ASUS Control Center

User Guide

Contents

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Contents

About this guide

Audience

This user guide is intended for system integrators, and experienced users with basic knowledge of configuring a server.

Contents

This guide contains the following parts:

Chapter 1: Getting Started

This chapter provides an overview of ASUS Control Center, and how to install it.

Chapter 2: Deployment

This chapter describes how to deploy ASUS Control Center agents and remove agents through Microsoft® Active Directory or manually. You may also add and manage agentless VMware or digital signage devices.

Chapter 3: Device Monitoring

This chapter describes the various monitoring tools and options available.

Chapter 4: Centralized Management

This chapter describes centralized management of metadata, security, software, and tasks of the ASUS Control Center.

Chapter 5: Account Management

This chapter describes how to add and edit accounts for different users.

Chapter 6: Notification Settings

This chapter describes setting the notifications and SMTP Server

Chapter 7: Server Configurations

This chapter describes system configuration options, and license information.

Appendix

This appendix includes a glossary of terms used in this document.

Conventions

To make sure that you perform certain tasks properly, take note of the following symbols used throughout this manual.

DANGER/WARNING: Information to prevent injury to yourself when trying to complete a task.

CAUTION: Information to prevent damage to the components when trying to complete a task.

IMPORTANT: Instructions that you MUST follow to complete a task.

NOTE: Tips and additional information to help you complete a task.

Typography

Bold text	Indicates a menu or an item to select.
Italics	Used to emphasize a word or a phrase.
<Key>	Keys enclosed in the less-than and greater-than sign means that you must press the enclosed key.
	Example: <Enter> means that you must press the Enter or Return key.
<Key1>+<Key2+<Key3>	If you must press two or more keys simultaneously, the key names are linked with a plus sign (+).
	Example: <Ctrl>+<Alt>+<Del>
Command	Means that you must type the command exactly as shown, then supply the required item or value enclosed in brackets.
	Example: At the DOS prompt, type the command line: **format A:/S**

Reference

Visit the ASUS websites worldwide that provide updated information for all ASUS hardware and software products. Refer to the ASUS contact information for details.

Chapter 1

This chapter provides an overview of ASUS Control Center, and how to install it.

Getting Started

1.1   Introduction to ASUS Control Center

Welcome! The ASUS Control Center is a server management solution that gives a vital distinction to our servers, and is also compatible with our ASUS commercial products. In server management, system stability is a major factor, with efficiency, cost-effectiveness, and convenience following close behind. To comply with this, we have created a reliable and user-friendly monitoring tool. The ASUS Control Center is a web-based interface that allows system administrators to conveniently manage computers either locally or remotely using a web-browser. With its colorful, graphical, and informative interface, the ASUS Control Center makes server management a delightful experience!

1.1.1   How ASUS Control Center works

The ASUS Control Center is composed of "agents" that generally act as data collectors, and a set of HTTP web pages that serve as the user interface (UI). The data collected by the agent, which are essential for the continuous monitoring operations performed by ASUS Control Center, are displayed in the UI.

In the monitoring process, the agent basically keeps track of the hardware and software status of the system. The agent has "sensors" that monitor fan rotation speeds (in RPM), working voltages, motherboard and CPU temperatures, and the backplane (if present).

In addition, the agent also monitors hard disk drives health status through the SMART (Self-Monitoring, Analysis, and Reporting Technology) feature, space utilization of a file system, CPU or system memory loading, and even the traffic status of a network device.

The agent records the history of the detected status of all monitored hardware items. The status record includes the time of alert events (fan, voltage, or temperature), and the type of alert event (critical, warning, or normal).

You can also configure ASUS Control Center to react to exceptional situations. For example, the administrator can be automatically notified by e-mail when a hard drive starts to malfunction or when a chassis intrusion is detected. In this way, ASUS Control Center acts as an active guardian of the system's key components.

1.2　ASUS Control Center installation

ASUS Control Center is a virtual appliance running on a virtual machine (VM), with all required services and settings pre-installed. The system requirements can be found in the **Appendix** section of this manual.

To install the ASUS Control Center on the Oracle VirtualBox, follow the steps below:

1.2.1　Deploy the OVA File

1.　Start the **VirtualBox**.
2.　From the menu, select **File** > **Import Appliance...** to launch the **Import Virtual Appliance** wizard.

    a.　Select the file to import and click **Next**.

    b.　Check the **Reinitialize the MAC address of all network cards** check-box, then click **Import**.

    c.　Wait for the appliance to be imported. This may take a few minutes.

3.　Select the VM on the list, then click **Start** on the toolbar to start the VM.

> A message may appear when starting up the VM for the first time, select **Change Network Settings**, then select the network connection you are currently using and click **OK**.

1.2.2   Initialize startup settings

Once ASUS Control Center has launched, follow the steps below to initialize startup settings:

1.   Read through the end user license agreement, check **I accept**, then click **Next**.
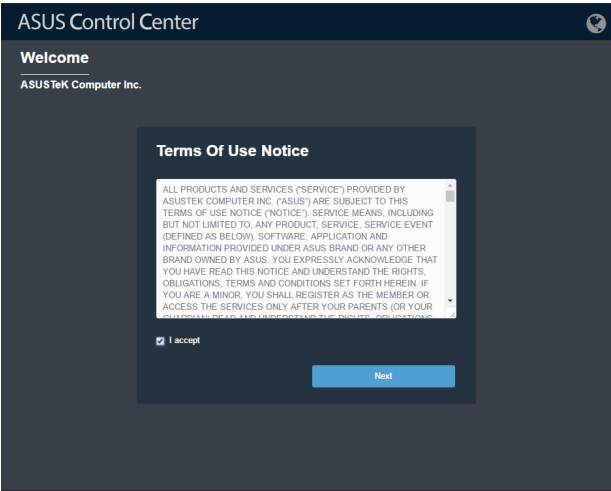
2.   Carefully read through the Privacy Policy, check **I accept**, then click **Next**.
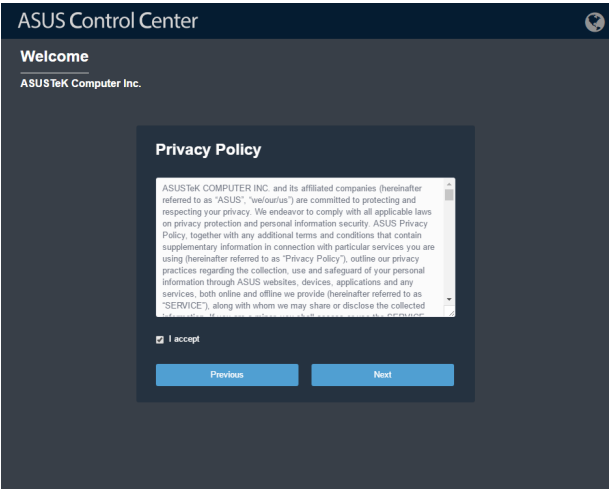
3. Enter and initialize the password. Click on **Next** once you are finished.

> (optional) You may also modify the Host Name, or the Time Zone.

ASUS Control Center

Welcome

ASUSTeK Computer Inc.

General Setting

ASUS

(UTC) Coordinated Universal Time

Initialize the Password

Previous   Next

4. Set the network configurations.

> If **Static** is selected, the IP Address and Subnet Mask should be filled in manually.

5. Click **Submit** once you are finished with all the settings.

ASUS Control Center

Welcome

ASUSTeK Computer Inc.

Initialize Network Environment

Address Assignment	● Static ○ DHCP
Address Assignment	● Static ● DHCP
IP Address	192.168.1.2
Subnet Mask	255.255.255.0
Gateway Address	192.168.1.1
Preferred DNS Server	192.168.1.81
Alternate DNS Server	168.95.1.1

Previous   Submit

1.3   Logging in to ASUS Control Center

To login ASUS Control Center:

1.   Enter the ASUS Control Center web console (http://HostName(IP):8080/ACC) through the web browser.

2.   Enter your **Account** and **Password**. Click **Login** to enter ASUS Control Center.

> 🌐 : Click this button, then select from the dropdown menu to change the language.
>
> ℹ️ : Click this button for more details about the ASUS Control Center. You may also scan the QR code for the mobile website version of ASUS Control Center.

