



Enterprise Erase E2400 User Guide
Revision 4.0

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CONTENTS

1.0 Product Overview	4
2.0 Installing and Removing Drives from the E2400	6
3.0 Erasing a Hard Drive Using the E2400	7
3.1 The Main Desktop Screen	7
3.2 Launching the Enterprise Erase Application	7
3.3 The Main User Interface (GUI)	8
3.4 Beginning the Erasure Process	8
3.5 Confirming the Erasure Process	9
3.6 Selection of Overwrite Level	9
3.7 Confirming the Overwrite Level	10
3.8 Status of Erasure in Progress	10
3.9 Successful Completion of an Erase	11
4.0 Canceling an Erase In Progress	12
4.1 Selecting the Drive	12
4.2 Canceling the Erase	12
4.3 Canceled Erase Display	12
4.4 Failed Erase Display	13
5.0 Hot Swap Function	14
6.0 Using the Sector Viewer	15
7.0 Viewing Erasure Logs	17
8.0 Product Support	18
Addendum – Request Licenses	19

1.0 Product Overview

1.1 Description

The Enterprise Erase E2400 is an appliance designed to erase loose hard drives. The system can erase up to twenty-four hard drives simultaneously; depending upon chosen configuration, it can erase any of the following drive types:

- SAS
- SATA
- IDE/PATA

The E2400 comes standard with three basic overwrite algorithms for the user to choose from when performing an erasure on a hard drive:

- Single Pass Overwrite
- Three Pass Overwrite with Verify (meets US DOD5220M Standard)
- Seven Pass Overwrite with Verify (meets US DOD5220M ECE Standard)
- CESG
- NIST SP 800-88

1.2 Items Included in Enterprise Erase E2400

Enterprise Erase E2400 comes with the following:

- One E2400 Appliance
- Two Towers each with 12 drive bays
- Power Cables and Data Cables
- 2.5 inch hard drive adapters (if requested by customer)

The user of the appliance will need to supply the following:

- Keyboard
- Mouse
- Monitor

1.0 Product Overview (cont.)

1.3 Preparation for Use

1. The first step in preparing E2400 for use is to connect the user supplied mouse, monitor, and keyboard. All appliances have ports for USB mice and keyboards, and some may still include PS2 ports.
2. Then, connect the supplied data cables from the appliance to the towers; cables will vary based on specific configuration, i.e. a tower configured for SAS will include a SAS data cable.
3. Next, connect the supplied power cables to the back of the E2400 appliance and two towers to the wall outlet.
4. Now, turn on the appliance by depressing the power buttons on the rear of the towers (power supply on/off switches); then depress the power button on the front of the appliance and two towers.

2.0 Installing and Removing Drives from the E2400

To install a drive into an E2400 with ‘Caddy-less Trays’, place the loose hard drive into the drive erasure tray until you feel it locate on the plug at the back of the tray.



2.1 Loose Drives Installed

3.0 Erasing a Hard Drive Using the E2400

3.1 Once the appliance has been powered on and the Linux software has booted, the main desktop screen will appear on the monitor. Figure 3.1 below shows the main desktop screen.



Figure 3.1 – Main Desktop Screen

3.2 **Double** click on the desktop icon for Enterprise Erase to launch the application.

3.0 Erasing a Hard Drive Using the E2400 (cont.)

3.3 After the software launches, you will see the main user interface (GUI). Figure 3.2 shows this interface.

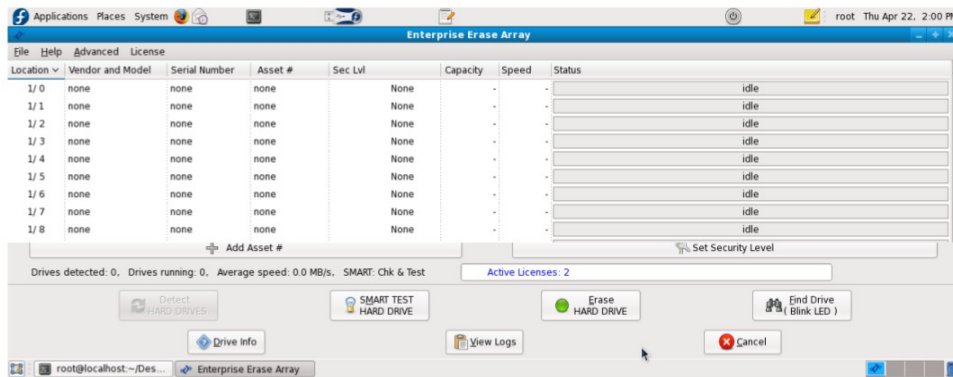


Figure 3.2 – E2400 Main User Interface Screen (GUI)

