TrueCommand™Guide

Version 1.0-RELEASE

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CHAPTER

ONE

INTRODUCTION

Welcome to TrueCommand™!

TrueCommand™ is a top-level management solution for managing multiple FreeNAS and TrueNAS systems. This is sometimes called a “single pane of glass” appliance and provides a unified administration for multiple users and multiple systems on networks.

TrueCommand™ can monitor an entire network of FreeNAS® and TrueNAS® systems. This includes showing system statistics on storage usage, network activity, active services, and more. Even more, TrueCommand™ has the ability to create custom reports about individual systems or a combination of many systems.

CHAPTER

TWO

INSTALLATION

TrueCommand™ is usually installed inside a virtual machine. It can also be installed on standalone hardware.

System Requirements

The system requirements for TrueCommand™ are:

- x86 64-bit CPU
- at least 4 GiB or 4096 MiB of RAM
- at least 80 GiB of disk space

Virtualization

VirtualBox

VirtualBox (https://www.virtualbox.org/) is an open source virtualization program originally created by Sun Microsystems. VirtualBox runs on Windows, BSD, Linux, Macintosh, and OpenSolaris.

To install or run TrueCommand™ in VirtualBox, start VirtualBox. Click the *New* button.

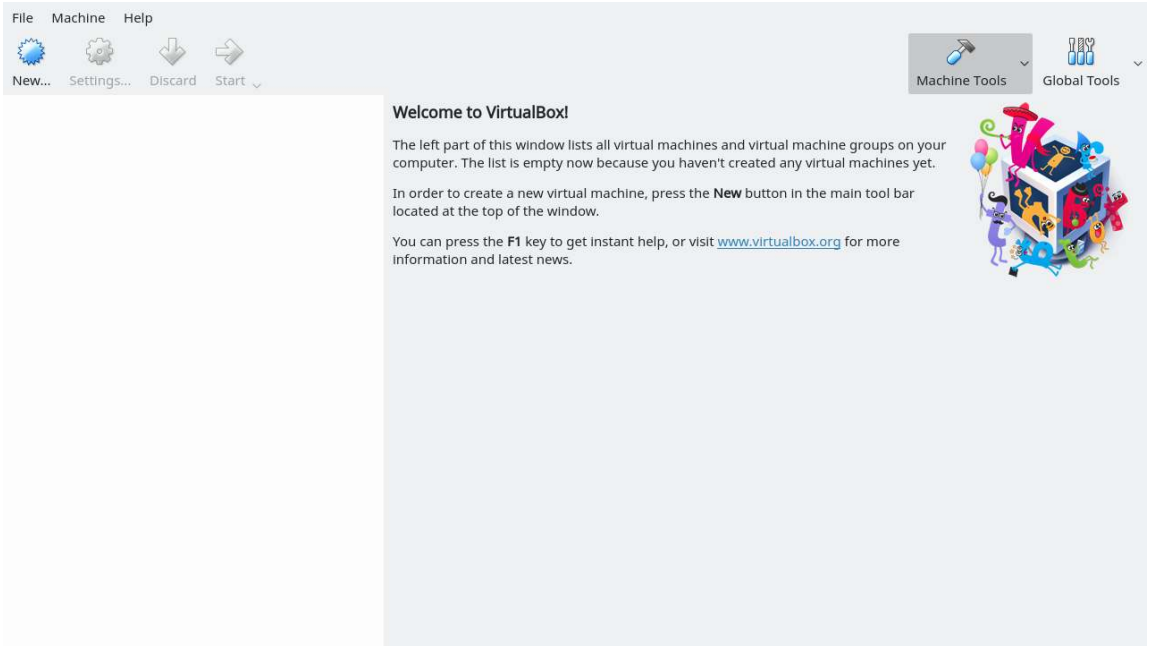


Fig. 2.1: VirtualBox Screen Menu

Enter a name for the virtual machine. Click the *Type* drop-down menu and select *BSD*. Select *FreeBSD (64-bit)* from the *Version* drop-down. Click *Next*.

Fig. 2.2: New Virtual Machine Name and Operating System

Change the base memory size to at least 4 GiB or 4096 MiB (see *System Requirements* (page 4)). Click *Next*.

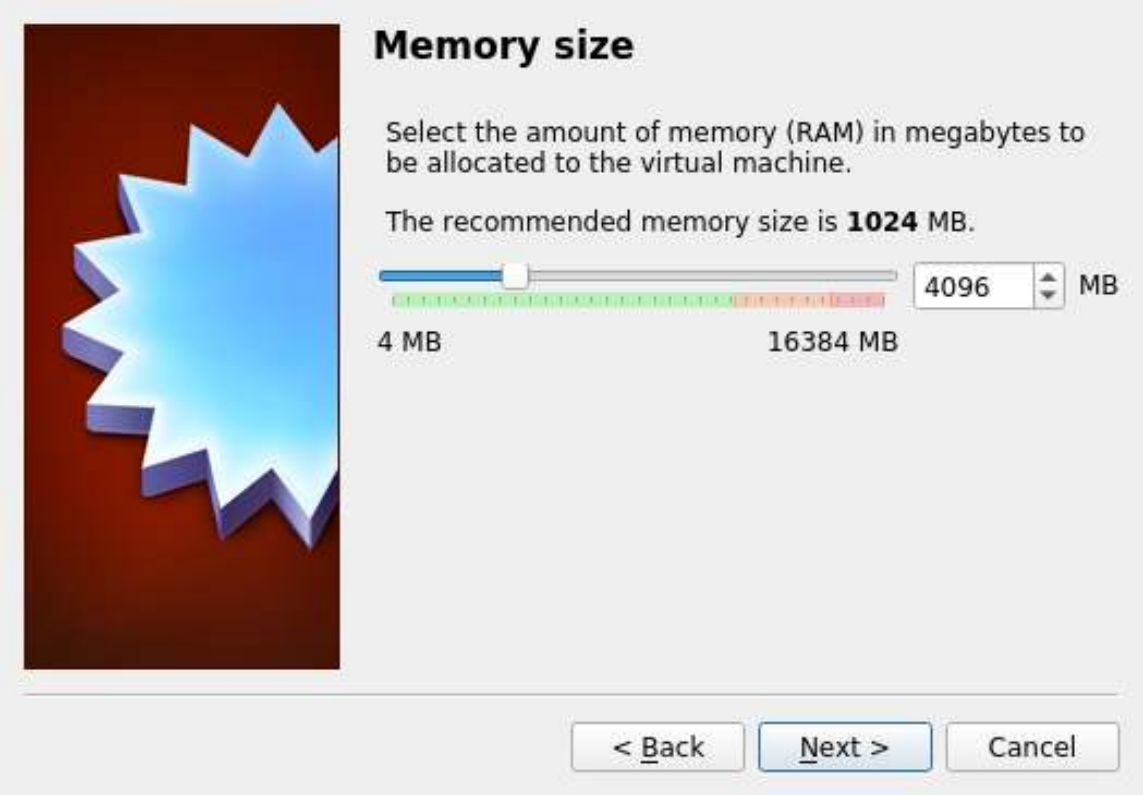


Fig. 2.3: Virtual Machine Reserved Memory

Click *Create*.

Fig. 2.4: Virtual Machine Hard Disk

Select *VDI* and click *Next*.

Fig. 2.5: New Virtual Hard Disk Type

Select *Dynamically allocated*. Click *Next*.

Fig. 2.6: Virtual Disk Storage Type

Set the size of the Virtual Disk. Set the Virtual Disk size to at least 80 GiB (see *System Requirements* (page 4). Click *Create* to create the new VM.

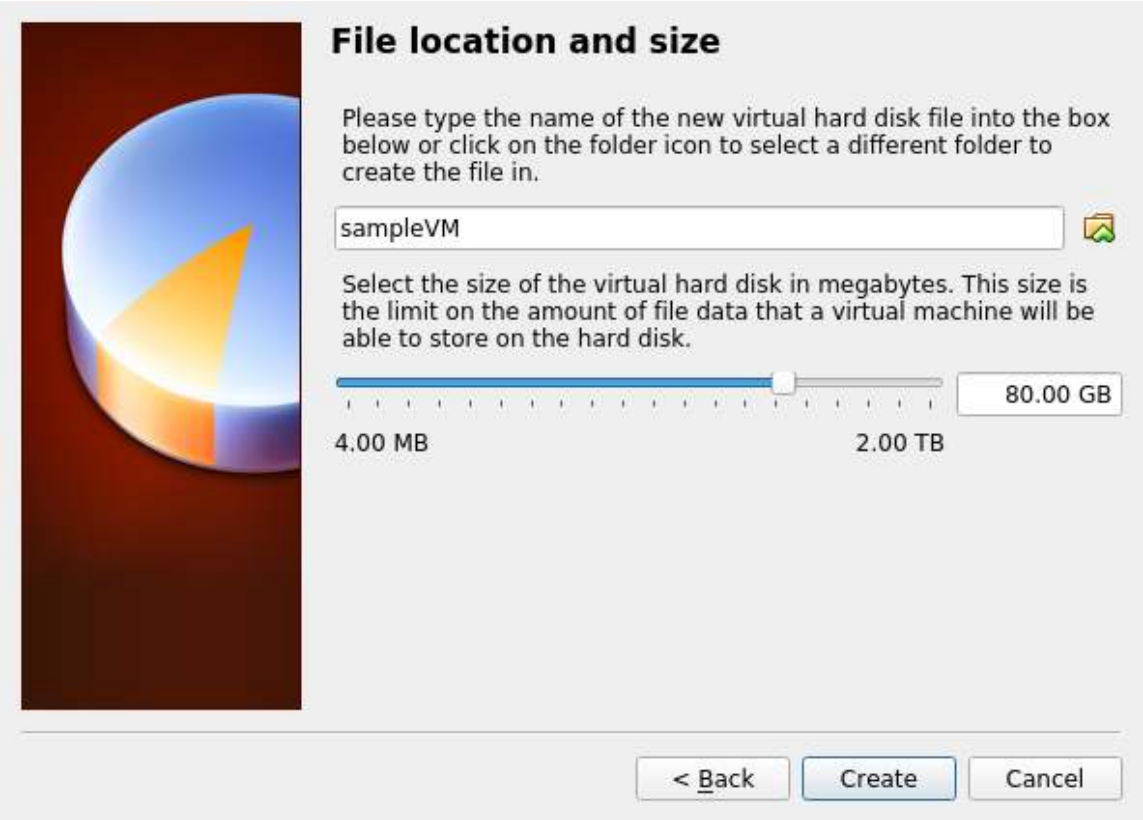


Fig. 2.7: Virtual Disk Location and Size

Highlight the VM and click *Settings* to create a device for the installation media.

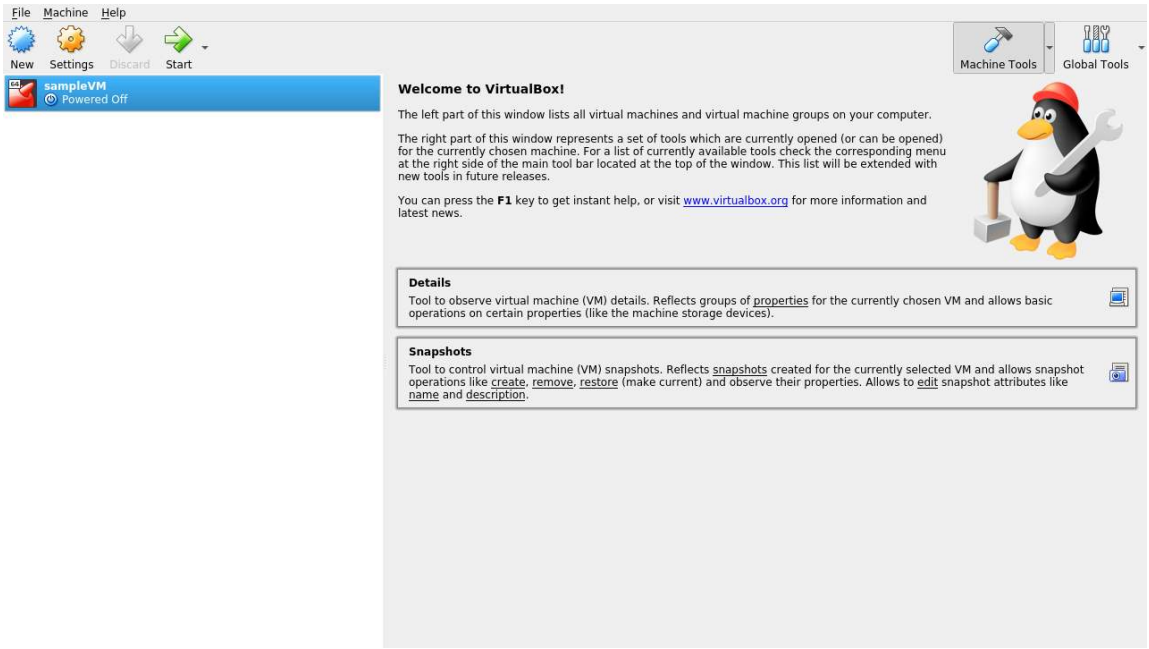


Fig. 2.8: New Virtual Machine

Click *Storage* in the left column to show storage options.

Select *Empty* from the **Storage Devices** frame and click the CD icon in the **Attributes** frame. Click *Choose Virtual Optical Disk File* to browse to the location of the TrueCommand™ `.iso` file.

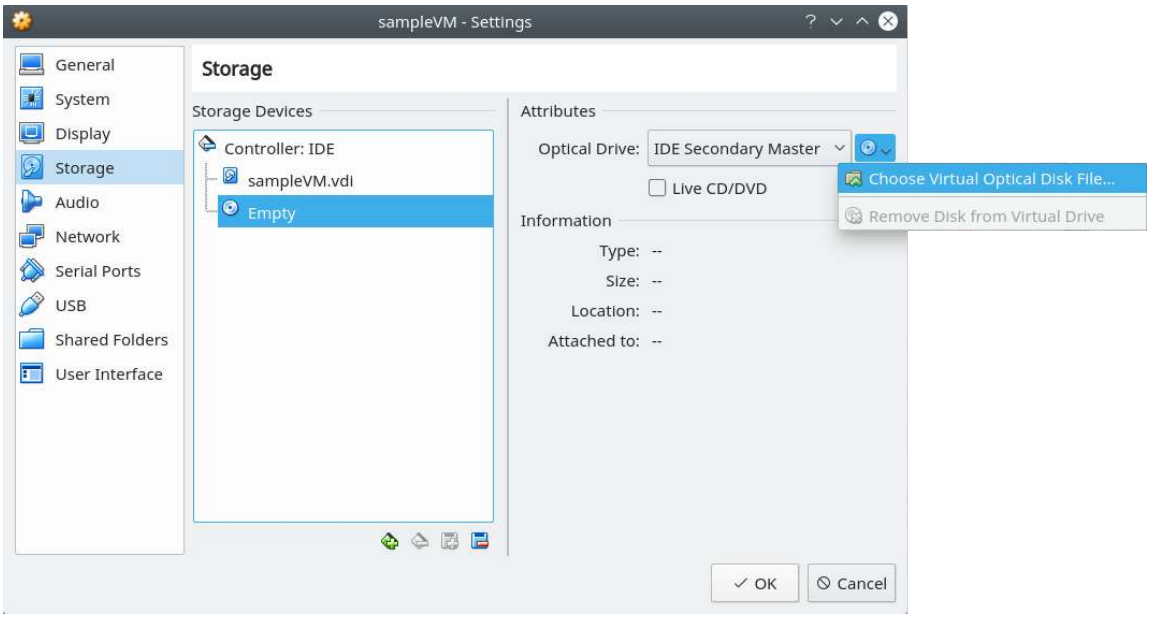


Fig. 2.9: Adding the ISO Installation Media

Configure the network adapter by opening the VM settings and clicking *Network*. Select *Bridged Adapter* in the *Attached To* drop-down menu. Choose the name of the physical interface from the *Name* drop-down menu. Click *Ok* to save the new settings.

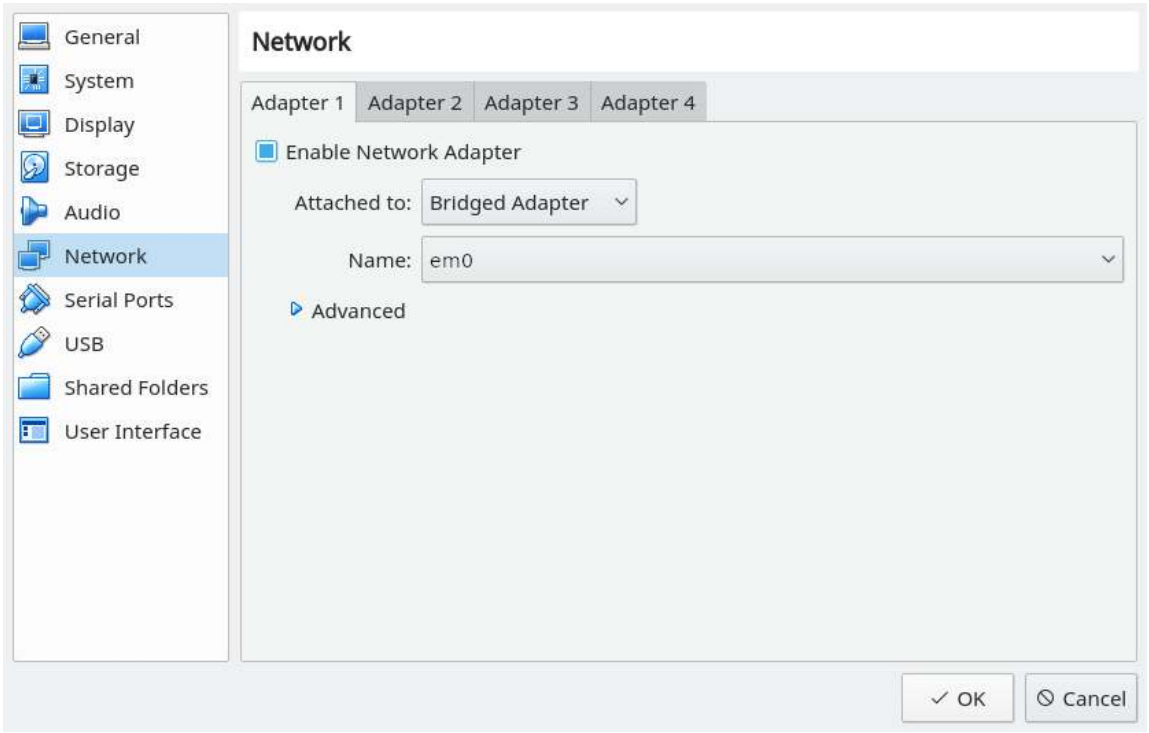


Fig. 2.10: Configuring a Bridged Adapter

Click *Start* to power on the VM and begin the TrueCommand™ *installation* (page 15).

After the installation is complete, shut down the VM. Remove the installation media by right-clicking the *IDE* icon and selecting *Remove Disk from Virtual Drive*.

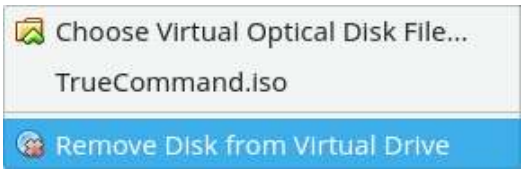


Fig. 2.11: Remove Installation Media

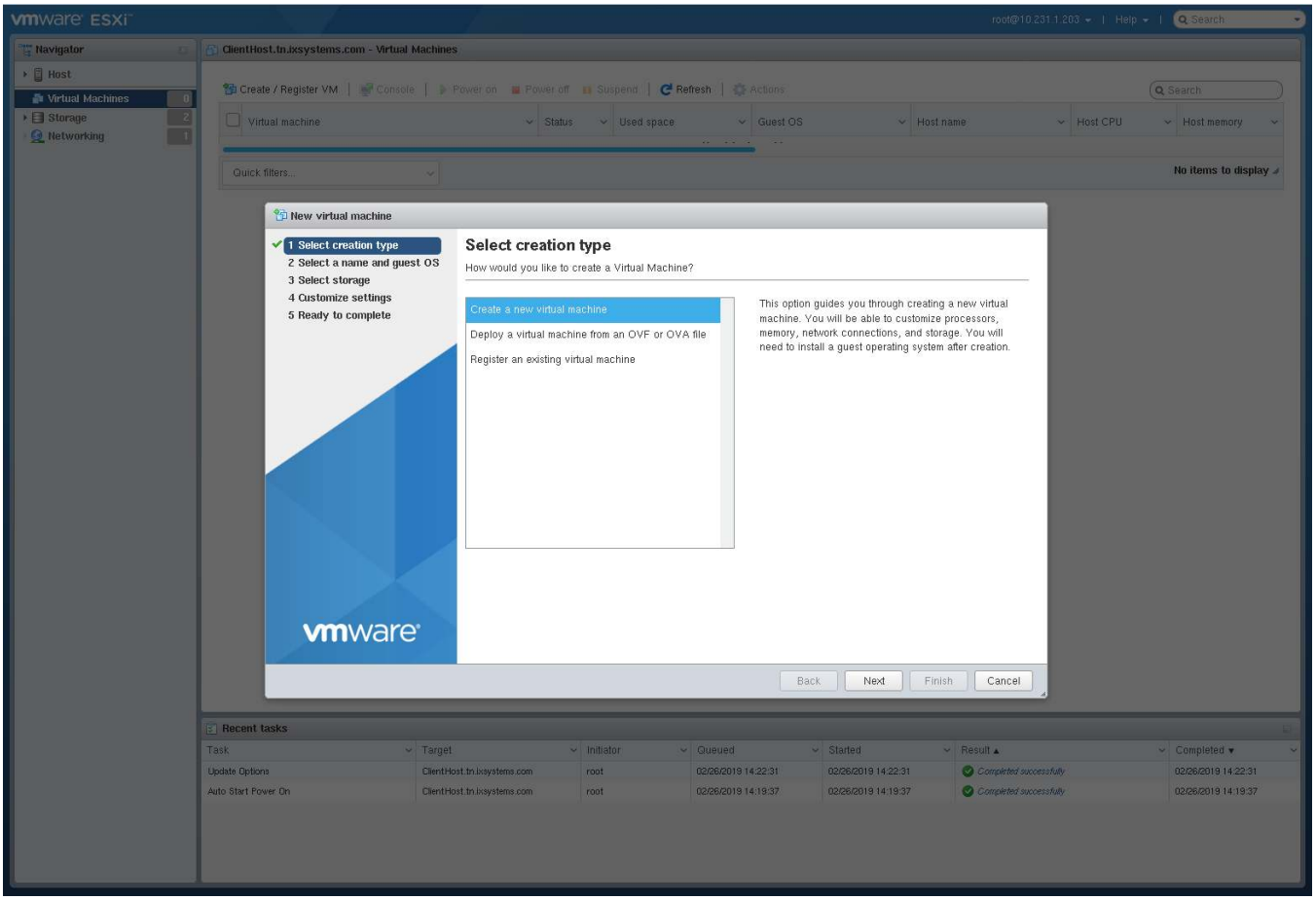
VMware ESXi

ESXi is a bare-metal hypervisor architecture created by VMware Inc. Commercial and free versions of the VMware vSphere Hypervisor operating system (ESXi) are available from the VMware website (https://www.vmware.com/products/esxi-and-esx.html).

