

About Grid

Grid is an SaaS based cloud service provided as part of the LiveWire maintenance subscription for managing, configuring, and monitoring certain aspects of LiveWire devices, both physical appliances and virtual. Grid is the preferred way to manage and configure one or more LiveWire appliances from a single pane of glass in the cloud.

This guide describes how Grid works in conjunction with your network and LiveWire device. Additionally, instructions for setting up and using Grid with your LiveWire device are also included.

Grid is a completely new implementation of the DMS (Device Management Service) SaaS offering.

Grid Portal

Grid portal is hosted in the cloud at <https://grid.liveaction.com/>. Grid portal displays all of a customer's LiveWire devices, both physical and virtual, in an interactive list. From the Grid portal many aspects of the LiveWire devices can be configured individually, as well as in bulk.

Grid on LiveWire

The DMS service running on the LiveWire device is the liaison between Grid portal and the LiveWire device. The DMS service is enabled by default, but can be enabled or disabled from the LiveAdmin Utility on the LiveWire device. See [Enabling Grid Support](#) on page 28.

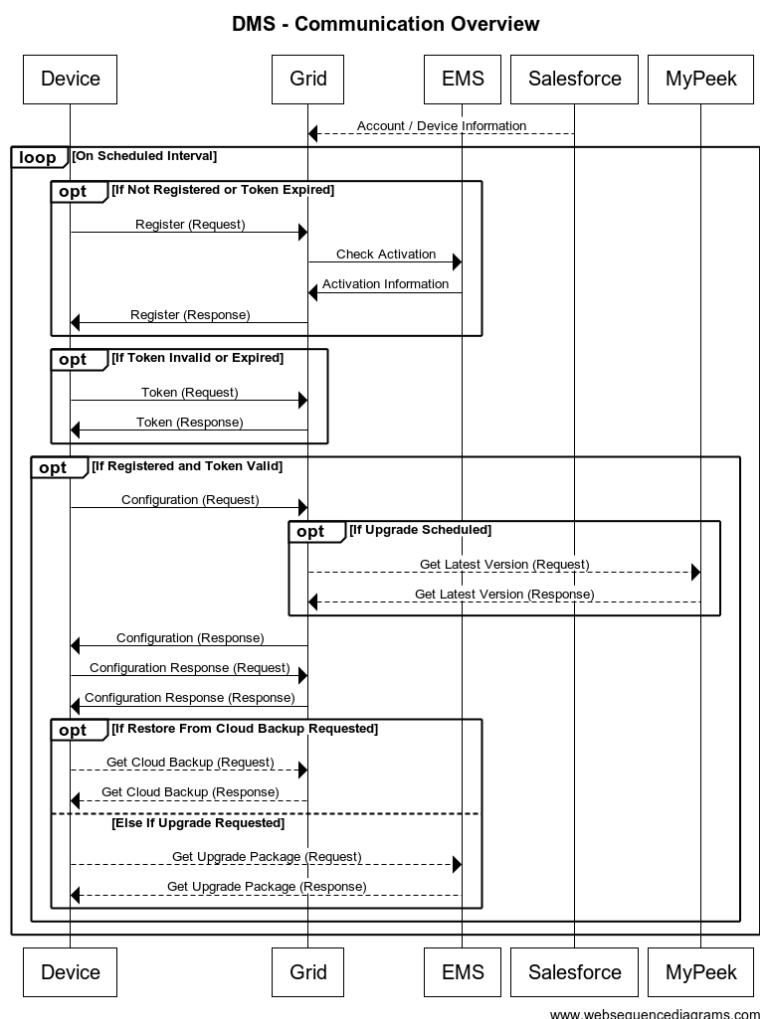
Grid Communications

The diagram below illustrates how communication flows between LiveWire and Grid.

LiveWire and Grid portal both communicate through a well-defined REST-API over HTTPS. If necessary, LiveWire can also be configured to use a proxy server using LiveAdmin.

All communications between LiveWire devices and Grid portal are initiated by the device. In other words, from the LiveWire point of view communication is outbound only. This is more secure, and practical, since most enterprise networks allow connections to be done from the inside-out, but not from the outside-in. This means that all actions initiated by the user through Grid portal are queued up until the device connects to Grid and requests the

configuration. The default interval for how often LiveWire checks the Grid for configuration changes is 10 minutes. The interval can be changed using the LiveAdmin utility.