3.4 To begin the erasure process, first highlight the drive you would like to erase on the list of devices on the user interface screen. Figure 3.3 below shows a highlighted drive as it would appear on the screen:

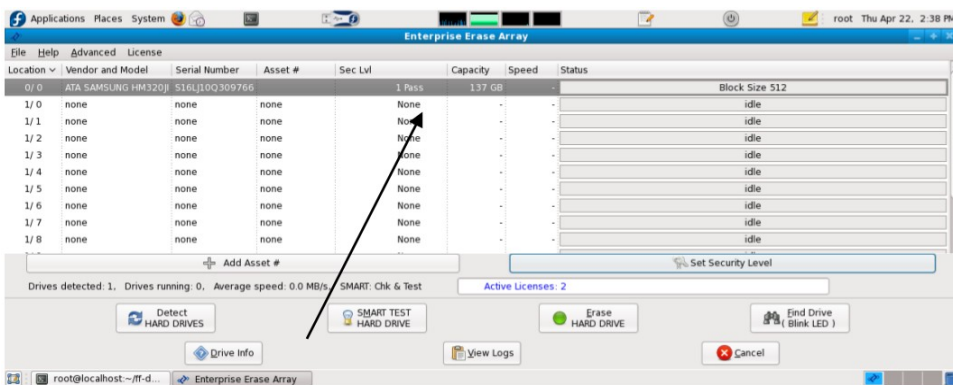


Figure 3.3 – User Interface Screen with Drive Highlighted

3.0 Erasing a Hard Drive Using the E2400 (cont.)

NOTE: It is possible to start drives in batches by highlighting multiple drives at a time as shown in the figure above. Simply hold the shift key while choosing drives to select multiples.

3.5 To begin the erasure process on the selected drive, press the button at the bottom of the main user interface screen labeled “Erase Hard Drive”. Figure 3.4 shows the location of this button.

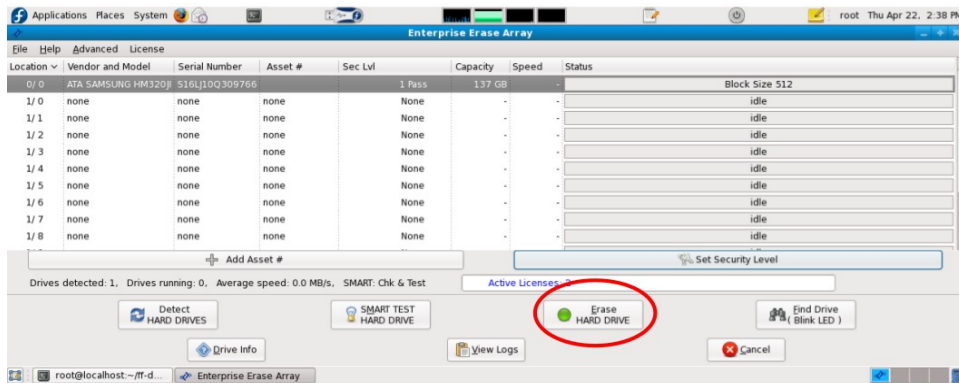


Figure 3.4 – Location of Erase Button on Main User Interface Screen

3.6 After pressing the “Erase Hard Drive” button, a pop-up window will appear that allows you to choose the level of overwrite you would like to execute on the selected drive. Figure 3.5 shows this pop-up window.

NOTE: Choices of overwrite level is a configurable option on many Tabernus products, so the screen displayed on your unit may not match the one shown in the figure below.