1.4   Menu screen overview

The main control panel of the ASUS Control Center user interface is displayed as shown.
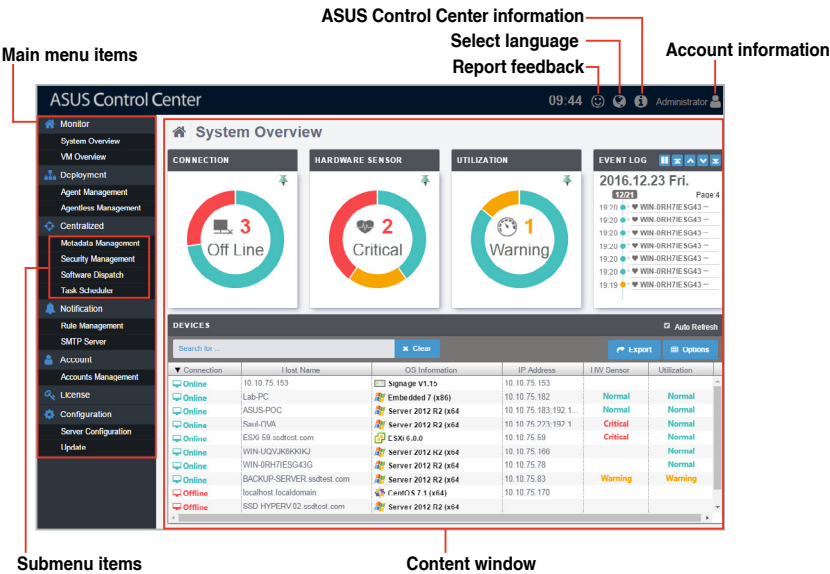
Menu items

The menu bar on the left of the screen has the following menu items:

Main Menu	Submenu	Description
Monitor	System Overview	Displays activity alerts and event logs to monitor server components in real time
	VM Overview	Displays the status and information of the hosts, and all VMs on the host device
Deployment	Agent Management	To remotely deploy agents, or install agents manually for effective monitoring
	Agentless Management	Add agentless VM or digital signage devices to be monitored automatically periodically
Centralized	Metadata Management	Customize device metadata
	Security Management	Modify different security settings for devices
	Software Dispatch	Dispatch software packages to be installed on devices
	Task Scheduler	Schedule different tasks to perform different functions on a specified date(s) on managed devices
Notification	Rule Management	Setting notification rules for the administrator
	SMTP Server	Configure SMTP Server settings to send notifications for server alert events

Main Menu	Submenu	Description
Account	**Accounts Management**	Manage accounts, control privileges and permissions
License		Import the product key for ASUS Control Center
Configuration	**Server Configuration**	Set Network configuration, scheduled server checks, and refreshment interval of main server and agent
	Update	Update to the latest version online for the latest functions, stability improvements, and security

Chapter 2

This chapter describes how to deploy ASUS Control Center agents and remove agents through Microsoft® Active Directory or manually. You may also add and manage agentless VMware or digital signage devices.

**Deployment**

2.1 Deploying new ASUS Control Center agent

Install new ASUS Control Center agents on devices and add them to the ASUS Control Center server for convenient management, monitor and control.

Refer to the **Appendix** for more details on the ASUS Control Center agent system requirements.

To access **Agent Management**, click **Deployment** > **Agent Management** in the left menu.
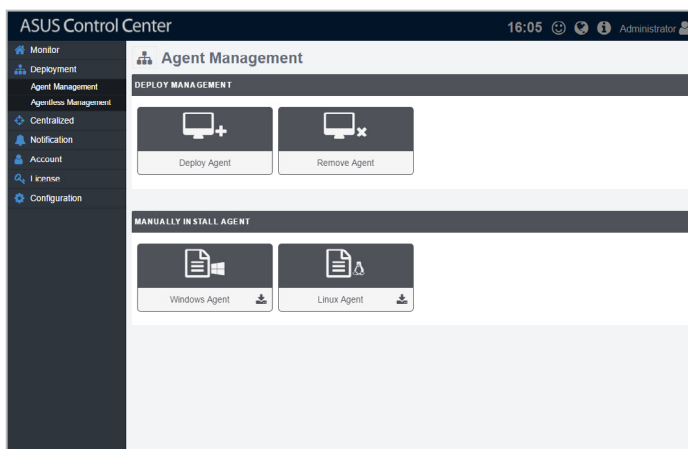
2.1.1 Automatically scanning for devices

This function is only available on Linux system devices.

To deploy new agents:

1. Click **Deploy Agent**. You will be redirected to the following screen:

2. Add devices to be scanned into the Deploy Management list by adding them individually or importing a CSV file:

   • To add a single device:

     a. Click on **Add**.

     b. Enter the IP Address or Host Name, Account, and Password, then click **Add**.

   • To add multiple devices:

     a. Click on **Import**.

     b. Select the CSV file to import and click **Open**.

   • Click on **Export** to export the current added devices list to a CSV file.
   • Use a text editor when editing the exported CSV file.
   • You may edit items added by clicking on it before scanning.

3. Once you have added all the devices to scan for, click on **Scan**.

4. The scanned results will be displayed in the Scan Result Information block. Select the devices you wish to deploy agent then click **Deploy**.

Unavailable devices will be listed as **Not Support**. You may click on the device to view details on why it is unavailable.

2.1.2   Installing Windows agents manually

You may install agents manually on the device by downloading the Windows®
Agent installation files from the ASUS Control Center web console.

To install the Windows agents manually:

1.   Click on **Windows Agent** to start downloading the installation files.

2.   Unzip the ZIP file containing the installation files.

3.   Launch the installer and follow the instructions to install the agent.

2.1.3   Installing Linux agents manually

You may install agents manually on the device by downloading the Linux Agent
installation files from the ASUS Control Center web console.

To install the Linux agents manually:

1.   Use the root account to login Linux;

2.   On ASUS Control Center, click on **Linux Agent** to start downloading the
      installation files.

3.   Unzip the file, *tar -zxvf LinuxAgent.tar.gz*.

4.   Type *./install.sh*.

5.   Choose the directory that you want to install, or use the default directory **/root/
      LinuxAgent**.

6.   Input the IP address of your main server.

7.   Wait for a few minutes for the installation to finish.

2.2   Removing agents

To remove an agent:

1.   Click on **Remove Agent**.
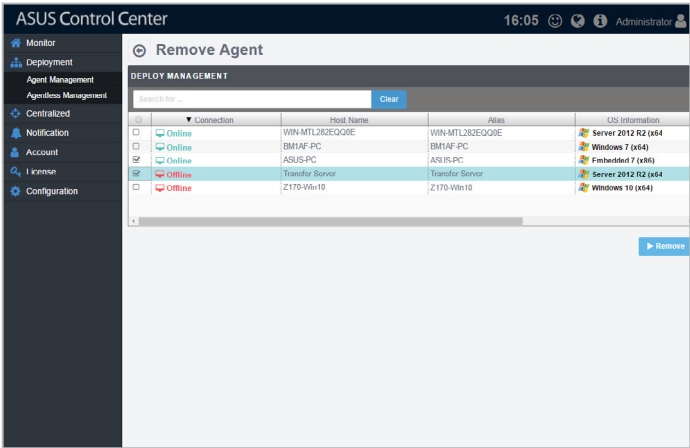
2.   Check the devices you wish to remove agents from on the list.
3.   Click on **Remove**, then click on **OK** to remove the agents from the devices.

> If the target host(s) are offline, the agents on these host(s) will be removed once the host(s) are online.

2.3   Adding agentless devices

Add VMware and Digital Signage for monitoring and other management options. When adding the VMware, the device added is the hypervisor. All VMware on the hypervisor will be displayed once the hypervisor has been added.

