Tabernus Enterprise Erase LAN 7.3

Thursday, January 15, 2015

Summary

This document describes the use of the Tabernus Enterprise Erase LAN 7.3, including the Erasure and Logging of Assets.

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Service and Support

For service or support issues, please contact support@tabernus.com or by phone 0845 689 1350.

Email: support@tabernus.com

Online Support: http://support.tabernus.com

Country	Contact
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Europe (UK Support)	**+44 (0) 1639 505 731, Option 2**

Service and Support Contact Numbers

Contents

What is Enterprise Erase LAN?

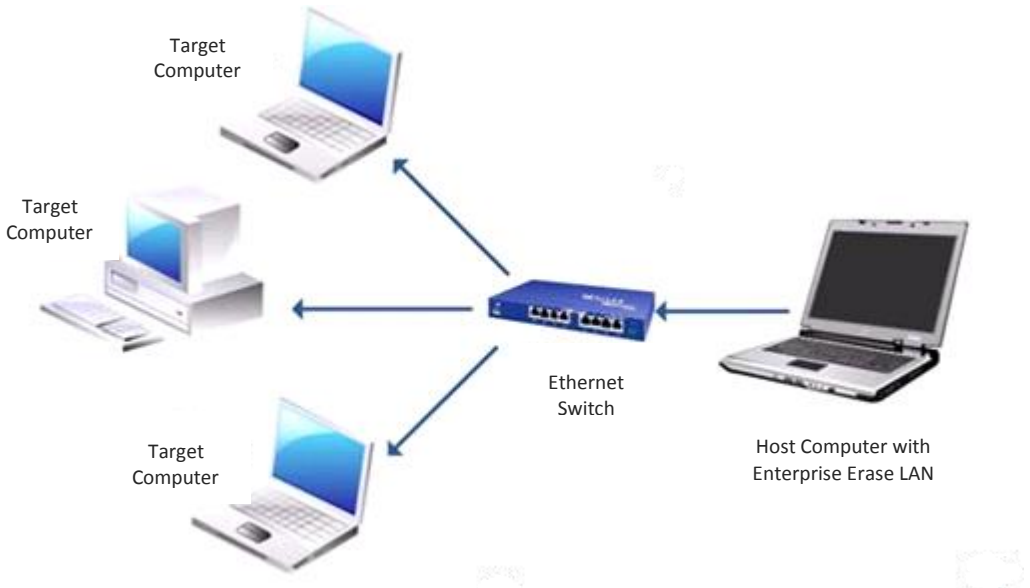
Product Features

Enterprise Erase LAN 7.3 is a data erasure and asset management system, designed to simultaneously erase up to 500 clients over a local area network (LAN). Couple this capability with organized reporting on both the erasure and the asset information collected from the client PCs and you have a business tool optimized to handle large volume data elimination. The Enterprise Erase LAN application is deployed with its own operating system. The erasure process is initiated from either a server console or the client console; all data relevant to the client is then captured and collected for your records.

The Enterprise Erase LAN was designed to run on its own private subnet. Although it can function on a company's main network, we recommend running on its own subnet to prevent accidental erasure of computer hard drives not assigned for decommission.

How Enterprise Erase LAN 7.3 Works

Enterprise Erase LAN allows for erasure of desktops, laptops, and servers over a local area network. The target devices are set up in a LAN to which the host device (that contains the Enterprise Erase LAN software) is also attached. The user can then PXE boot the target devices, see all of them through the software and erase them simultaneously. This erasure can be initiated from either the client or the host. Enterprise Erase LAN allows the user to erase up to 500 target devices without having to remove the drives from their host hardware for erasure. Enterprise Erase LAN can also be used to erase small servers (four or less internal drives). Setup is similar to the graphic shown:



LAN System Diagram

Server Minimum Requirements

System Requirements	
CPU	IBM-compatible PC with a 64 Bit Intel or AMD processor (***Quad Core***)
RAM	Minimum 4 GB RAM
HDD	Minimum 80 GB HDD – Note: Hard drive needs to be new or very reliable
DVD	DVD Drive
Misc.	Network Interface Card, Display, Keyboard, Mouse

Minimum System Requirements for LAN 7.3

Client Minimum Requirements

Client Requirements	
CPU	IBM-compatible PC with a Pentium or AMD processor
RAM	512 MB RAM
Misc.	Network Interface Card, Display, Keyboard, Mouse

Minimum Client Requirements for LAN 7.3

Enterprise Erase LAN 7.3 Software Features

- Capable of erasing up to 500 computers simultaneously
- Asset Management Logging Capability
- Reporting for both the hard drive erased and client asset information, which can be ported to an existing database
- Can be deployed and activated on commercial off the shelf hardware
- Intuitive operator interface, Visual Pass/Fail Notification
- Capable of erasing any drive type (SATA, IDE, SCSI, SAS, FC and SSD)

Quick Start Guide – How to Erase a PC

Launching the Enterprise Erase LAN Server

To start the Enterprise Erase LAN Server, double click the **Enterprise Erase LAN Server** icon.

Launch Enterprise Erase LAN Server

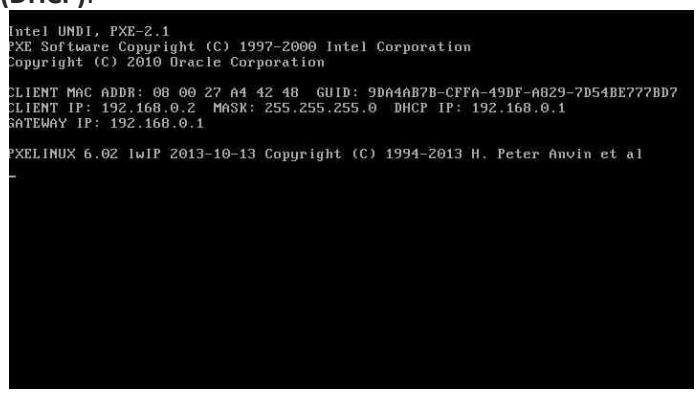
NOTE: If the software is started without licenses, the user is prompted to add licenses or run in demo mode. Running Enterprise Erase in demonstration mode allows fully functional testing of all the software features without having to install the software on a system. The demo mode will generate reports and perform partial data removal on hard drives. Data removal and times to completion are only 50% of a full erasure.

Start License Wizard or continue in demo mode

Network Boot the Client Systems

Once the Enterprise Erase LAN Server is running and listening for clients, we can network boot the clients (also known as PXE or NIC Booting). This option may be disabled by default, and in these cases will need to be configured in the System BIOS. It is may also be necessary to change the Boot Order in the System BIOS. Please refer to the motherboard or manufacturer for further instructions.

With the network boot options changed, along with any BIOS settings, a system reboot will be required. When the system boots, the PXE Boot ROM will load, followed by a message saying **Searching for server (DHCP)**.



PXE Boot Screen

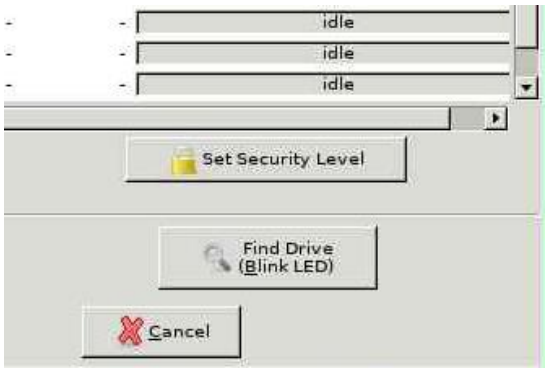
The client system will continue network boot: this should take around two minutes, dependent on network setup. After this the LAN client window will open automatically.

Starting Erasure from Client PC

Prior to initializing the erasure, Asset IDs may be changed and employee ID entered for tracking and compliance. Asset ID will default to the system service tag, and it is possible to set a default employee ID on the server, as discussed later in the manual.

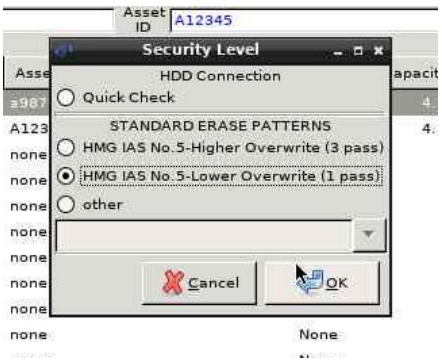
Enter Asset & Employee ID on Client

A security level must be chosen prior to starting the erasure. To select an erasure algorithm, use the **Set Security Level** button



Set Security Level button

The **Security Level** dialog box will appear; this allows the fast selection of an erasure algorithm.