3.0 Erasing a Hard Drive Using the E2400 (cont.)

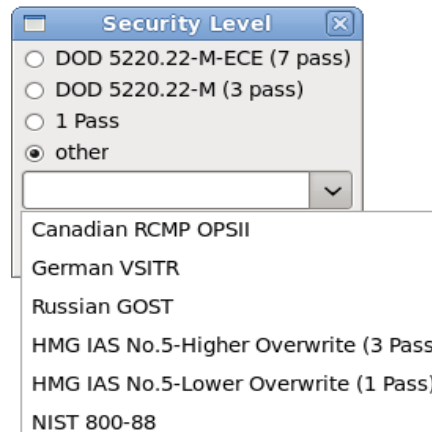


Figure 3.5 – Security Level Pop-up Window

3.7 When this window appears, select the desired erasure level and press “OK”; the process will begin.

3.8 After the erasure process is started, the status of the process is displayed on the user interface screen. Figure 3.6 shows where the progress can be viewed.

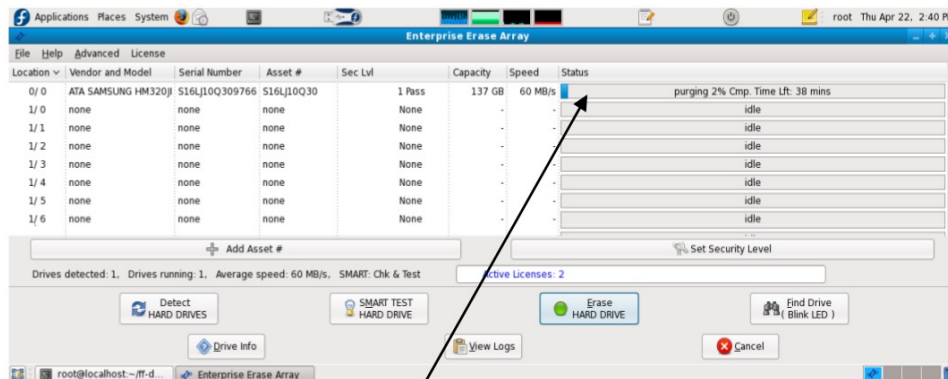


Figure 3.6 – User Interface Screen Shows Erasure Process

3.0 Erasing a Hard Drive Using the E2400 (cont.)

3.9 Once the erasure process is complete, the completed drive will be highlighted in green indicating a successful erasure. Figure 3.7 below shows the successful completion of an erase:

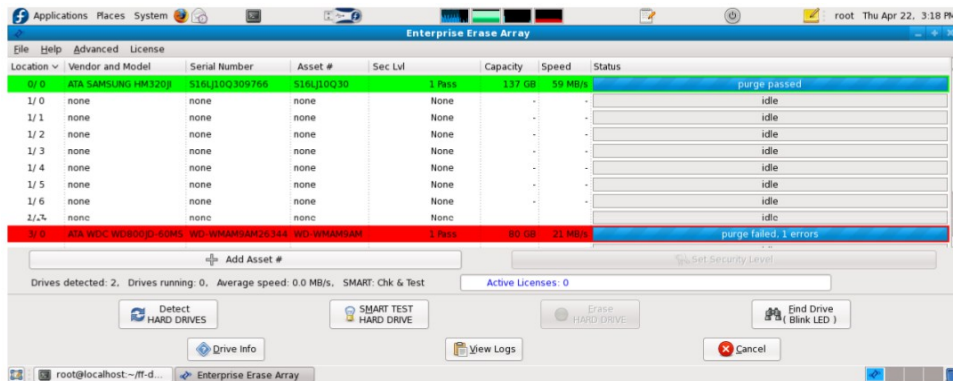


Figure 3.7 – Successful Completion of Erasure Process (Green Bar)

4.0 Canceling an Erase in Progress

4.1 It is possible to stop an erase in process. First, highlight the drive from the device list on the main user interface. This can be done in the same way as shown in section 3.4 of this document.

4.2 Once the drive has been selected, press the button at the bottom of the user interface screen marked “Cancel”. Figure 4.1 shows the location of this button.

