



Addendum B

Sun StorageTekTM Virtual Operator Panel

Customer User's Guide

Sun Microsystems, Inc.
www.sun.com

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Summary of Changes

Addendum B contains updates to the *Sun StorageTek Virtual Operator Panel Customer User's Guide*, Revision JA.

These changes will be incorporated into the manual at the next reissue (Revision JB).

This addendum contains a compilation of information regarding VOP release 1.0.13, such as:

- Support of IPv6 addressing for the T10000 tape drive in the sunVOP application
- Changes to the ltoVOP interface

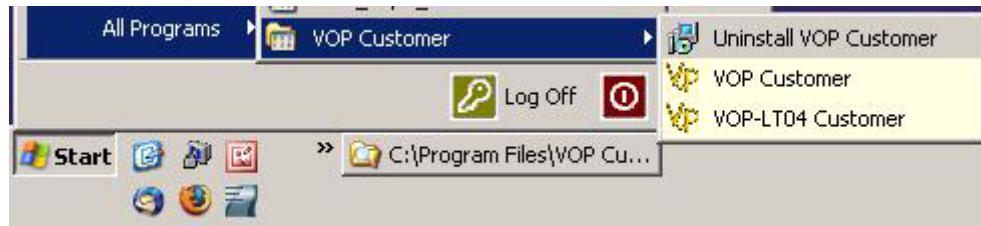
Summary of Changes

VOP 1.0.13 Addendum

This addendum to the *Sun StorageTek Virtual Operator Panel Customer User Guide* identifies what is new in version 1.0.13.

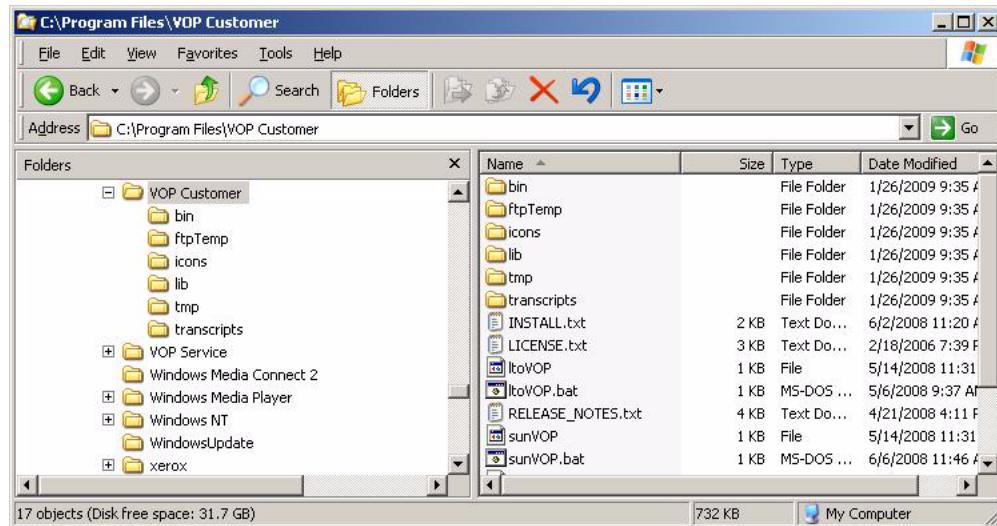
You can start the Windows version of VOP from the Start button or a batch file.

Start button (All Programs):



- Click the *VOP Customer* command to use the program with a T10000 or T9840D tape drive.
- Click the *VOP-LTO4 Customer* command to use the program with an HP LTO4 tape drive.

Batch file:



- Click *sunVOP.bat* to use the program with a T10000 or T9840D tape drive.
- Click *ItoVOP.bat* to use the program with an HP LTO4 tape drive.

Note: Use the *ItoVOP* and *sunVOP* files without the .bat extension on Solaris or Linux systems.

■ Changes to sunVOP

Changes from VOP 1.0.12:

- Changed "Make Tape" behavior to continue making tapes until the user explicitly cancels the operation
- Fixed bugs in the enroll process
- Added support for IPv6 addressing

IPv6 is the next generation Internet protocol. It provides a much larger address space than IPv4. This is based on the definition of a 128-bit address—IPv4 used a 32-bit address. The format of an IPv6 address is eight fields of four hexadecimal characters separated by colons (for example: 2001:0db8:85a3:0000:0000:8a2e:0370:7334).

The user's guide provides information in Appendix B regarding a private tape drive network where you use VOP to access any drive on the network. The information pertains to a network that uses IPv4 addresses. You can modify the network components to upgrade the network to make use of IPv6 addresses. This document does not provide information to upgrade your network, contact your network administrator for assistance with an upgrade.