To access **Agentless Management**, click **Deployment** > **Agentless Management** in the left menu.
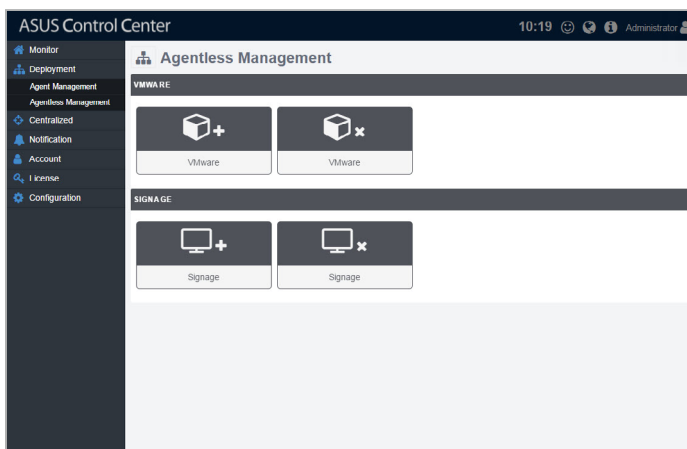
2.3.1   Add VMware

To add a new hypervisor:

1.   Click on ![icon] in the Vmware block. You will be redirected to the following screen:
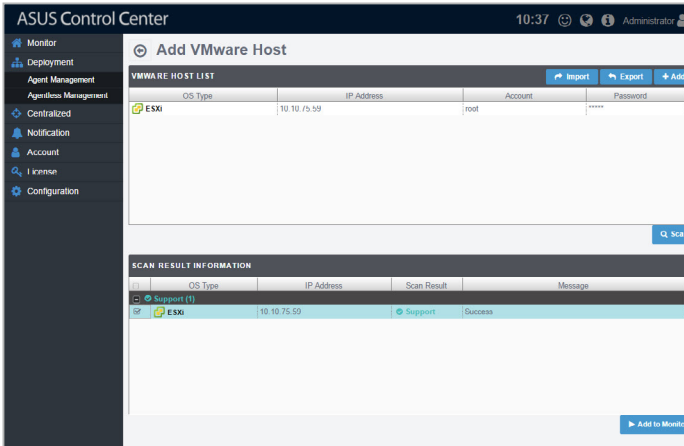
2.   Add devices to be scanned into the VMware Host list by adding them individually or importing a CSV file:
    - To add a single hypervisor:
        a. Click on **Add**.
        b. Enter the IP Address, Account, and Password, then click **Add**.
    - To add multiple devices:
        a. Click on **Import**.
        b. Select the CSV file to import and click **Open**.

> - Click on **Export** to export the current added devices list to a CSV file.
> - Use a text editor when editing the exported CSV file.
> - You may edit items added by clicking on it before scanning.

3.   Once you have added all the devices to scan for, click on **Scan**.

4.   The scanned results will be displayed in the Scan Result Information block. Select the hypervisors you wish to add then click **Add to Monitor**.

> - Unavailable devices will be listed as **Not Support**. You may click on the device to view details on why it is unavailable.
> - Devices added may take a few minutes before they are displayed in the overview.

2.3.2   Add Digital Signage

To add a new hypervisor:

1.   Click on ▢₊ in the Signage block. You will be redirected to the following screen:

2.   Add devices to be scanned into the Digital Signage Host list by adding them individually or importing a CSV file:

    • To add a single hypervisor:
        a. Click on **Add**.
        b. Enter the IP Address and port, then click **Add**.
    • To add multiple devices:
        a. Click on **Import**.
        b. Select the CSV file to import and click **Open**.

> •   Click on **Export** to export the current added devices list to a CSV file.
> •   Use a text editor when editing the exported CSV file.
> •   You may edit items added by clicking on it before scanning.
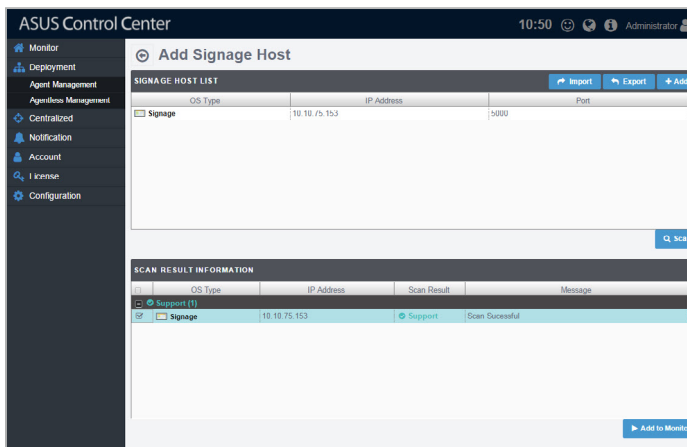
3.   Once you have added all the devices to scan for, click on **Scan**.

4.   The scanned results will be displayed in the Scan Result Information block. Select the devices you wish to add then click **Add to Monitor**.

> •   Unavailable devices will be listed as **Not Support**. You may click on the device to view details on why it is unavailable.
> •   Devices added may take a few minutes before they are displayed in the overview.

2.4 Removing agentless devices

2.4.1 Removing VMware Host

To remove VMware Host:

1. Click on in the VMware block. You will be directed to the following screen:
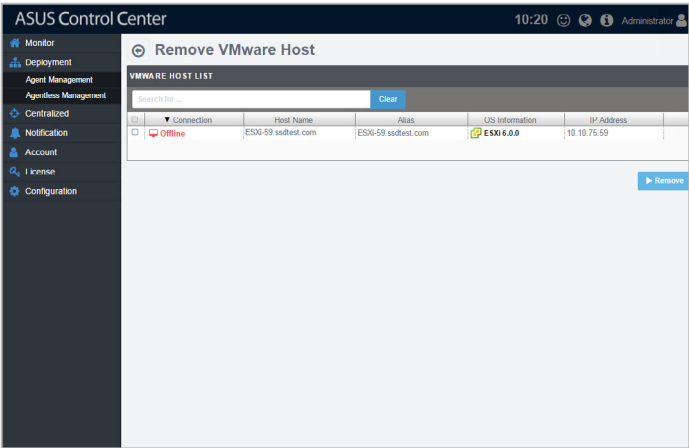
2. Check the hypervisors you wish to remove.
3. Click on **Remove**, then click on **OK** to remove the hypervisor.

2.4.2   Removing Signage Host

To remove Digital Signage devices:

1.   Click on [icon] in the Signage block. You will be directed to the following screen:

2.   Check the Signage devices you wish to remove.
3.   Click on **Remove**, then click on **OK** to remove the device.

Chapter 3

This chapter describes the various monitoring tools and options available.

Device Monitoring

3.1   System Overview

The system overview screen gives you a quick overall status check for all devices. You may also select an individual device for details on its status, or perform actions such as remotely control it, power it off, or turn on its locator LED.

To access the **System Overview**, click **Monitor** > **System Overview** from the left menu.

Connection

This item allows you to view a summary of the connection status of all managed devices. Status: Green - Online, Orange - Maintain, Red - Offline

Hardware Sensor

This item allows you to view a summary of the hardware status of all managed devices. Status: Green - Normal, Orange - Warning, Red - Critical

Utilization

This item allows you to view a summary of the utilization status of all managed devices. Status: Green - Normal, Orange - Warning, Red - Critical

Event Log

The event log displays the status of all managed devices in real time. Clicking on an item on the list will display more details about that item.

Devices

This table displays all managed devices. This table will display the items that correspond to the filter set/selected.

3.2   Filter devices

3.2.1   Filter devices using the Dashboard

To filter the devices using the Dashboard:

1. Click on the following items on the Dashboard to filter and display the devices corresponding to the status selected:

    •   **Connection:** Click on a colored segment on the circle to display all items which correspond to the selected connection status.

    •   **Hardware Sensor:** Click on a colored segment on the circle to display all items which correspond to the selected hardware sensor status.

    •   **Utilization:** Click on a colored segment on the circle to display all items which correspond to the selected utilization status.

    •   **Event Log:** Click on an event on the Event log to display the item.

2. The filtered devices will be displayed in the **Devices** block. You may select a single device from the list to view more details.

3. To view all devices, click on the **Clear** button in the **Devices** block to clear the filter.

3.2.2   Filter devices using the Search toolbar

> To clear the filter and view all devices, click on **Clear**.

•   To filter the devices using the Search bar:

    Enter a keyword into the Search bar to search for devices with details matching the search criteria.

•   To filter the devices using Column headers:

    1. Hover over the column in which you wish to filter.

    2. Click on ☰ then select the filter rule and enter the keyword to search.

> •   To add more detail columns to the Devices block, click on **Options**, then check the metadata item you wish to display.
>
> •   Click on the Name of a column header to sort the filter results alphabetically.

•   To filter using Row Groupings:

    1. Click on **Options**.

    2. Drag the columns from the Columns list into the Row Groupings list to filter by those columns.

   3. Click on ⊖ to remove or disband a row.

3.3   View device details

/ The screenshot may vary between agent and agentless devices, for more
details on viewing agentless device details, refer to **3.4 View agentless device
details**.