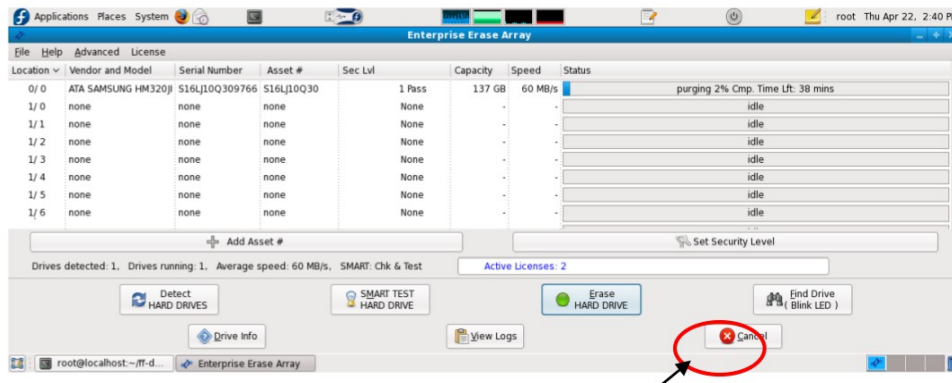


Figure 4.1 – Successful Completion of Erasure Process (Green Bar)

4.3 When the erasure process is canceled, the device will appear with a yellow bar in the device list showing that the erase has been stopped.

4.0 Canceling an Erase in Progress (cont.)

4.4 When a drive fails the erasure process, the drive is highlighted in the GUI with a red bar. This can be seen in Figure 4.2 below:

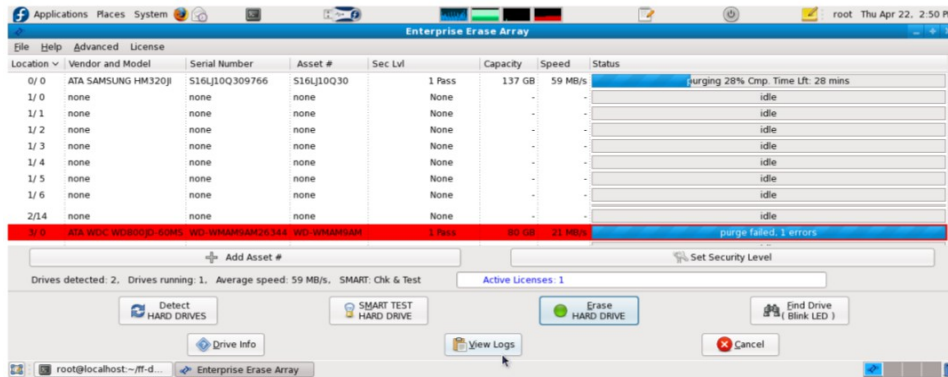


Figure 4.2 – Location of Cancel Button on the Main User Interface Screen

5.0 Hot Swap Function

The E2400 is designed to allow for hot swapping of drives without affecting the erasure process running on other drives in the appliance.

5.1 To begin the hot swap process, remove the completed drive from the E2400 drive bay.

5.2 Depress the “Detect Hard Drives” button in the software GUI.

5.3 The software should then show no drive in this location on the GUI.

5.4 Install the new drive into this drive bay.

5.5 Depress the “Detect Hard Drives” button again.

5.6 NOTES on Hot Swap Function:

- Some drives take longer to hot swap than others; always give ample time for the drive to establish a link with the appliance. This is particularly true of fibre channel hard drives, which may take up to two minutes to be fully hot swap.
- Some drives (particularly some older EMC 1GB drives) produce inconsistent results with hot swapping; these drives will need to be inserted prior to a full system reboot.
- Some drives by design are not capable of hot swapping.

6.0 Using the Sector Viewer

Using the sector viewer allows the user the opportunity to view data contained on sectors of any of the drives that can be seen by the E2400 appliance.

6.1 To view the sectors on a particular drive, highlight the drive you would like to view on the device list. This is done in the same way as is shown in section 3.4 of this document.

6.2 After highlighting a drive, right click on the selected drive and a “Sector Viewer” dialog box will be displayed. Click on this dialog box and the Sector Viewer windows will appear. The sector viewer is shown in Figure 6.1 below.

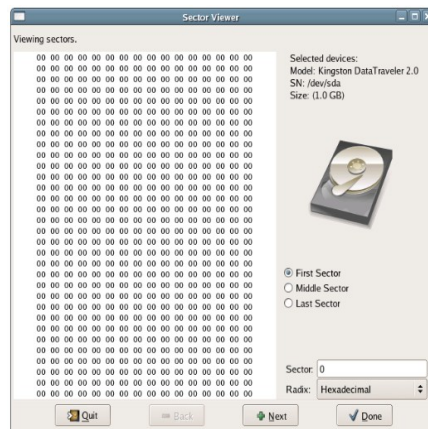


Figure 6.1 – Sector Viewer Screen

6.0 Using the Sector Viewer

6.3 Use the “Next” or “Back” button to go to the next sector. You can also enter the sector number in the “Sector” input window. Figure 6.2 shows the button locations.