This portion of the addendum provides an overview of the screens that contain information related to IPv6.

Retrieve Menu

You can access the Retrieve menu when the drive is online or offline. The IPv6 information resides in the View Drive Data area.



View Current Drive Settings of the Network

An IPv6 section has been added above the Network node name parameter to show the various address values. The *interface id* is unique to the drive's Ethernet port while the *IPv6 address 4* value is the link local address of the drive. Other values are present when the drive is connected to an IPv6 network.

Figure 1. View Network

Parameter Definition	Parameter Value
IPv4 address:	010.000.000.001
Subnet mask:	255.255.255.000
Gateway:	255.255.255.255
IPv6 static address:	""
IPv6 interface id:	"0010:4fff:fe09:537F"
IPv6 address 0:	"-null-"
IPv6 address 1:	"-null-"
IPv6 address 2:	"-null-"
IPv6 address 3:	"-null-"
IPv6 address 4:	"FE80::210:4FFF:FE09:537F"
IPv6 address 5:	"-null-"
IPv6 address 6:	"-null-"
IPv6 address 7:	"-null-"
IPv6 address 8:	"-null-"
IPv6 address 9:	"-null-"
Network node name:	"T10000-001000183"

View Current Drive Settings for Encryption

The parameter labeled KMS IPv4/v6 addr (Enroll) has been expanded to allow for IPv6 addressing. The other changes from version 1.0.12 include FIPS support for KMS 2.1:

- Running in FIPS mode
- FIPS certification level

Figure 2. View Encrypt

Parameter Definition	Parameter Value
Crypto Serial Number:	000005c7
Device zeroed:	No
Device reset:	No
Encryption active:	No
Running in FIPS mode:	No
FIPS certification level:	N/A
Licensed:	No
Use tokens:	UNKN
Permanently encrypting:	UNKN
Agent ID (Enroll):	""
*Pass Phrase (Enroll):	""
KMS IPv4/6 addr (Enroll):	""
Active device keys:	No
(date/timestamp):	***
Active media keys:	No
(date/timestamp):	***
(drv pool dts):	***
(dev keys dts):	***
(mapping dts):	***
Key Load Number:	0
Number of media keys:	0
EKT address:	000.000.000.000
OKT-1 address:	000.000.000.000
OKT-2 address:	000.000.000.000
Need device keys:	No
Rcvd device keys:	No
(Hold date/timestamp):	***
Need media keys:	No
Rcvd media keys:	No
(Hold date/timestamp):	***

Refer to the encryption documentation for further information regarding FIPS mode.

Configure Menu

The Configure Drive Parameters property sheet for the Network has been expanded to include an IPv6 static address.

Note: Check with your network administrator prior to setting an IPv6 static IP address. The address must be unique.

If you want to set a static address:

1. Use an IPv4 address to connect VOP to the tape drive.

Note: The initial manufacturing setting is 010.000.000.001, as shown in the following figure.

2. Navigate to the Change Drive Parameters Network property sheet.
3. Enter the static IP address. A check mark appears in the Update box adjacent to the address.
4. Click the Commit button.