To view more details about a device:

Click on the device you wish to see more details about in the **Devices** block. You
will then be redirected to the device's information page, as seen below:
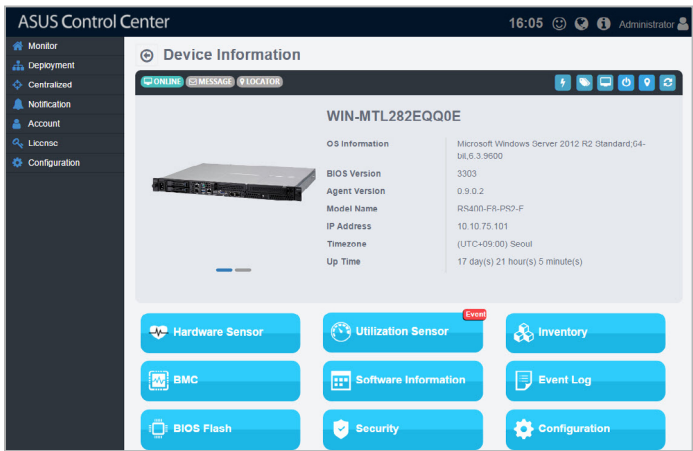
Top Menu bar

	Power Master:	This item allows you to review power consumption (min, average, max) history of the device at a specified time (one week, day, hour). Refer to **3.8 Power Master** for more details.
	Metadata Editor:	This item allows you to edit the metadata of the device by double clicking in the Value field.
	Remote Desktop:	This item allows you to remotely control a device. Refer to **3.6 Remote control a device** for more details.
	Power Control:	This item allows you to power off or restart a device.
	Locator LED:	This item allows you to turn on/off the Locator LED.
	Refresh:	This item will refresh the device data.

/ A red **Event** will appear on items with a warning/critical event.

Hardware Sensor

This item allows you to set the threshold value for the voltage, temperature, fans, HDDs, RAID, S.M.A.R.T., connection, and backplane.

	⚏ : Click this button to switch the layout view.
	➕ : Click this button to expand all rows.
	➖ : Click this button to minimize all rows.

Utilization Sensor

This item allows you to set the utilization threshold value for the CPU, DIMM, Partition, and Network.

	⚏ : Click this button to switch the layout view.
	➕ : Click this button to expand all rows.
	➖ : Click this button to minimize all rows.

Inventory

This item displays more details about your device and disk. Click on **Asset Information** for more details on the device. Click on **Disk Information** for more details on the disk.

BMC

This item allows you to see more details about the LAN IP in the **Share LAN** or **DM_LAN1** tab or set Power Master in the **Power Master** tab.

The BMC option will be grayed out if BMC is unavailable on the device.

Software Information

This item displays details on the software and applications with the **Application**, **Service**, **Process**, and **Environment Variables** tab. You may also install applications from the **Software Market** tab.

- To export the table click the **Export** button, enter a filename, then click **OK**.
- You may search and filter items using the Search toolbar, for more details refer to **3.2.2 Filter devices using the Search toolbar**.
- Refer to **4.3.1 Adding software to the Software Pool** to create a software pool.

Event Log

This item displays the event logs for the **ASUS Control Center**, **Application**, **System**, and **Security**. You may view each event log by clicking on the tabs. Click on an event to view more details about the event.

> • To export the table click the **Export** button, enter a filename, then click **OK**.
>
> • You may search and filter items using the Search toolbar, for more details refer to **3.2.2 Filter devices using the Search toolbar**.

BIOS Flash

This item displays information about the BIOS.

Security

This item allows you to set permissions on the device for the **Registry Editor Tool**, **USB Flash Device**, and **Watchdog Function**.

Configuration

This item allows you to configure the interval at which hardware and utilization sensors are checked, and also set the interval which the agent will respond to the server's requests.

3.3.1   Shutting down or restarting the device

To shut down or restart a device:

Click on [power icon] then select **Power Off** to shut down the device, or select **Power Restart** to restart the device.

3.3.2   Refreshing device data

ASUS Control Center will automatically refresh the data of your device, you may set the refresh interval, or manually refresh the data.

• To set the automatic refresh interval for a device:

1. Click on **Configuration** then enter the refresh time in seconds for hardware sensors and utilization sensors.

2. Click on **Save** to save the changes made.

• To manually refresh the status of a device:

Click on [refresh icon] , then click on **OK** to refresh the data.

3.3.3 Setting the device security
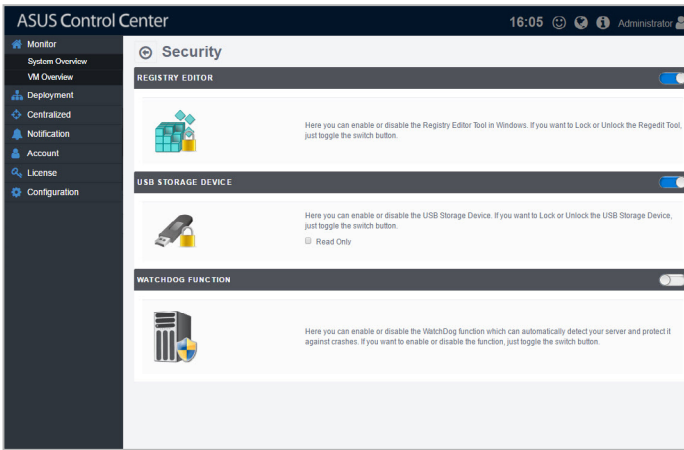
To set the security permissions for the device:

Click on **Security**, then toggle to enable or disable the following functions,

- Registry Editor: Disable this item to lock the Regedit Tool in Windows®.
- USB Storage Device: Disable this item to restrict access of USB Storage Devices connected to the device.
- Watchdog Function: Enable this function to automatically detect and protect your server against crashes.

3.3.4 Installing software on the device
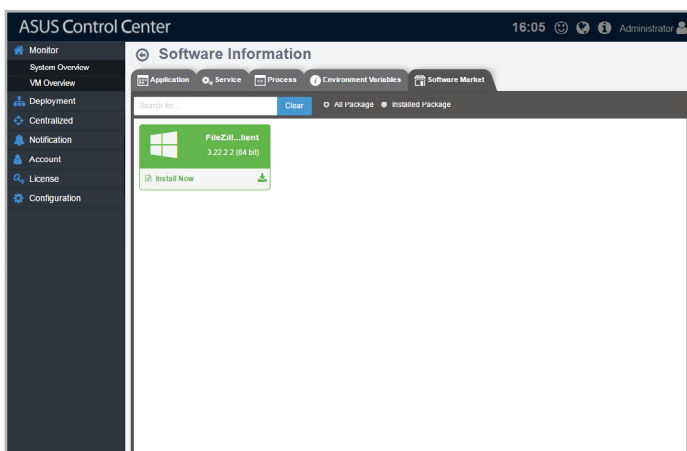
To install software on the device:

1. Click on **Software Information** > **Software Market**.
2. Locate the software you wish to install, then click to start deploying the software on the device.

> To add more software to the Software Market, refer to **4.3.1 Adding software to the Software Pool**.

3.4 View agentless device details

/ The screenshot may vary between agent and agentless devices, for more
details on viewing details on devices with agents, refer to **3.3 View device
details**.

3.4.1 Viewing VMware vSphere details
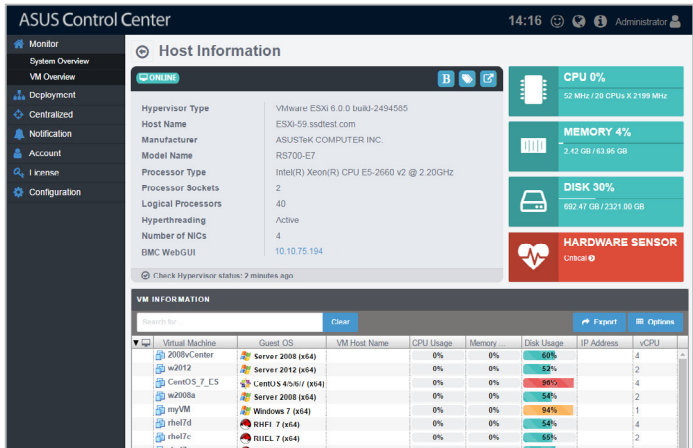
*   To view more details about VMware vSphere Hypervisor and virtual machines
    from **System Overview**:

    1. Click **Monitor** > **System Overview** in the left menu.
    2. Click on the hypervisor you wish to see more details about in the **Devices**
        block. You will then be redirected to the hypervisor information page
        displaying all virtual machines installed on it, as seen in the screenshot
        above.

/ VMware vSphere display a 🔲 icon in the OS Information column.