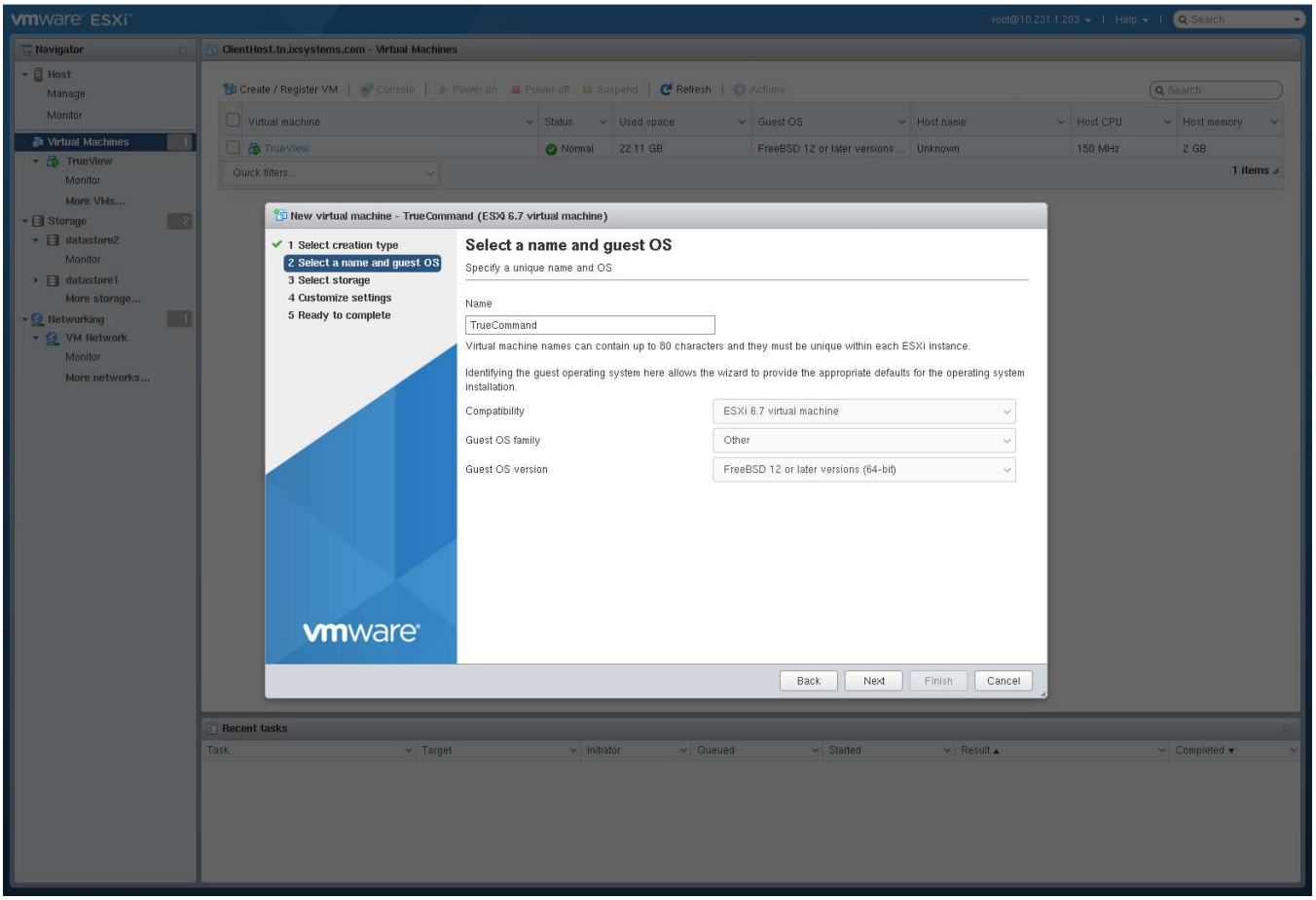
When the VMware vSphere client is installed, use it to connect to the ESXi server. Enter the username and password created when installing ESXi to log into the interface. After logging in, go to *Storage* to upload the TrueCommand™ `.iso`. Click *Datastore browser* and select a datastore for the TrueCommand™ `.iso`. Click *Upload*. Use the file dialog to choose the TrueCommand™ `.iso` from the host system.

Click *Create / Register VM* to create a new VM. The *New virtual machine* wizard opens:

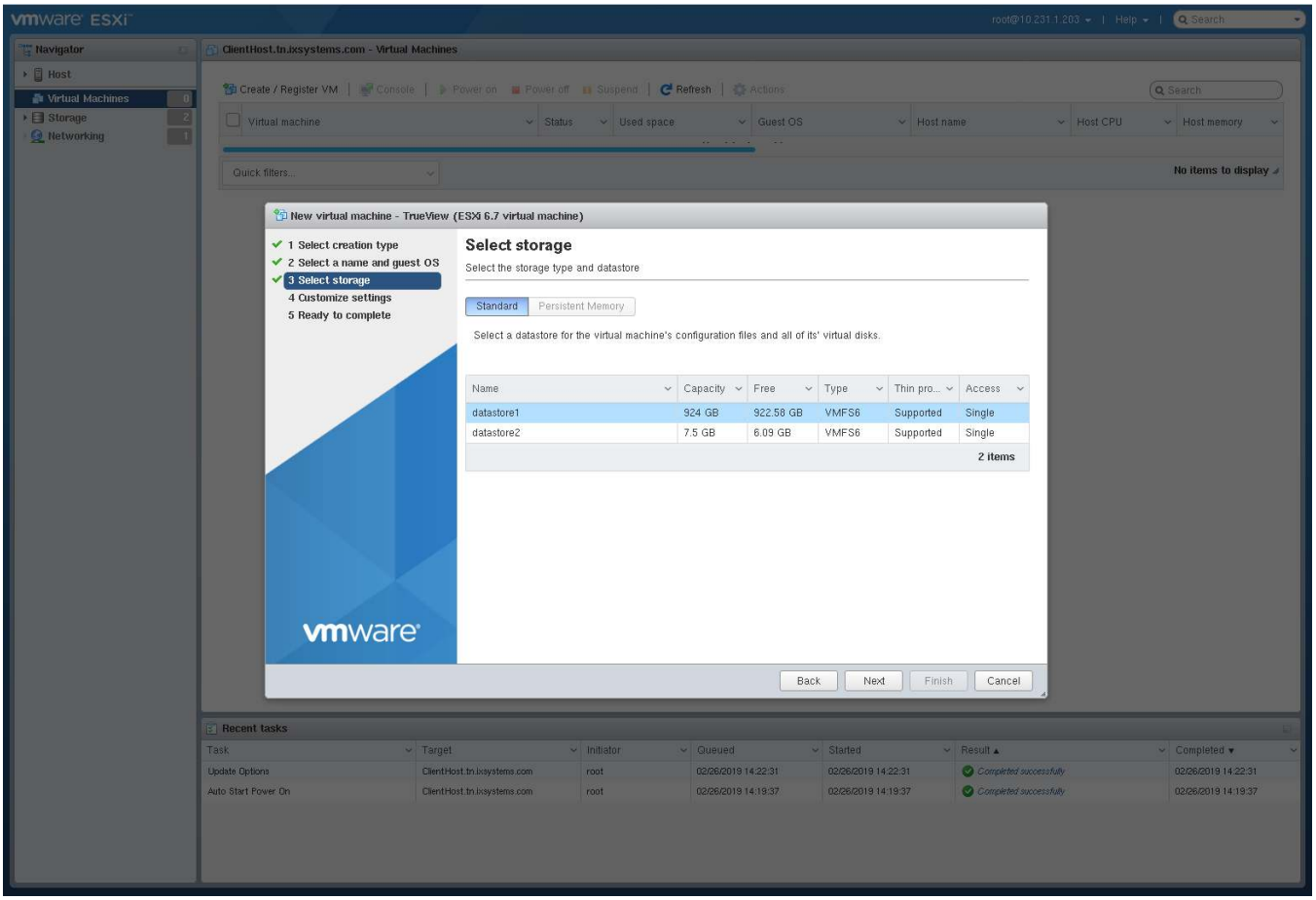
1. **Select creation type**: Select `Create a new virtual machine` and click *Next*.



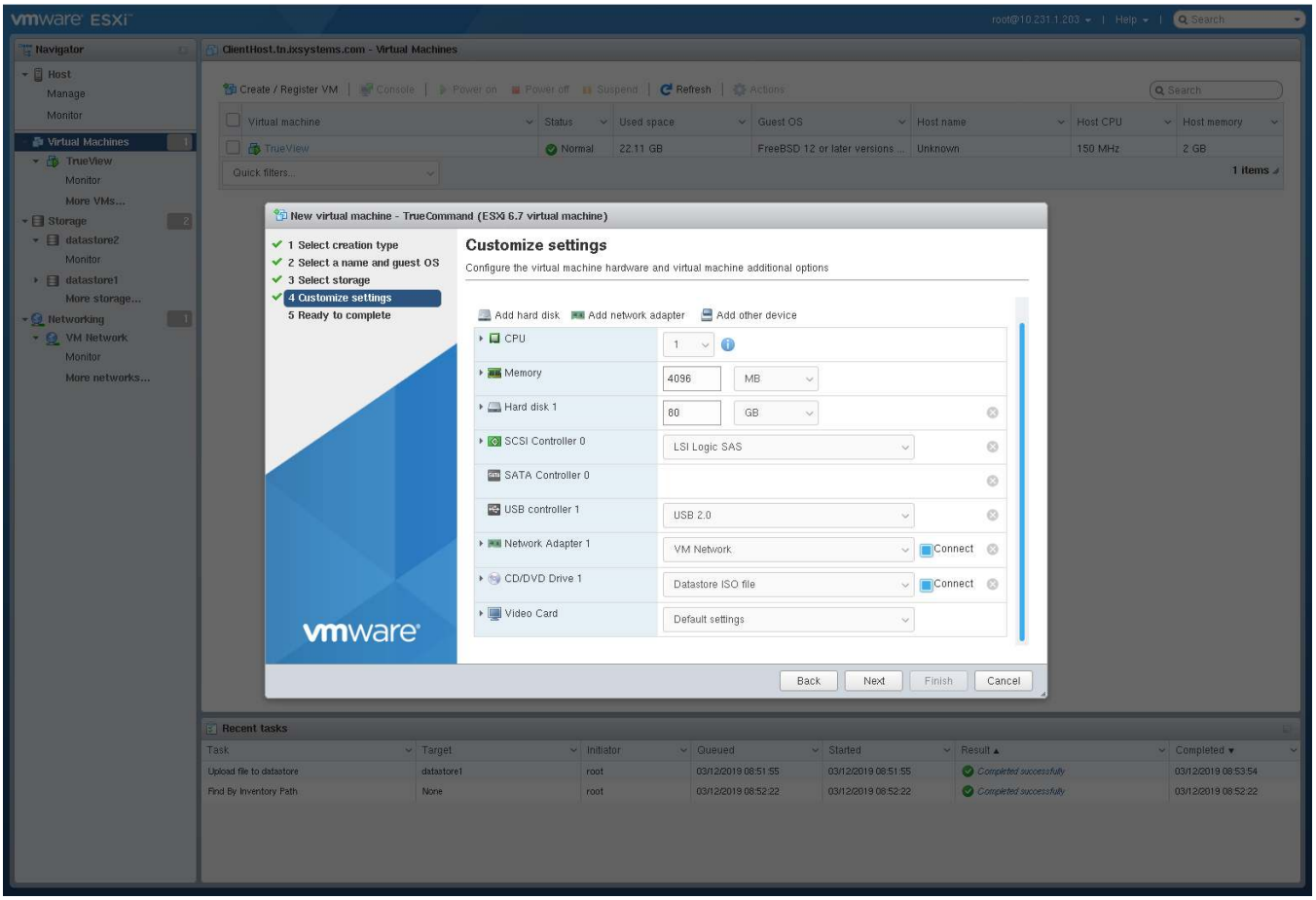
2. **Select a name and guest OS**: Enter a name for the VM. Leave ESXi compatibility version at the default. Select `Other` as the Guest OS family. Select `FreeBSD12 or later versions (64-bit)` as the Guest OS version. Click *Next*.



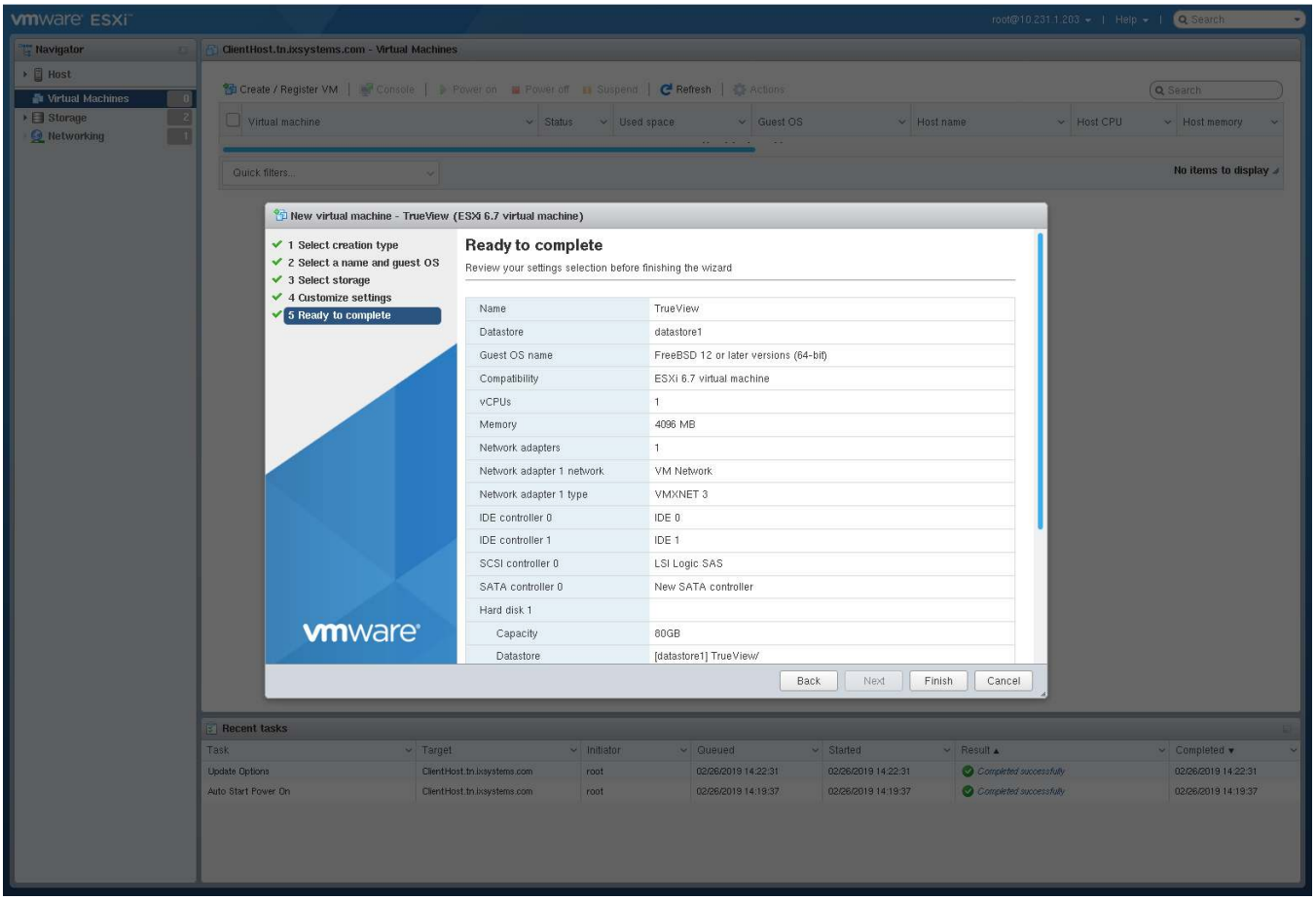
3. **Select storage**: Select a datastore for the VM. The datastore must be at least 80 GiB (see *System Requirements* (page 4)).



4. **Customize settings**: Enter at least 4 GiB or 4096 MiB of memory and at least 80 GiB of virtual storage (see *System Requirements* (page 4)). Select `Datastore ISO file` from the *CD/DVD Drive 1* drop-down. Use the Datastore browser to select the uploaded TrueCommand™ `.iso`. Click *Next*.



5. **Ready to complete**: Review the VM settings. Click *Finish* to create the new VM.



Click *Virtual Machines* → *{VM}*, where *VM* is the TrueCommand VM name. Click *Power on* to start the VM. Click *Console* → *Open browser console* and *install* (page 15) TrueCommand™.

Installing TrueCommand™

The TrueCommand™ installer boot menu appears first. After a short pause, it automatically continues. To boot with one of the options, type the number of the option.

Fig. 2.12: Installer Boot Menu

Press `Enter` to select the default option, *Install*.

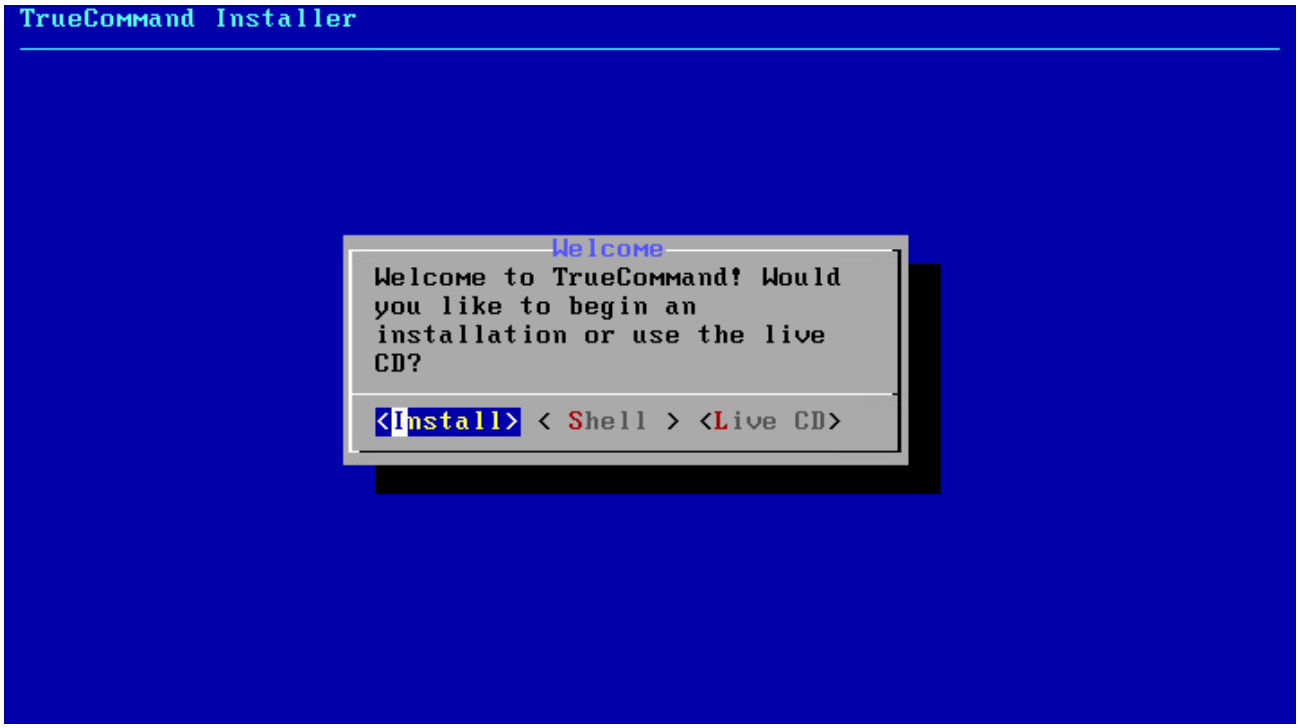


Fig. 2.13: Installer Options

Available disks are shown. Use the arrow keys to choose the target disk. Press `Spacebar` to select the desired disk. Press `Enter` to continue.

Press `Enter` to reserve the entire disk for TrueCommand™.

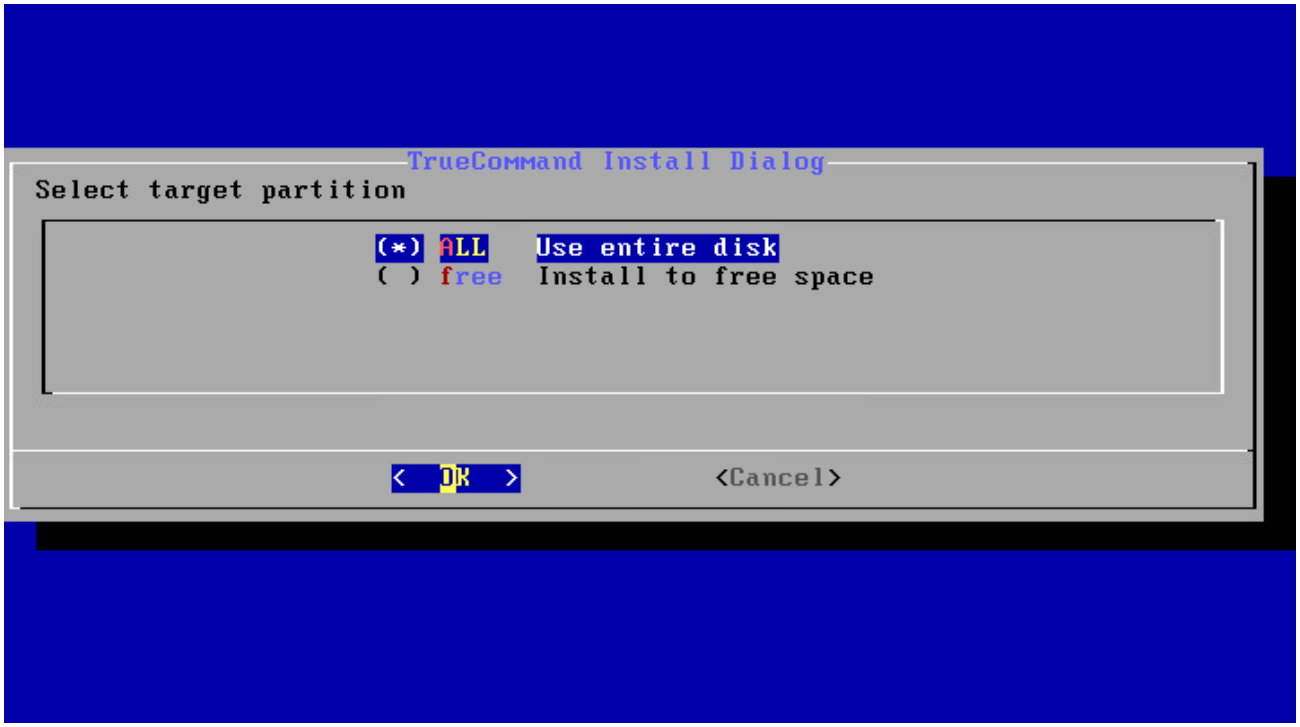


Fig. 2.14: Select Target Partition

Use the arrow keys to select *GPT*. *MBR* should only be used on legacy clients that cannot use *GPT*. Press `Enter`.