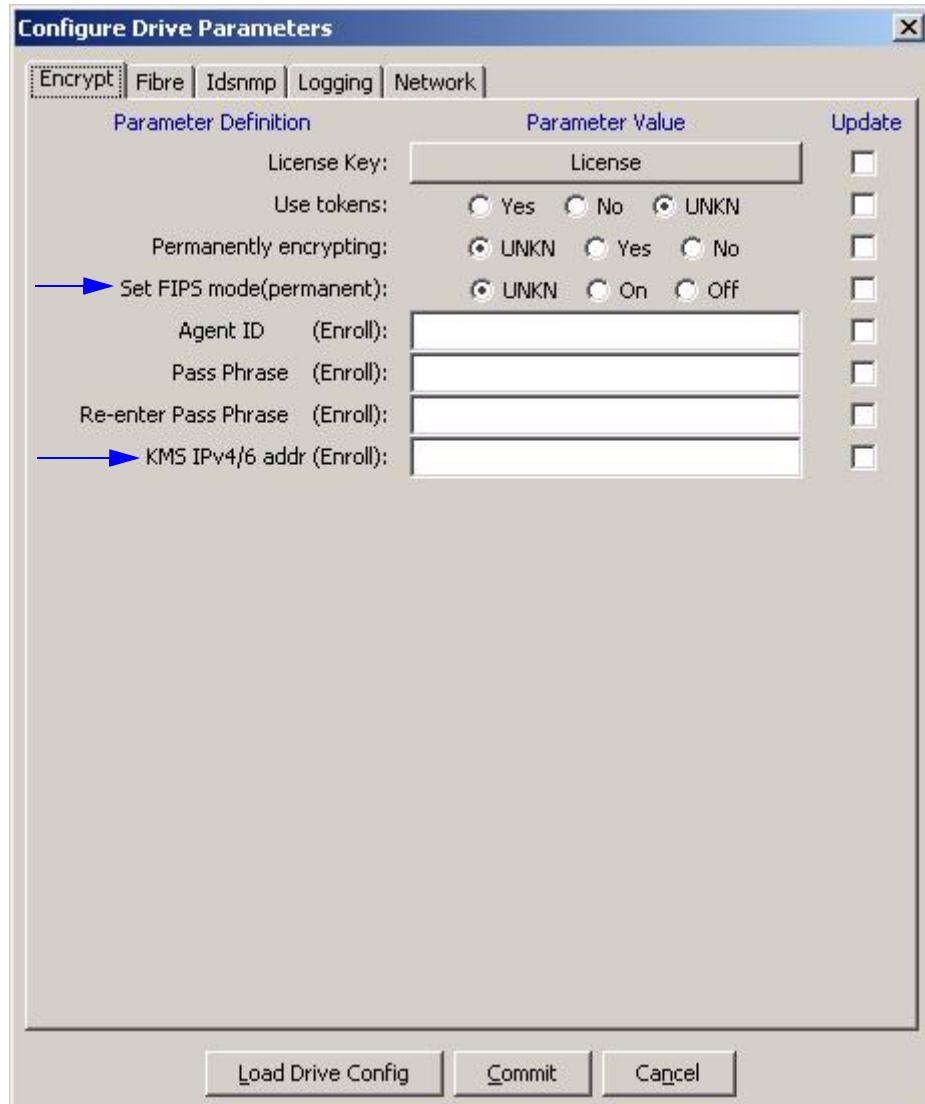
Figure 3. Change Network

Parameter Definition	Parameter Value	Update
IPv4 address:	010.000.000.001	<input type="checkbox"/>
Subnet mask:	255.255.255.000	<input type="checkbox"/>
Gateway:	255.255.255.255	<input type="checkbox"/>
IPv6 static address:		<input type="checkbox"/>
Network node name:	T10000-001000183	<input type="checkbox"/>

The Configure Drive Parameters property sheet for Encryption parameters has been expanded to include:

- Set FIPS mode (permanent)
- IPv6 address of the KMS

Figure 4. Change Encrypt



Refer to the encryption documentation for further information regarding FIPS mode and KMS IPv6 addressing.

■ Changes to ItoVOP

The VOP application window now has four basic operational functions (tabs):

- Monitor Drive
- Enroll Drive
- Configure Drive
- Service Drive

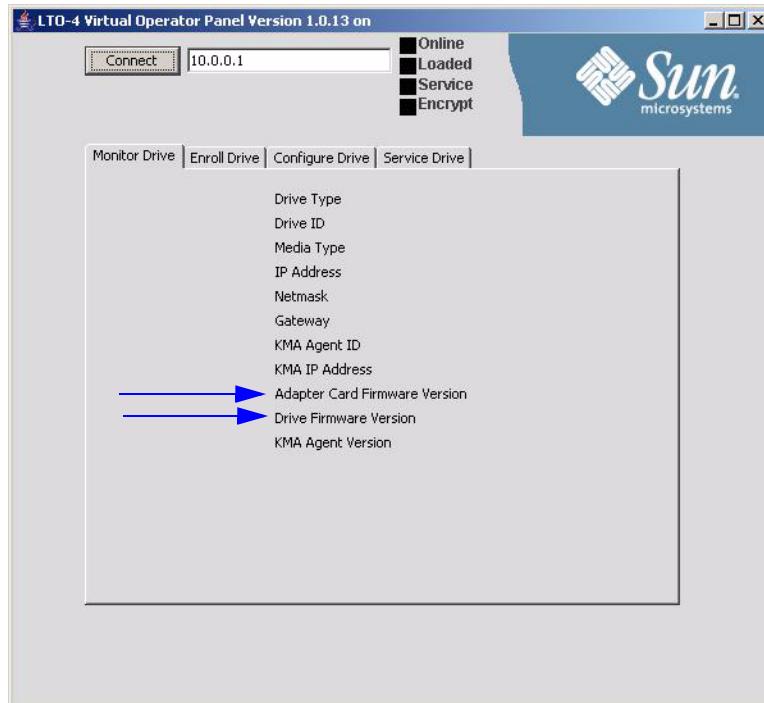
Several functions from the Configure Drive tab of version 1.0.12 have been moved to either the Enroll Drive tab or the Service Drive tab.