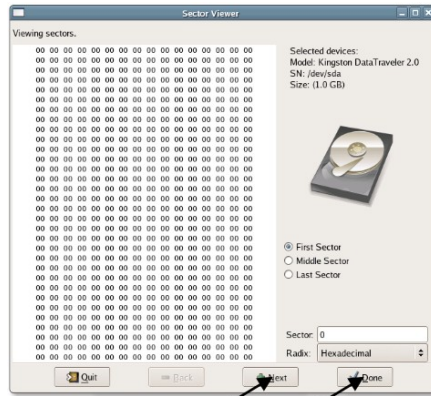


Figure 6.2 – Sector Viewer Screen

6.4 To change the output display from Hexadecimal to ASCII click on the “Radix” pull down menu. Figure 6.3 shows the location of this pull down menu.

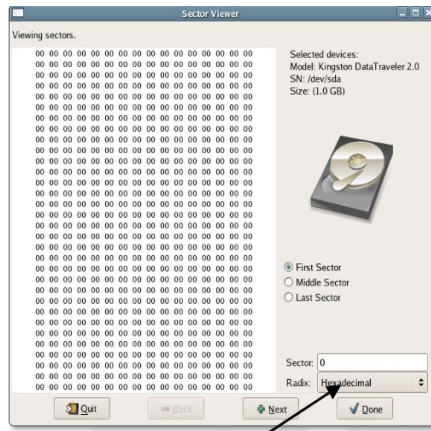


Figure 6.3 – Sector Viewer Screen

7.0 Viewing Erasure Logs

The E2400 creates two versions of raw erasure logs detailing each erase that is conducted with the appliance. These two versions contain the same information, but are formatted differently. One version is a .csv file, the other a .txt file. Both are delineated in a way to allow for easy importing into spreadsheet programs.

The E2400 software also creates a PDF version of the erasure reports that can be supplied to a customer.

7.1 To view the purge logs generated by the application click on the “View Logs” button at the bottom of the main user interface screen. The location of this button is shown in Figure 9.1 below:

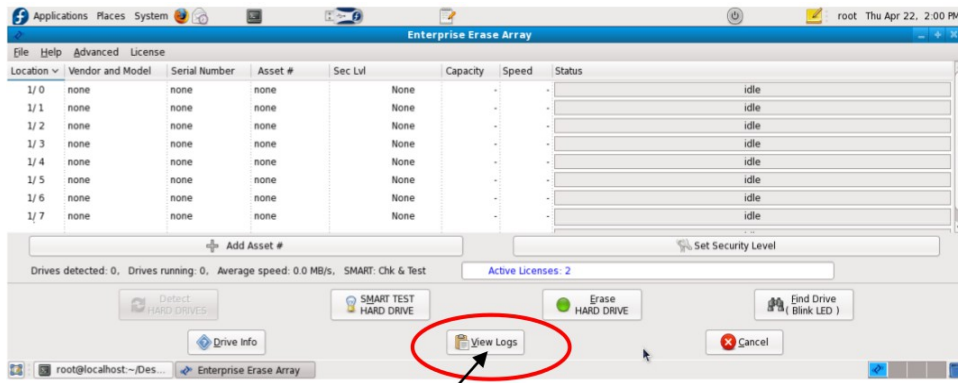


Figure 7.1 – Location of View Logs Button on Main User Interface Screen

8.0 Product Support

Tabernus has a support staff that will help you with any issues found on Enterprise Erase E2400 or any other Tabernus products. The support team can be reached in the following ways:

Via email:

support@tabernus.com

Support tickets can be created directly, and FAQ's & known *Solutions* can be found at:

support.tabernus.com

Via Phone:

+1 (512) 372 - 9823 (US)

Or

+44 (0) 1639 505 731 (UK)



