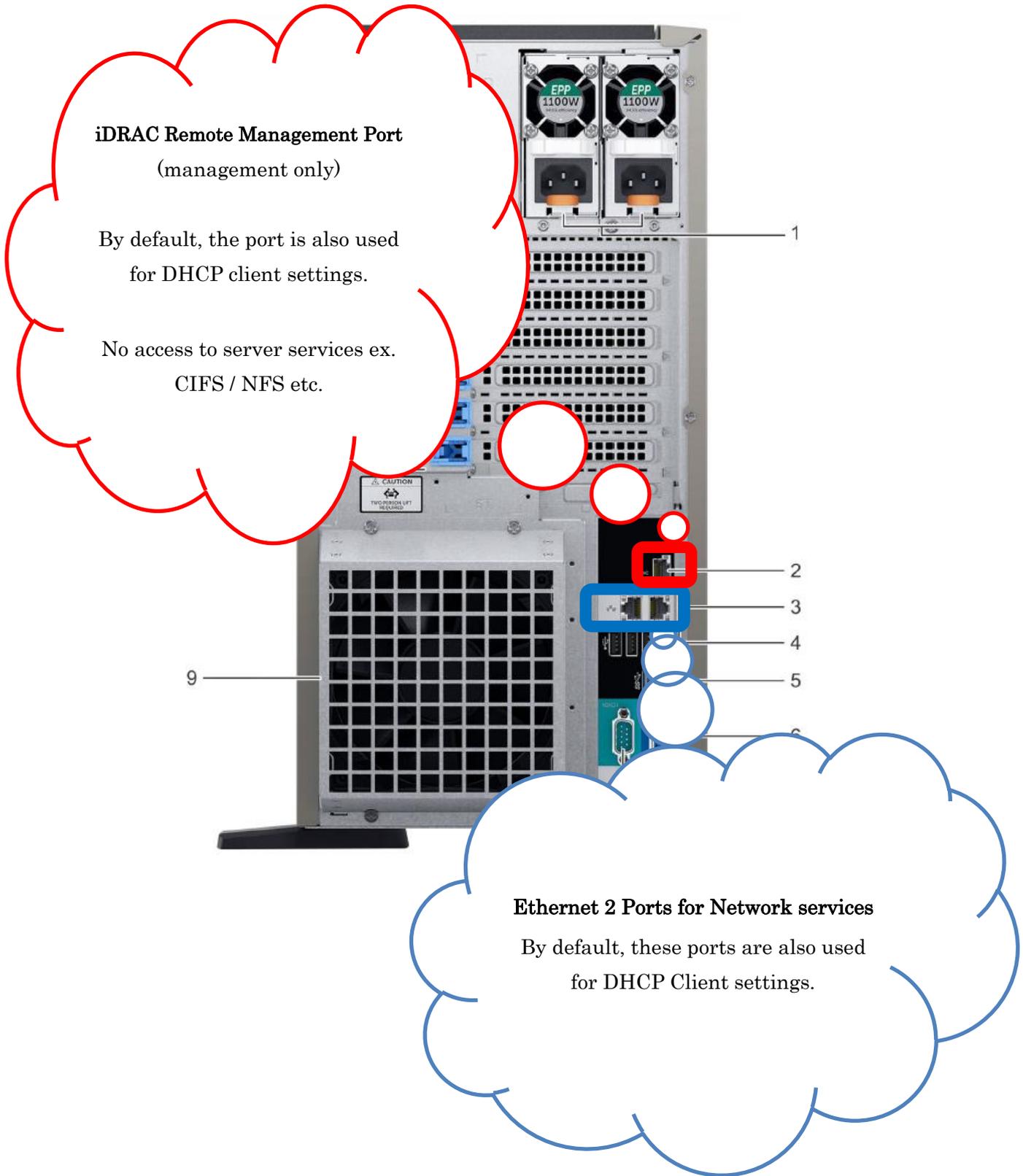
## Version Control

Version	Date	Created	Remarks
1	2019.3.12	Nippon COMSYS Corporation	First edition
1.1	2020.9.10	Dell Technologies, Inc.	Equipment image, reference Information added

# Front view of T440 device



## Rear view of T440



## mac address confirmation method

You can check the mac address of the NIC with the *'ifconfig'* command.

\* Please note that the output below may differ depending on the environment (see eth0, eth1, as examples).

```
# ifconfig -a
eth0      Link encap:Ethernet(1)  HWaddr 00:80:90:44:08:11(2)
          inet addr:192.168.1.11(3) Bcast:192.168.1.255(4) Mask:255.255.255.0(5)
          inet6 addr: fe80::3199:ff:fe01:3762/64 Scope:Link(6)
          UP(7) BROADCAST(8) RUNNING(9) MULTICAST(10)  MTU:1500(11)
          Metric:1(12)
          RX packets:583312 errors:0 dropped:0 overruns:0 frame:0(13)
          TX packets:28344 errors:0 dropped:0 overruns:0 carrier:0(13)
          collisions:0 txqueuelen:100(13)
          RX bytes:4987886272 (4.9 GB) TX bytes:50440257 (50.4 MB)(14)
eth1      Link encap:Ethernet  HWaddr 00:80:00:48:AA:88
          BROADCAST MULTICAST MTU:1500 Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:100
          RX bytes:0 (0.0 B) TX bytes:0 (0.0 B)
lo        Link encap:Local Loopback
          inet addr:127.0.0.1 Mask:255.0.0.0
          UP LOOPBACK RUNNING MTU:3924 Metric:1
          RX packets:16 errors:0 dropped:0 overruns:0 frame:0
          TX packets:16 errors:0 dropped:0 overruns:0 carrier:0
```