Fig. 2.15: Select Disk Format

Set and confirm the `root` password. **The :literal:'root' user is for system maintenance and is not used to access the |brand| web interface**. TrueCommand™ accounts are created through web interface after installation.

Press `Enter` to continue.

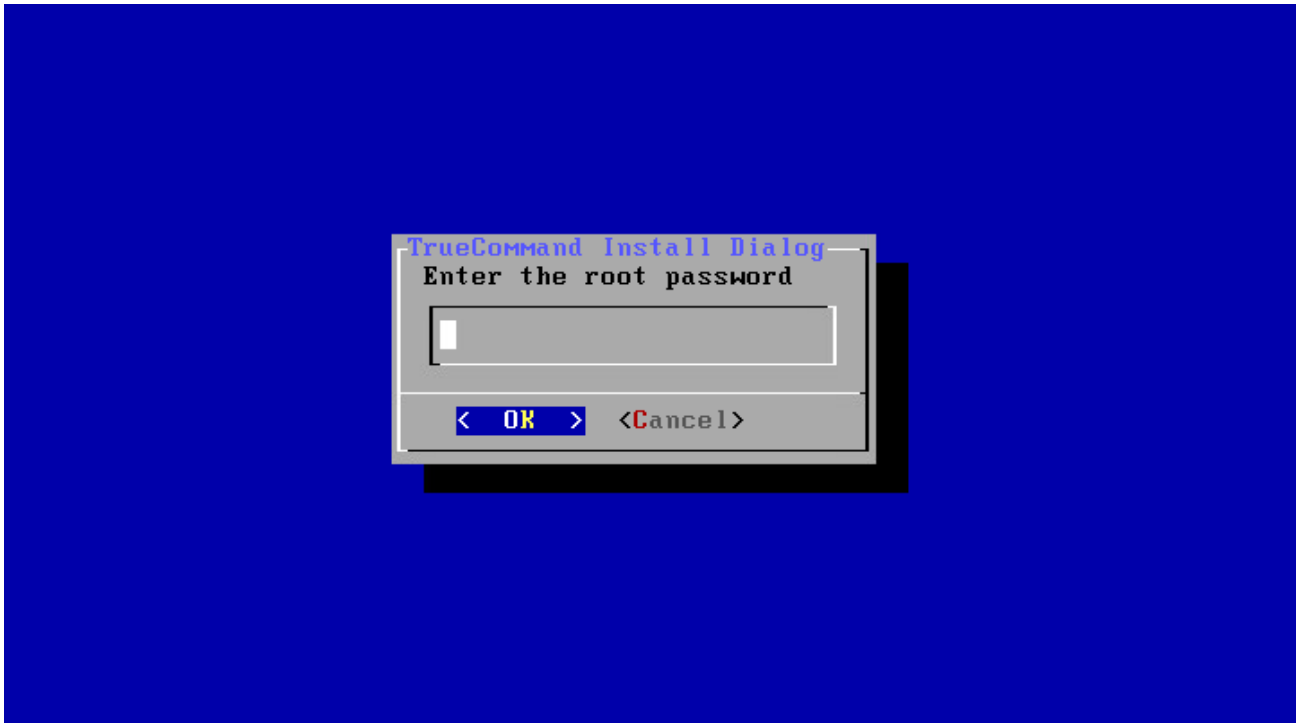


Fig. 2.16: Set `root` password

A system user is created for optional SSH access to the TrueCommand™ system. Enter a username and press `Enter`. Enter a full name for the user and press `Enter`.

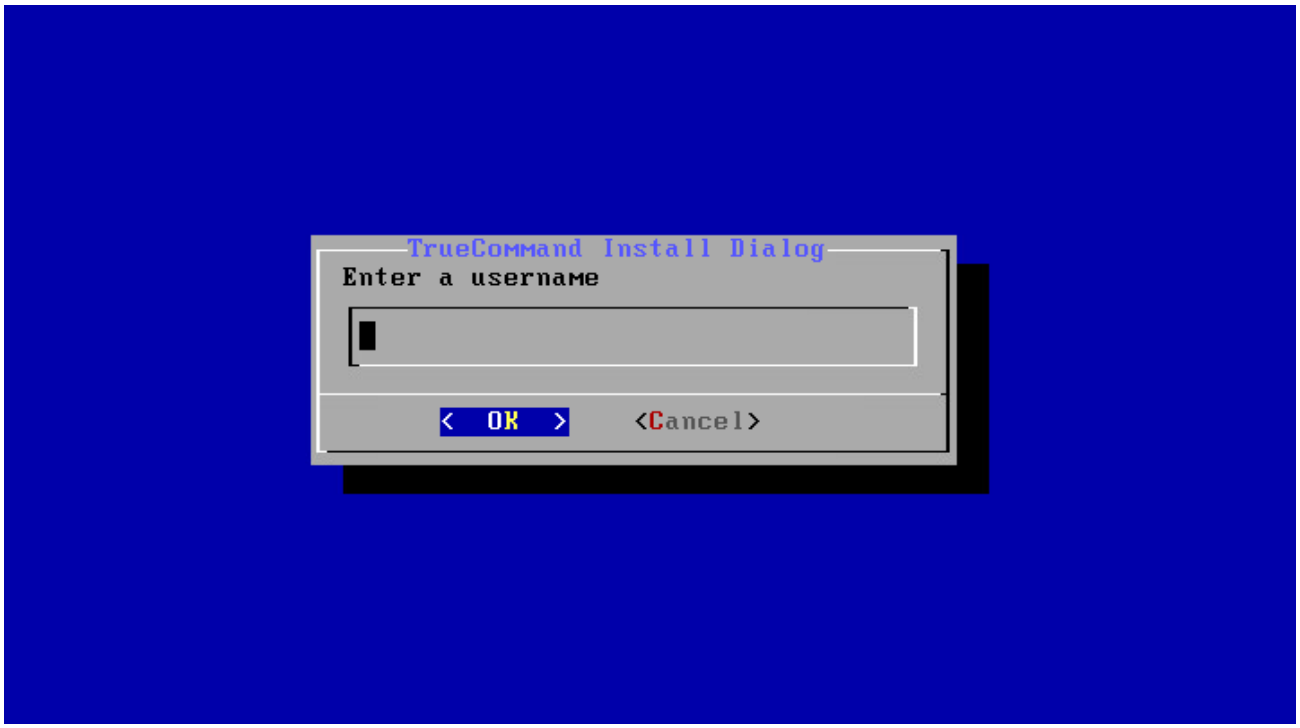


Fig. 2.17: Set System User Username

Enter the password, then enter it again to confirm.

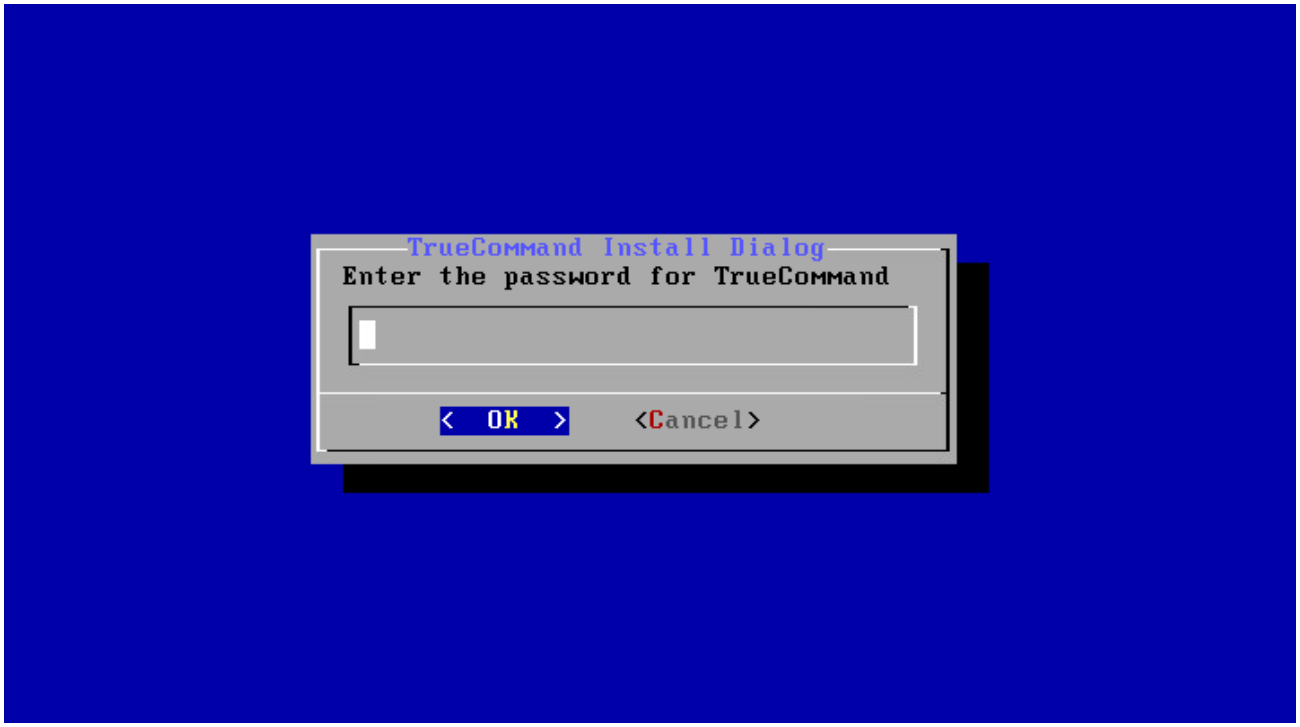


Fig. 2.18: Set System User password

Press `Enter` to select the default, `/bin/sh`.

Fig. 2.19: Select User Shell

Enter `TrueCommand` as the system hostname and press `Enter`.

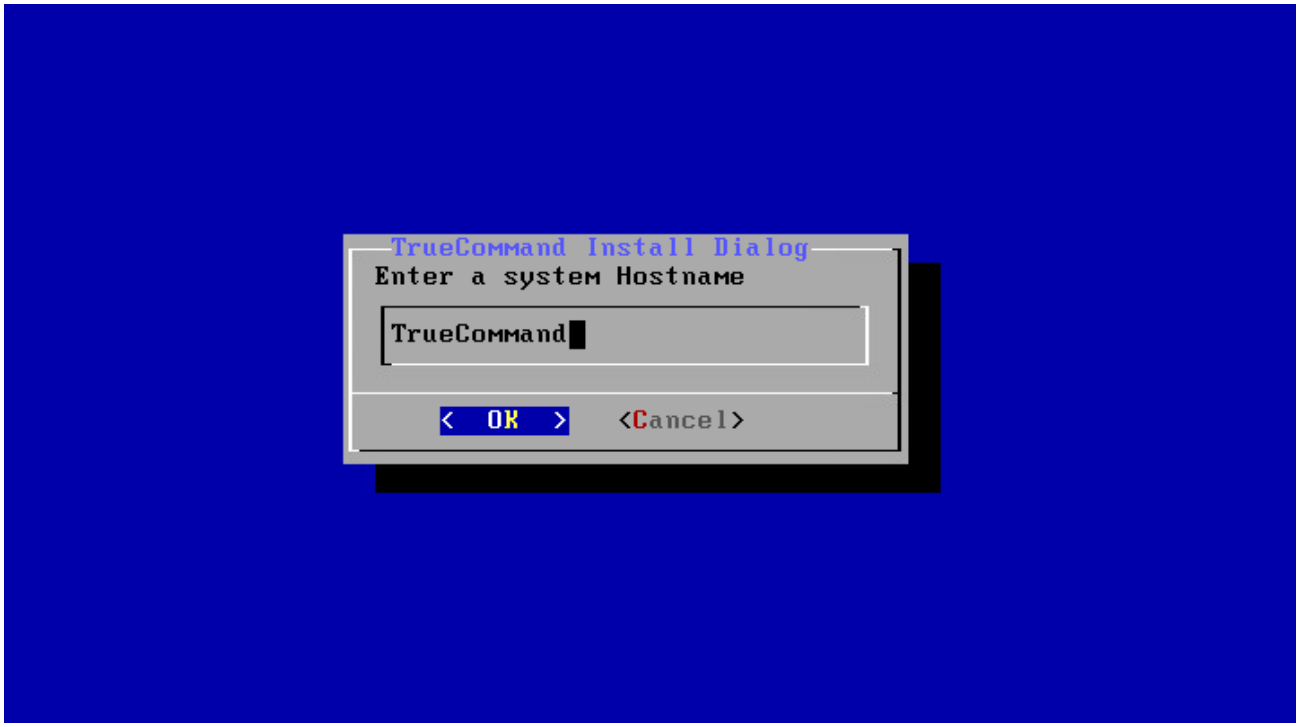


Fig. 2.20: Set Hostname

Press `Enter` to *Enable networking*.

Fig. 2.21: Enable Networking

Use the arrow keys to select the network card. A static IP address is strongly recommended. DHCP can be used, but can result in the system unexpectedly moving to new IP address.

When using a static IP address, the IP address, gateway, and netmask are required. DNS is optional, but recommended for name resolution.

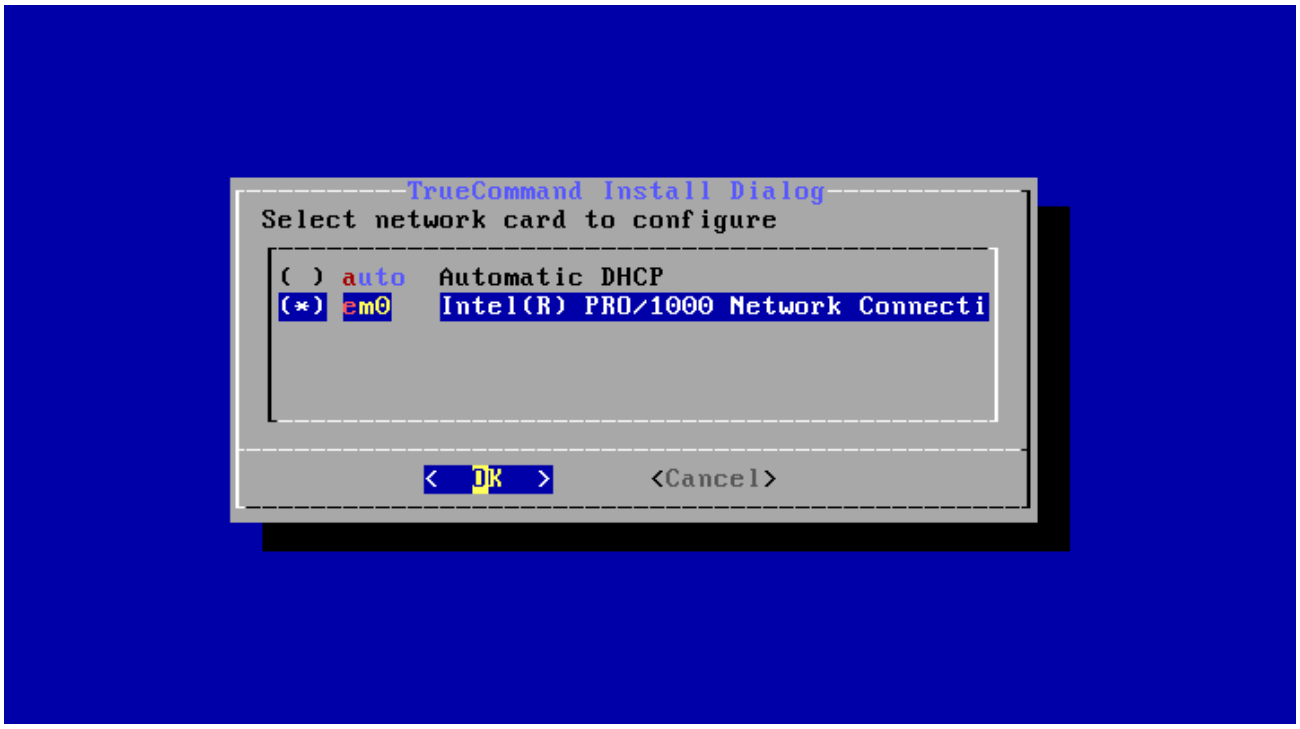


Fig. 2.22: Select Network Card

Press `Enter` to the Enable SSH. Enabling SSH is not required, but recommended.

Fig. 2.23: Enable SSH

Select *install* and press `Enter`.

Fig. 2.24: Start the Installation

Wait for the *Installation finished!* message and press `Enter`.

```
Setting em0 to DHCP on the system.
Running chroot command: cat /.tmpPass | pw useradd -n TrueView -c "Sam" -h 0 -s
"/bin/sh" -m -d "/home/TrueView" -G "wheel,operator"
Setting hostname: sam.local
Setting root password
Running chroot command: cat /.rootpw | pw usermod root -h 0
Running chroot command: newaliases
newaliases: Aliases are not used in sSMTP
Running chroot command: rc-update add sshd default
 * service sshd added to runlevel default
ZFS Unmount: tank/var/tmp
ZFS Unmount: tank/var/mail
ZFS Unmount: tank/var/log
ZFS Unmount: tank/var/audit
ZFS Unmount: tank/usr/src
ZFS Unmount: tank/usr/ports
ZFS Unmount: tank/usr/obj
ZFS Unmount: tank/usr/jails
ZFS Unmount: tank/usr/home
ZFS Unmount: tank/tmp
ZFS Unmount: tank/root
Unmounting: /mnt
Installation finished!
Press ENTER to continue
```

Fig. 2.25: Finish Installation

Use the down arrow to select *quit*. Press `Enter`.

Fig. 2.26: Quit Install Wizard

Restart the TrueCommand™ system. Remove the TrueCommand™ install media so the system boots from the hard drive.

CHAPTER

THREE

STARTING

The *Appliance Status* menu appears when TrueCommand™ is running.

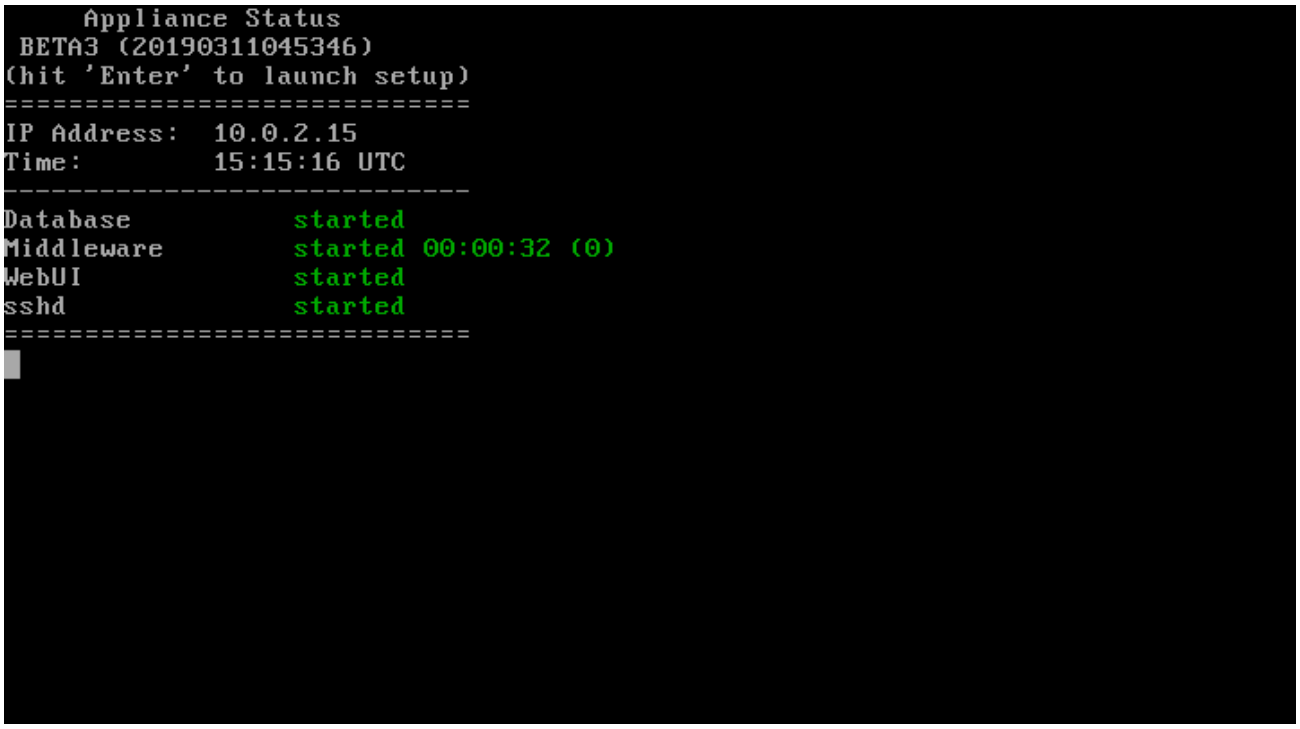


Fig. 3.1: TrueCommand™ Appliance Status

Locating the TrueCommand™ IP Address

The IP address of the TrueCommand™ system is displayed at the top of the *Appliance Status* menu.

Enter the DNS hostname or IP address in a browser to access the TrueCommand™ web interface.

System Configuration Utility

TrueCommand™ can be easily configured using the system configuration utility. To start the utility, press `Enter` at the *Appliance Status* screen. Use the arrow keys to move up and down. Press `Enter` to select an option:

Manage Services

- *Middleware*
  - Display the status of the `ix_middleware`. Display options to *Start*, *Stop*, *Restart*, or *Force Stop* the service.
- *WebUI*
  - Display the status of the `nginx`. Display options to *Start*, *Stop*, *Restart*, or *Force Stop* the service.
- *sshd*
  - Display the status of the `sshd` service. Display options to *Start*, *Stop*, *Restart*, *Force Stop*, or *Enable Root Login/ Disable Root Login* the service.

Manage Networking

- *Custom Gateway NO*
  - Enter a custom gateway number.
- *DNS Settings*
  - Add or remove a DNS nameserver.
- Network Interface settings. This option depends on the network device connected. For example, a system with an Intel network card shows up as `em0`.
  - This option contains contains settings to *Enable DHCP*, *Set Static IP*, and *Restart Device*.

Date/Time Settings

- *Set Time Zone*
  - Choose a time zone to set the time.
- *Resync with NTP*

  - Use Network Time Protocol (NTP) (https://en.wikipedia.org/wiki/Network_Time_Protocol) to dynamically set the time.

Updates

Display the current train of TrueCommand™.

- *Perform Updates*
  - Only appears when updates are available. Select to download and install the latest update.
- *Force Update All*
  - Force the system to update.
- *Switch Trains*
  - Switch between *Release*, *Stable-Nightly*, and *Nightly* trains.

Reboot System

- Power off and restart the system.

Shutdown System

- Power off the system.