Monitor Drive

Eleven information elements are available for the HP LTO4 drive instead of ten.

- Adapter Card Firmware Version is now a generic description rather than the Dione Version that appeared in version 1.0.12
- Drive Firmware Version has been added above the last item (KMA Agent Version)

Figure 5. Not Connected

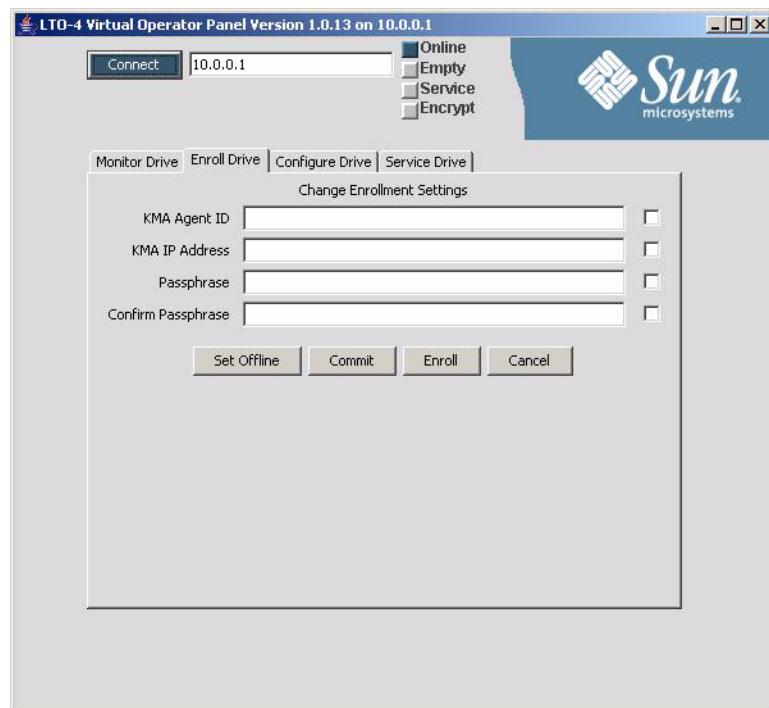


Enroll Drive

The Enroll Drive tab contains most of the functions that were in the Configure Drive tab of version 1.0.12.

- KMA Agent ID
- KMA IP Address
- Passphrase
- Confirm Passphrase
- Set Offline/Online
- Commit
- Enroll
- Cancel

Figure 6. Enroll Drive

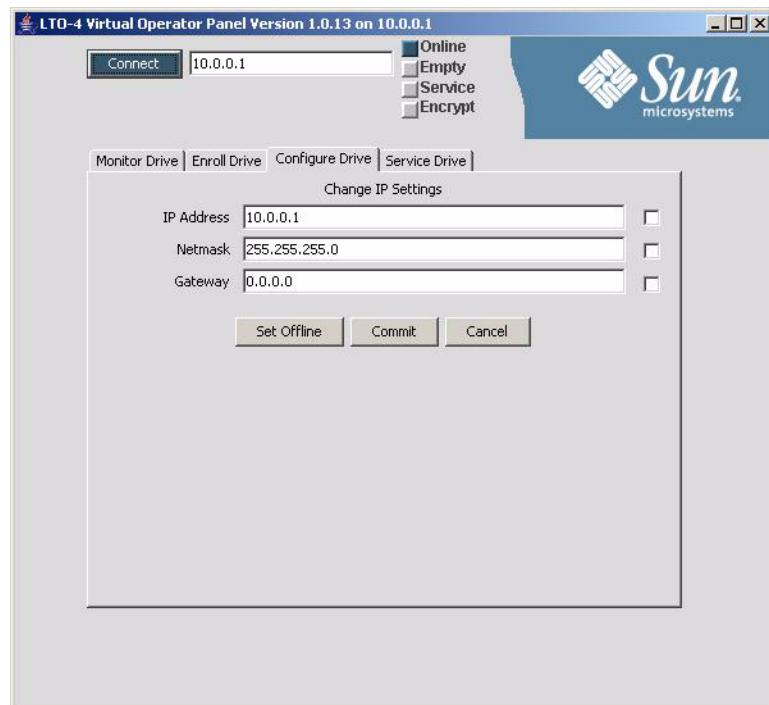


Configure Drive

The Configure Drive tab has been reduced from version 1.0.12 and contains the following functions:

- IP Address of the drive
- Netmask
- Gateway
- Set Offline/Online
- Commit
- Cancel

Figure 7. Configure Drive



Service Drive

The Service Drive tab has gained the IPL button that was in the Configure Drive tab of version 1.0.12 resulting in six buttons on the screen.

Figure 8. Service Drive