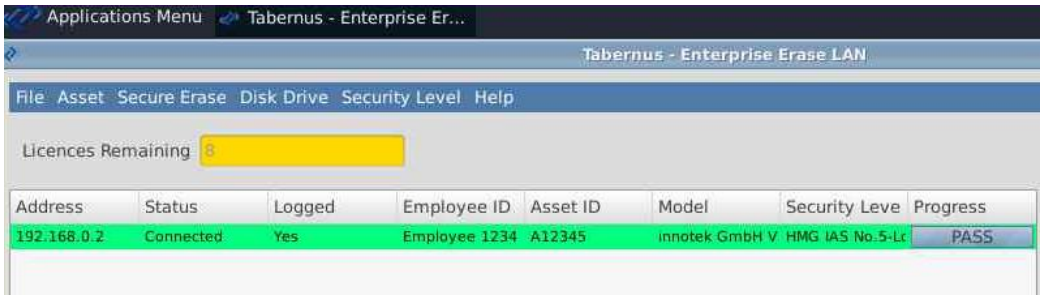


Set Security Level on LAN 7.3 Client

Select the **Erase Hard Drive** button, found in the lower portion of the client interface to start the erasure.

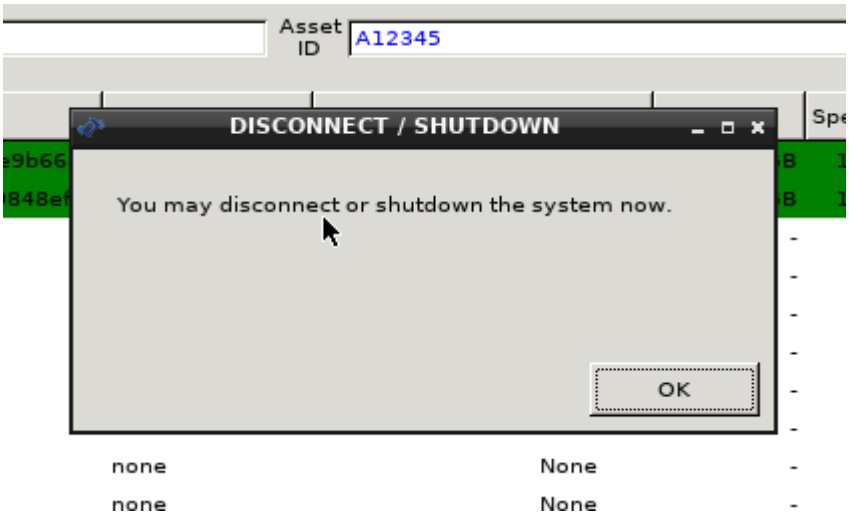
Erase Hard Drive Button

The connected hard drives will be erased. The background of the client will turn green to notify the operator that the erasure was successful. A red line would indicate a failure or exception result.



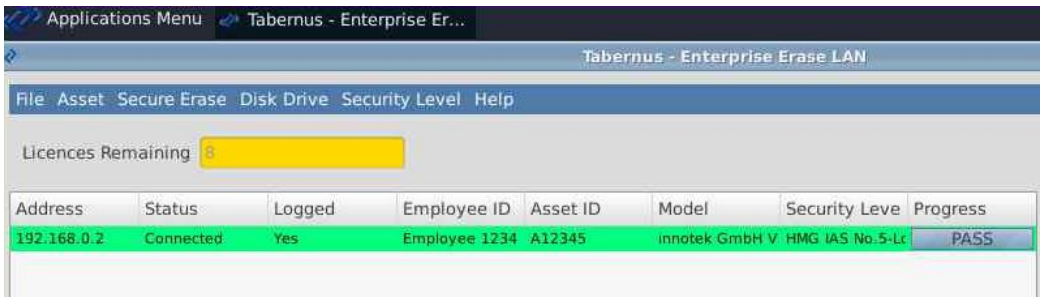
The background turns green once erasure is complete – on both server (shown) and client

Once the client has uploaded all reports to the Enterprise Erase LAN server, a disconnect notice will appear. It is safe to power down the system at this point.



Disconnect Notice

The LAN 7.3 Server interface mirrors the erasure status, with a green (or red) background, and **Pass** (or **FAIL**) is listed. When the reports are successfully saved on the server the Logged column will indicate **Yes**.



Server view of the erasure - in Demo mode

Background displays - Color Coding

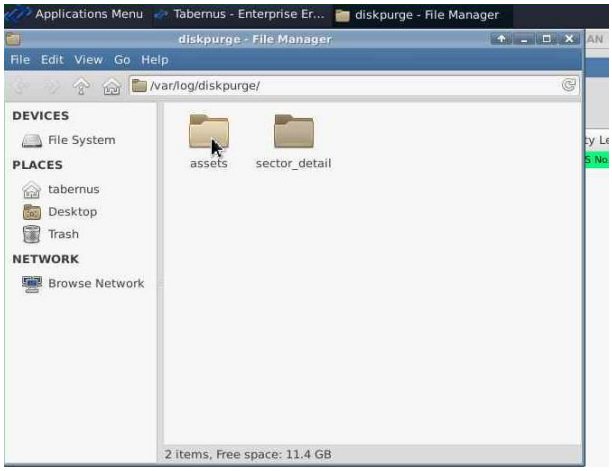
The background of each drive system is color coded to assist the operator in immediately identifying the status of the erasure.

Status	Color Coding
Default	No color coding
In Progress	Blue
Cancelled	Yellow
Passed	Green
Failed/Exception	Red

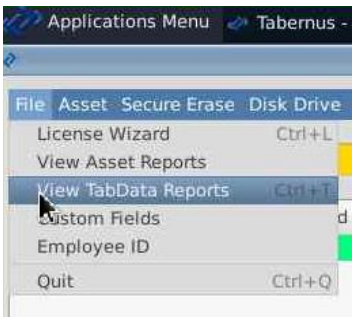
Color Coding for the Operator

Erasure Reports

There are two methods for gathering reports for assets that have been erased using the Enterprise Erase LAN software. There are reports that have been generated on a per-asset basis and are transferred back to the server via FTP from the client at the end of the erasure. These simple reports can be accessed from the /var/log/diskpurge directory on the server, which can be easily opened using the software with **File→ View Asset** Reports. A more comprehensive web-based report generation tool is also availabe. This is Tabdata, and is accessible via **File→ View Tabdata Reports**.



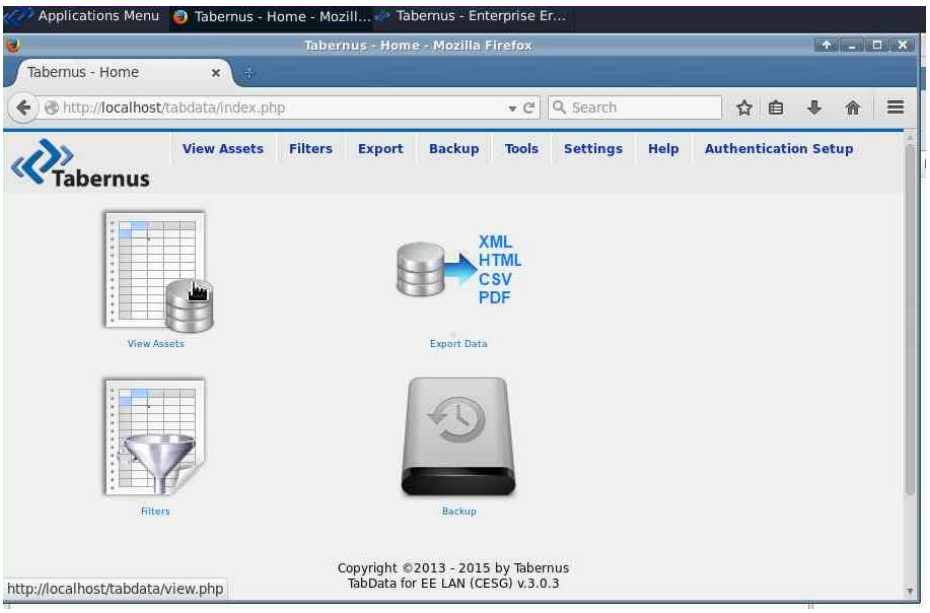
Asset Report Location



Opening Erasure Reports - Tabdata

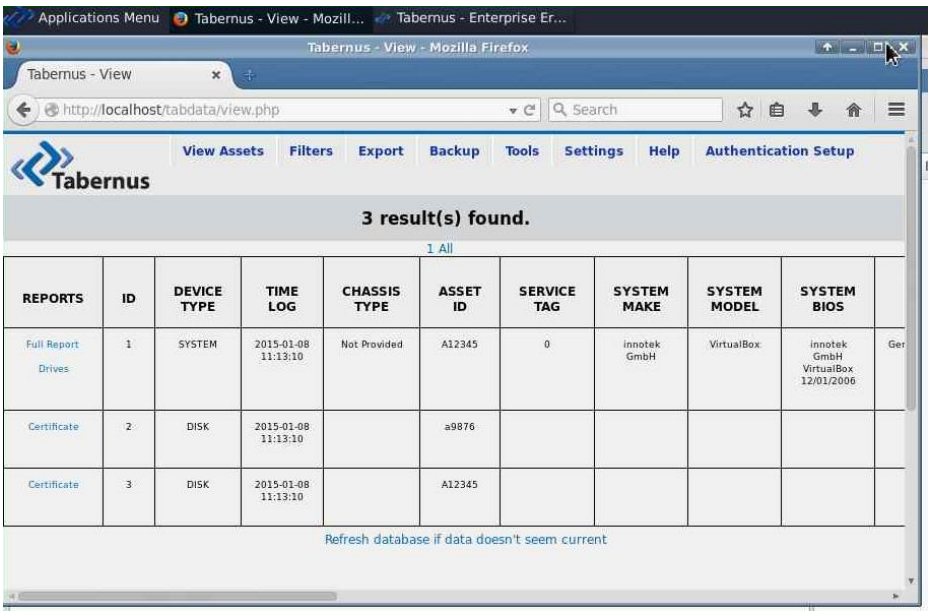
Tabdata Web-based Report Generation

File→ View Tabdata Reports opens the Tabdata web interface. This tool will allow a user to search for and print/save asset reports for any systems that have been erased using this Enterprise Erase LAN server.