Addendum – Request Licenses

Key Based Licensing

1. Start the software and **Click License > License Key Codes.**

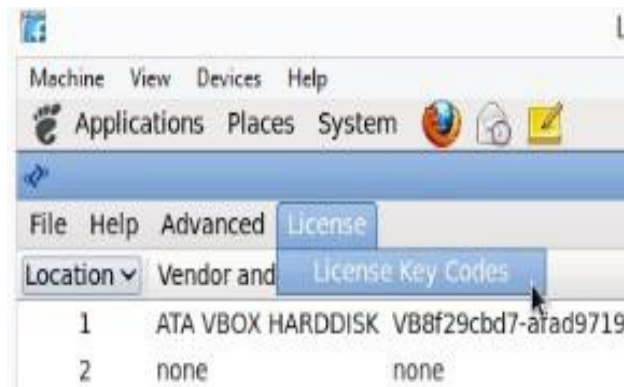


Figure 2.1: License Key Codes

2. The Tabernus License Wizard will open.

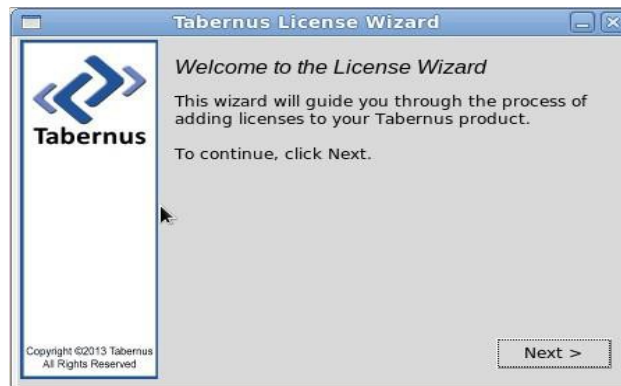


Figure 2.2 – Tabernus License Wizard

Addendum – Request Licenses (cont.)

3. Enter the quantity of licenses you require and **press NEXT**

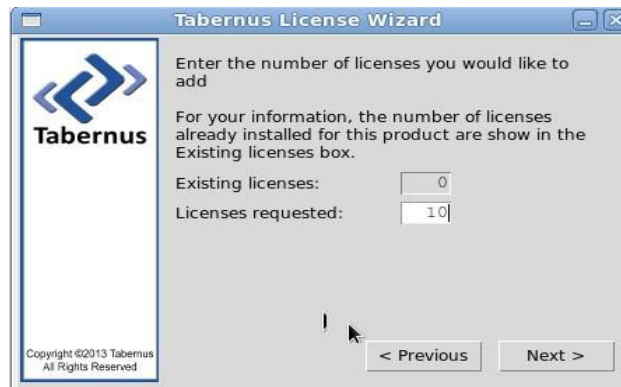


Figure 2.3 – License Quantity Log

4. You will be presented with a Request Key



Figure 2.4 – Request Key Dialog

NOTE: Make a note of this key if you are not close to your PC you use to access the Customer Portal

Addendum – Request Licenses (cont.)

5. Log in to the Customer Portal (customer.tabernus.com) and **CLICK Request License by Key**.



Figure 2.5 – Customer Portal: Request License by Key

6. The Add License Request by key dialog will open.

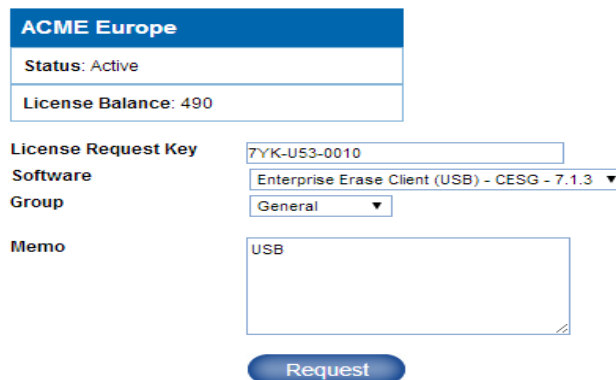
ACME Europe	
Status:	Active
License Balance:	490
License Request Key	<input type="text"/>
Software	Choose a Software Revision ▼
Group	General ▼
Memo	<input type="text"/>
Request	

Figure 2.6 – Add License Request by Key Dialog

7. Enter your Request Key into the License request Key box – use UPPERCASE letters and enter hyphens at this stage. Note that all “0” are zeroes.
8. Next, select a Software Revision – select the software revision you are licensing to ensure your records remain accurate.

Addendum – Request Licenses (cont.)