Grid Registration

When a LiveWire is purchased, it is entered into Grid automatically, and associated with the customer account. If it is the first LiveWire the customer has purchased, the account is created, and an email invite will be sent with a link to login to the Grid portal account.

When a LiveWire device is first connected to the network and either gets an IP automatically through DHCP or is given a static IP address, it will reach out to Grid portal and register itself. During the registration process, Grid will attempt to activate the LiveWire, and Grid will return any configuration changes that were made using the DMS portal.

When a user logs in to Grid portal they will see all of their LiveWire devices. Even if the devices have not been connected to the network, configuration changes can still be made to the device. When the device does connect to Grid portal, the configuration changes will be applied to the LiveWire.

Grid Automatic Activation

During the registration process, Grid portal will automatically activate the LiveWire. The result of the activation is a license file that is installed onto the device. With the license installed, the user will not have to perform this process manually the first time they connect using Omnippeek. Instead, the user will be able to go right to work on creating a capture and using LiveWire.

If the LiveWire is factory reset, it will lose the activation file. In this case, when the LiveWire is given an IP address and registers with Grid portal, it will be given the license file again, and become activated.

Using Grid

Managing and Configuring LiveWire Devices

If you have one or more LiveWire devices, you can use Grid to manage and configure these devices from the cloud. In order to use Grid for the LiveAction appliance, you must first enable the *Enable Centralized Management* option in the LiveAdmin utility as described in [Enabling Grid Support](#) on page 28.

Note When *Centralized Management* is enabled, you can make local changes to the LiveWire device using the LiveAdmin utility; however, changes made with Grid will overwrite any local changes made with the utility.

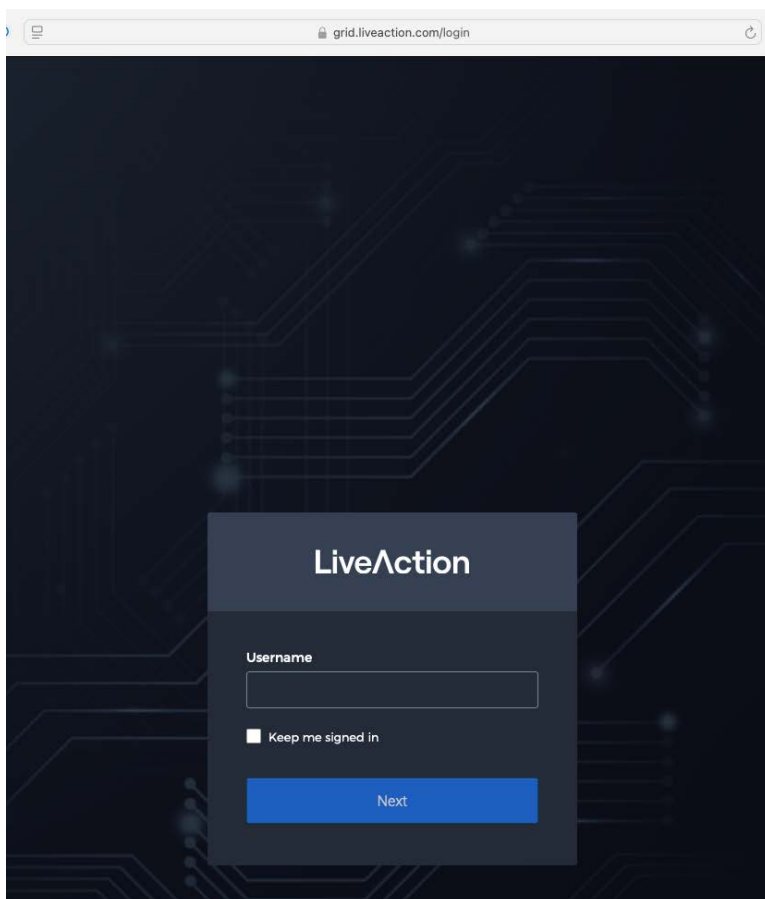
Note All Grid communications require that the LiveWire device has Internet access and is able to access various websites including <https://grid.liveaction.com> and <https://mypeek.liveaction.com> using TCP over port 443. If necessary, configure a DNS server to resolve the URLs above.

Additionally, all Grid communications are initiated by the LiveWire device, so it is not necessary to open a port in the firewall for communications.