*   To view more details about VMware vSphere Hypervisor and virtual machines
    from **VM Overview**:

    1. Click **Monitor** > **VM Overview** in the left menu. You may view an
        overview of all hypervisors and the all virtual machines installed.

2. Click on an item. You will be redirected to the hypervisor information page displaying all virtual machines installed on it, as seen in the screenshot above.

> • To export the table click the **Export** button, enter a filename, then click **OK**.
>
> • You may search and filter items using the Search toolbar, for more details refer to **3.2.2 Filter devices using the Search toolbar**.

Top Menu bar

Power Master: This item allows you to review power consumption (min, average, max) history of the device at a specified time (one week, day, hour). Refer to **3.8 Power Master** for more details.

> This option is only available if BMC settings have been entered.

Metadata Editor: This item allows you to edit the metadata of the device by double clicking in the Value field.

BMC: This item allows you to add a new node to Power Master by entering the IP address, entity name, entity description, BMC username, and BMC password.

VMware ESXi: This item allows you to link to the vSphere Web Client management interface.

> VMware ESXi link is only available if a Web Client management interface link is detected.

Hardware Sensor

This item allows you to set the threshold value for the voltage, temperature, fans, HDDs, RAID, S.M.A.R.T., connection, and backplane.

> : Click this button to switch the layout view.
>
> : Click this button to expand all rows.
>
> : Click this button to minimize all rows.

VM Information

This list displays details on all the virtual machines on the hypervisor, including CPU usage, Memory usage, Disk usage, Guest OS, and IP address.

> • To export the table click the **Export** button, enter a filename, then click **OK**.
>
> • You may search and filter items using the Search toolbar, for more details refer to **3.2.2 Filter devices using the Search toolbar**.
>
> • If **VMware Tool** is not installed, some items may not be displayed, such as IP address. To view all information about VMware vSphere installed, ensure to install **VMware Tool**.

Remote Control

The 🖥 icon in front of each virtual machine in the **VM Information** list allows you to remote control the virtual machine.

To remote control a virtual machine:

1. Click on 🖥 of the virtual machine you wish to remote control to enter the **Remote Desktop** login screen.

2. Enter the username, password, and port of the remote device, then select the protocol you wish to use when connecting.

> • Linux and Windows® systems use different protocols, ensure the device is reachable through the selected protocol (ssh, vnc, and rdp).
>
> • On a Windows® system, the user may have to open the corresponding port in the firewall.
>
> • The port entered has to match the port set on the device.

3. Once the login has been successfully authenticated, you will be logged into the desktop or command line of the device system; this varies between systems.

> To switch mouse and keyboard control to the ASUS Control Center, press <Ctrl> + <Alt> on the keyboard. To switch mouse and keyboard control back to the remote device, click in the remote device window.

4. Click on ⬅ located in the top left corner to end the remote desktop session.

3.4.2   Viewing Digital Signage details
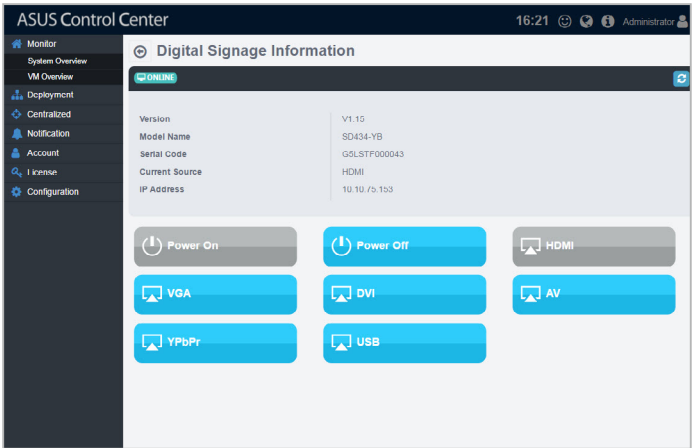
To view more details about a Digtial Signage:

1.   Click **Monitor** > **System Overview** in the left menu.
2.   Click on the digital Signage you wish to see more details about in the
       Devices block. You will then be redirected to the Digital Signage information
       page, as seen in the screenshot above.

Digital Signage display a 🖼 icon in the OS Information column.

Top Menu bar

🔄   Refresh: This item will refresh the device data.

Power On / Power Off

Click on **Power On** or **Power Off** to power on or power off the digital signage. The
selected option will be grayed out.

HDMI / VGA / DVI / AV / YPbPr / USB

Select the input source. The selected option will be grayed out.

3.5   Setting the threshold for sensors

Set the critical and warning thresholds of the different sensors.

To set a threshold:

1.   In the **System Overview** screen, select a device from the **Devices** block.

2.   Click on Hardware Sensor or Utilization Sensor to view the items being monitored.

3.   Click on a item to adjust the threshold values:

   •   High Critical: When the value exceeds this threshold value, the sensor will display **Critical**.

   •   High Warning: When the value exceeds this threshold value, the sensor will display **Warning**.

   •   Low Critical: When the value is below this threshold value, the sensor will display **Critical**.

   •   Low Warning: When the value is below this threshold value, the sensor will display **Warning**.

   The threshold options for each item may vary.

4.   Click on **SAVE** once you have finished adjusting the threshold values of the item.

3.6   Remote control a device

The remote control function provides a flexible interface for device management through the desktop or command-line accessed in ASUS Control Center.

To remote control a device:

1.   In the **System Overview** screen, select a device from the **Devices** block.

2.   Click on [icon] to enter the **Remote Desktop** login screen.

3.   Enter the username, password, and port of the remote device, then select the protocol you wish to use when connecting.

> • Linux and Windows® systems use different protocols, ensure the device is reachable through the selected protocol (ssh, vnc, and rdp).
>
> • On a Windows® system, the user may have to open the corresponding port in the firewall.
>
> • The port entered has to match the port set on the device.

4.   Once the login has been successfully authenticated, you will be logged into the desktop or command line of the device system; this varies between systems.

> To switch mouse and keyboard control to the ASUS Control Center, press <Ctrl> + <Alt> on the keyboard. To switch mouse and keyboard control back to the remote device, click in the remote device window.

5.   Click on [icon] located in the top left corner to end the remote desktop session.

3.7   BMC Information

The BMC screen displays the information on the BMC of the device, you may also view the link to ASMB through the **Shared Lan** and **DM_LAN1** tabs. You may also set and enable Power Master through the **Power Master** tab.

To access **BMC Information**, click on **Monitor** > **System Overview**, select the device from the **Devices** block, then click **BMC**.

> The device has to support BMC to use the functions described in this section.

3.7.1   Viewing ASMB details

To see more details about ASMB on the device:

1.   Select the **Share Lan** or **DM_LAN1** tab, then click the IP Address.
2.   Login ASMB.

3.7.2   Setting up Power Master

To set up and enable Power Master:

1.   Select the **Power Master** tab.
2.   Enter an entity name, entity description, and the BMC user name and password, then select the BMC IP address.
3.   Click on **Save** to finish setting up the Power Master.

3.7.3   Editing Power Master node

To edit a Power Master node:

1.   Select the **Power Master** tab.
2.   Edit the information, then click **Save** to save the changes made.

3.7.4   Deleting Power Master node

To delete a Power Master node:

1.   Select the **Power Master** tab.
2.   Click **Delete**, then click **OK** to delete the node entity.

3.8 Power Master

Power Master allows you to view the devices power consumption of the device at specified time intervals. You can also set a threshold for the device by clicking on **Policy**.

To access **Power Master**, click on **Monitor** > **System Overview**, select the device from the **Devices** block, then click [⚡] .

> • The device has to support BMC to use the functions described in this section.
>
> • This function is only available after Power Master has been set up, refer to **3.5.2 Setting up Power Master** for more details.
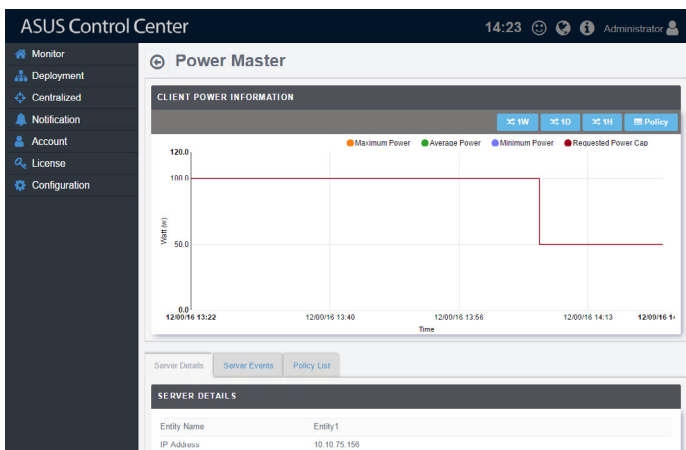
3.8.1 Viewing Power Consumption

View the details on different power consumption values sorted according to a specified time interval

To view the power consumption:

1. Select which values to display on the graph by selecting Maximum Power, Average Power, Minimum Power, and Requested Power Cap at the top of the graph.
2. Select the interval to display by clicking on the **1W** (week), **1D** (day), or **1H** (hour) time intervals shown at the top of the graph.