Tabdata Landing Page

Clicking **View Assets** will show a list of each system (and disk) that has been erased by the LAN Server.



View Assets Page

Reports can be generated from this page:

- **Full Report**: A single page with the Asset information (system details) and disk drive information for each drive erased
- **Drives** Report: A single page document that contains every drive that has been erased on that particular system
- **Certificate**: A single page per hard drive with all the disk information

More information about the Tabdata reporting tool can be found in the Tabdata section of the manual.

Setting up Enterprise Erase LAN 7.3

Download Software

1. Download Software ISO image from your Customer Portal.
2. Burn ISO image to DVD media.
3. Insert DVD and boot DVD on Server/Host System.
4. A Live CD desktop will appear with software and installation icons.

New Software Installation

1. From the desktop, double click on the **Install Tabernus OS** icon.

Install Tabernus OS Icon

2. An installation wizard will start; follow Appendix 1 for detailed instructions to install to the hard drive.
3. After installation, the user will be prompted to reboot. Please reboot when requested.

Initial Startup of Software and Network Setup

After installation is complete and the server has rebooted, select the Enterprise Erase LAN Server icon to launch the server.

On first run of the software, the user will be prompted to run through the network setup wizard. This allows the network adaptor to be specified along with the IP address and subnet mask for the wiping subnet so as to avoid IP collisions with other networks – a corporate LAN for reporting, for example.

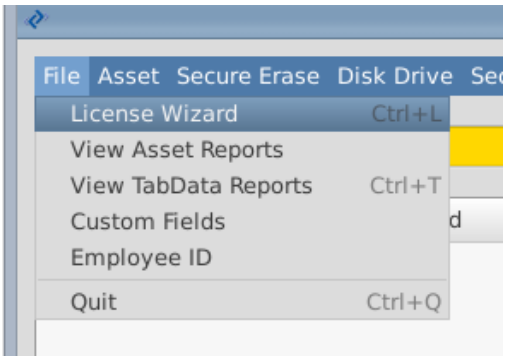
When the network setup has been completed the Enterprise Erase LAN software will continue to load, the user will then be prompted to add licenses or run in demo mode. The demo mode will generate reports and perform partial data removal on hard drives. Data removal and times to completion are only 50% of the target drive in the demo mode.

License Wizard – Adding Licenses to Server

Before License Load *After License Load*

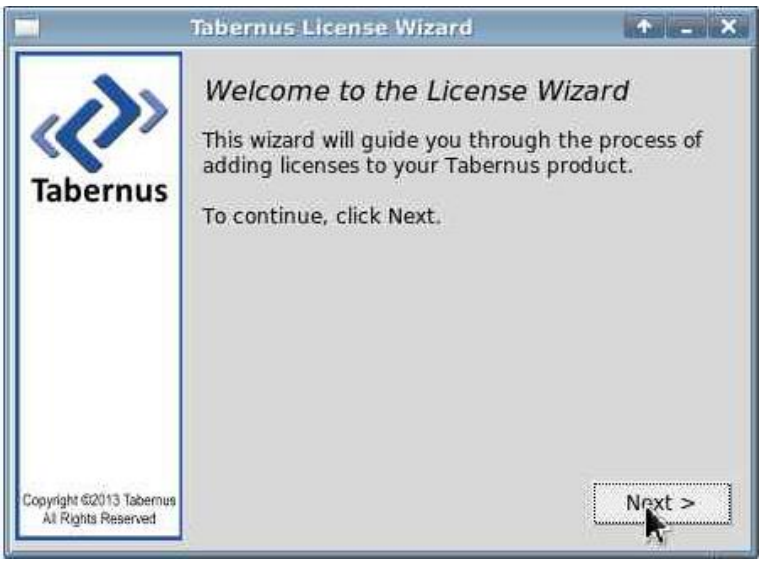
Licenses remaining are updated

To launch the License Wizard, select **File ⟶ License Wizard.**



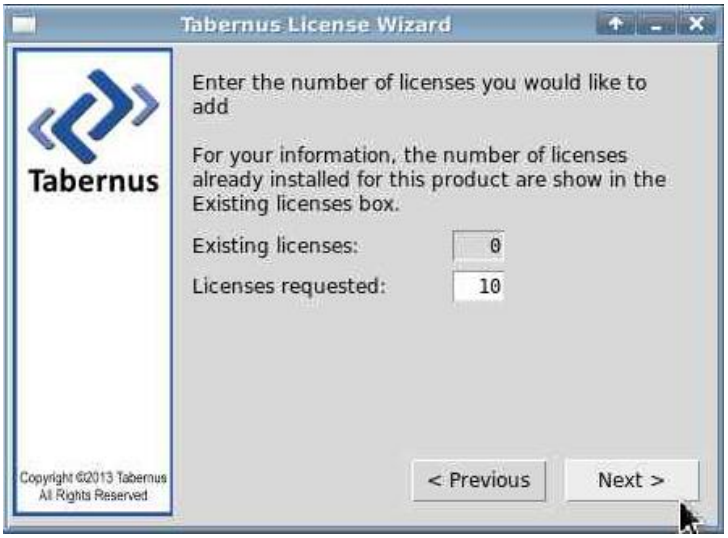
Start the License Wizard

The Tabernus License Wizard will open.



Tabernus License Wizard

Enter the quantity of licenses required and press **Next**.



License Quantity Dialogue

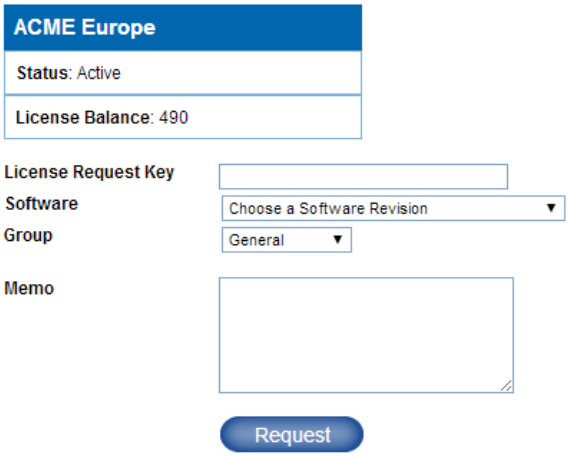
You will be presented with a **Request Key**: make a note of this key if you are not close to the PC you use to access the Customer Portal.

A Request Key is generated

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

Customer Portal: Request License by Key

The **Add License Request by Key** dialog will open.

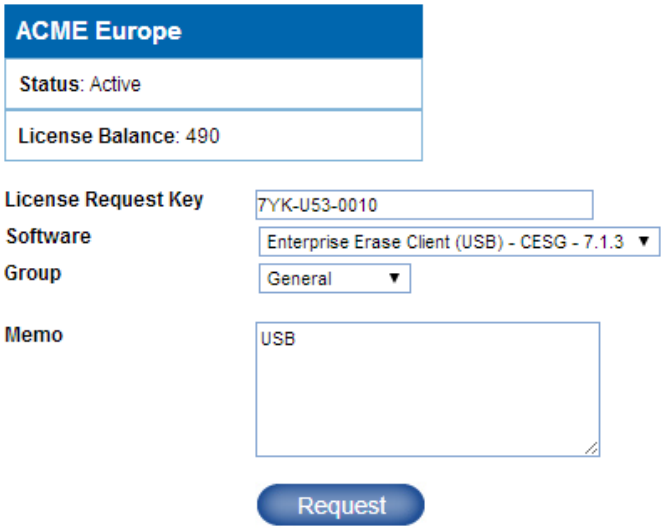


Add License Request by Key Dialogue

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.

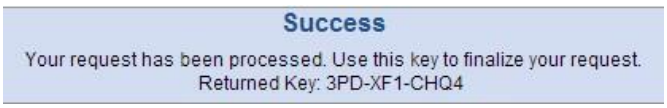
Next, select a Software Revision – select **Enterprise Erase LAN v7.3** to ensure your records remain accurate.