Adding TrueCommand™ as an Exception

TrueCommand™ uses a self signed certificate (https://en.wikipedia.org/wiki/Self-signed_certificate) for a secure connection. Because of this, most internet browsers consider the IP address or DNS hostname untrustworthy. The IP address or DNS hostname must be added as an exception to connect.

Adding an Exception in Firefox

Click *Advanced* to view information about the error code.

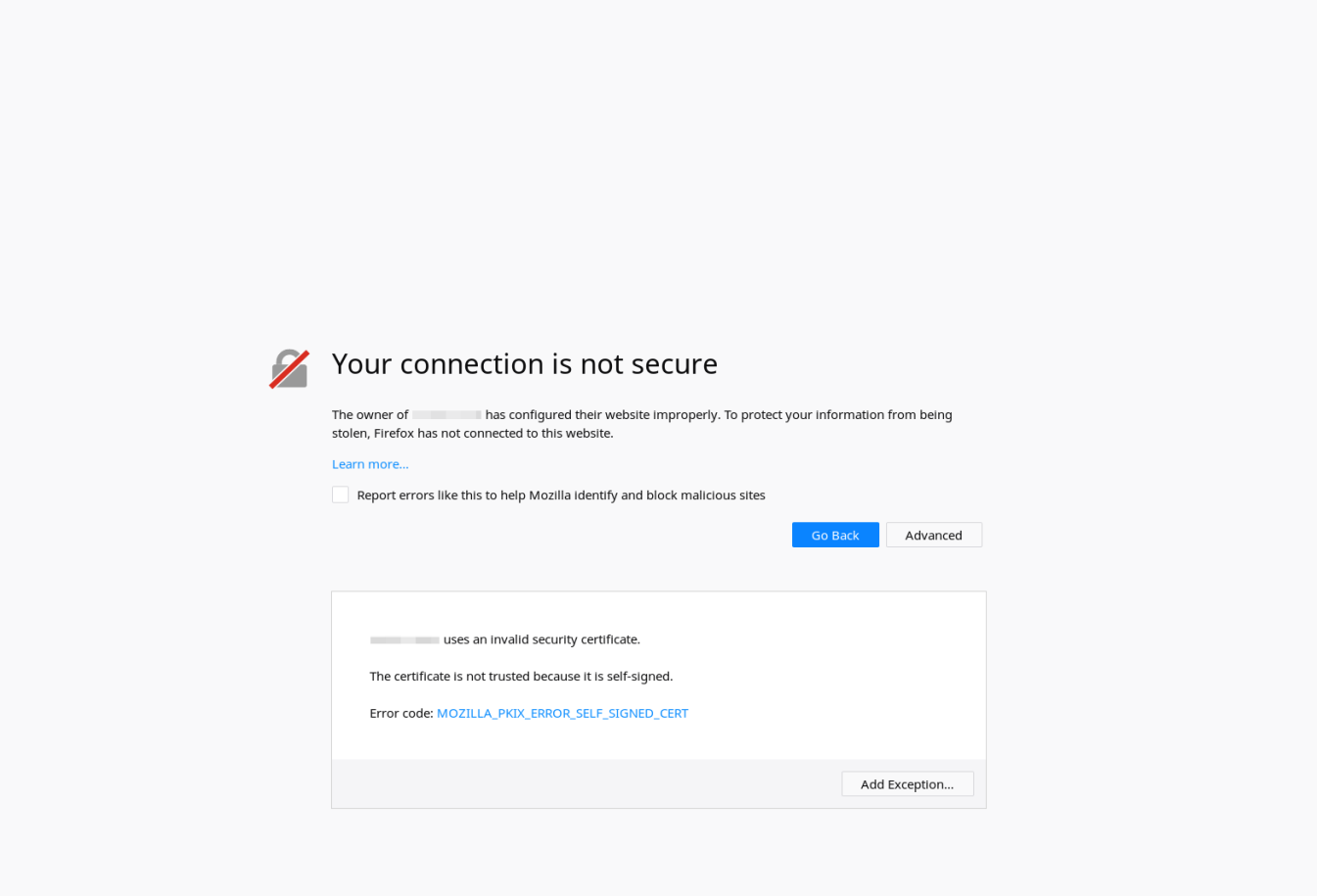


Fig. 3.2: Firefox Connection Warning

Click *Add Exception...*. Set *Permanently store this exception* to keep the IP address or DNS hostname permanently stored in Firefox.

Click *Confirm Security Exception*.

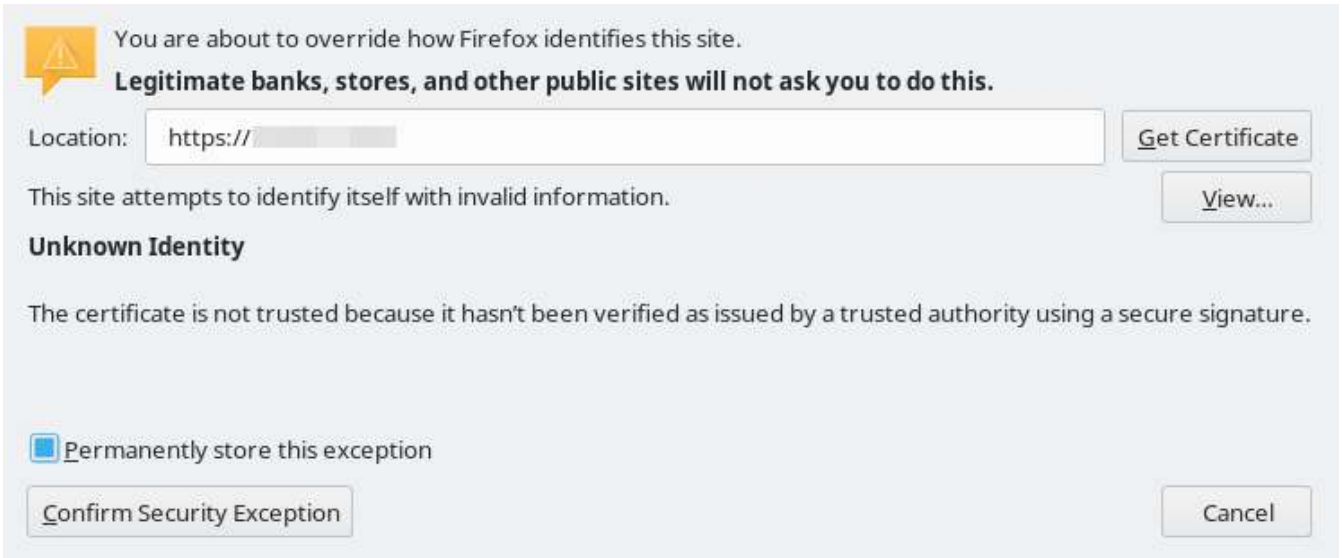


Fig. 3.3: Firefox Add Exception

Adding an Exception in Chrome

Click *Advanced* to view information about the error code.

Click *Proceed to {IP address or DNS hostname} (unsafe)*.

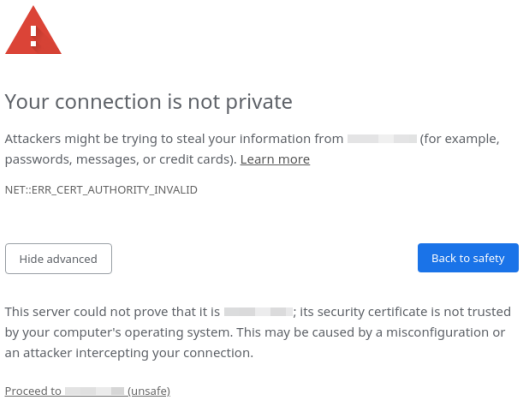


Fig. 3.4: Chrome Connection Warning

Signing Up for TrueCommand™

Follow these steps to create a new admin user:

1. **Log in using the default username** (`admin`) **and password** (`admin`). This username is only present when there are no actual users defined in the database.

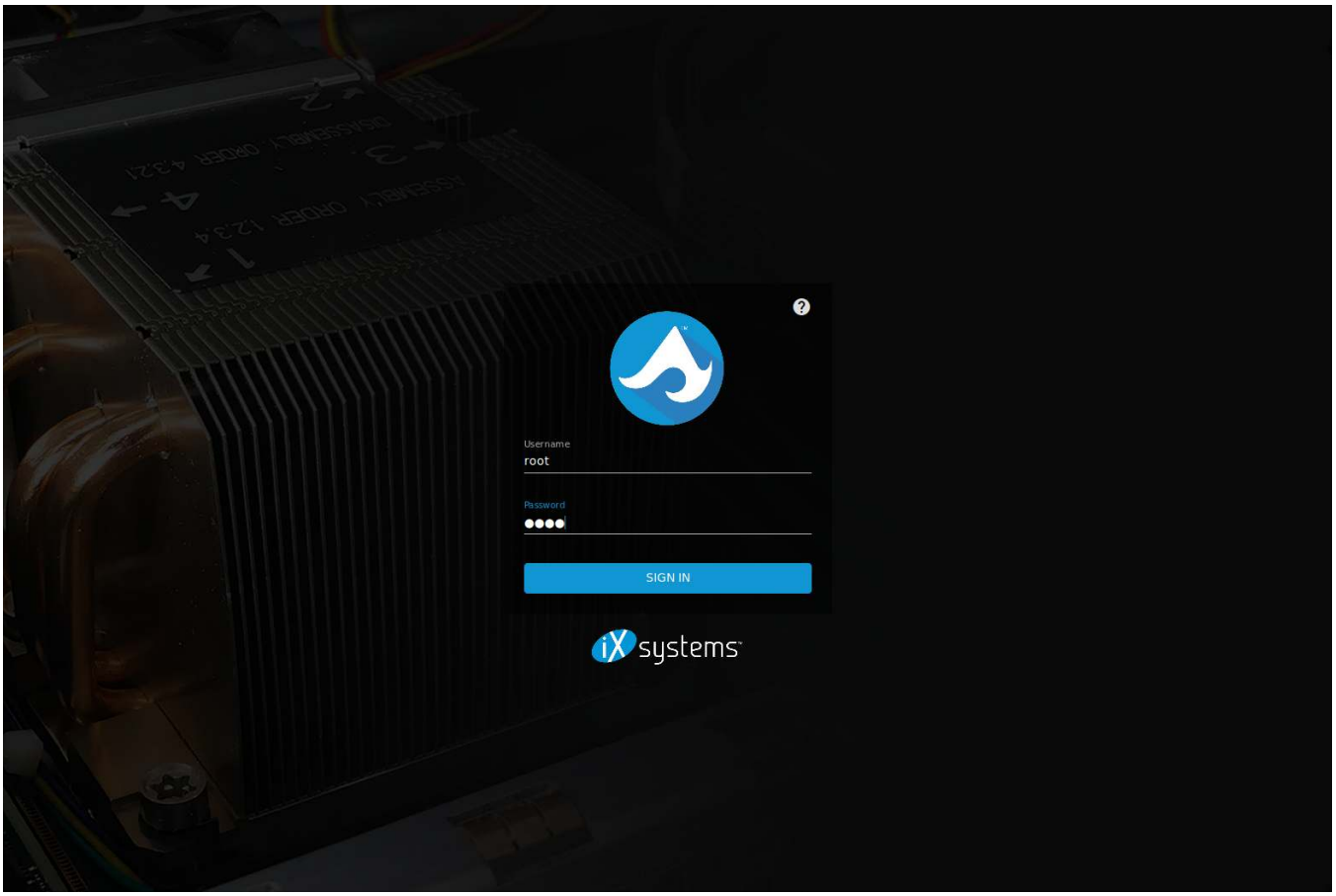


Fig. 3.5: Log in to Access Sign Up Page

2. Enter a username and password. Read the terms of service, set *I have read and agree to the terms of service*, and click *SIGN UP*.

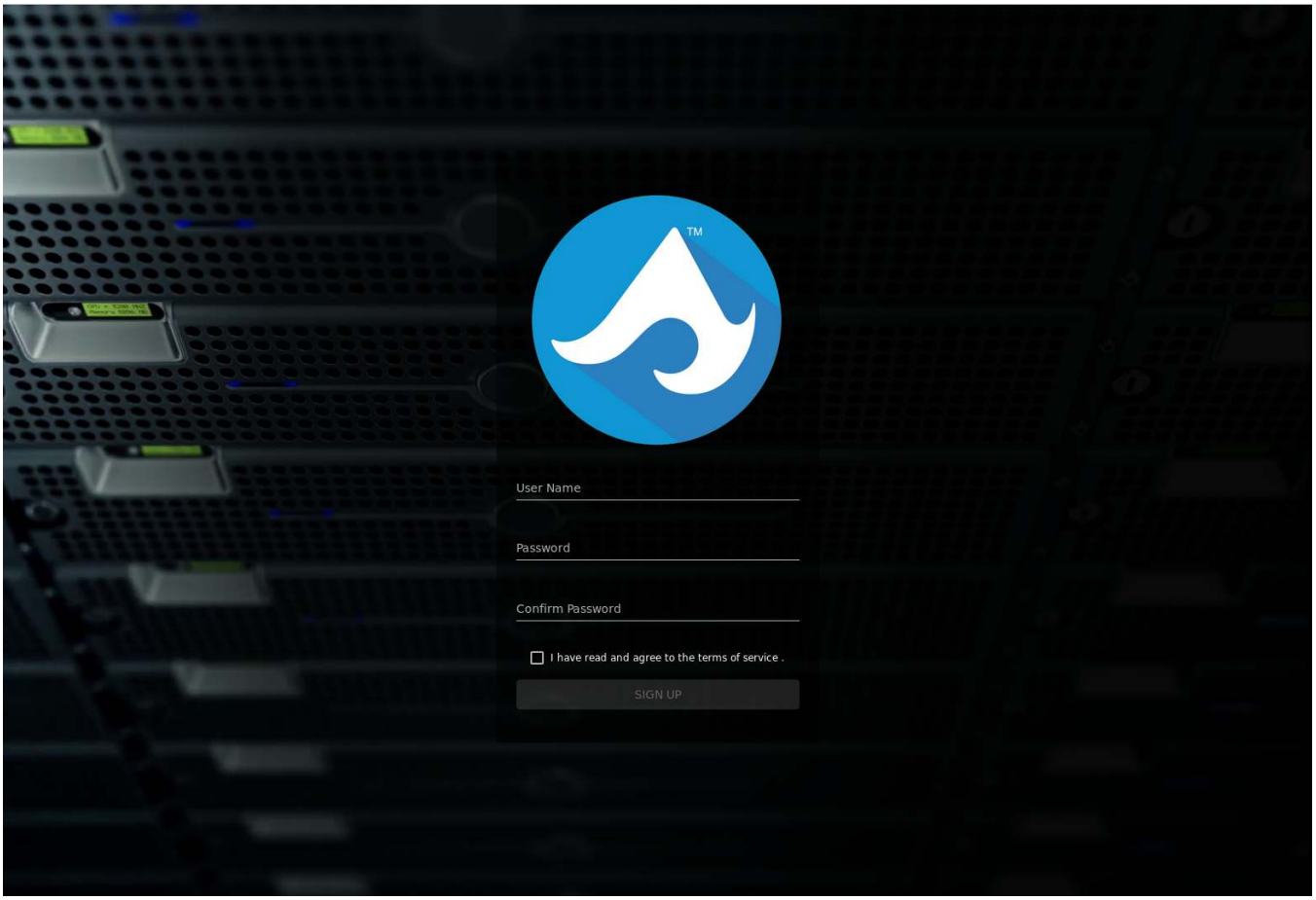


Fig. 3.6: Sign Up for TrueCommand™

3. Log in with the created user. The TrueCommand™ web interface is displayed.

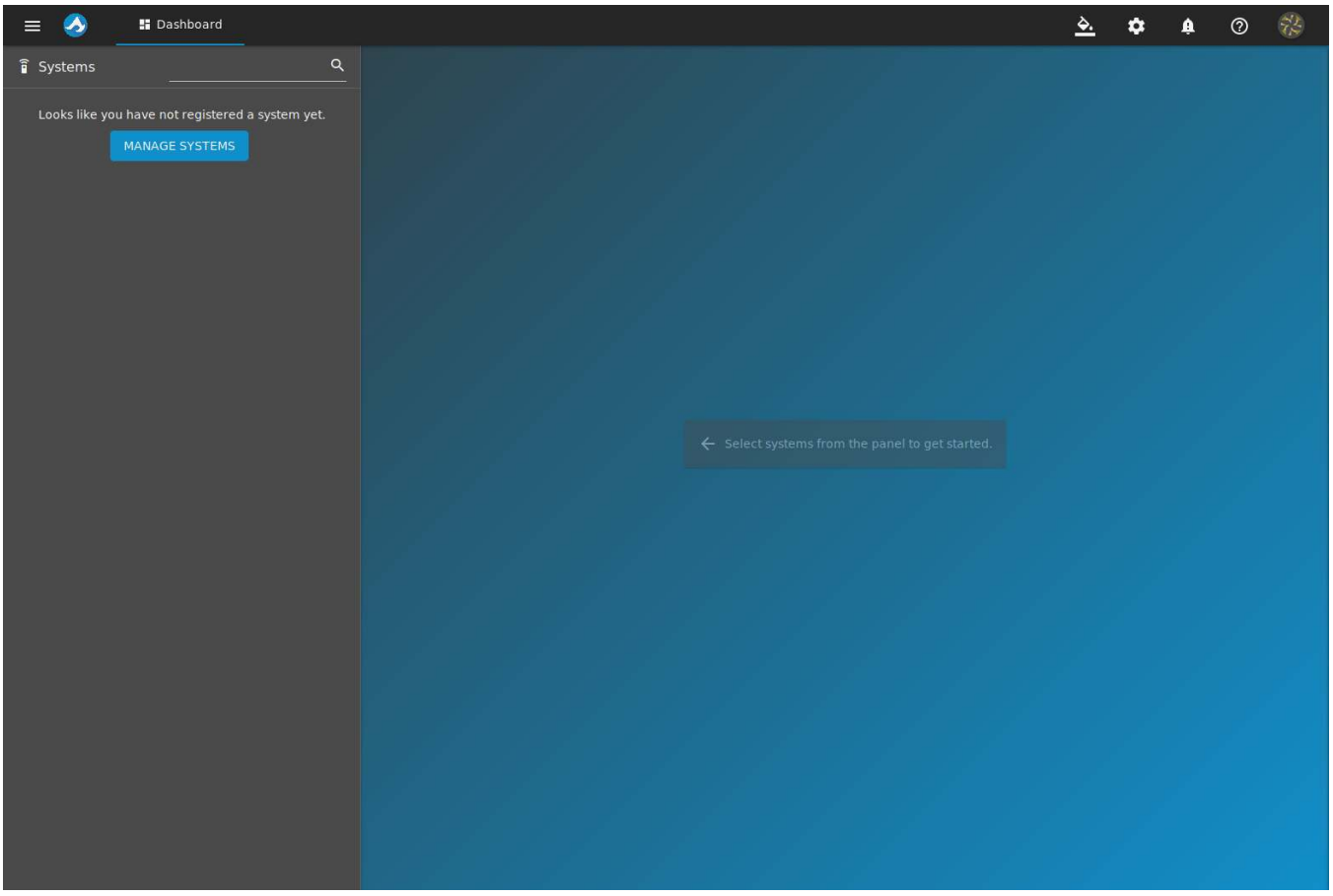


Fig. 3.7: Empty Dashboard

CHAPTER

FOUR

DASHBOARD

The dashboard is used to manage and monitor FreeNAS® and TrueNAS® systems. It displays system storage capacity, CPU usage, memory usage, network statistics, and other useful information.

The dashboard is empty when first setting up TrueCommand™ because no systems are being monitored. *Add Systems* (page 33) to view them on the dashboard. All added systems are shown on the dashboard by default. To hide a system on the dashboard, unset the checkbox in the *Systems* side panel. Access the system by clicking ⚙ (Settings) in the side panel. This opens the system interface associated with the DNS hostname or IP address.

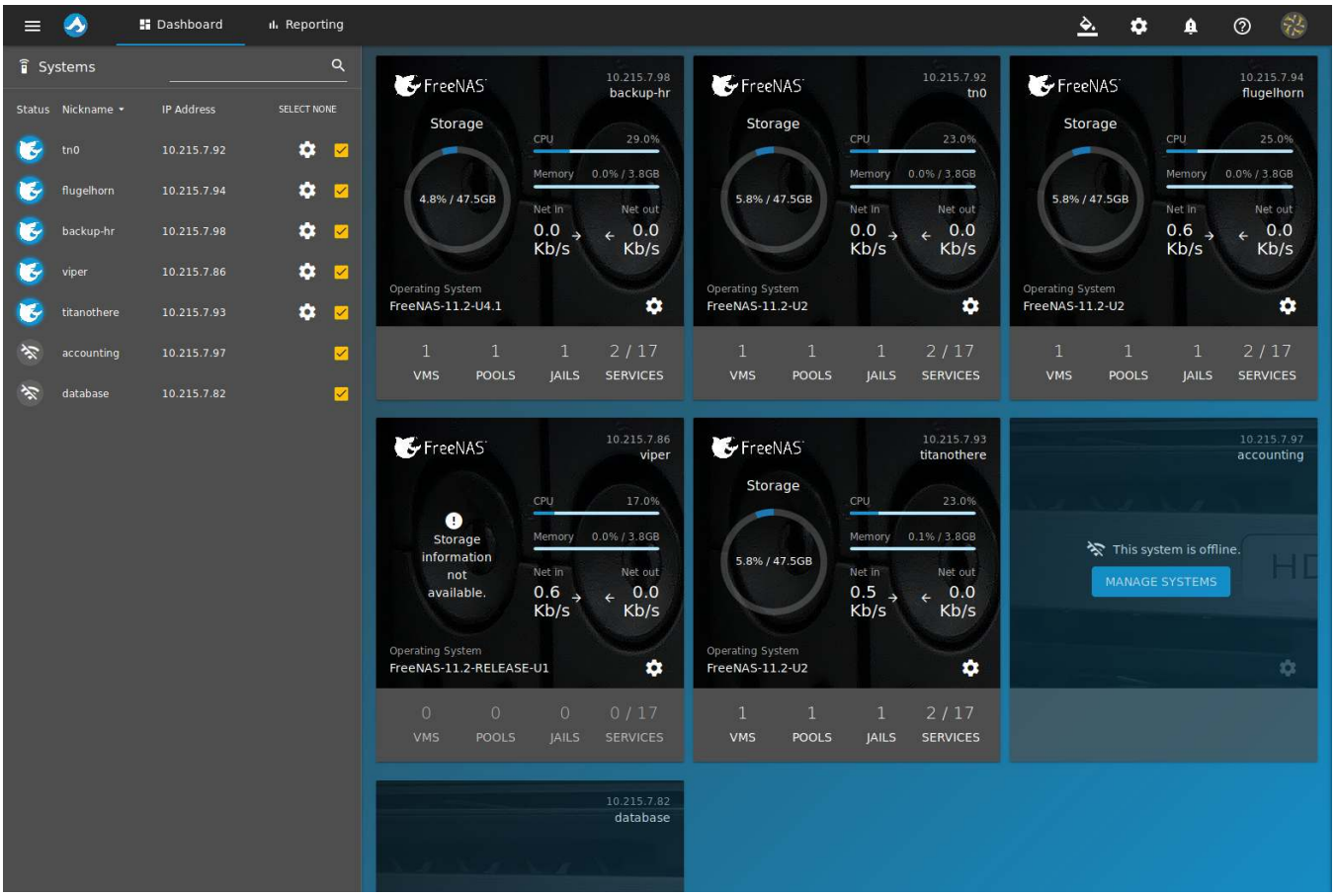


Fig. 4.1: Dashboard with Systems

View more information about a specific system by hiding all other systems on the dashboard. When only one system is shown, there are *Metrics*, *Storage*, *Network*, *Services*, *Jails*, and *Virtual Machines* pages that show more information about the FreeNAS® or TrueNAS® system.