3.8.2   Adding a policy

Policies allow you to configure thresholds for power consumption.

To add a new policy:

1. Click on **Policy**.
2. Enter a description, Entity, Threshold value, Policy Type, and Reserve Budget.
3. Select an interval to apply the policy:
   - Permanent Policy: The policy will be in effect all the time.
   - Specific Time: The policy will only be in effect at a designated time.
   - Recurrent Time: The policy will be in effect every time the at designated time.
4. Check **Policy Enable** to enable the policy.
5. Click **Add** once you are finished to add the policy to the Policy List.

3.8.3   Viewing and editing policies

You may view all the policies added by clicking on the **Policy List** tab, you may also check the Status column to enable or disable the policy.

To edit the policy, click on [icon] to edit the details of the policy, then click **Update** to save the changes made.

3.8.4   Deleting policies

To delete a policy:

1. Click on the **Policy List** tab.
2. Click on [icon] then click **OK** to delete the policy.

Chapter 4

This chapter describes centralized management of metadata, security, software, and tasks of the ASUS Control Center.

Centralized Management

4.1 Metadata Management

Metadata Management allows you to add or edit the metadata of a single device or multiple devices.

To access **Metadata Management**, click **Centralized** > **Metadata Management** from the left menu.
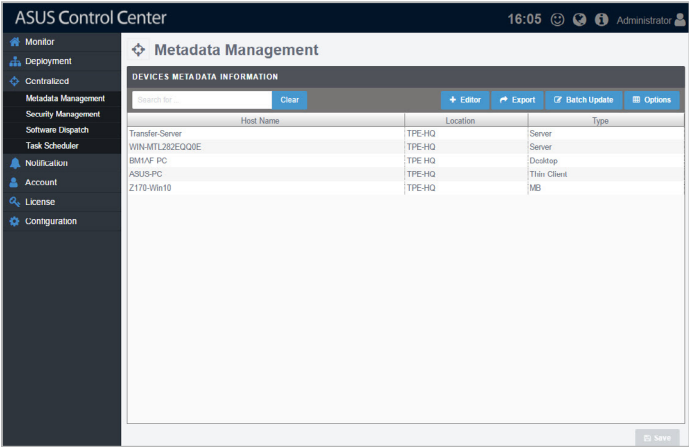

You may search and filter items using the Search toolbar, for more details refer to **3.2.2 Filter devices using the Search toolbar**.

4.1.1 Adding metadata fields

To add metadata fields:

1. Click on **Editor** to open the Metadata Editor.
2. Enter the Field Name of the new metadata column, then select a Field Type from the drop down menu.
3. Click on **Add** to add the field.
4. (optional) You may set or edit the default value of the new field by double-clicking in the **Default Value** cell and then entering the new default value.
5. Click on **Save** when you have finished adding or editing the metadata fields
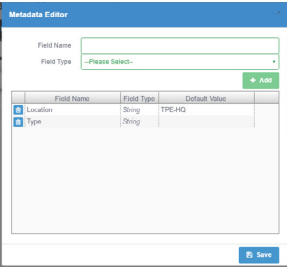
4.1.2　Exporting the metadata

Exporting the metadata to a CSV file allows you to edit multiple metadata fields together, then update them by importing it back into ASUS Control Center. To import the changes made to the metadata in the CSV file, refer to **4.1.4 Editing multiple metadata fields**.

To export the metadata:

1.　Click on **Export**.
2.　Enter a filename for the CSV file, then click **OK**.

> •　Use a text editor when editing the exported CSV file.
> •　Do not edit the **aswm_HostName** and **ClientGUID** fields.
> •　Only the existing data in the CSV file may be edited, adding new rows and columns to the CSV file may cause failure when importing to the ASUS Control Center.

4.1.3　Editing metadata fields

To edit metadata fields:

1.　Double-click on a field you wish to edit and enter the new value.

> •　The **Host Name** field cannot be edited.
> •　Edited fields will have red text.

2.　Click on **Save** once you have finished making changes to the metadata.
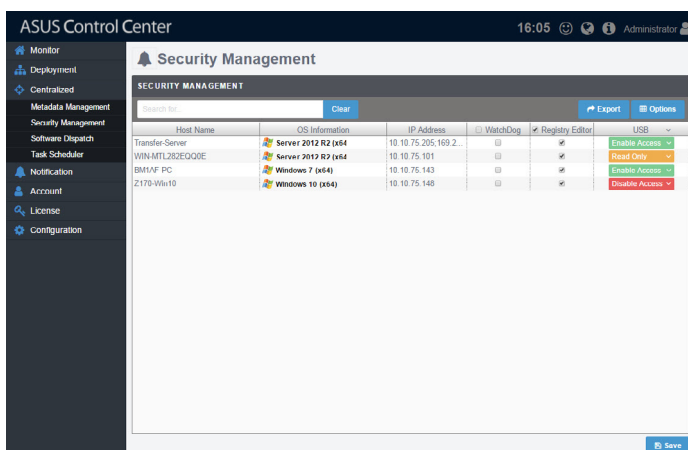
4.1.4　Editing multiple metadata fields

To edit multiple metadata fields:

1.　Click on **Batch Update**.
2.　Select a CSV file to import, then click **Open**.
3.　Select the field columns to update to the server, then click **Batch Update**.
4.　Click on **Save** to save the changes made.

4.2 Security Management

Security Management allows you to modify the security settings of all devices.

To access **Security Management**, click **Centralized** > **Security Management** from the left menu.

You may search and filter items using the Search toolbar, for more details refer to **3.2.2 Filter devices using the Search toolbar**.

4.2.1 Setting security functions for all devices

To set the security functions for all devices:

1. Check the column headers to enable or disable the function on all devices:

   • Registry Editor: Disable this item to lock the Regedit Tool in Windows®.

   • Watchdog Function: Enable this function to automatically detect and protect your server against crashes.

2. Click on the down arrow in the **USB** column header to enable, disable or set USB storage devices to Read Only mode - this allows the users to view files on the USB storage device only.

3. Click on **Save** once you have finished making changes to save the changes made.

• You may export the table to a CSV file by clicking on the **Export** button.

• Click on Options to group the devices by row.


4.3 Software Dispatch Management

Software Dispatch Management allows you to upload software which can be installed on devices.

To access **Software Dispatch Management**, click **Centralized** > **Software Dispatch Management** from the left menu.
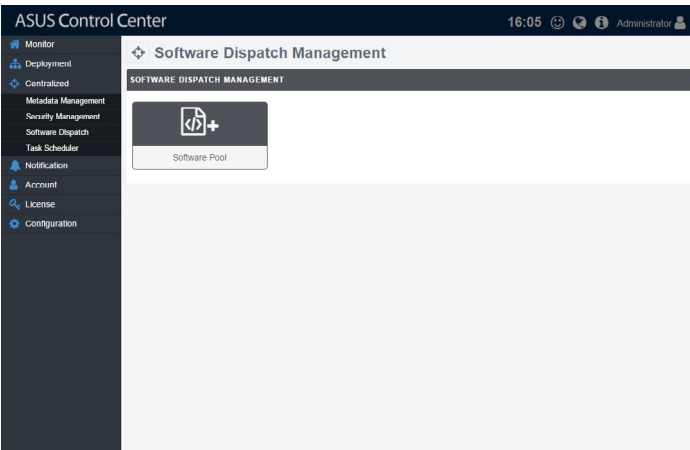
4.3.1 Adding software to the Software Pool

The Software Pool displays all the software uploaded to ASUS Control Center for dispatching to devices.
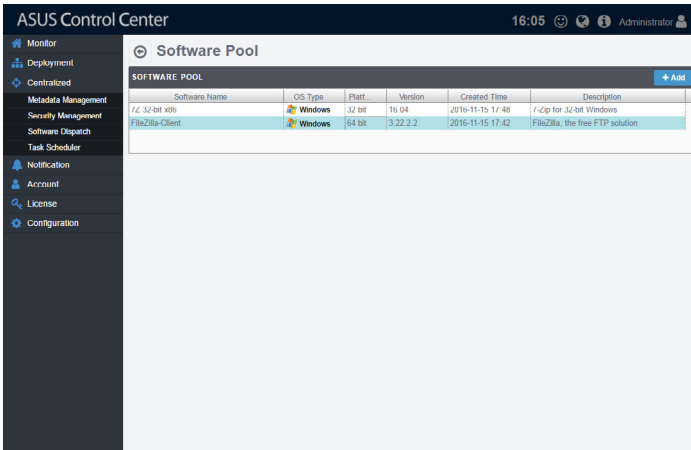
To add a new software to the Software Pool:

1. Click on **Software Pool**.
2. Click on **Add**, then enter the name, OS type, version, platform and description of the software.
3. Click on **Next** when you have finished entering the details.
4. Upload the script file by clicking on **Upload Script File** or dragging the script file into the dotted square, then click **Add**.