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



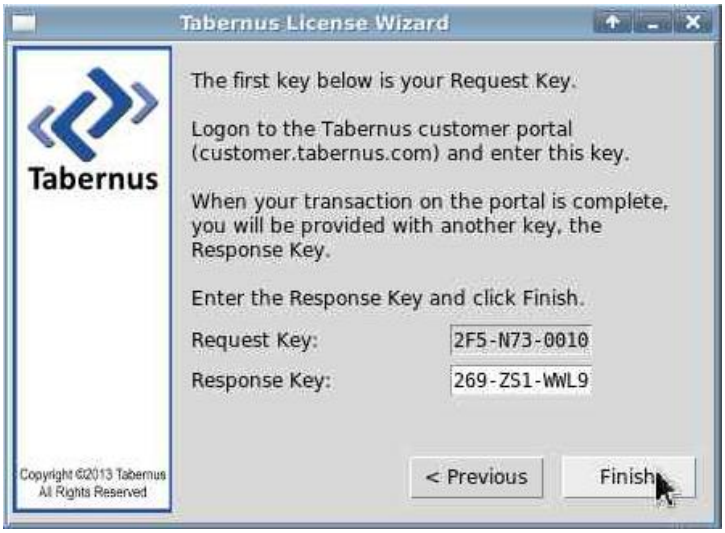
Enter Request Key and Other Details

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



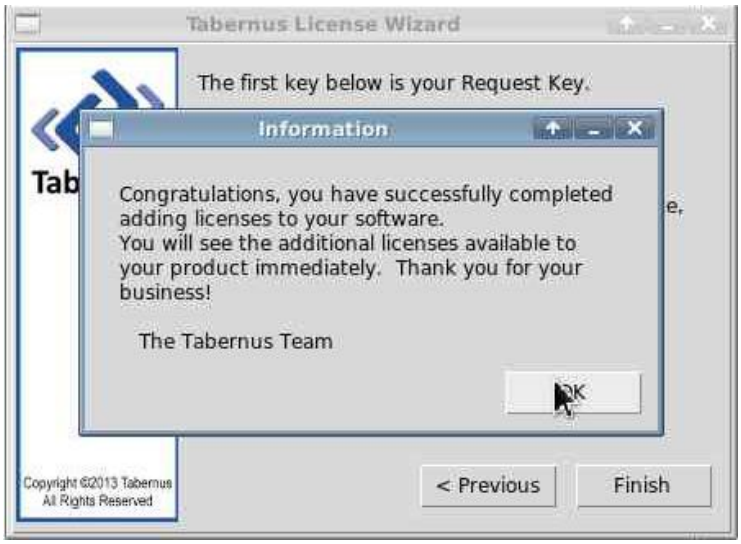
Response Key

Enter the Response Key into the **Response Key** box as shown below. There is no need to use hyphens or use uppercase characters at this stage, as the software will do this automatically.



Enter Response Key

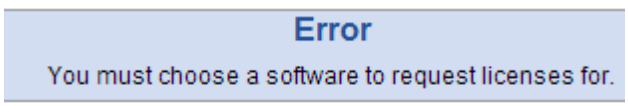
Click **Finish**. A successful license transfer will produce the following dialog box.



Successful License Transfer

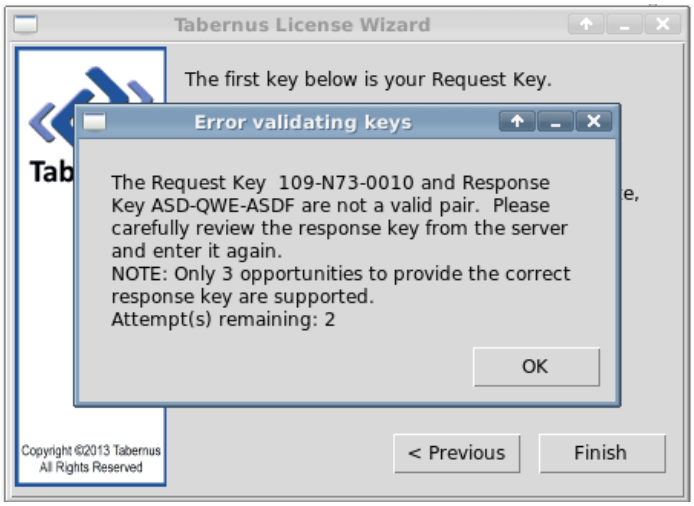
Possible Error Conditions

If the software revision in the Add License Request by Key dialog is not selected, the following message will appear:



Software Revision Selection Not Made

If an incorrect Response Key is entered, the following error message will be displayed:



Incorrect Response Key Entry Error

If this error is displayed, re-enter the Response Key, being careful to note whether the '1's are 'l's etc. There are three chances to enter the key before procedure must be started anew.

If the following error is displayed, check whether the Request Key was correctly entered i.e. used uppercase letters and having entered the hyphens correctly. This message may also be shown if a quantity of licenses greater than are available on the portal are requested.

General Error Condition

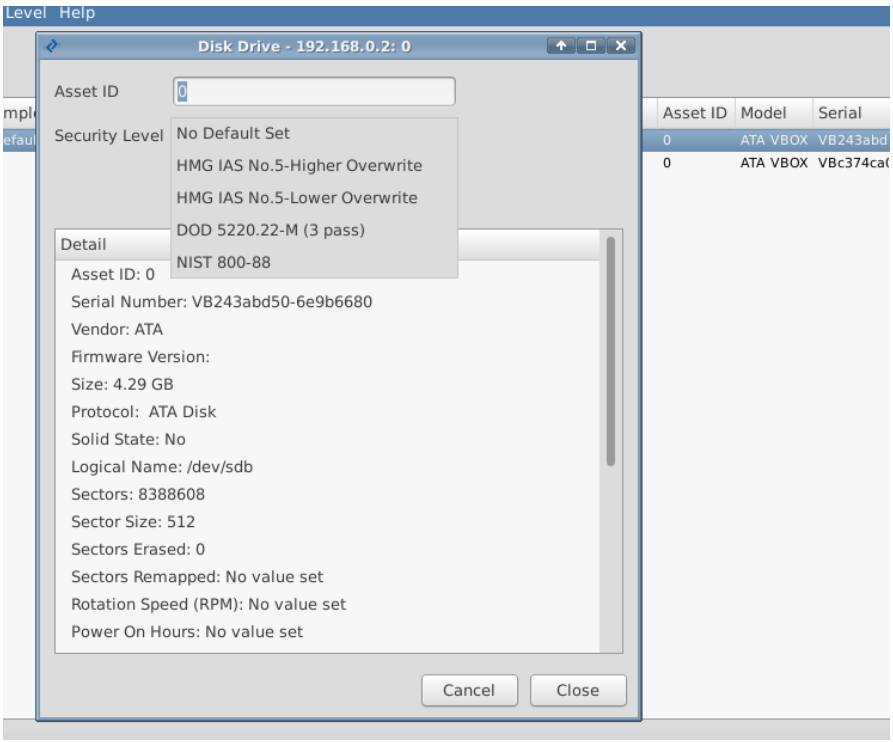
Further Erasure Options

As discussed in the Quick Start Guide section of this manual typically the security level and the erasure are managed from the client side. These can also be managed from the Enterprise Erase LAN server, along with default behavior.

Setting Erasure Levels from Server

To set the erasure level for a single hard drive on a client system from the server:

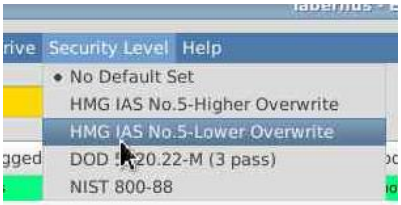
- Click on the system line on the server interface – this will show the connected hard drives in the hard drive area of the interface
- Double click on the disk that on which the security level needs to be changed – this will open the disk drive dialog. This dialog details all of the information that has been captured about the hard drive, and the security level can be set.
- Click the drop down to set the security level, save and close the dialog



Disk Drive Dialog

Setting Default Erasure Levels from Server

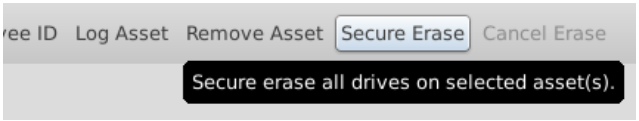
It is possible to set a default security level for every client system that connects to the Enterprise Erase LAN server. Once this is set through **Security Level → <selected erasure level>**, this erasure level will be transmitted to every client that is subsequently connected.



Default Security Level

Starting Erasure from Server

Once a security level has been selected for the hard drives attached to a client asset, either automatically or by the user, it is possible to start the erasure from the server. This is done by selecting the chosen asset and clicking **Secure Erase** at the bottom of the server interface.

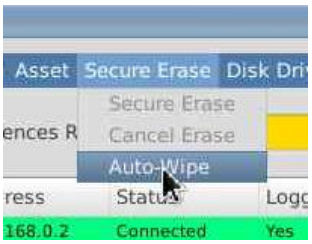


Secure Erase Button

Setting Auto-Wipe on Server

If there is a default security level set on the Enterprise Erase LAN Server it is also possible to set up automatic erasure on the software. When this is set any client that connects to the server will be given the default security level, and start the erasure automatically. This feature is disabled if there are no licenses on the server, when it is running in demo mode, to prevent accidental 50% erasure.