CHAPTER

FIVE

SYSTEMS

A list of monitored TrueNAS® and FreeNAS® systems is displayed at the top of the systems page. The total number of discovered systems on the network and the number of systems that are actually connected to TrueCommand™ are also shown. The SYSTEMS page has three tabs: *Systems* (page 33), *System Groups* (page 34), and *Discovered Systems* (page 34). View the systems page by going to ⚙ (Settings) → *Systems*.

Click ⚙ (Settings) → *Systems* → *NEW SYSTEM* to begin monitoring a FreeNAS® or TrueNAS® system. Enter the system IP address or DNS hostname, nickname, and password. If a mistake is made, the contents of the fields can be reset by clicking *RESET FORM*. To add the new system, click *ADD SYSTEM*. Adding a system with an incorrect password shows that system as *offline* in the dashboad and added systems list.

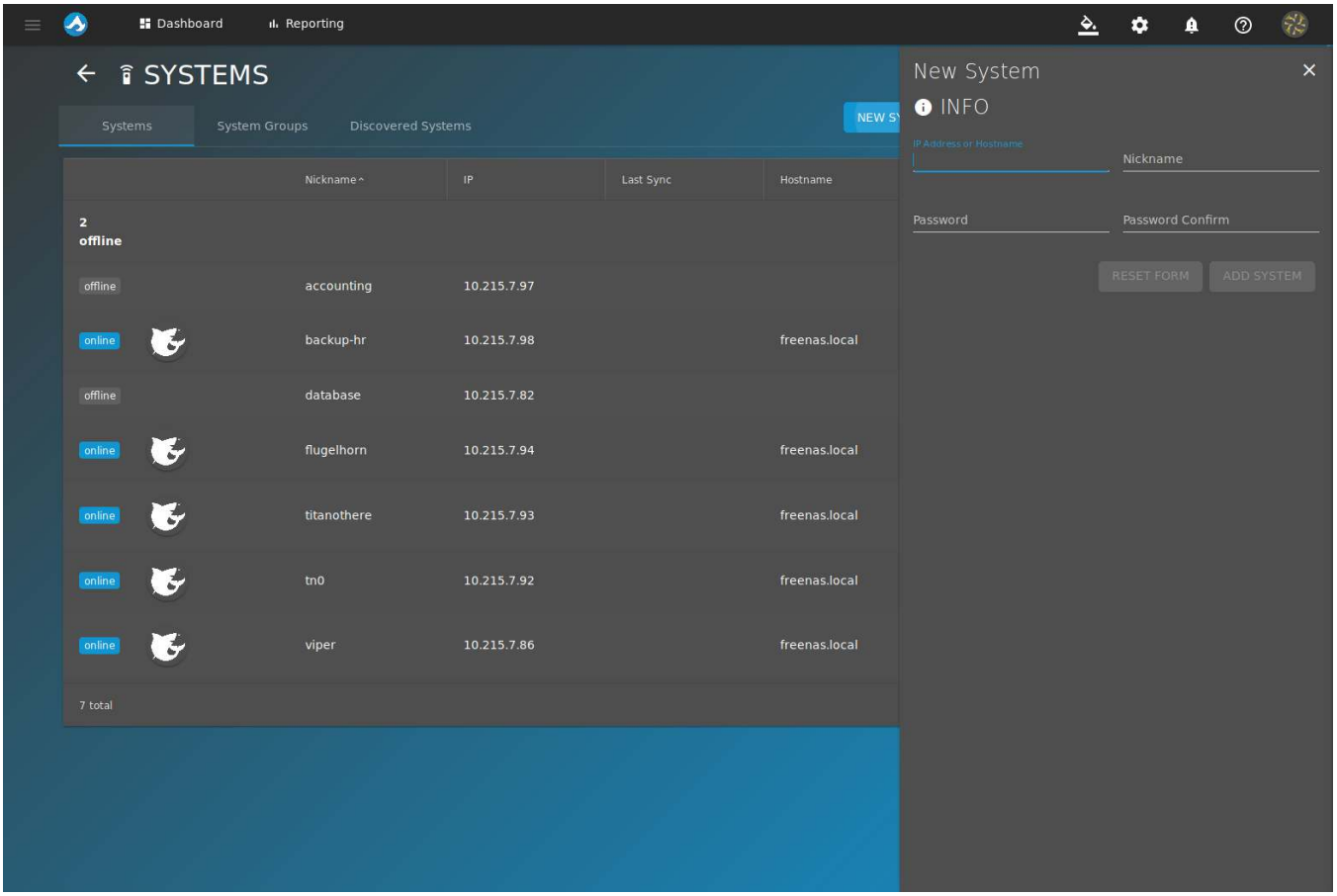


Fig. 5.1: Adding a New System

Click *Systems* to view all added systems.

Systems can be edited by clicking ✎ (Edit Item). Change the system information by entering new information in the fields. To go back to the original contents of the fields, click *RESET FORM*. Systems can be added to a *group*

(page 34) by clicking *ADD GROUP* and selecting a group from the drop-down. If a group of systems has not been created, the button says *Manage Groups*. A system can be removed from a group by clicking ⊖ (Remove).

A system can be removed from the systems being monitored by TrueCommand™ by clicking 🗑 (Delete). Confirm the deletion by clicking *DELETE SYSTEM*.

Groups

Groups are collections of systems. Systems can be organized into a group to efficiently manage permissions and reports for the group.

Click *System Groups* to view the list of created groups and the systems they contain. Groups are created by clicking ⚙ (Settings) → *Systems* → *NEW GROUP*. Enter a group name. Click *ADD SYSTEM* to add systems to the group. Select a system that belongs in the group. Repeat this step to add multiple systems to a group. Click *CREATE GROUP* when all desired systems are added to the group.

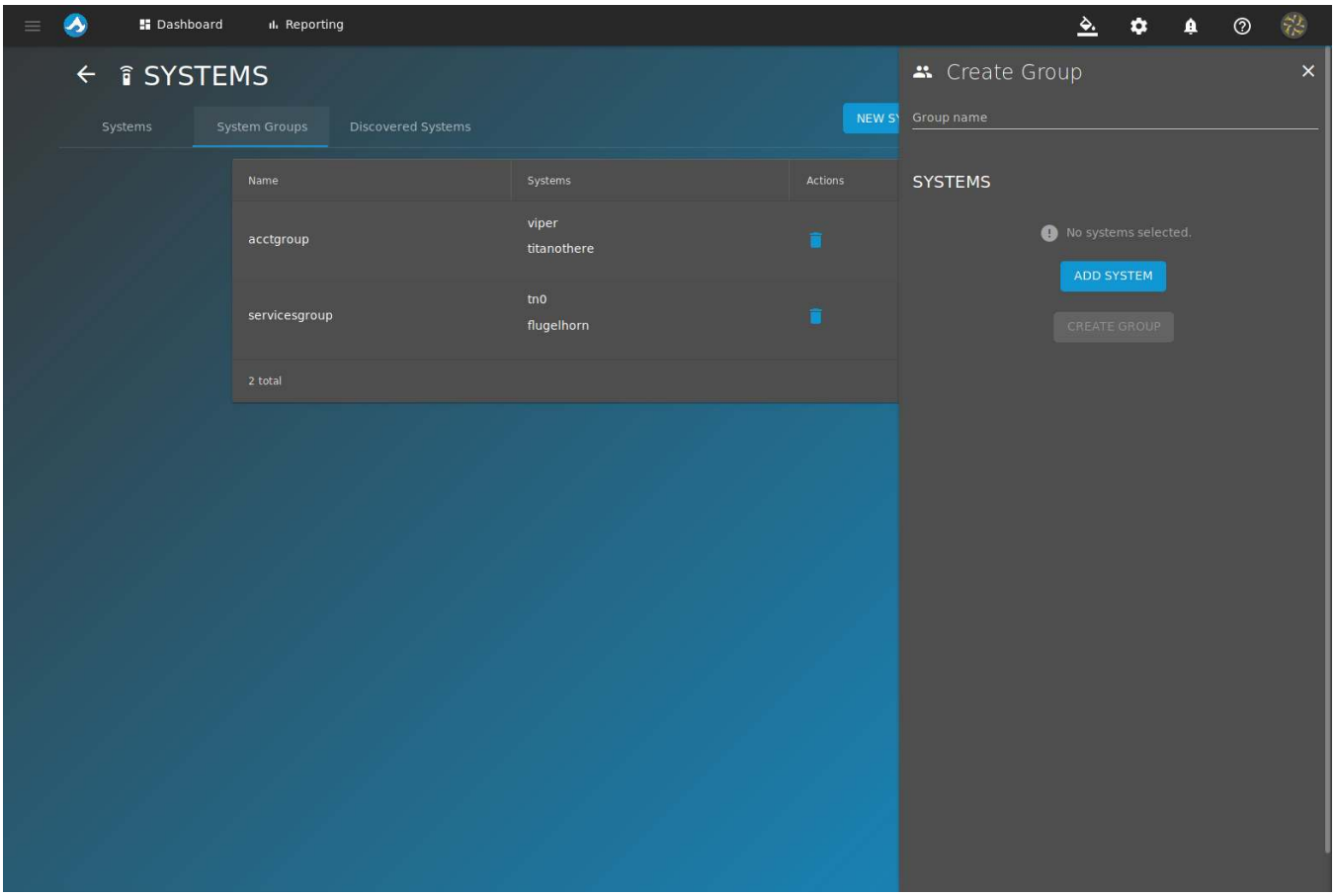


Fig. 5.2: Adding a New Group

To delete a system group, click 🗑 (Delete). Confirm the deletion by clicking *YES*.

Discovered Systems

Click *Discovered Systems* to view a list of systems TrueCommand™ has detected on the local network.

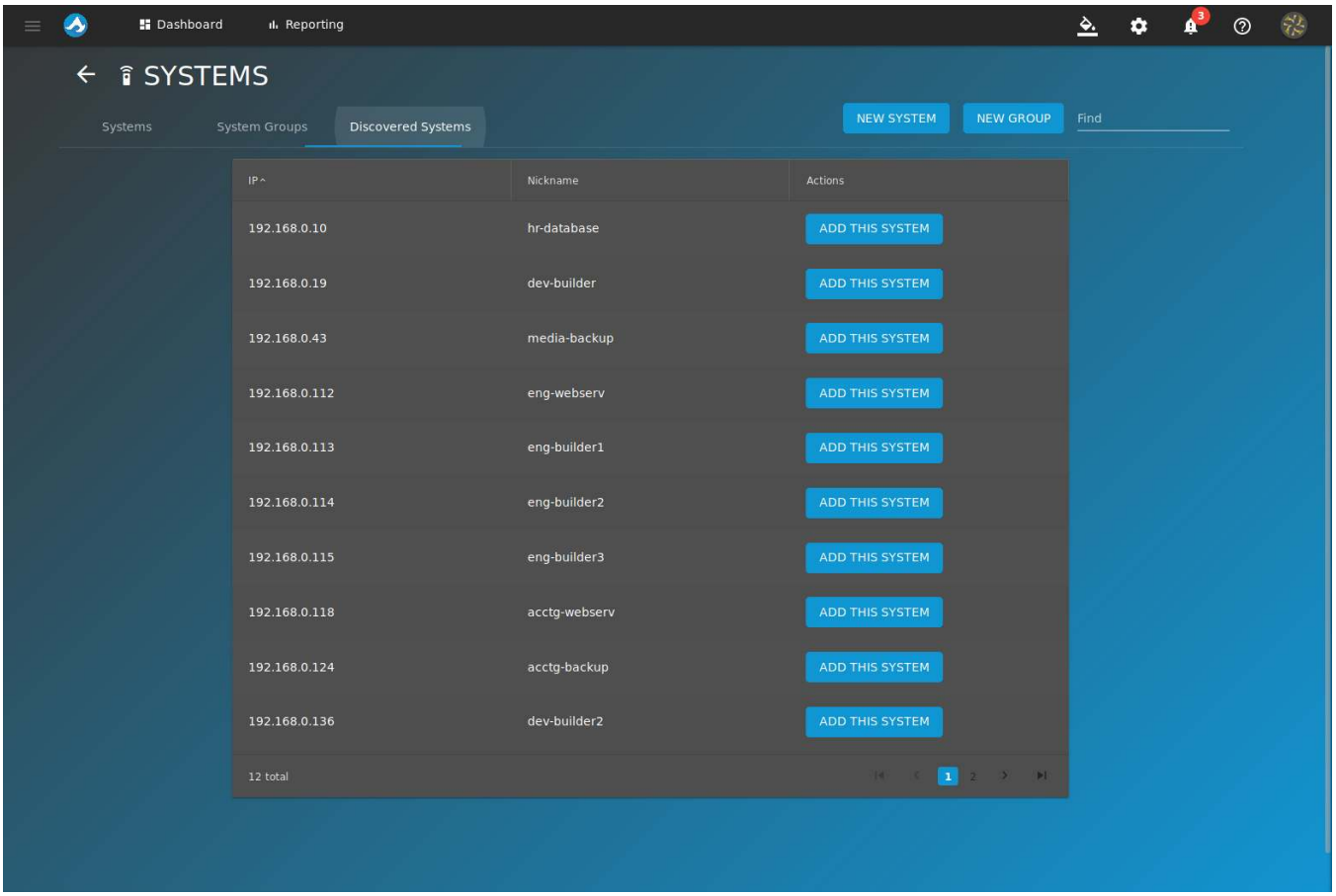


Fig. 5.3: Discovered Systems

A system can be added to TrueCommand™ monitoring by clicking *ADD THIS SYSTEM*. Enter a nickname and the password for the system, then click *ADD SYSTEM*.

CHAPTER

SIX

USERS

TrueCommand™ allows multiple people to connect to the system with personalized settings. Each person has a unique user account.

Add User

Register a new user by clicking ⚙ (Settings) → *Users* → *NEW USER*. Enter a descriptive username and an authentication method for the user. The *DEFAULT* authentication method uses the TrueCommand™ web interface to log in. *LDAP/AD* allows for a single sign on experience through Lightweight Directory Access Protocol (LDAP) (https://en.wikipedia.org/wiki/Lightweight_Directory_Access_Protocol) or Active Directory (AD) (https://en.wikipedia.org/wiki/Active_Directory). Usernames and passwords are provided through LDAP or AD. This means a user can log in with an LDAP or AD account without creating a TrueCommand™ login. The *LDAP server* IP address or DNS hostname and *Domain* are required to use *LDAP/AD*. The LDAP or AD *Username (optional)* is required if the TrueCommand™ username does not match the LDAP or AD credentials.

After entering the information, click *CREATE USER* to add the user to TrueCommand™. Repeat this process to add multiple users.

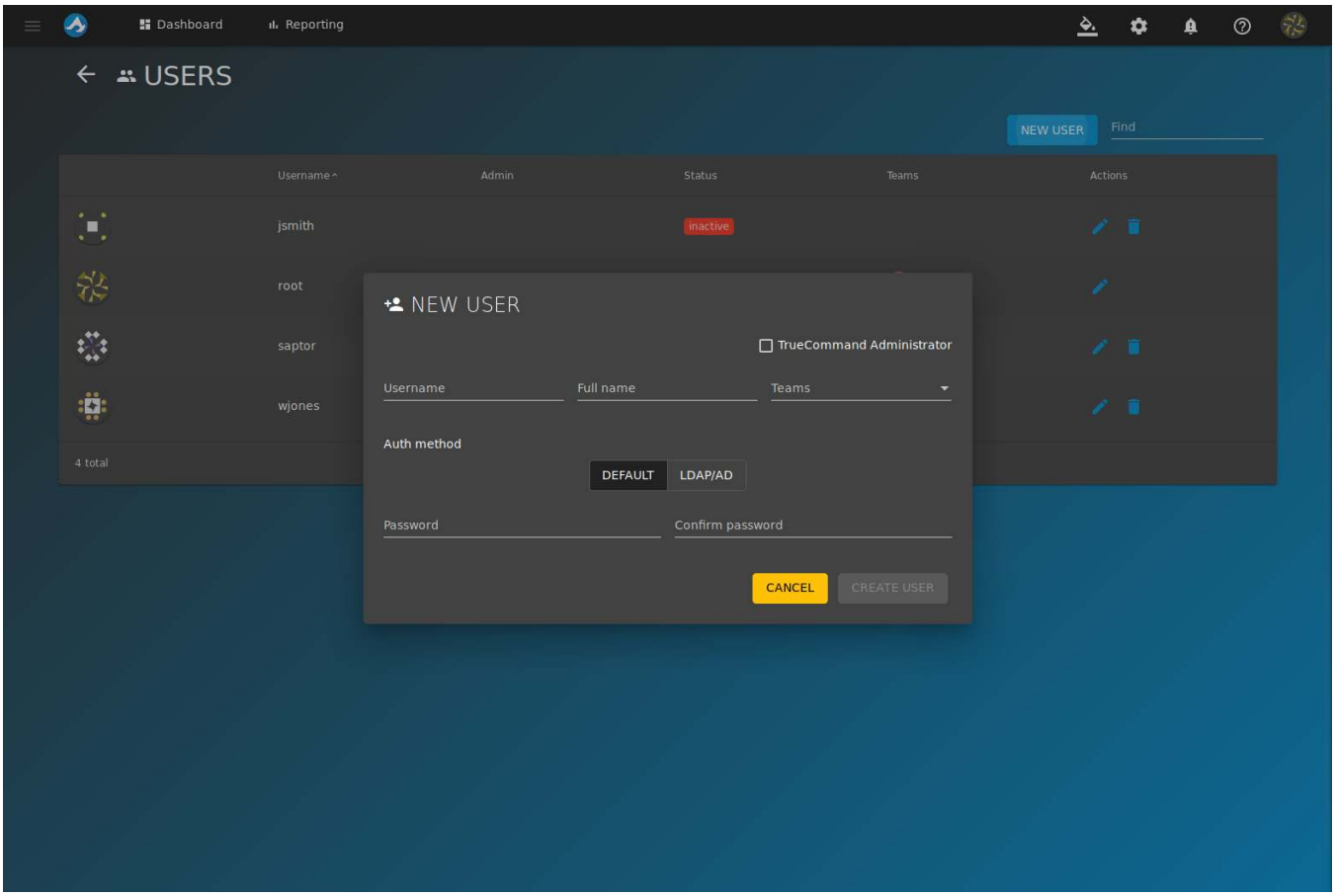


Fig. 6.1: Adding a User

Users can be assigned to *Teams* (page 39). When a team is created, select a team from the drop-down to add the user to that team. Users can be members of multiple teams.

Users can be deleted by clicking (Delete).

Warning: Deleting a user permanently removes the user and cannot be undone.

Edit User

Edit users from the (Settings) → *Users* → (Edit Item) menu. These details can be changed for a user:

- **AVATAR**: Click (Edit Item) and choose an avatar image. An avatar is a picture associated with the user.
- **USER DETAILS**: A user can be given administrator privileges by clicking the slider. The *Username*, *Full Name*, *Title*, *Email*, *Phone*, and *Auth method* can be changed. The *LDAP server* IP address or DNS hostname and *Domain* are required to use *LDAP/AD*. The LDAP or AD *Username (optional)* is required if the TrueCommand™ and LDAP or AD username are different. To go back to the original contents of the fields, click *RESET FORM*.
- **JOINED TEAMS**: The *CREATE A NEW TEAM* button appears if no teams exist. When teams are present, the *JOIN TEAM* button appears. Click *JOIN TEAM* to add the user to a team. Users can be added to multiple teams. Click ⊖ (Remove) to remove the user from a team.
- **SYSTEM ACCESS**: The *MANAGE SYSTEMS* button appears if a system has not been added to TrueCommand™. When a system has been added, the *ADD SYSTEM* button appears. Click *ADD SYSTEM* and select a system from the drop-down to give the user access to that system. To assign the type of access to the system, choose

read or *read/write* from the *ACCESS* drop-down. To remove a user's access to a particular system, click ⊖ (Remove) on the desired system.

- **SYSTEM GROUPS**: A *MANAGE GROUPS* button appears if a group has not been created. When a group has been created an *ADD GROUP* button appears. Click *ADD GROUP* and select a group from the drop-down to give the user access to all the systems in that group. To assign the type of access to the group, choose *read* or *read/write* from the *ACCESS* drop-down. To remove a user's access to a particular group, click ⊖ (Remove) on the desired group.
- **End User License Agreement (EULA)**: The EULA can be viewed by clicking *VIEW THE EULA*.