To use Grid to manage and configure your LiveWire device:

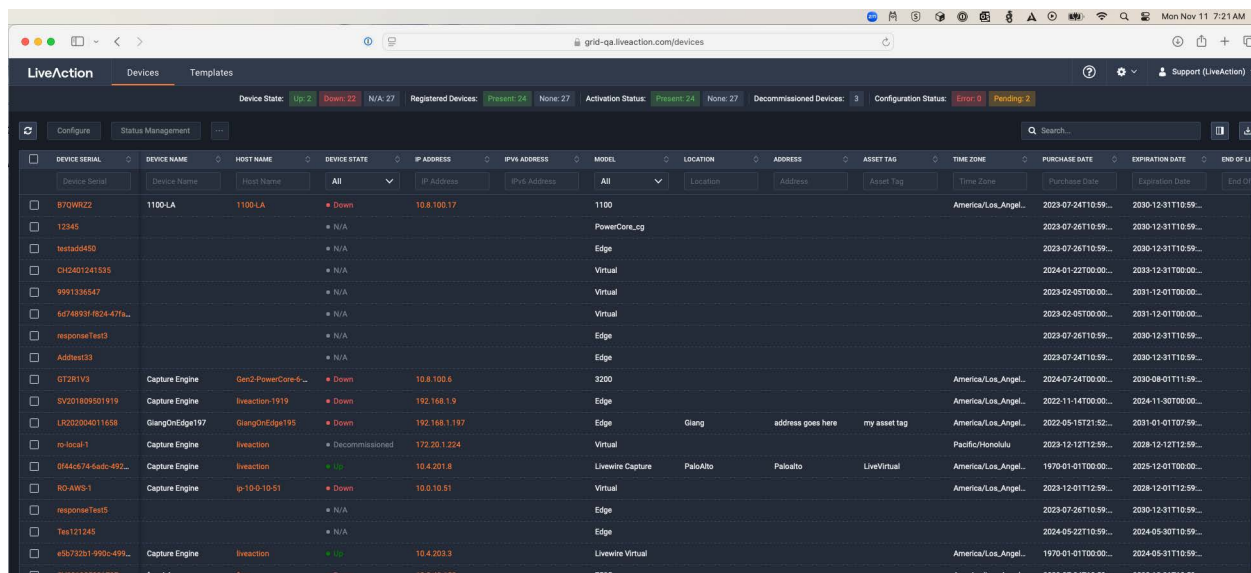
1. Login into Grid at <https://grid.liveaction.com>.

A LiveWire device record is added to Salesforce and it calls the register call. If the user does not already exist in the associated Okta Org a user is created and the credentials are sent out. Second, when an existing Grid user adds a new user to their account, credentials will be sent out.



Grid Devices Tab

Grid Devices tab displays the LiveWire devices associated with your account. A description of the available options and settings in the Devices tab is provided below.



The screenshot shows the LiveAction web interface. At the top, there's a navigation bar with 'LiveAction', 'Devices', and 'Templates'. Below this, a summary bar displays device statistics: Device State (Up: 2, Down: 22, N/A: 27), Registered Devices (Present: 24, None: 27), Activation Status (Present: 24, None: 27), Decommissioned Devices: 3, and Configuration Status (Error: 0, Pending: 2). A search bar and a 'Support (LiveAction)' link are also present. The main table lists devices with columns: Device Serial, Device Name, Host Name, Device State, IP Address, IPv6 Address, Model, Location, Address, Asset Tag, Time Zone, Purchase Date, Expiration Date, and End of Life. The table contains 15 rows of device data, including details like '1100-LA', '1100-LA', '1100-LA', '1100-LA', '1100-LA', '1100-LA', '1100-LA', '1100-LA', '1100-LA', '1100-LA', '1100-LA', '1100-LA', '1100-LA', '1100-LA', and '1100-LA'.