Set Auto-wipe with the **Secure Erase → Auto-Wipe** menu item**.**



Auto-Wipe Menu Item

Asset Management

The Tabernus Enterprise Erase LAN software has several features for extended asset management and data collection. These features, detailed below, allow for collection of asset information that cannot be automatically collected from the hardware that is being erased.

Setting Asset and Employee ID on Client

Prior to initializing the erasure, Asset IDs may be changed and an Employee ID entered for tracking and compliance. Asset ID will default to the BIOS assigned service tag, but can be changed to fit with the user's asset management process. The service tag will always be recorded to the asset database as a separate field, so this data is not lost.

To open the dialog below, click **Enter Asset & Employee Inf.** on the client interface.

Enter Asset & Employee ID on Client

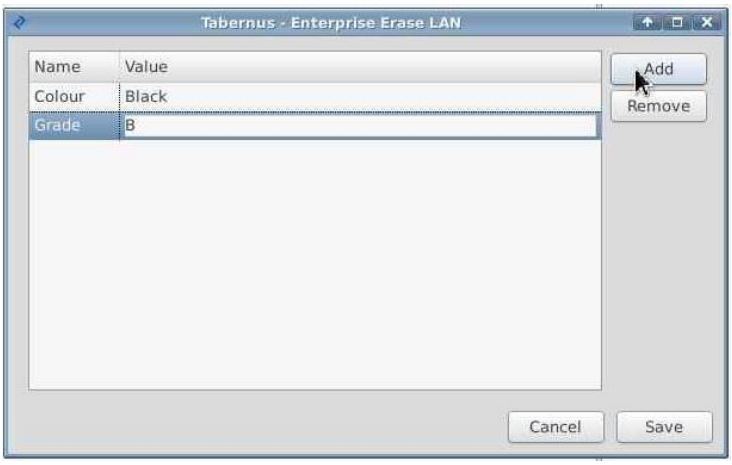
Setting a Default Employee ID

If the server is being operated by a single user, it may be preferable to set a default Employee ID on the server so this does not need to be added for each system connected. This dialog is accessed from the **File → Employee ID** menu item on the server.

Setting the Default Employee ID

Custom Fields

Custom fields can be set up by an operator to extend the ability of the software to capture extended information about a PC or erasure job. When a custom field is added on the server, it will create a field to be filled out in the asset dialog on the client. The custom field dialog can be accessed from the **File → Custom Fields** menu item.



Custom Field Dialog

The **Name** of the custom field is used to refer to the field when filling it in on the asset dialog box on the client. The **Value** is a default value, that will be transmitted to the client, but can be modified from the client side when required. The **Value** may be left blank should no default value be required.

Advanced Asset Details on Client

Most fields that are recorded to the database are editable from the client interface. To open the Asset Dialog to edit the fields click **EDIT & LOG ASSET**.

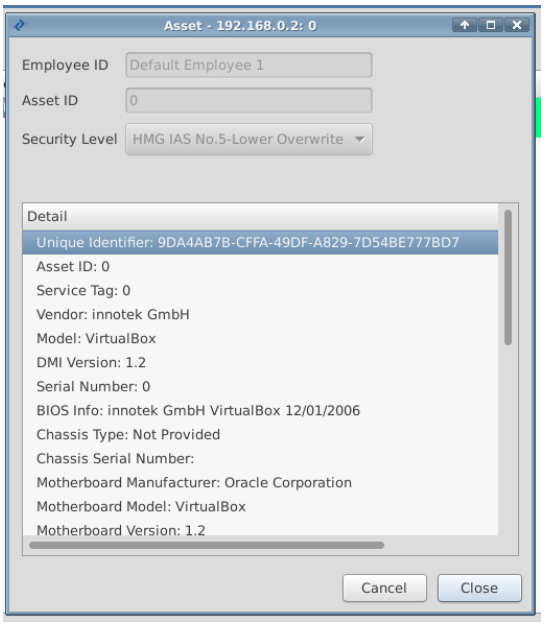
User defined custom fields will be at the top of this Asset Dialog if they have been set on the server. To edit a value click on the value, enter a new value and press return to save or escape to exit without saving.

Edit & Log Asset Button

Asset Dialog - Client

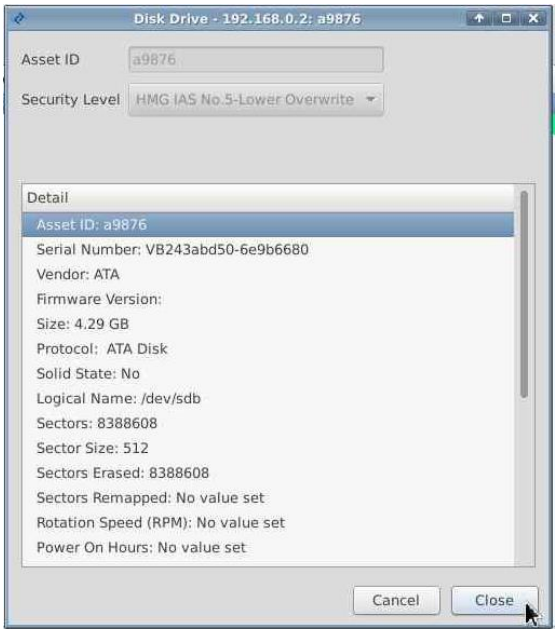
Viewing Asset Information on Server

All the asset information that is set in the Asset Dialog above can be accessed from the server during the erasure. This dialog can opened by double clicking on the asset line on the server interface.



Asset Dialog - Server

Further information about the individual disks can be found by double clicking on a drive line on the server interface.



Disk Drive Dialog - Server

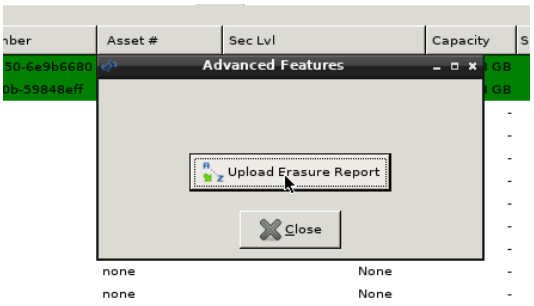
Logging Assets from the Server

It is possible to log an asset to the database without erasure so that system reports can be used. This is useful if a machine does not contain any erasable media (HDD or SSD). Select the system(s) to log and press the Log Asset button.

Log Asset Button

Uploading Erasure Reports from Client

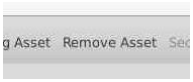
Should the report upload fail due to network disconnection it is possible to resend the erasure logs back to the server when the physical connection has been reestablished. Double click on **Advanced** on the menu bar and click **Upload Erasure Report**



Upload Erasure Report

Removing Assets from the Server

When an asset has completed erasure, and the operator wishes to remove the line from the server to save interface space, the client can be removed by selecting it (multiple selections can be made with [ctrl] or [shift]) and pressing **Remove Asset**.



Upload Erasure Report

Logs & Reports

Erasure Reports

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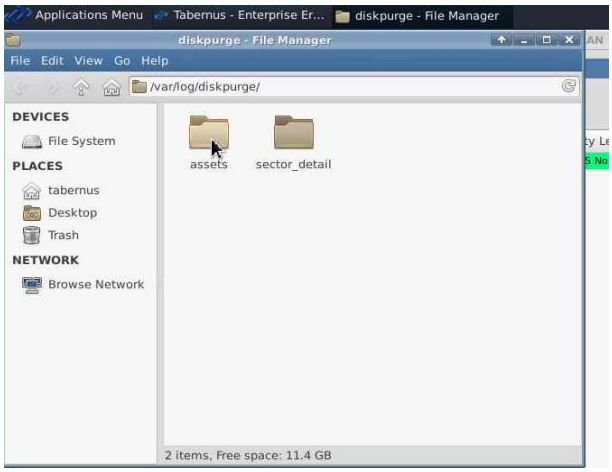


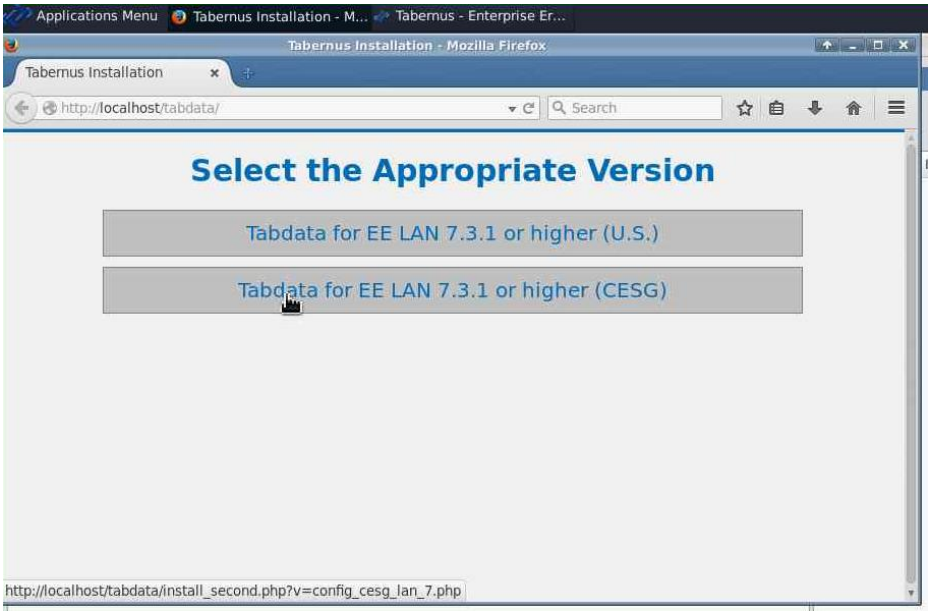
Asset Report Location

Erasure logs are stored under /var/log/diskpurge/

The **assets** folder contains erasure logs, sorted by date, in both a pdf and xml format.