## Backup / Restore from the USB disk mount to LTO8 tape:

- i. Attach the USB hard disk drive to the computer.
- ii. Confirm that filesystem has been mounted ( you can use gnome 'nautilus' file system manager.) #By default, Cent OS 7 has automount feature.
- iii. /dev/nst0 device is the LTO 8 drive.
- iv. Now you can backup files on the mounted drive to LTO8 tape using '*tar cvf*' command.
- v. You can access the LTO8 tape drive by using '*mt*' command.
- vi. When restoring file(s) from the LTO8 tape to the USB disk, you must move properly the tape head using the '*mt*' command.
- vii. \*To restore a tar archive to the USB disk, you should use '*tar xvf*' command.

\*caution, this will overwrite the existing data on the hard drive.

## Tape device

Tape devices are recognized as `/dev/st0` and `/dev/nst0`.

- `/dev/st0` automatically rewinds the tape to the beginning after a read / write operation.
- `/dev/nst0` moves to the beginning of the next file after a read / write operation.

## Check the tape status

Check the tape status with the `'mt'` command:

```
# mt -f /dev/nst0 status
SCSI 2 tape drive:
File number = 4, block number = 0, partition = 0.
Tape block size 0 bytes. Density code 0x46 (LTO-4).
Soft error count since last status = 0
General status bits on (81010000):
EOF ONLINE IM_REP_EN
#
```

## Tape operation

To rewind the tape, specify `rewind` with the `'mt'` command:

```
# mt -f /dev/nst0 rewind
```

To move the tape to the beginning of the next file at the current position, specify `fsf 1` with the `'mt'` command:

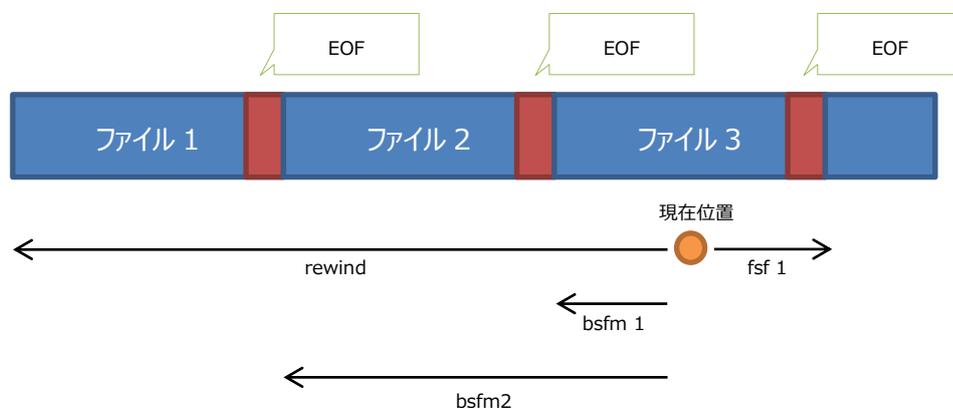
```
# mt -f /dev/nst0 fsf 1
```

To move the tape to the beginning of the file at the current position, specify `bsfm 1` with the `'mt'` command:

```
# mt -f /dev/nst0 bsfm 1
```

To move the tape to the beginning of the file immediately before the file at the current position, specify bsfm 2 with the 'mt' command:

```
# mt -f /dev/nst0 bsfm 2
```



## File writing with 'tar' command

Specify /dev/st0 or /dev/nst0 as the write destination with the tar command:

```
# tar cvf /dev/nst0 <file name> <file name>...
```

## File extraction with 'tar' command

Move to the beginning of the target file and read from /dev/st0 or /dev/nst0 with the tar command:

```
# tar xvf /dev/nst0
```

## Tape drive cleaning

When cleaning is required, "C" will be displayed on the character display. Insert only the cleaning cartridge into the drive. When cleaning is complete, the cleaning cartridge will be ejected.

## Reference URL

T440 Owner's Manual

[https://topics-cdn.dell.com/pdf/poweredge-t440\\_owners-manual10\\_en-us.pdf](https://topics-cdn.dell.com/pdf/poweredge-t440_owners-manual10_en-us.pdf)

T440 Japanese Manual

[https://topics-cdn.dell.com/pdf/poweredge-t440\\_owners-manual10\\_ja.pdf](https://topics-cdn.dell.com/pdf/poweredge-t440_owners-manual10_ja.pdf)

## TAG NUMBER is 777CHV2

You can access DELL'S support resources new device driver etc. at the following URL:

<https://www.dell.com/support/home/en-us/product-support/servicetag/0-WDJVK3YxYmJ6N1BHT0QxK1IRK1ImQT090/overview>