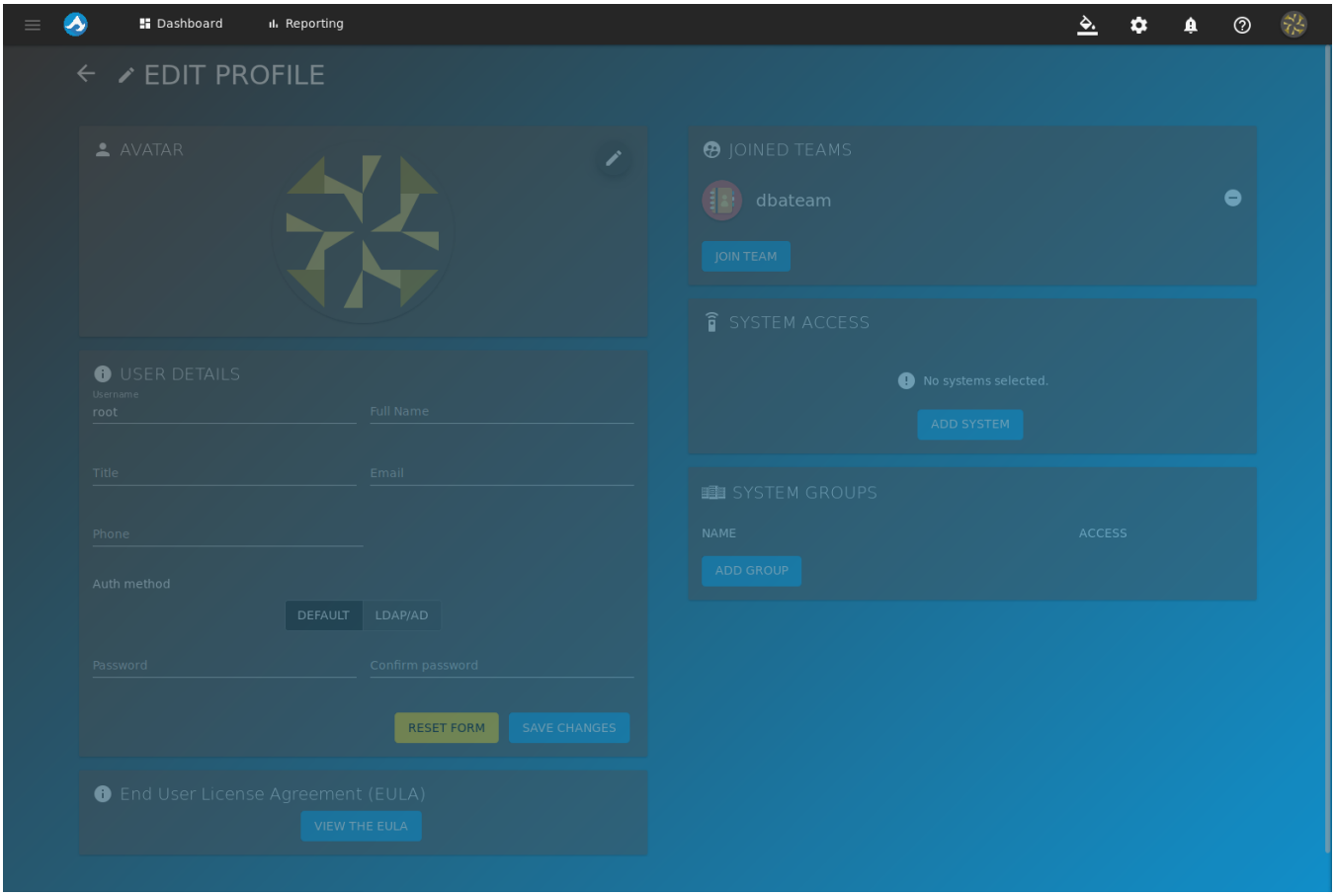


Fig. 6.2: Editing a User

CHAPTER

SEVEN

TEAMS

Teams are a collection of users. They provide a more efficient way of managing users. For example, changing the permissions for one team is much faster than changing the permissions for many individual users.

Add Team

A team is created by clicking ⚙ (Settings) → *TEAMS* → *CREATE TEAM*. Enter a name and select an avatar for the new team. Click *CREATE TEAM* to create the team.

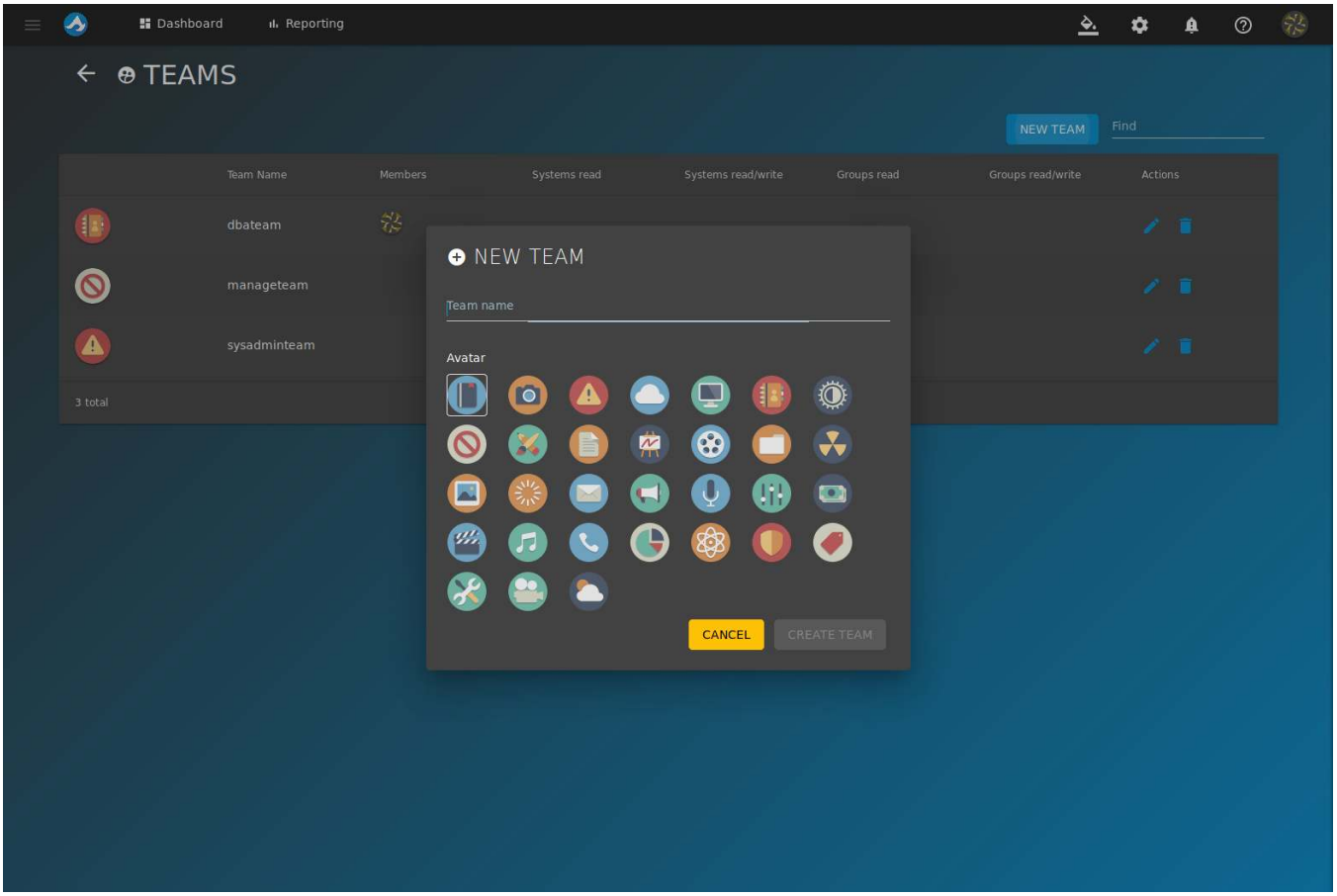


Fig. 7.1: Adding a New Team

Edit Team

Click ⚙ (Settings) → *Teams* → ✎ (Edit Item) to edit a team. These options can be changed:

- **TEAM AVATAR**: Click ✎ (Edit Item) to upload an avatar image or use an existing image.
- **MEMBERS**: To add users to the team, click *ADD USER* and choose them from the drop-down. To remove users from the team, click ⊖ (Remove) on the desired user.
- **SYSTEM ACCESS**: Give the team access to specific systems by clicking *ADD SYSTEM* and selecting systems from the drop-down. This gives all users that are a part of the team access to the systems selected. To change the type of access, click *read* or *read/write* from the *ACCESS* drop-down. To remove a system from access by the team, click ⊖ (Remove) on the desired system.
- **SYSTEM GROUPS**: Give the team access to *created groups* (page 34) of systems by clicking *ADD GROUP* and selecting groups from the drop-down. This gives all members of the team access to the group of systems selected. To change the type of access, click the *ACCESS* drop-down and select *read* or *read/write*. To remove a group from access of the team, click ⊖ (Remove) on the desired group.

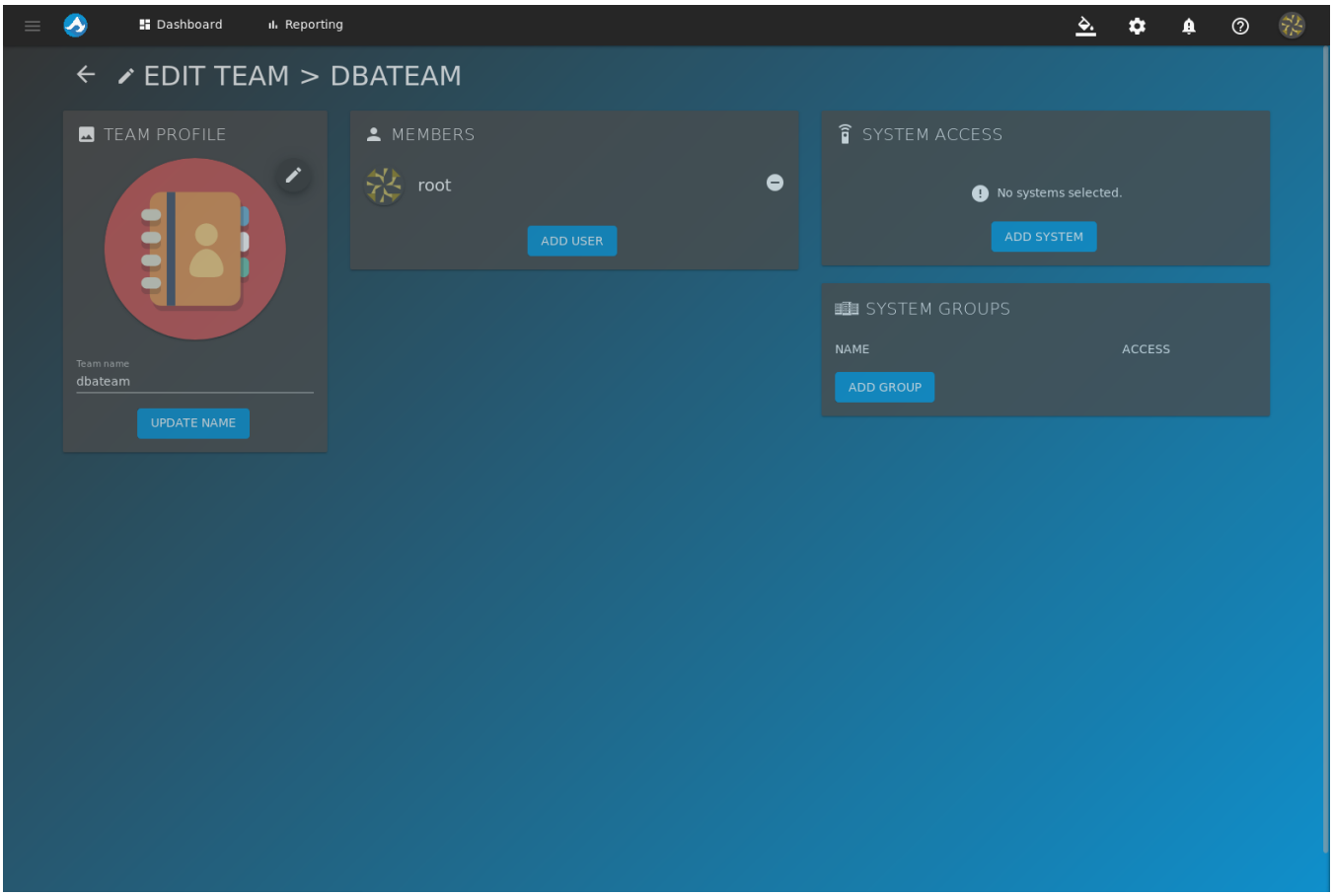


Fig. 7.2: Editing a Team

CHAPTER

EIGHT

REPORTING

The Reporting page provides graphs about the systems TrueCommand™ is monitoring. The default report shows a memory usage summary for all systems. This includes active memory, unused memory, and cache usage.

View the Reporting page by clicking *Reporting*. This page shows one day of data by default. Adjust the time shown by clicking *7D* for one week, *1D* for one day, and *1H* for one hour of data.

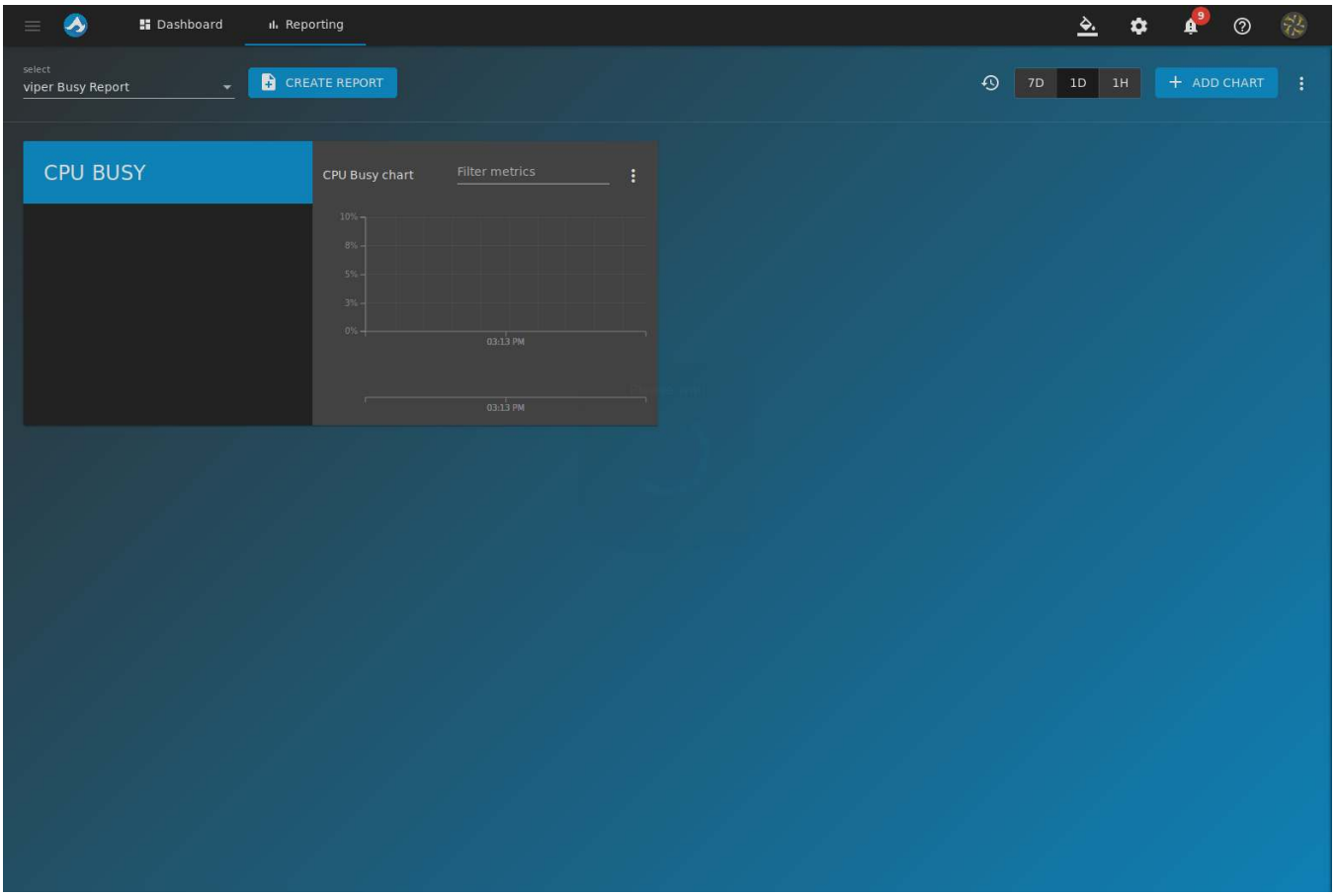


Fig. 8.1: Reporting Page

Create Report

Click *CREATE REPORT* to create a customizable report. Enter a title and a description for the report. Click *CREATE REPORT* under the *Description* field. Click *ADD CHART* and follow the wizard to add a customized chart to the report:

1. **General Info**: Enter a chart title and description. Click *NEXT*.

2. **Select systems**: Add systems to the chart by clicking *ADD SYSTEM*. Select systems from the drop-down menu. Remove systems by clicking ⊖ (Remove). Click *NEXT*.
3. **Select data sources**: Click › (Expand) on the desired system. Click › (Expand) for the category of data source and select the desired data source. Multiple data sources can be selected.
4. **Advanced Options**: Choose a *Chart Type*. An optional *Y Axis label* can be defined. Increase or decrease the size of the datapoints by changing the value for *Datapoint size (px)*. Set *Y Axis Range Minimum* and *Y Axis Range Maximum* as desired.
5. **Finished**: Click *CREATE CHART* to create and show the chart. The process can be restarted by clicking *RESET*.

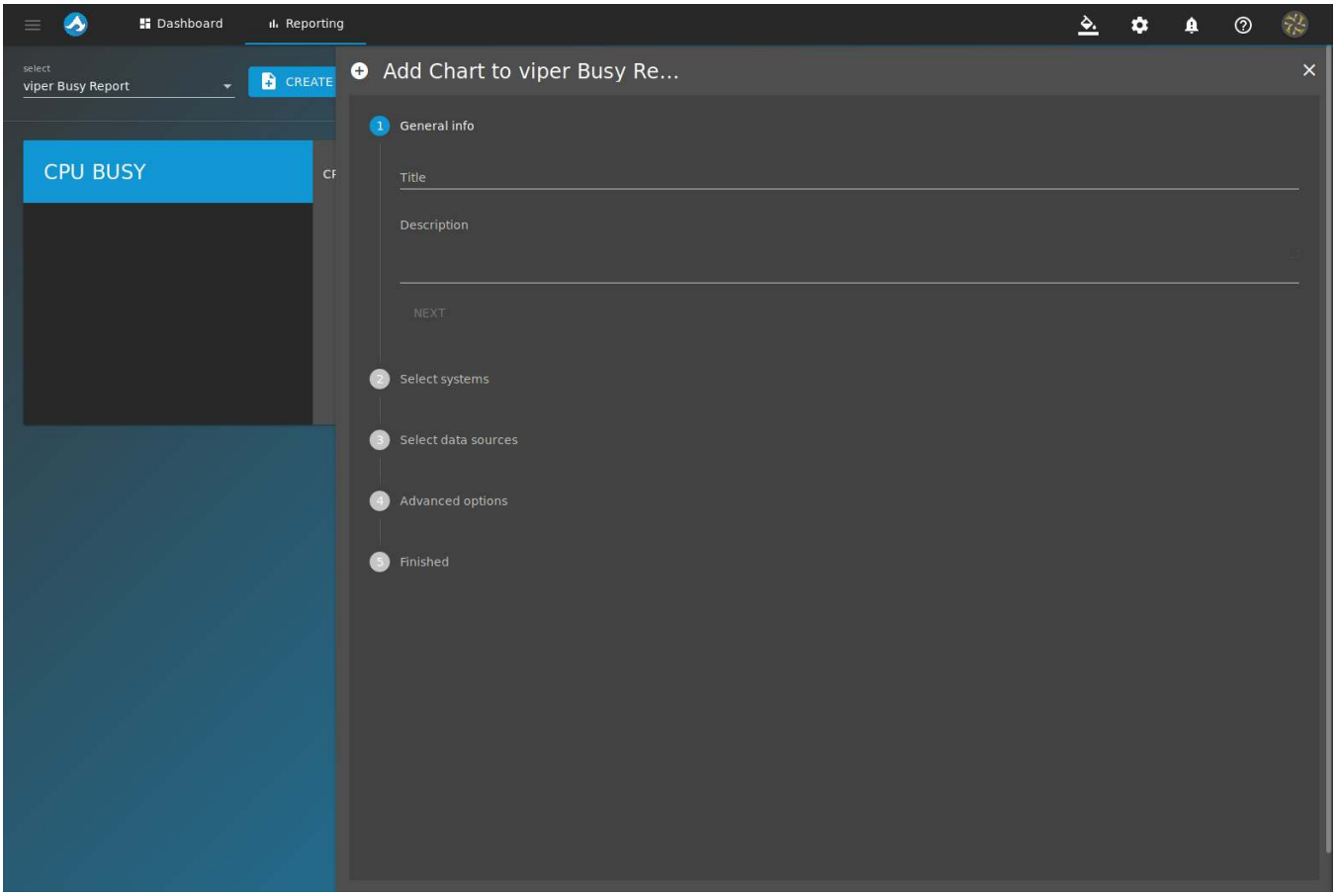


Fig. 8.2: Adding a New Chart

A `.csv` or `.json` file of the chart can be downloaded by clicking ⋮ (Options) → *Download CSV* or ⋮ (Options) → *Download JSON*. Charts can be deleted from the report by clicking ⋮ (Options) → *Delete chart*. Charts can be moved by clicking and holding ⤢ (move).

Reports can be deleted by clicking ⋮ (Options) → *Delete Report*.

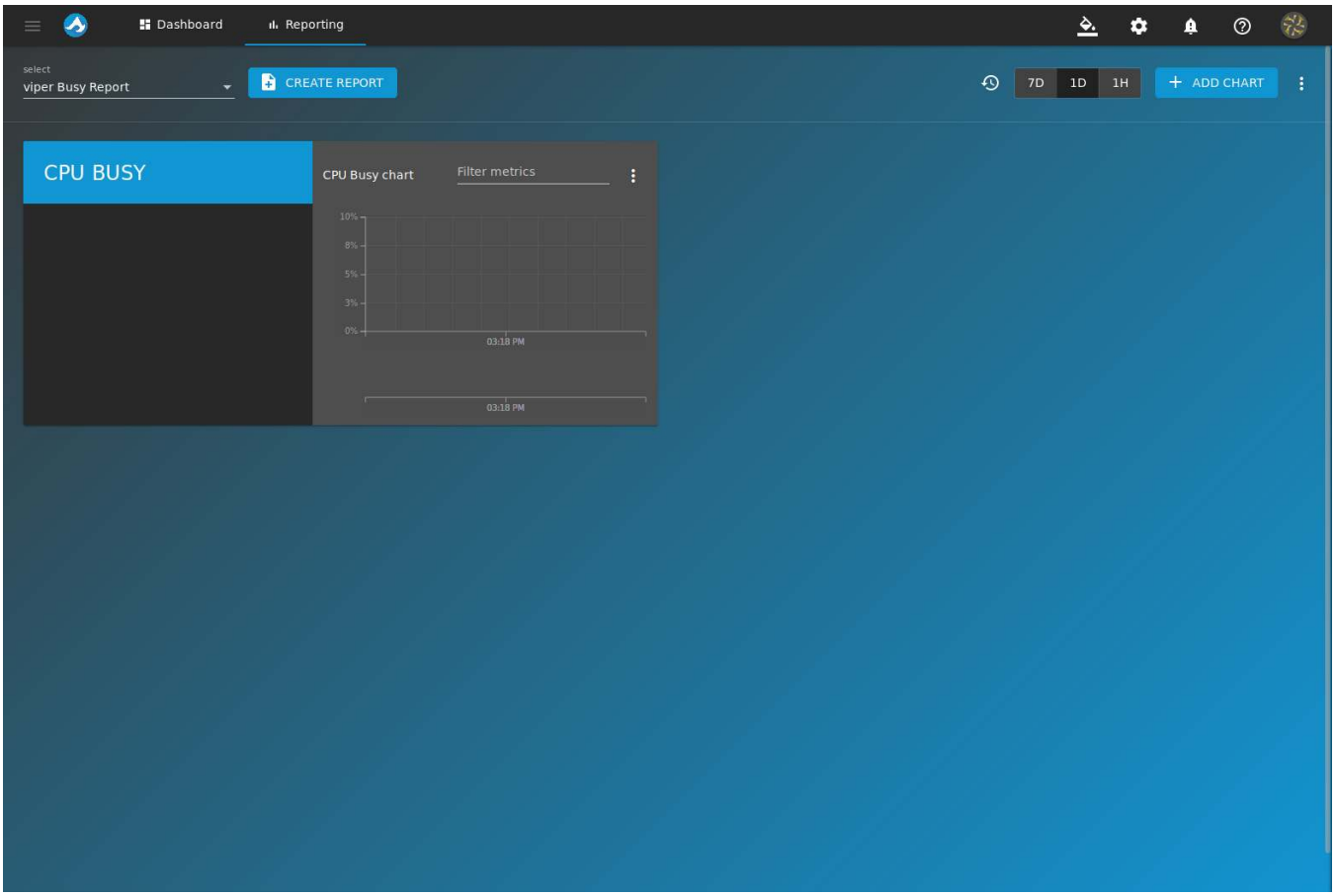


Fig. 8.3: Custom Report

CHAPTER

NINE

LOGS

Logs track user activity on TrueCommand™. For example, if a user deletes a system from TrueCommand™, the log records which user deleted it along with other information associated with the deleted system. Click an entry in the logs to show more information.