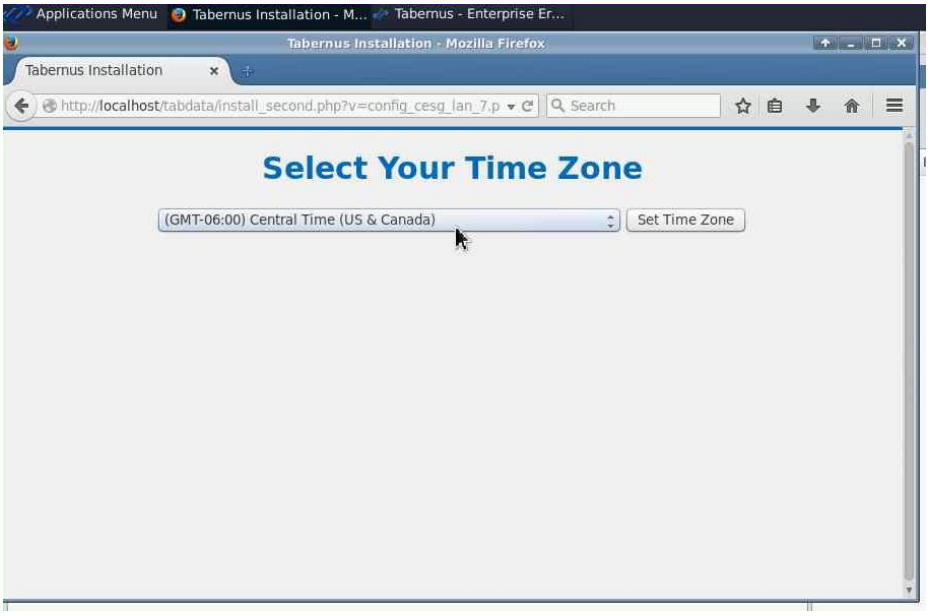
Tabdata Installation

When Tabdata reports are first used, there is a small amount of setup to be done. The localization preferences need to be set for the required version.



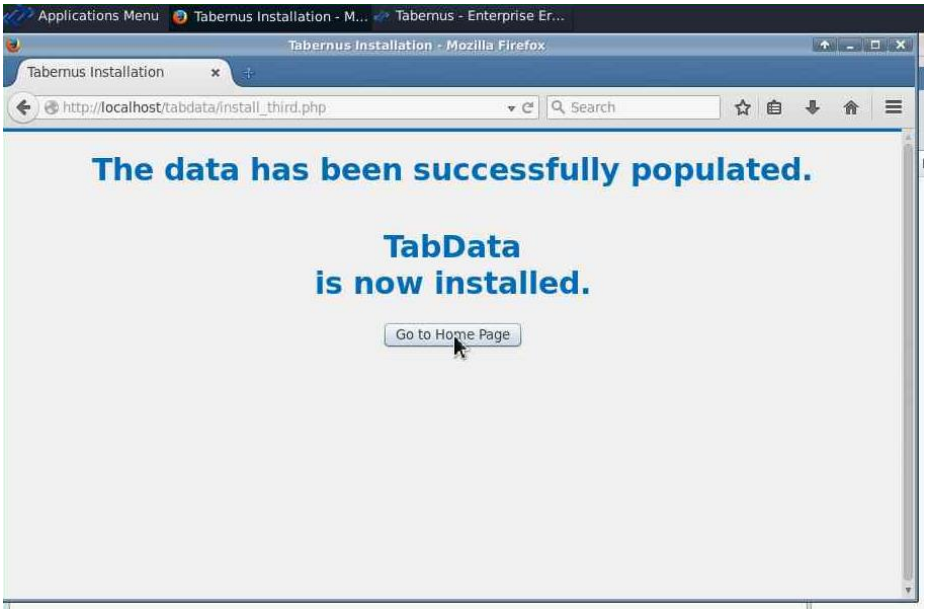
Tabdata localization – Page1

Next we set the time zone offset for the reporting.



Tabdata localization – Page2

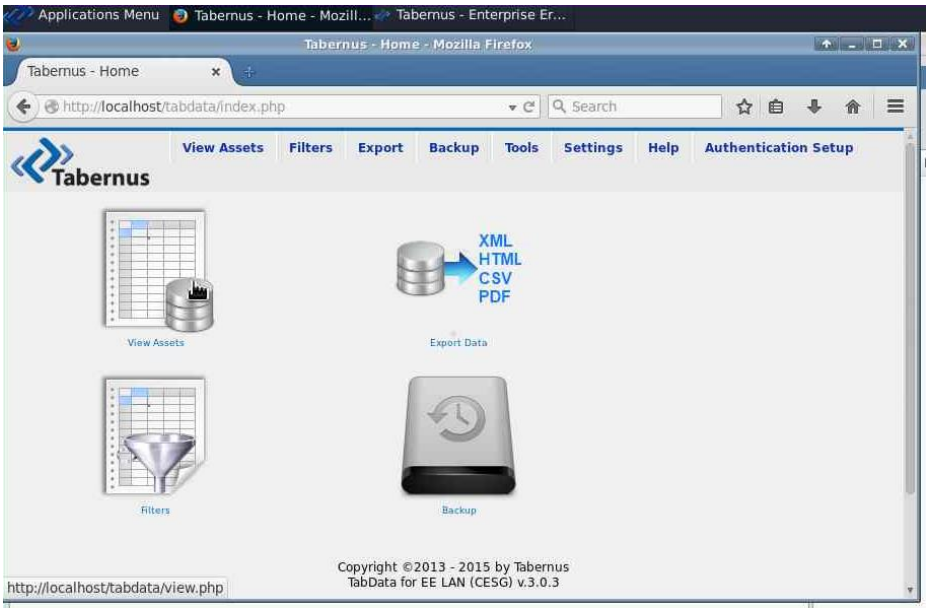
After the two steps above, the Tabdata web application will connect to the local database for asset information, and the setup with be complete. A confirmation page will be displayed.



Tabdata installation confirmation

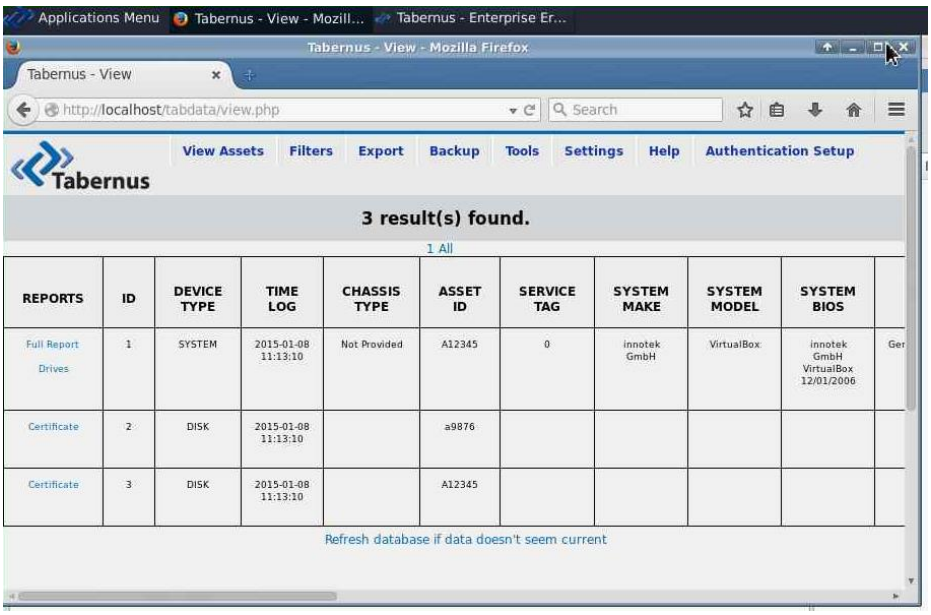
Tabdata Reports

File→ View Tabdata Reports opens the Tabdata web interface. This tool will allow a user to search for and print/save asset reports for any systems that have been erased using this Enterprise Erase LAN server.



Tabdata Landing Page

Clicking **View Assets** will show a list of each system (and disk) that has been erased by the LAN Server.