9. Unless you have it set up, ignore Group. You can, if you wish, enter a Memo:- noting the server you are licensing, for example:



The screenshot shows a web form for requesting a license. At the top, there is a blue header with the text "ACME Europe". Below this, there are three rows of information: "Status: Active", "License Balance: 490", and "License Request Key" with the value "7YK-US3-0010". The "Software" dropdown is set to "Enterprise Erase Client (USB) - CESG - 7.1.3", and the "Group" dropdown is set to "General". The "Memo" field contains the text "USB". A blue "Request" button is located at the bottom of the form.

Figure 2.7 – Enter Request Key and Other Details

10. You will be presented with a Response Key: make a note of this if you are not close to your Tabernus machine.



Figure 2.8 – Response Key

Addendum – Request Licenses (cont.)

11. Enter the Response Key into the Response Key box as shown (below). There is no need to enter hyphens or use uppercase characters at this stage.

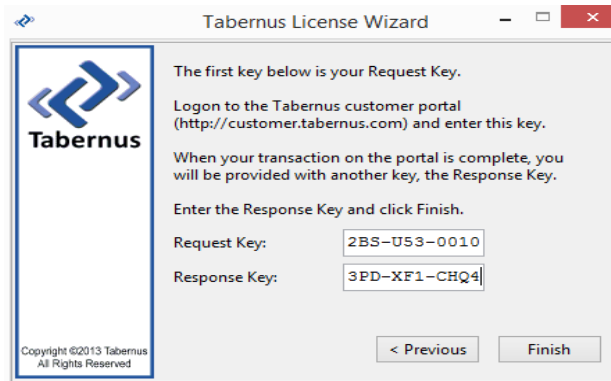


Figure 2.9 – Enter Response Key

12. **CLICK Finish:** A successful license transfer will produce the following dialog box

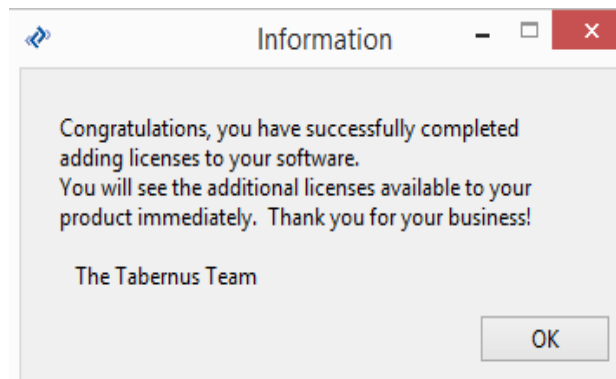


Figure 2.10 – Successful License Transfer

Addendum – Request Licenses (cont.)

Possible Error Conditions

1. If you do not select a software revision in the Add License Request by Key dialog box, the following message will appear.

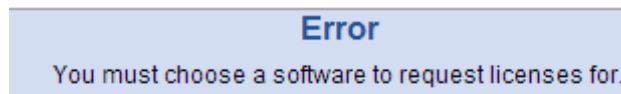


Figure 2.11 – Software Revision Selection Not Made

2. If you enter an incorrect Response Key, you will receive the following error message.

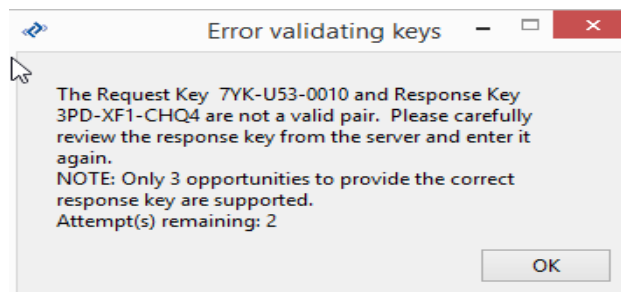


Figure 2.12 – Incorrect Response Key Entry Error

3. If you receive the (above) error, re-enter the Response Key, being careful to note whether "l's" are "I's" etc. You have three chances to enter the key before you have to start the procedure over anew
4. If you receive the following error, check whether you have entered the Request Key correctly, i.e., using uppercase letters and having entered the hyphens correctly. You will also receive this message if you request a quantity of licenses greater than that you have available on the portal

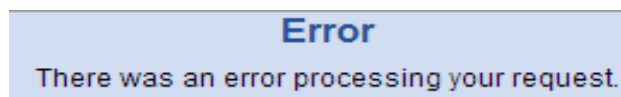


Figure 2.13 – General Error Condition