4.3.2   Removing software from the Software Pool

To remove software from the Software Pool:

1. Click on **Software Pool**.
2. Click on the software you wish to remove. The software information window should appear, you can view the details about the software here.
3. Click on **Remove**, then click **OK** to remove the software.
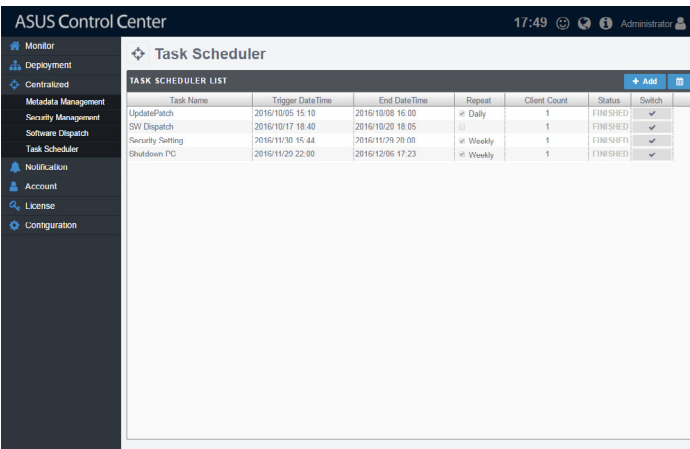
4.4 Task Scheduler

Task Scheduler allows you to set different tasks to be executed automatically at specific times or to repeat periodically.

To access **Task Scheduler**, click **Centralized** > **Task Scheduler** from the left menu.

4.4.1 Viewing the Task Scheduler

View different details of the Task Scheduler by clicking on the / icon.

 : History list of all tasks, including Task Name, Trigger DateTime, End DateTime, Repeat, Client Count, Status and Switch.
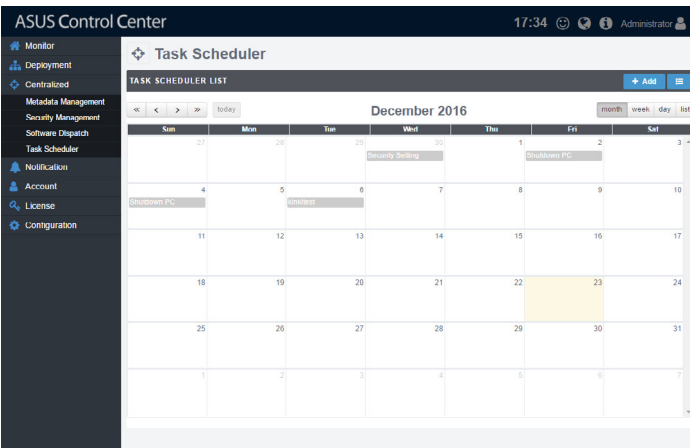

 : Calendar view displaying the tasks and the dates when they will be executed.

4.4.2   Changing the Calendar view layout

You may switch between different layouts in the calendar view

«	View previous year
»	View next year
‹	View previous month
›	View next month
today	Move to the current day. The current day will be highlighted on the calendar.
month	Display month view
week	Display week view
day	Display day view
list	Display list of all tasks in the selected month and year.

4.4.3   Adding a new scheduled task

To add a new scheduled task:

1.   Click on **Add**.

2.   Enter the TaskSet Name, then select a Trigger DateTime.

3.   (optional) Check **End DateTime**, then select an end date and time.

4.   (optional) Check **Repeat**, then select **Daily** to repeat the task daily, or **Weekly** to repeat the task weekly.

5.   Check **Task Schedule Enabled** to enable and activate the task.

6.   Select **Windows** or **Linux** in the **Target Type** field.

7. Once the Target Type has been selected, a list of all devices matching the Target Type will be displayed. Select the devices to apply the task to, then click **Next**.

> You may search and filter items using the Search toolbar, for more details refer to **3.2.2 Filter devices using the Search toolbar**.

8. Click on **Add** in the middle-right of the screen to add a new task.

9. Select an action type. Each action type contains different options, see the table below for a list of the action types and the options available:

Action Type	Options
Power Control	Power On: Power on the device
	Power Off: Power off the device
	Power Reboot: Reboot the device
Service Control	Service Name: Enter the name of the service
	Start: Activate the service
	Stop: Stop the service
	Restart: Restart the service
Software Dispatch	Platform Type: Select from 32Bit, 64Bit, or 32_64Bit to filter the software options.
	Package Name: Select an item from the **Software Pool** to be installed. The options will vary according to the Bit type selected in **Platform Type**.
Security Control	Security Type:
	• **WatchDog Function**
	StatusWatchDog: Enable / Disable
	• **Registry Tool**
	StatusRegistry: Enable / Disable
	• **USB Control**
	StatusUsbAccess: Enable Access / Disable Access / Read Only

> **Linux** only supports **Power Control** and **Security** action types.

10. Set the **Delay Time** (in minutes). This function is used to set a delay time before the task is executed.

⚠️ When adding multiple tasks, ensure to set a Delay Time for each task to ensure the tasks are executed properly.

11. Once you have finished with setting the task, click on **Save**. The newly added task will be displayed in a timeline, you may click and drag the items in the timeline to rearrange the scheduled tasks. Clicking on 🗑 will delete the task.

12. When you are finished, click on the **Add** at the bottom of the screen.

4.4.4   Editing a scheduled task

To edit a scheduled task:

1. Click on the task you wish to edit on the calendar in Calendar view.
   OR
   Click on the task you wish to edit from the list in History view.
2. Edit the details then click **Update** at the bottom of the screen when you have finished editing.
3. Click **OK** to confirm the changes made.

4.4.5   Deleting a scheduled task

To delete a scheduled task:

1. Click on the task you wish to edit on the calendar in Calendar view.
   OR
   Click on the task you wish to edit from the list in History view.
2. Click **Delete** at the bottom of the screen, then click **OK** to delete the scheduled task.

Chapter 5

This chapter describes how to add and edit accounts for different users.

Account Management

5.1   Accounts Management

The account management function displays all user accounts on ASUS Control Center, and allows you to add, edit, or modify permissions of user accounts.

To access **Accounts Management**:

- Click **Account** > **Accounts Management** from the left.
- Click **Account Information** in the top right corner, then select **Settings**.
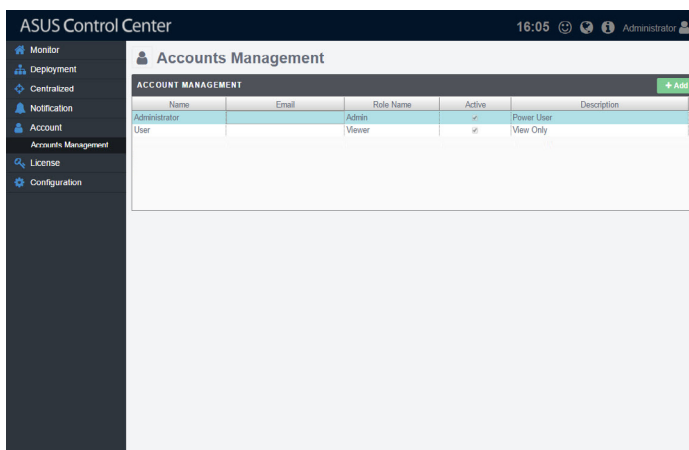
5.1.1   Adding new accounts

To add new accounts:

1.   Click on **Add**.
2.   Enter the name, password, email, role name, and description of the new account.
3.   Check **Account Enable** in the **Active** field to enable the account.
4.   Click **Add** once you have finished entering the account details.