View Assets Page

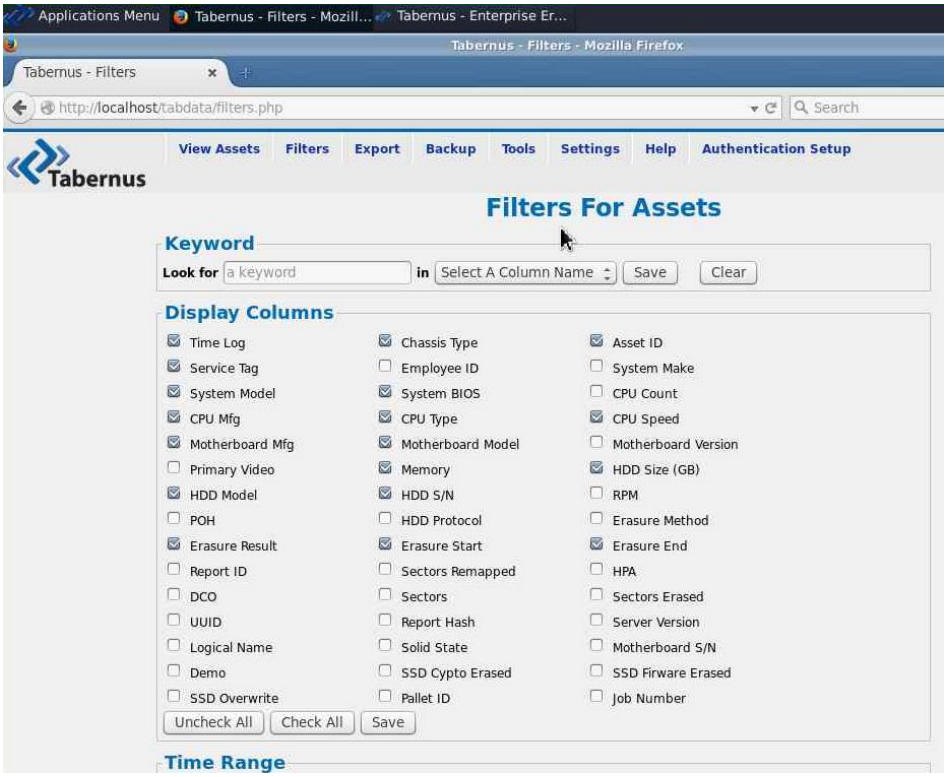
Reports can be generated from this page:

- **Full Report**: A single page with the Asset information (system details) and disk drive information for each drive erased
- **Drives** Report: A single page document that contains every drive that has been erased on that particular system
- **Certificate**: A single page per hard drive with all the disk information

Tabdata Filters Page

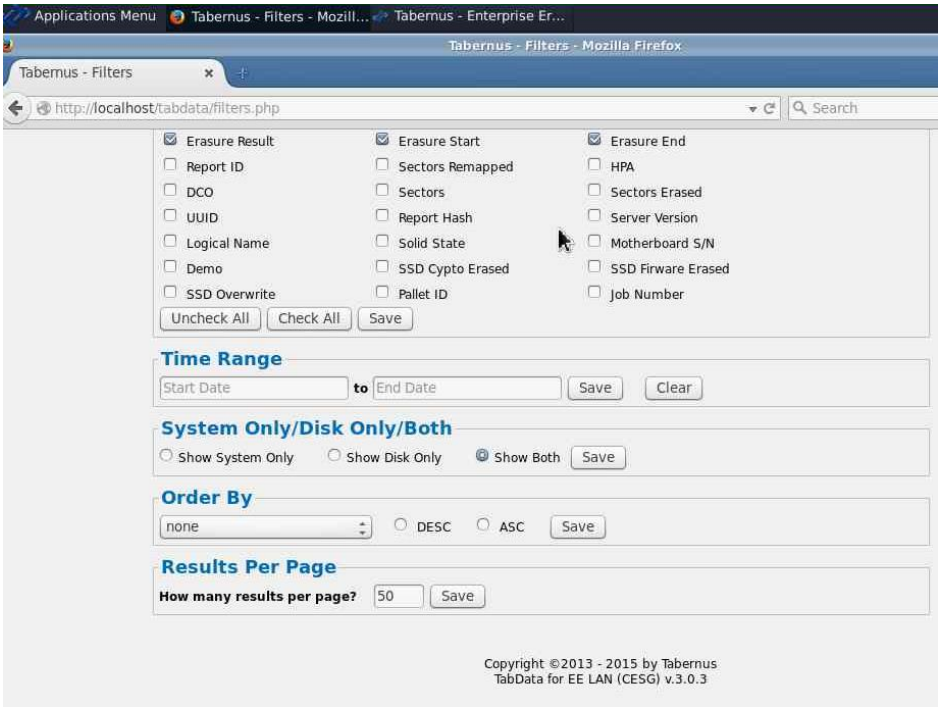
Clicking on the **Filters** link at the top of the Tabdata interface will open the filters page. This filters page will allow the user to search for a particular asset or set of assets.

When searching for an asset, the user should enter the search string into the keyword box and select the column name to be searched. % can be used as a wildcard while searching. For example “%ABC123%” searching in Asset ID will match all assets with Asset IDs containing “ABC123”. When the keyword has been entered and saved, navigate back to the **View Assets** page to view the selection.



Tabdata Filters Page – part 1

The **Display Columns** selection area allows the user to customize which asset information is available on the **View Assets** page.



Tabdata Filters Page – part 2

The **Time Range** allows the user to only display systems or disks that are within the range that is set.

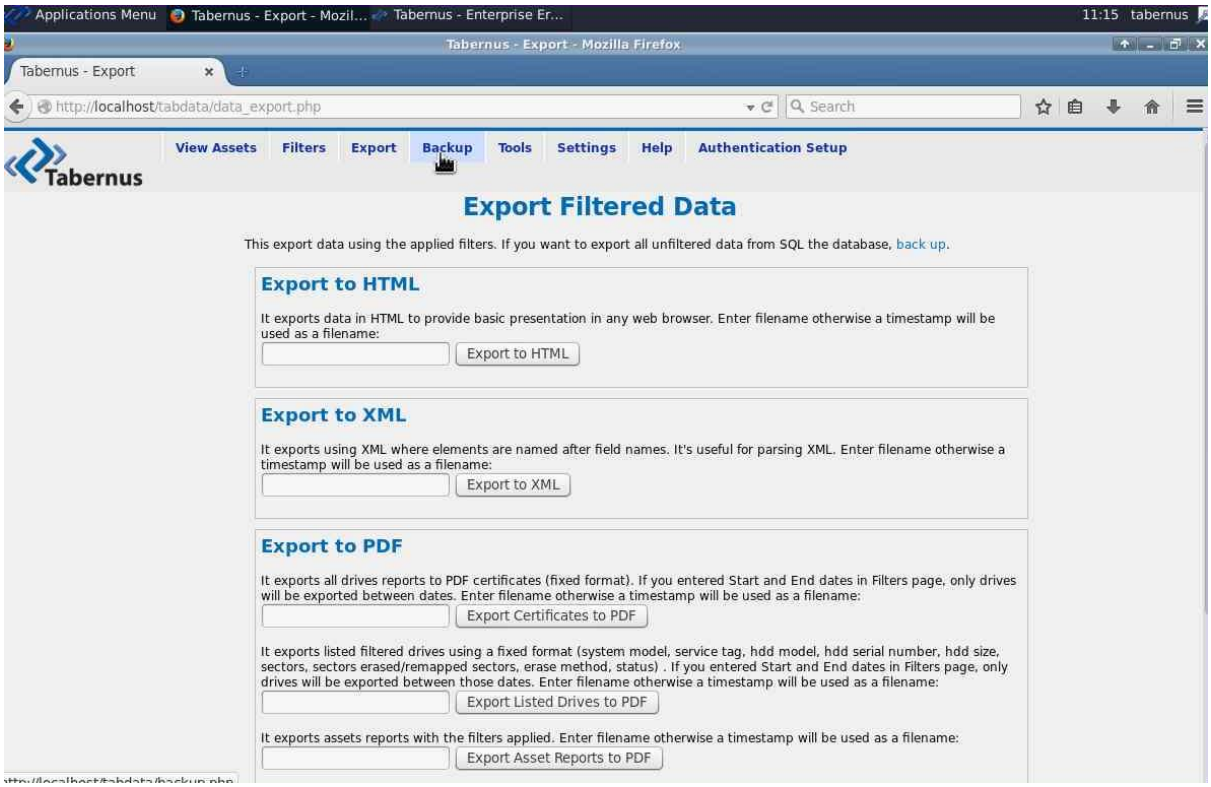
The **System Only/Disk Only/Both** will show only system lines in the **View Assets** page or just disk lines, or both (default behavior as shown above)

Tabdata Export Reports

Clicking on **Export** from within the Tabdata interface will open up the **Export Filtered Data** page. This page allows a user to export reports in a variety of formats. When exporting data, only data that is in the current filtered set will appear in the reports.