The **SYSTEMS** panel has options to *HIDE ALL* or *SHOW ALL* actions affecting connected systems.

The **USERS** panel also has *HIDE ALL* and *SHOW ALL* options for user related actions..

Logs can be filtered by date. Change the end and start date by manually entering a specified date or click (Calendar) to select a date from the calendar. Click *REFRESH* to refresh the list with the latest entries.

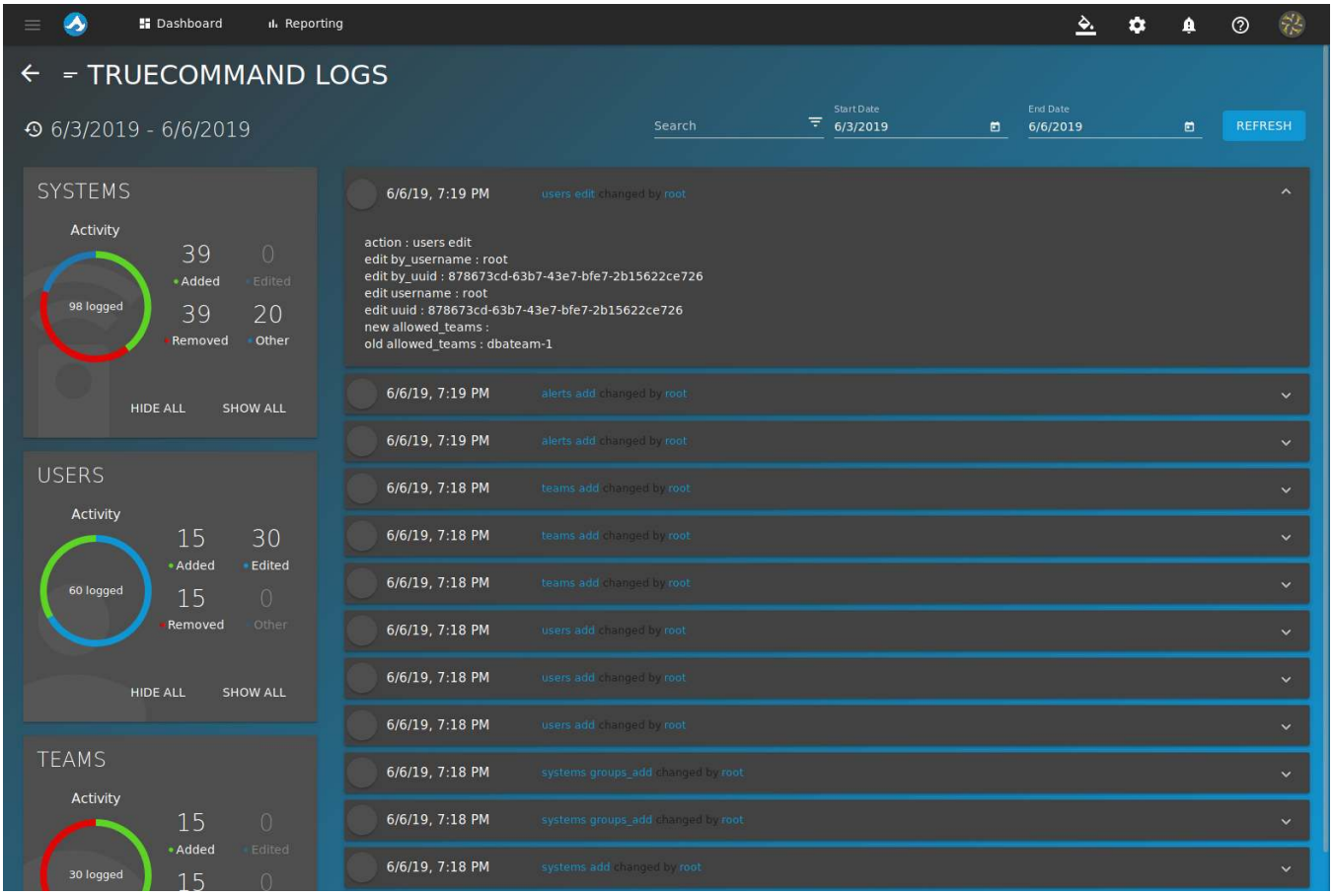


Fig. 9.1: Log Entry

CHAPTER

TEN

ALERT RULES

The TrueCommand™ alert system provides visual warnings for monitored systems that require attention. The current number of alert rules, total notices, and the most recent alert notice are shown at the top of the page. New alert rules can be created to monitor a wide variety of system information. The Alert Rules page is accessed from ⚙ (Settings) → *Alert Rules*. Click on an alert rule to view more information about it.

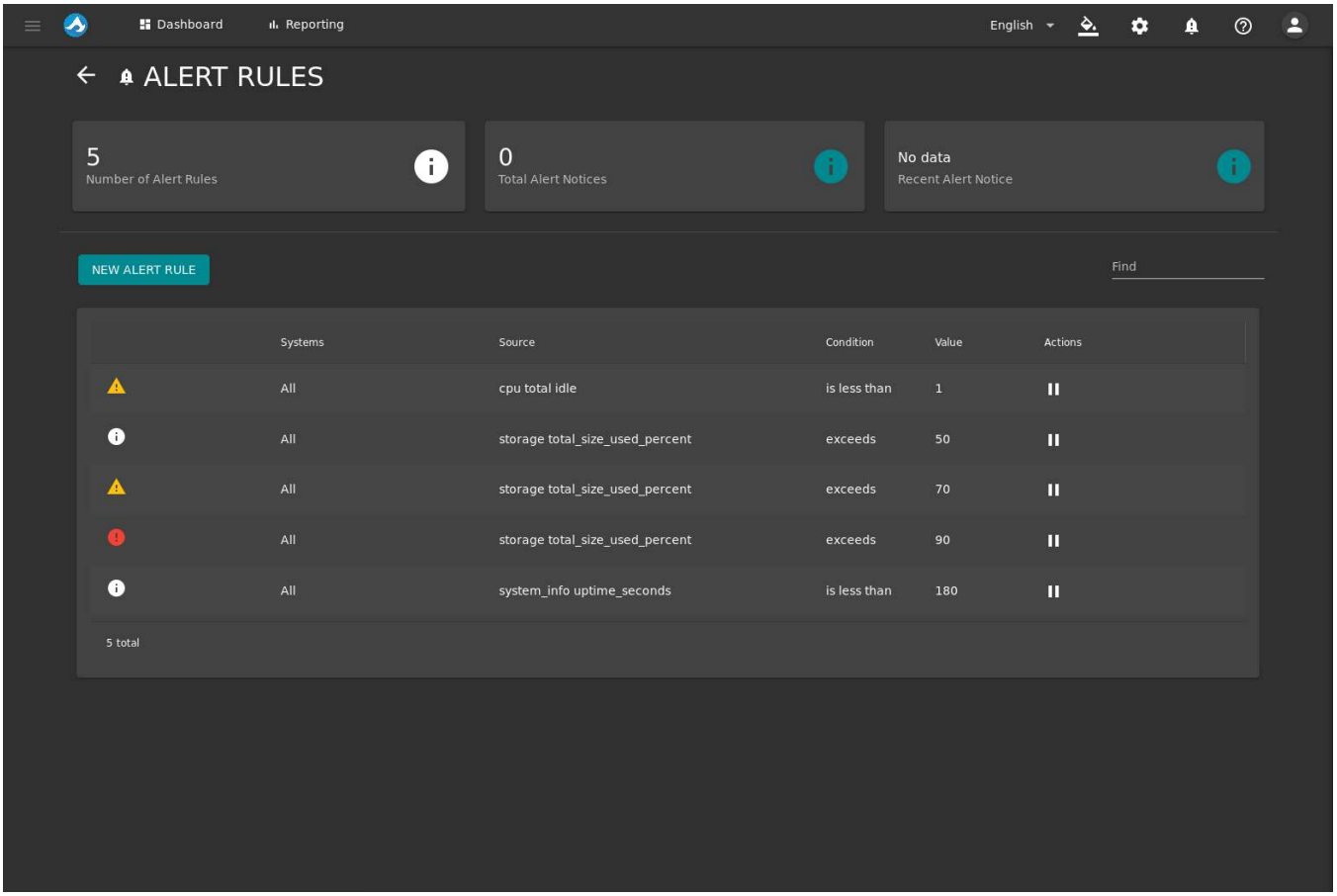


Fig. 10.1: Alert Rules Page

Add Alert Rule

To create a new alert rule, click *NEW ALERT RULE* and follow the creation wizard:

1. **Select a System**: Choose a system to create an alert for and click *NEXT*.
2. **Select a Data Source**: Choose a data source for the alert. For example, choosing *cpu_temp* makes the alert about the cpu temperature for the chosen system. Click *NEXT*.

3. **Type and Threshold**:
   - *Field to Scan*: This is the system data TrueCommand™ will monitor. The options change depending on the Data Source.
   - *Importance of Rule*: Choose *Information*, *Warning*, or *Critical*. This determines the severity of the alert.
   - *Comparison Type*: A conditional statement that applies to the *Field to Scan* and the *Comparison Value*.
   - *Comparison Value*: Enter a value appropriate to the options scenario and options selected.
   - *Finished*: To create the new alert, click *CREATE ALERT*. To start over, click *RESET*.

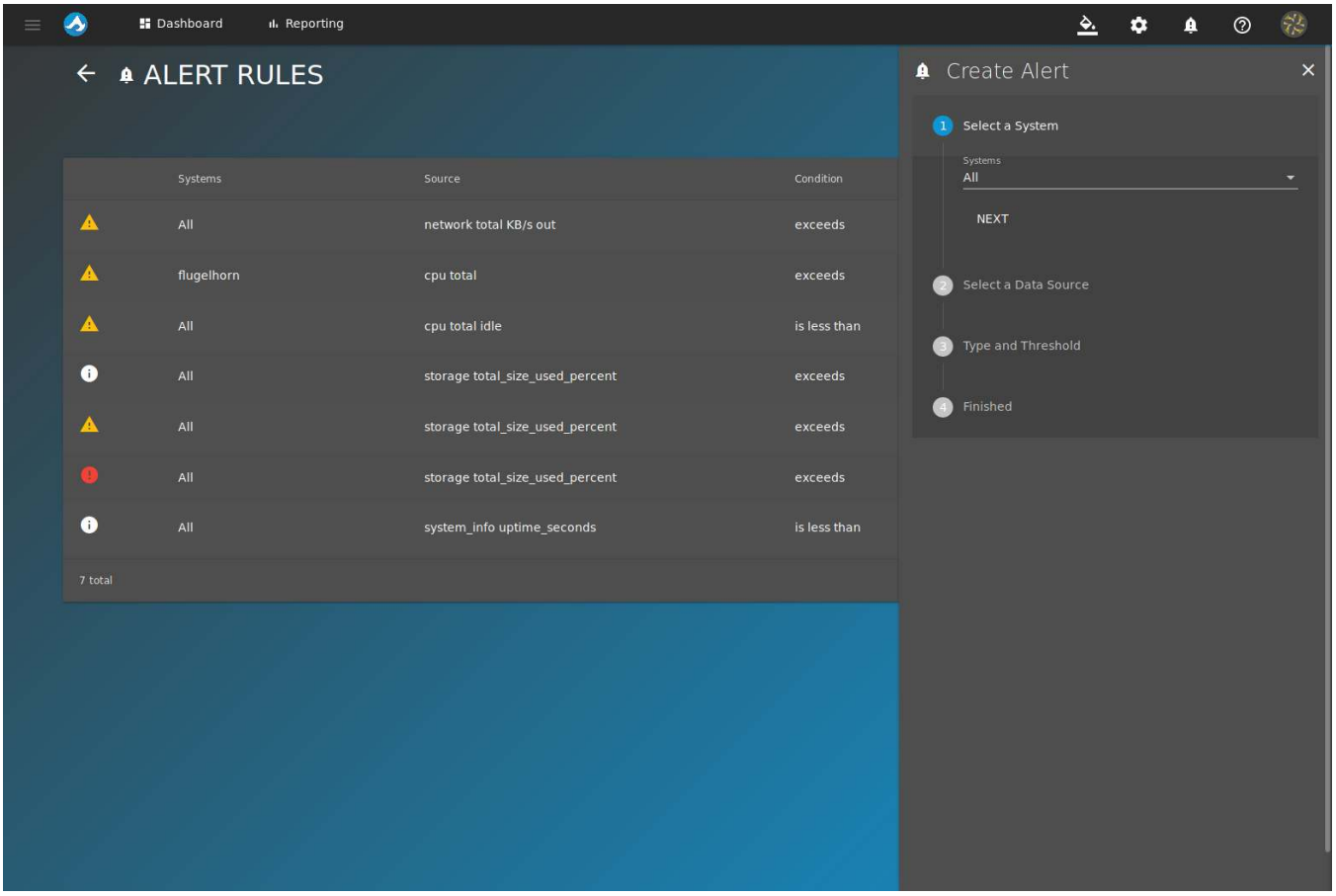


Fig. 10.2: Adding a New Alert Rule

Alert rules can be deleted by clicking 🗑 (Delete). Alert rules can be disabled temporarily by clicking ⏸ (Pause).

CHAPTER

ELEVEN

ADMINISTRATION

The ADMINISTRATION page has these tabs: *About*, *Updates*, *Email Setup*, and *Configuration*. The ADMINISTRATION page is accessed from ⚙ (Settings) → *Administration*.

Note: The *Administration* option is only available to users with administrator permissions.

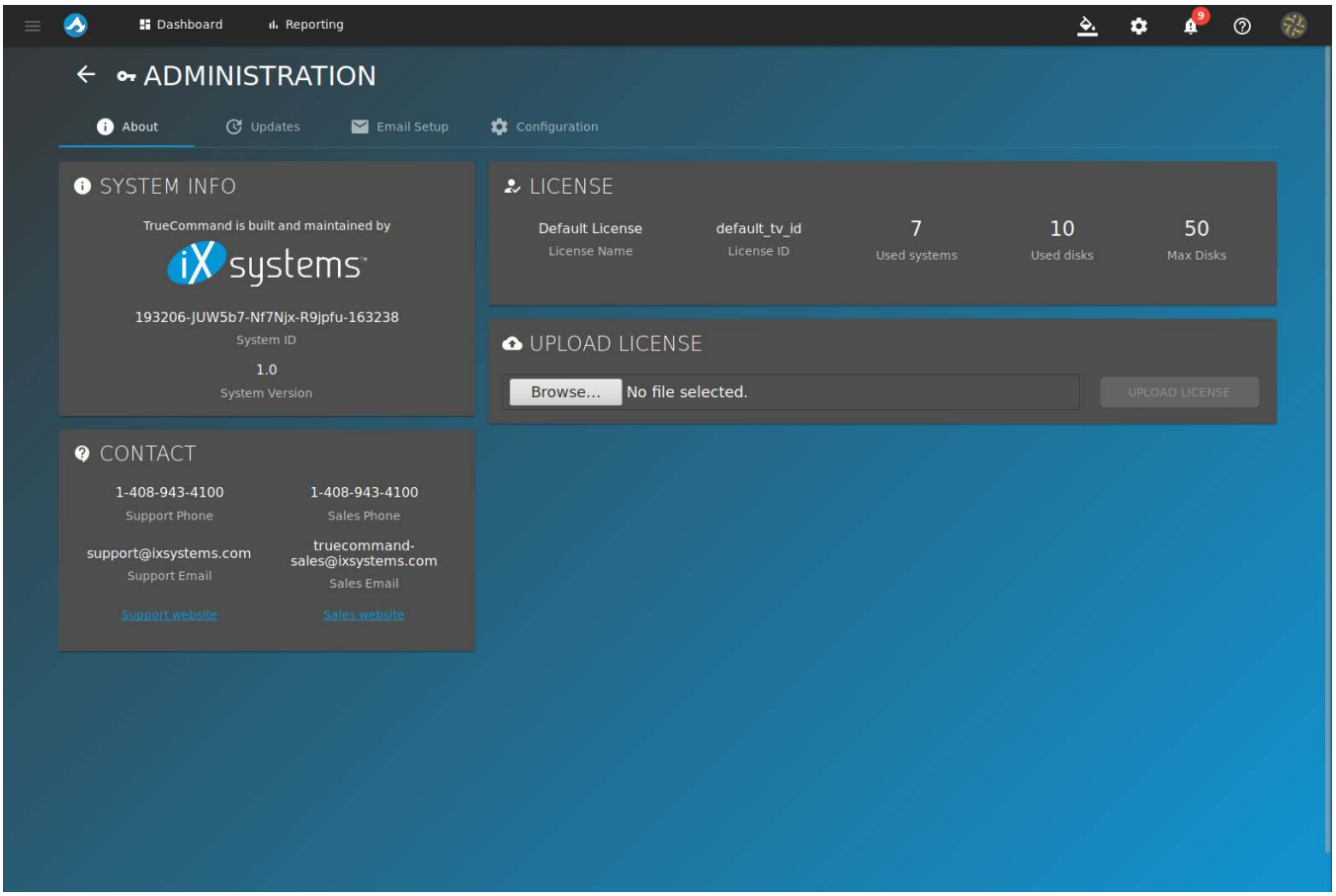


Fig. 11.1: Administration Information

The *About* tab contains:

- **SYSTEM INFO**: Show the current TrueCommand™ system ID and version.
- **LICENSE**: Display the current license and the maximum number of disks the license allows.
- **CONTACT**: Show the iXsystems™ Support phone number and email address as well as the Sales phone number and email.

- **UPLOAD LICENSE**: Click *Browse...* to open the file browser. Select the new license file to upload. Click *UPLOAD LICENSE* to apply the new license to TrueCommand™.

Note: Contact iXsystems™ support to upgrade the TrueCommand™ license.

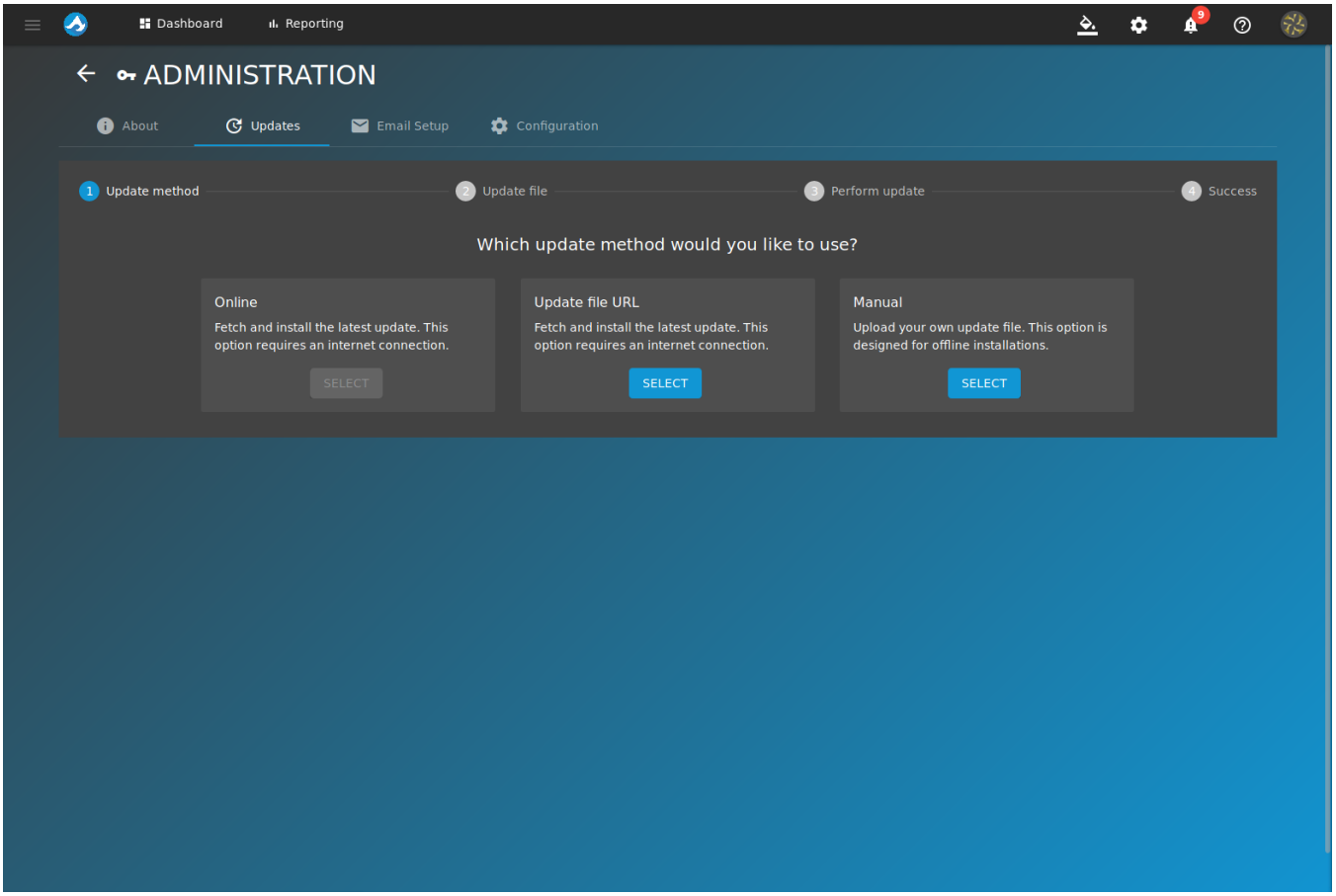


Fig. 11.2: Administration Updates

The *Updates* tab contains an update wizard:

1. **Update method**: Choose the desired update method by clicking *SELECT*. *Online* fetches and installs an available update immediately. The system is automatically rebooted to apply the update. *Update file URL* updates TrueCommand™ from the URL provided. *Manual* updates TrueCommand™ from an uploaded file.
2. **Update file**: If *Update file URL* was chosen, enter the URL of an update file. If *Manual* was chosen, upload an update file.
3. **Perform update**: Shows the status of the update.
4. **Success**: Shows if the update succeeded or not.