5.1.2   Editing accounts

To edit an account:

1.   Click on the account you wish to edit from the Account Management block.
2.   Modify the account, then click **Update** to save the changes made to the account.
3.   Click **OK** to confirm the update to the account details.

5.1.3   Deleting accounts

To delete an account:

1.   Double-click on the account you wish to delete.
2.   Click on **Delete**, then click **OK** to delete the account.
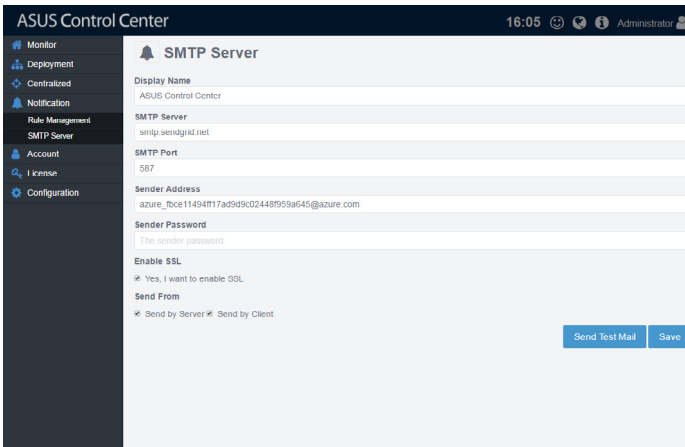
The Administrator account may not be deleted.

Chapter 6

This chapter describes setting the notifications and SMTP Server

Notification Settings

6.1   Setting up the SMTP Server

Set up the SMTP (Simple Mail Transfer Protocol) for ASUS Control Center to allow feedback on system failures and alerts to be sent via email to the system administrator.

To set the SMTP Server:

1.   Click **Notification** > **SMTP Server** to navigate to the settings page.

2.   Enter the display name, SMTP Server, SMTP Port, sender address, and password.

3.   Check **Yes, I want to enable SSL** to enable SSL.

4.   Select the devices to use the SMTP server:

  •   Send by Server: Client devices will send the notification information to the server first, the server will then send the notification email.

  •   Send by Client: Notification emails will be sent from the client device.

5.   Click on **Send Test Mail** to check the status of the SMTP. If the SMTP is functioning properly, you should receive an email.

6.   Click **Save** to save the changes made, after confirming the SMTP is functioning.

6.2 Rule Management

Rule management allows you to add or edit rules on notifications. When a device is in warning or critical status, an email will be sent to the system administrator.

6.2.1 Adding rules for notifications

To add a rule:

1. Click **Add Rule**.
2. Enter a rule name, then select the devices to apply the rule to. Click **Next**.
3. Select conditions (type and status of hardware or utilization sensors) to send notifications, then click **Next**.
4. Check **Event Log** to select if the event log should be sent in the email.
5. Enter the email addresses the notification should be sent to, then click **Submit Rule**.

> When entering multiple emails, use a semicolon ' **;** ' to separate the emails.

6.2.2 Viewing and editing notification rules

You may view and edit the rules in the **Rule List**, clicking on a rule will display the devices and type of status to send notifications in the **Notify Host List**, **Monitor Hardware Sensor List**, and **Monitor Utilization List**.

Unchecking the **Active Rule** column in the **Rule List** for a rule will disable the rule. You may also disable the event log by unchecking the **Event Log** column.

6.2.3 Deleting notification rules

To delete a notification rule:

1. Select a rule in the **Rule List** you wish to delete, then click on 🗑 in the **Delete Rule** column.
2. Click **Delete** to delete the rule.

Chapter 7

This chapter describes system configuration options, and License information.

Server Configurations

7.1 Server Configuration

The Server Configuration screen allows you to configure different settings for the mainserver, agents, and network.

To access **Server Configuration**, click **Configuration** > **Server Configuration** from the left.

> Changes made to each section will only be applied after clicking the **Save** button in each section respectively.

Common Configuration List

Set the Timezone of the ASUS Control Center by selecting a timezone from the dropdown list.

Mainserver Configuration List

Adjust the intervals for web page refreshment, system update detection, and Hypervisor status check via the mainserver.

Agent Configuration List

Configure the interval at which agents will respond to server requests, or set the interval at which the agent will monitor the hardware and utilization sensors.

Network Configuration

Set the network configurations automatically (DHCP), or manually (Static). If you select **Static**, you will need to enter the IP Address, Host Name, Subnet Mask, Gatweway Address, and DNS server.

7.2 Checking for system updates

The Update screen will display available updates for the Linux Agent, Windows Agent, and Main Server, you may manually refresh the updates screen by clicking on **Check Refresh**. Clicking on an update will automatically update the server and agent without needing to restart the system.

To access **Update**, click **Configuration** > **Update** from the left.
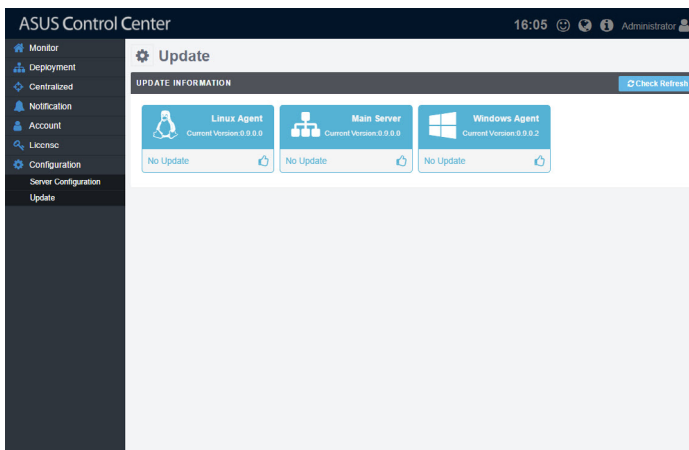
> Ensure to add *asuscontrolcenter.asus.com/** to your firewall exceptions list to enable update checks.

7.3 License Information

This screen displays the license information of your ASUS Control Center, this includes your license key, activation date, expiry date and edition.

If you have a product license key, you may also import and activate your license key by clicking on **Import Key**. For more information on license keys, refer to https://asuscontrolcenter.asus.com.
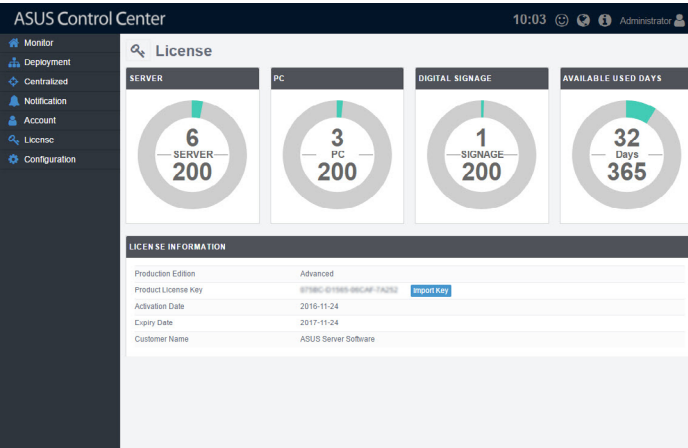
Appendix

This appendix includes a glossary of terms used in this document.

Appendix

System Requirements

Hardware Host Server Requirements

Virtual machine hypervisors	Oracle VirtualBox 5.1.x VMware ESXi 5.x Microsoft Hyper-V 3.0
Virtual machine resources (200 clients capability)	4 vCPU 8 GB memory 100 GB disk space
Minimum VM requirement (50 clients capability)	2 vCPU 4 GB memory 100 GB disk space
Networking	HTTP / HTTPS SMTP SNMP Connection among devices
Supported Internet browsers	Browsers with HTML5 support Google Chrome Firefox Apple Safari ASUS ZenUI browser

Managed Clients Requirements

Supported client OS	Windows Server 2008 Windows Server 2008 R2 Windows Server 2012 Windows Server 2012 R2 Windows 7 Windows 8.1 Windows 10 Windows Embedded 7 RedHat 6.4~6.8 CenOS 6.4~6.8 Scientific Linux 6.4~6.8
Requirement on Client Systems	Windows .NET Framework 3.5 Linux sysstat, smartmontools, wireless-tools, ethtool, ipmitool, Open IPMI driver, ASMB

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