Export can be made to:

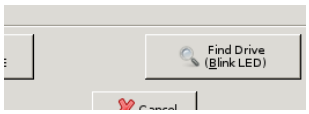
- HTML – a human readable HTML page
- XML – a useful data format for importing to other data systems
- PDF – available in the same formats as on the **View Assets** page, but with multi-page documents
    - Certificates – a single drive certificate per page
    - Listed Drives – a single drive instance per line
    - Asset Reports – full asset reports, one per page



Utilities

Find Drive

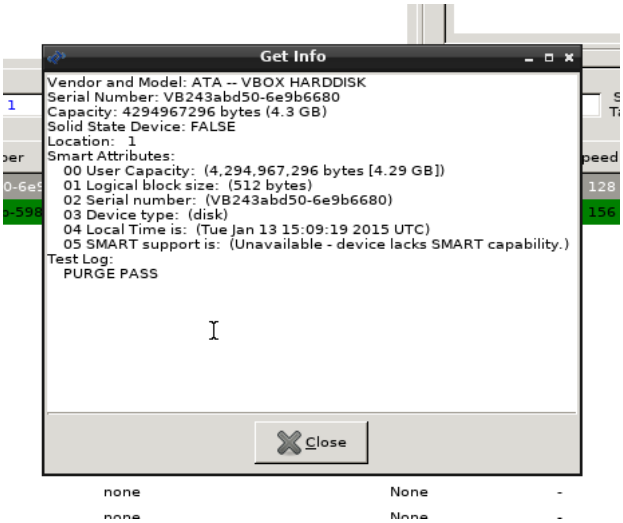
The **Find Drive (Blink LED)** button on the client interface allows a user to locate a physical drive from the client. When the button is clicked the disk activity light (where available on hardware) will blink for the physical hard drive.



Find Drive Button

Drive Info

The **Drive Info** button on the client interface opens up a dialog with extended information on disk drive selected when the button is pressed



Drive Info Dialog

Smart Test

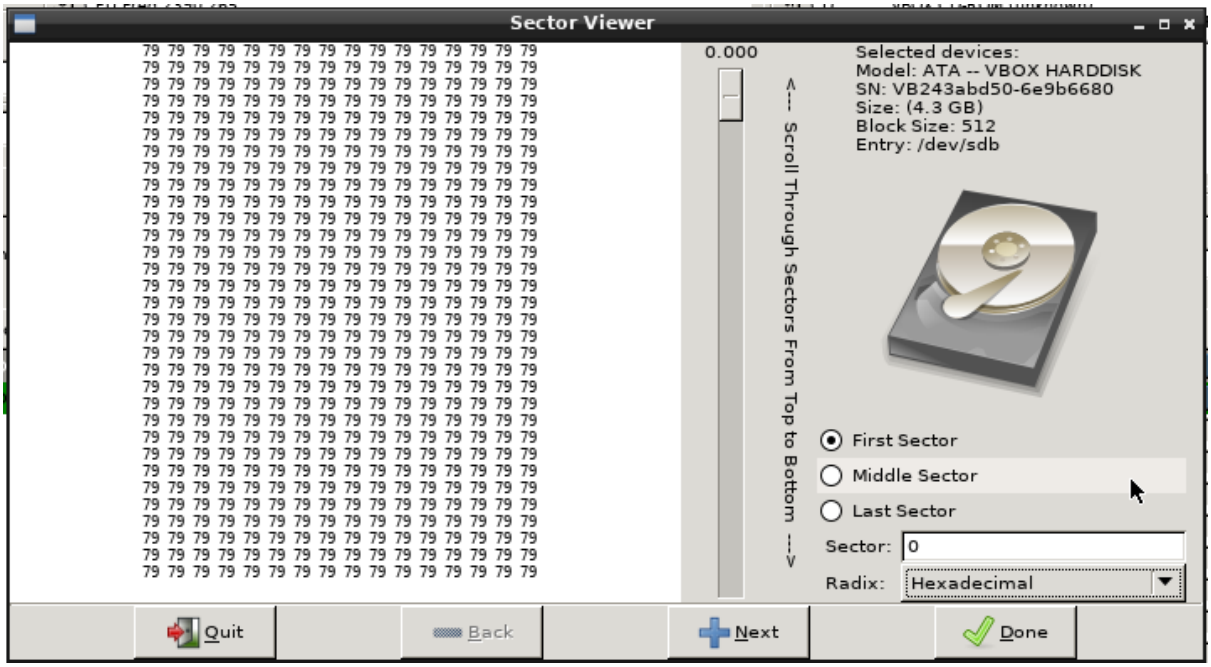
The **Smart Test** button on the client will perform a SMART quick check on the drive, this can be done prior to starting an erasure. The results from this quick check can be found in the **Drive Info** dialog above.

View Logs

The erasure logs that are transferred to the server at the end of the erasure are available to view on the client after the erasure. To open the directory containing these files press the **View Logs** button.

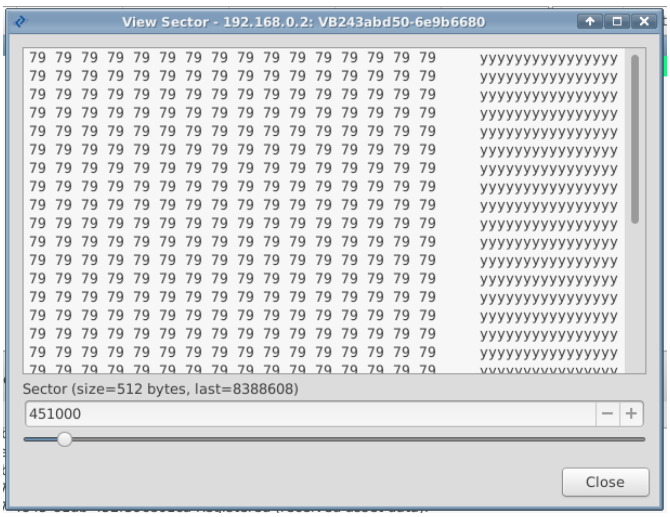
Sector Viewer

A sector viewing utility is available on both the client and server in order to see the raw data on the hard drive. To open the sector viewer on the client right click on the hard drive line in the interface and click **Sector Viewer**. Using the **Radix** control a hexadecimal view can be used, or ASCII to convert appropriate values to human readable text.



Sector Viewer – Client Side

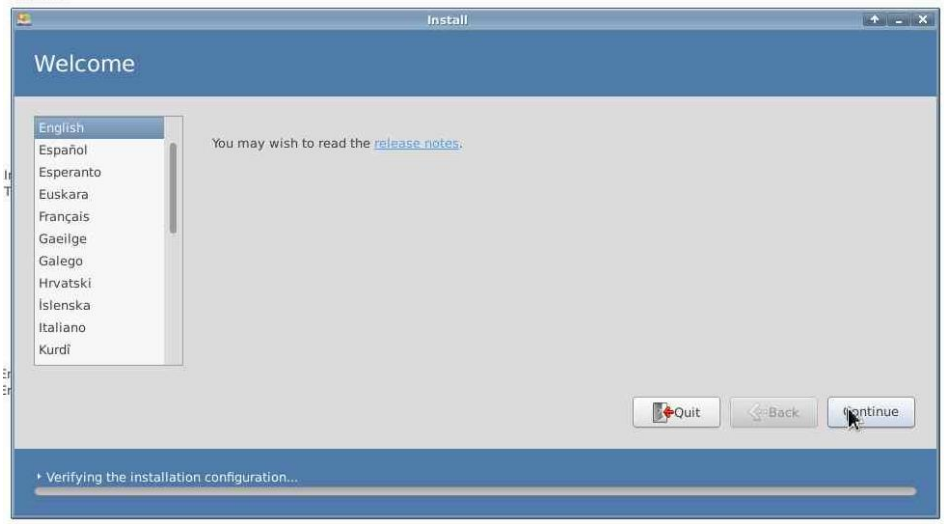
The sector viewer is also available from the server. Select a hard drive line, right click and choose **View Sector.**



Sector Viewer – Server Side

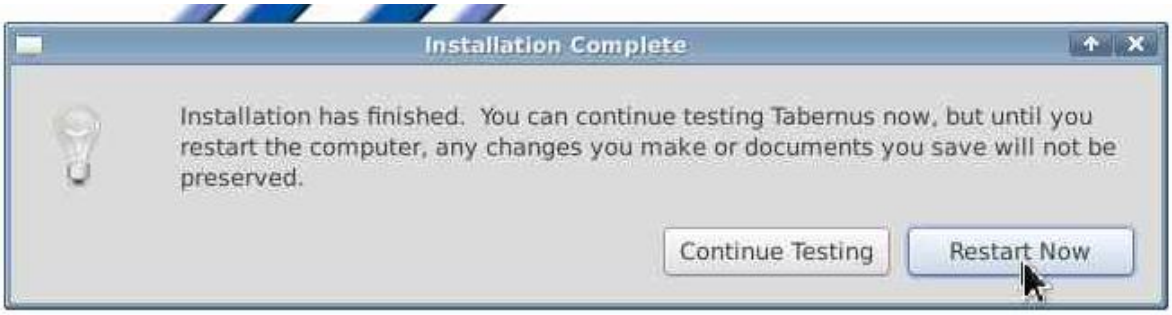
Appendix 1 – Step by Step Installation

Double Click the Install Icon



Select Operating System Language

Select Location



Reboot System. Eject Disk and Reboot to Desktop