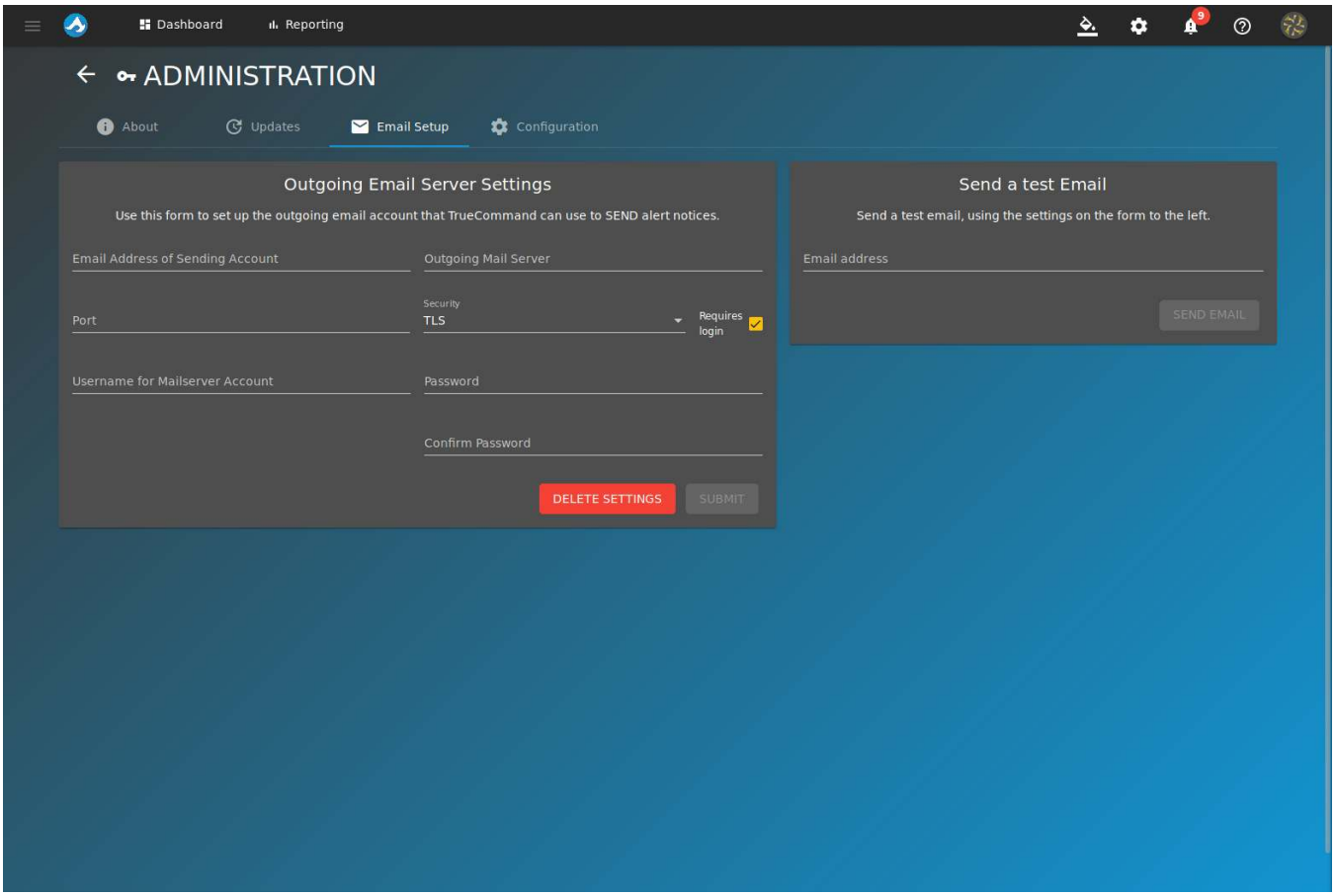


Fig. 11.3: Administration Email Setup

The *Email Setup* tab contains:

- **Outgoing Email Server Settings**:

Field	Description
Email Address of Sending Account	The name that appears in the *From* field of the email.
Outgoing Mail Server	The mail server DNS name for email submissions. For example, *mail.example.com*.
Port	Port number to use when contacting the email server. For example, *587*.
Username for Mailserver Account	The username on the mail server.
Password	Password for the mailserver.
Security	Email encryption type (https://www.fastmail.com/help/technical/ssltlsstarttls.html). Enter *TLS*, *STARTTLS*, or *TLS+STARTTLS*.
Authorization Method	Mailserver authentication type. *LOGIN*, using a username and password, is standard.

  Click *SUBMIT* to confirm the outgoing email server settings. Click *DELETE SETTINGS* to remove the contents of the fields and delete the outgoing email credentials.

- **Send a Test Email**: Enter an email address and click *SEND EMAIL* to send a test email using the current outgoing email server settings.

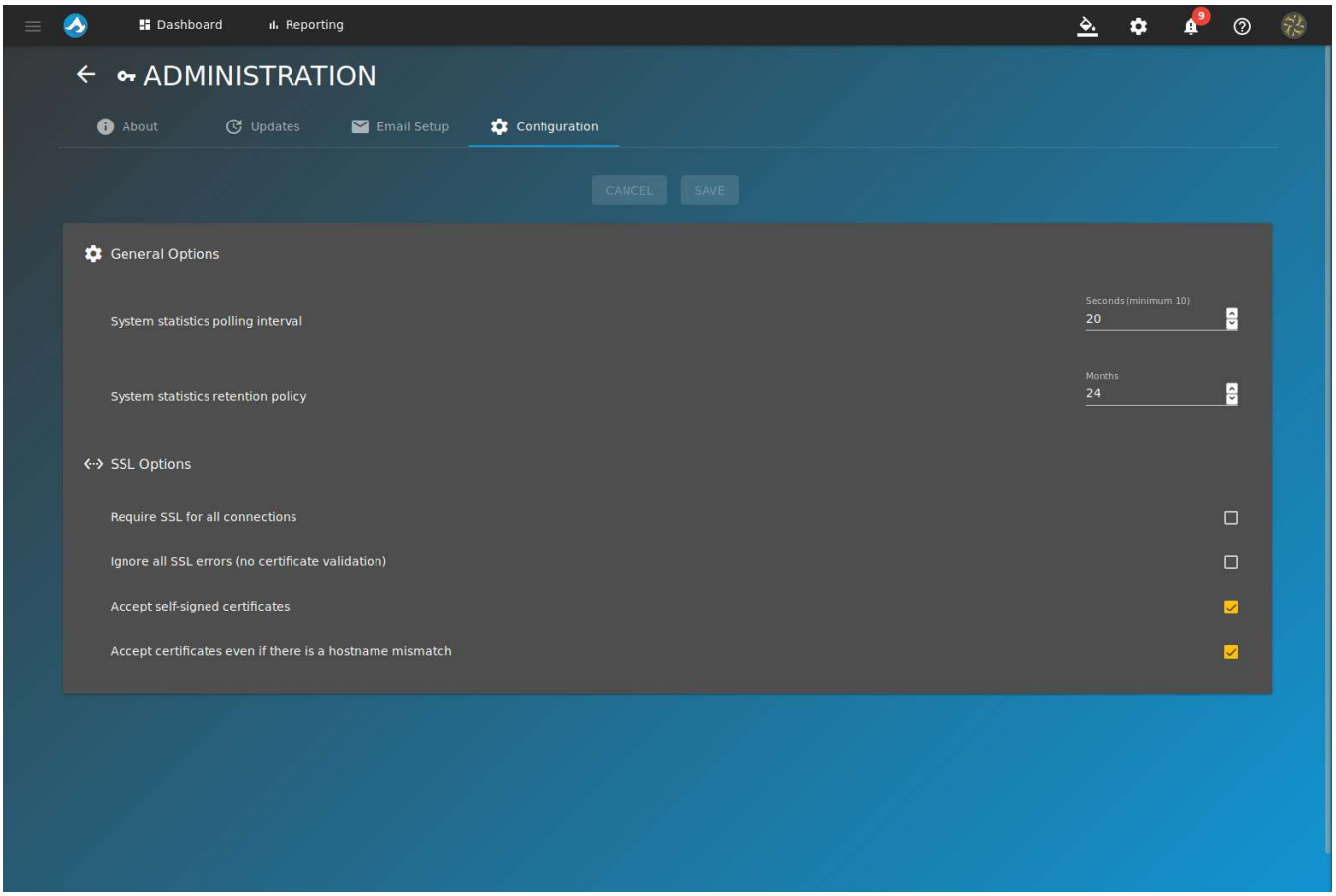


Fig. 11.4: Administration Configuration Options

The *Configuration* tab contains:

- **General Options**:
  - *System statistics polling interval*: The ammount of time, in seconds, TrueCommand™ pulls statistics from systems being monitored. The minumum is 10 seconds.
  - *System statistics retention policy*: The amount of time, in months, TrueCommand™ keeps statistics that were pulled from systems being monitored.
- **SSL options**:
  - *Require SSL for all connections*: Set to require SSL for all connection types. This is useful when a monitored system does not allow SSL-secured access or if the monitored system is using a custom port.
  - *Ignore all SSL errors (no certificate validation)*: Set to disable SSL certificate validation.
  - *Accept self-signed certiicates*: Set by defualt. Allows TrueCommand™ to connect to systems using self-signed certificates.
  - *Accept certificates even if there is a hostname mismatch*: Set by default. Accepts certificates that have the system hostname, but was registered in TrueCommand™ with an IP address or vice-versa.

Click *SAVE* to save the new system configuration. To reset the fields back to the previous values, click *CANCEL*.

CHAPTER

TWELVE

HELP TEXT

TrueCommand™ includes a help text feature that shows additional information when the mouse pointer is held over an element in the web interface.

Click ⓘ (Help) to enable the help text dialog. When the dialog is enabled it is displayed in the bottom left corner of the web interface. When help text is enabled and the mouse pointer is held over an element, additional text about the element is displayed in the dialog. If help text is disabled and the mouse pointer is held over an element, a small tool tip is displayed.

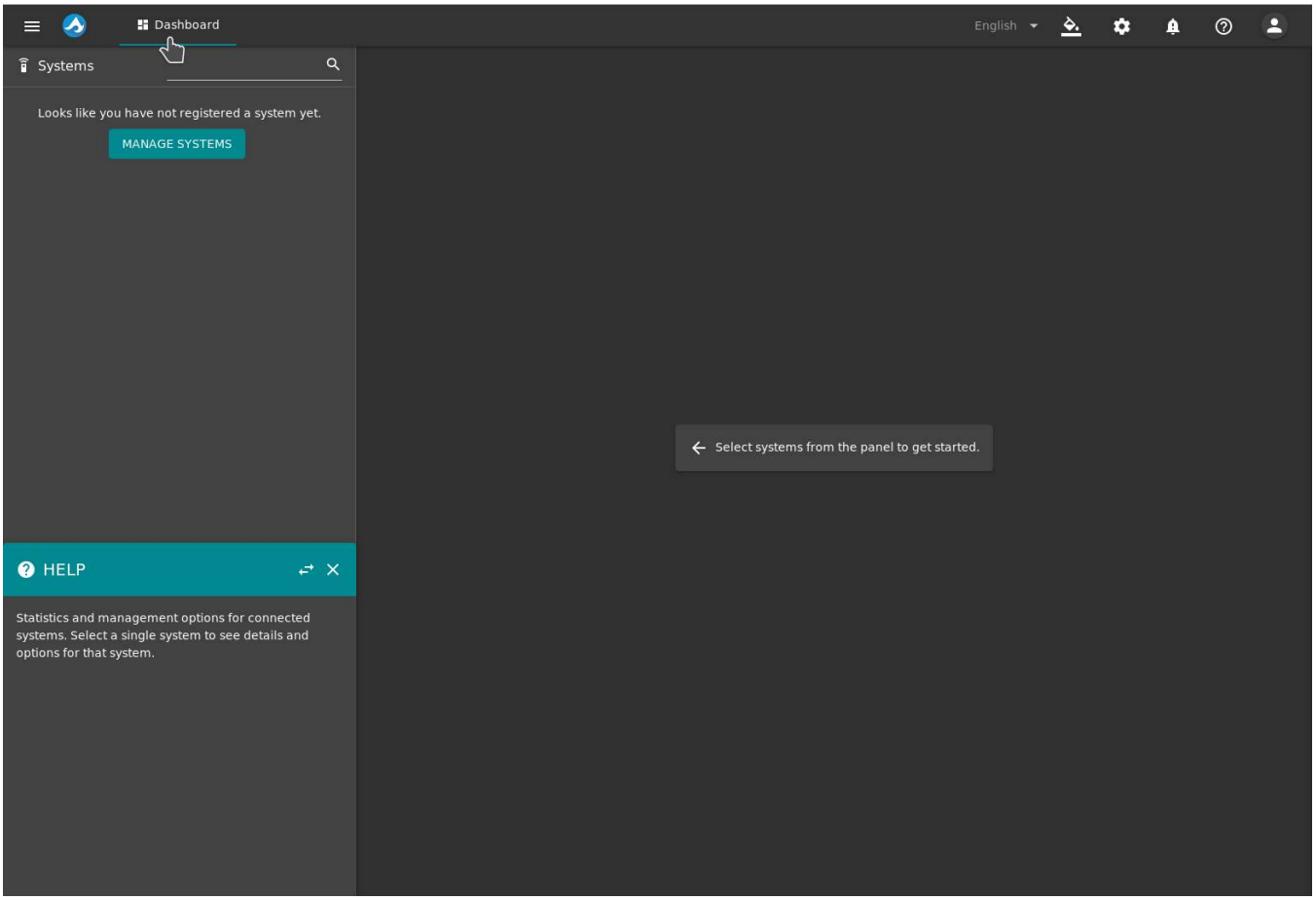


Fig. 12.1: Help Text for *NEW SYSTEM* button

CHAPTER

THIRTEEN

USER MENU

The user avatar is displayed in the top right corner of the web interface. Click the avatar to display a list of options that include *Profile*, *API*, *Alerts*, and *Log out*.

- *Profile*: Edit the current user. See *Edit User* (page 37) for the available options that can be edited.
- *API*: interface to test API calls to the middleware. Advanced users and developers can use the middleware to program their own monitoring applications. API calls generate a response which is displayed on the page.

  Click *UI LOG* to download the web interface log.

  Click *MW LOG* to view the middleware log.

  TrueCommand™ API documentation is available by adding `/docs` to the end of the TrueCommand™ hostname or IP address in the browser address bar.

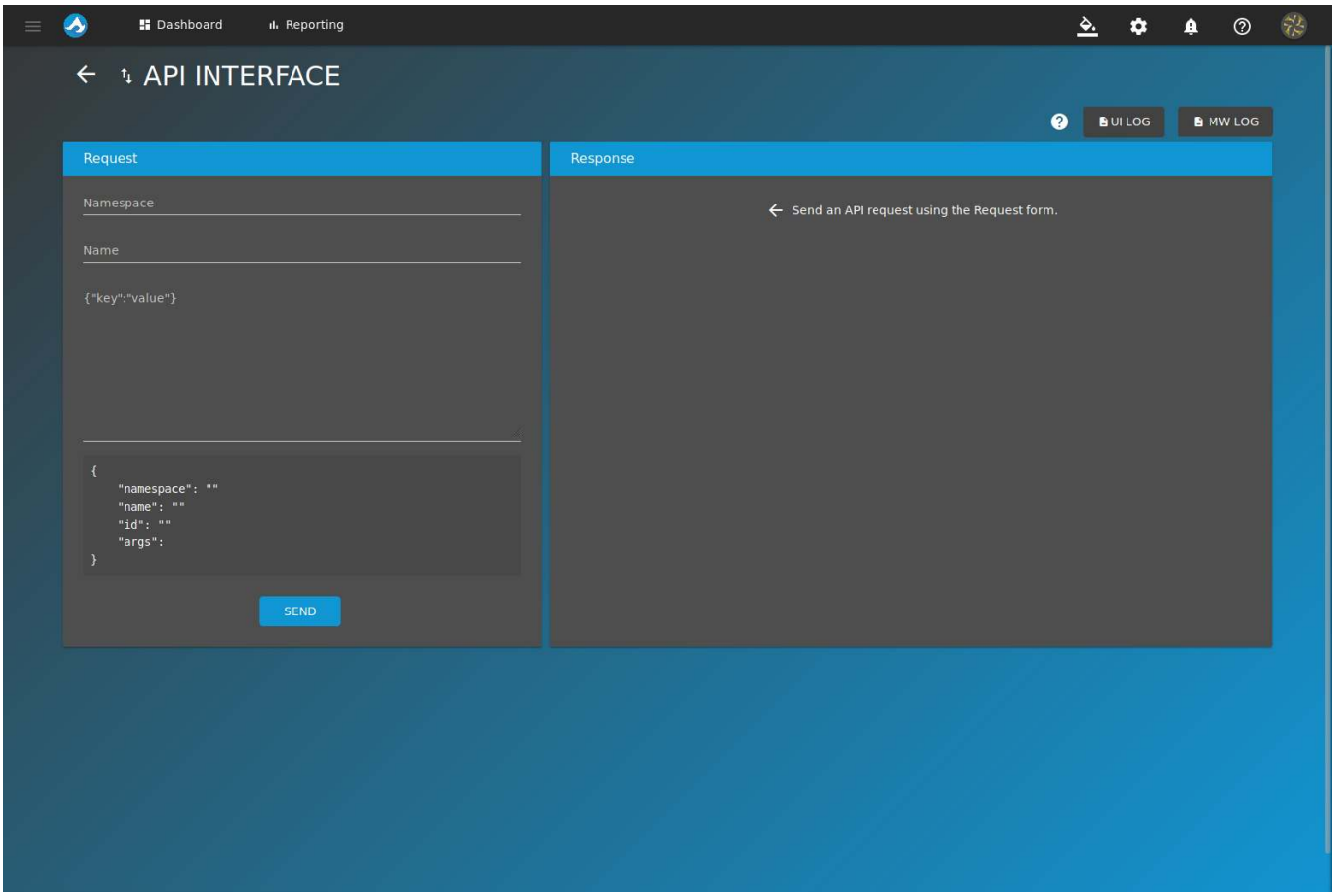


Fig. 13.1: API Interface

- *Alert Notices*: A list of all alerts that TrueCommand™ has issued. Alerts are notifications about the systems being monitored by TrueCommand™. The page shows the number of alert rules, the total number of alert notices, and the most recent alert notice.

  The *Active Notices* tab shows the list of alerts that have not been resolved or deleted. Resolve individual alerts by clicking ✓ (Resolve). To resolve multiple alerts, select the desired alerts and click *RESOLVE SELECTED*.

  Click ⓘ to view additional comments about an alert notice. Comments can be added to an alert notice by entering information in the *Leave a comment* field and clicking *ADD COMMENT*.

  Alerts can also be deleted. **Deleting an alert cannot be undone**. Delete an alert by clicking 🗑 (Delete). To delete multiple alerts, select the desired alerts and click *DELETE SELECTED*.

  The *Resolved Notices* tab shows a list of all alerts that have been marked as resolved. Delete resolved alerts by clicking 🗑 (Delete). To delete multiple resolved alerts simultaneously, set the desired resolved alerts and click *DELETE SELECTED*.

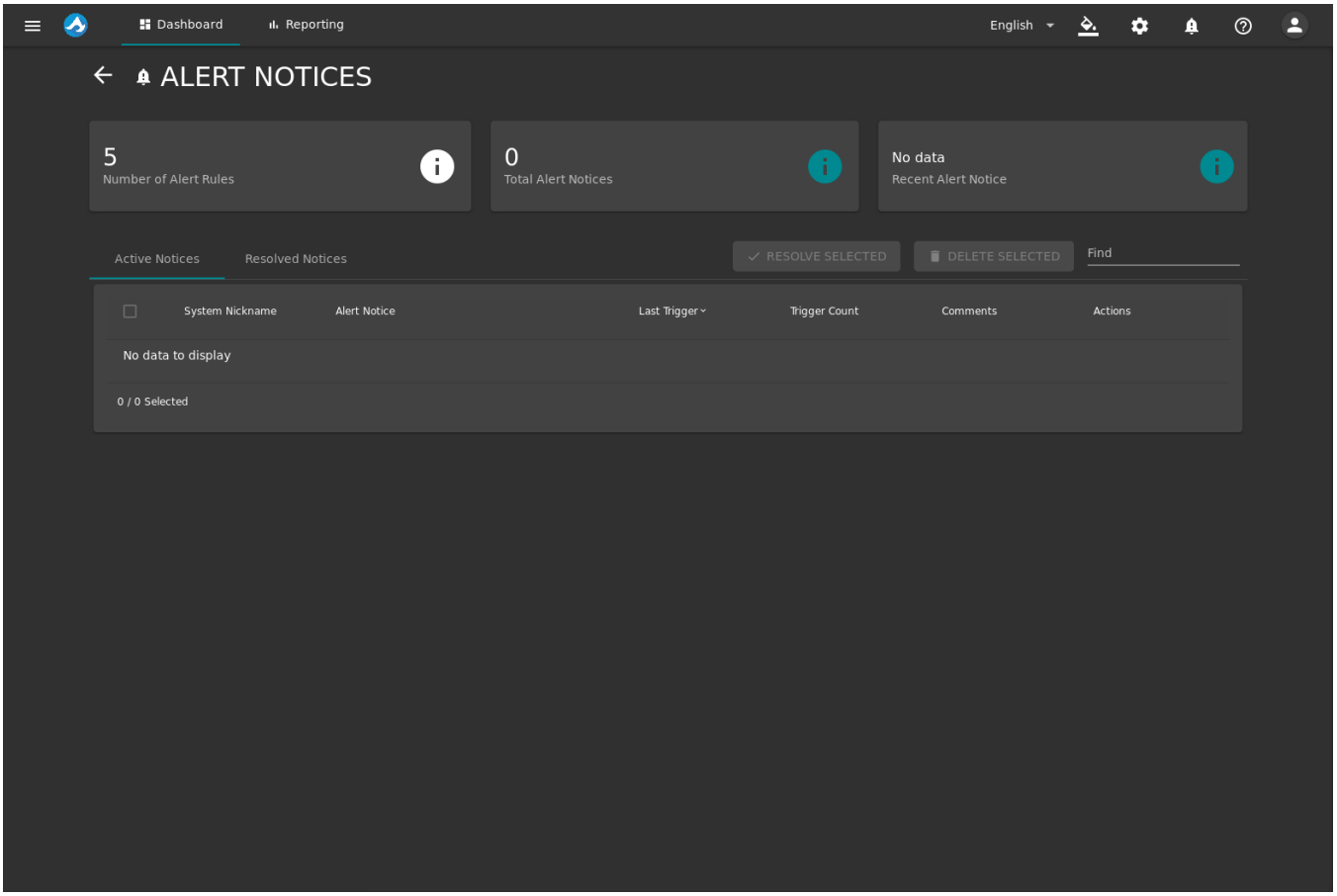


Fig. 13.2: Alert Notices

- *Log Out*: Log out of the TrueCommand™ web interface.