Device Serial	Device Name	Host Name	Device State	IP Address	IPv6 Address	Model	Location	Address	Asset Tag	Time Zone	Purchase Date	Expiration Date	End of Life
870WR22	1100-LA	1100-LA	Down	10.8.100.17		1100				America/Los_Angeles	2023-07-24T10:59...	2030-12-31T10:59...	
12345			N/A			PowerCore_Log					2023-07-26T10:59...	2030-12-31T10:59...	
testad5450			N/A			Edge					2023-07-26T10:59...	2030-12-31T10:59...	
CH2401241535			N/A			Virtual					2024-01-22T00:00...	2033-12-31T00:00...	
9991338547			N/A			Virtual					2023-02-05T00:00...	2031-12-01T00:00...	
6d74893f-b24-47fa...			N/A			Virtual					2023-02-05T00:00...	2031-12-01T00:00...	
responseTest3			N/A			Edge					2023-07-26T10:59...	2030-12-31T10:59...	
AdHesit33			N/A			Edge					2023-07-24T10:59...	2030-12-31T10:59...	
GT2R1V9	Capture Engine	Gen2-PowerCore-6...	Down	10.8.100.6		3200				America/Los_Angeles	2024-07-24T00:00...	2030-08-01T11:59...	
SV201809501919	Capture Engine	livesection-1919	Down	192.168.1.9		Edge				America/Los_Angeles	2022-11-14T00:00...	2024-11-30T00:00...	
LR202004011658	GiangOnEdge197	GiangOnEdge195	Down	192.168.1.197		Edge	Giang	address goes here	my asset tag	America/Los_Angeles	2022-05-15T21:52...	2031-01-01T07:59...	
ro-local-1	Capture Engine	livesection	Decommissioned	172.20.1.224		Virtual				Pacific/Honolulu	2023-12-12T12:59...	2028-12-12T12:59...	
0f4c674-64dc-492...	Capture Engine	livesection	Up	10.4.201.8		LiveWire Capture	PaloAlto	PaloAlto	LiveVirtual	America/Los_Angeles	1970-01-01T00:00...	2025-12-01T00:00...	
RO-AWS-1	Capture Engine	ip-10-0-10-51	Down	10.0.10.51		Virtual				America/Los_Angeles	2023-12-01T12:59...	2028-12-01T12:59...	
responseTest5			N/A			Edge					2023-07-26T10:59...	2030-12-31T10:59...	
Test121245			N/A			Edge					2024-05-22T10:59...	2024-05-30T10:59...	
e5b732b1-990c-49f...	Capture Engine	livesection	Up	10.4.201.3		LiveWire Virtual				America/Los_Angeles	1970-01-01T00:00...	2024-05-31T10:59...	
SV201809501927	Edge-LA	Edge	Down	10.8.60.148		7325				America/Los_Angeles	2024-02-21T10:59...	2030-12-31T10:59...	

Device State

The *Device State* displays whether the device is able to connect to the DMS portal.

- *Up*: Displays the number of devices that were able to connect to the Grid portal
- *Down*: Displays the number of devices Grid has not heard from in the last two intervals. The default interval is 10 minutes.
- *N/A*: Displays the number of devices that are not available to the DMS portal.

Registered Devices

The *Registered Devices* displays the number of devices that have registered with Grid.

- *Present*: Displays the number of devices that have registered with Grid.
- *None*: Displays the number of devices that have not registered with Grid.

Activation Status

The *Activation Status* displays the number of devices that have been activated.

- *Present*: Displays the number of devices that have been activated with Grid.
- *None*: Displays the number of devices that have not been activated with Grid.

JBOD Status

The *Devices* page also displays the health of JBODs attached to the device registered with Grid.

- *Online*: The JBOD and all the hard disks in the appliance are working properly
- *Offline*: The JBOD status is reported as Offline by the LiveWire device.
- *Degraded*: The LiveWire device reports that the JBOD appliance is in Degraded state and needs attention.

- N/A: No JBOD appliance is not connected to this LiveWire device.

LiveAction

Devices

Templates

Device State: Up: 1 Down: 2879 N/A: 120

Registered Devices: Present: 2880 None: 120

Activation Status: Present: 2880 None: 120

Decommissioned Devices: 0

Configuration Status: Error: 0 Pending: 0

Configure

Status Management

...

Search...

DEVICE SERIAL	DEVICE NAME	HOST NAME	DEVICE STATE	JBOD STATE	IP ADDRESS	IPv6 ADDRESS	MODEL	LOCATION	ADDRESS	ASSET TAG	TIME ZONE
Device Serial	Device Name	Host Name	All	Online	IP Address	IPv6 Address	All	Location	Address	Asset Tag	Time Zone
79c59265-4bd9-49c...	b-c411-lad01	b-c411-lad01	Up	Online	10.198.128.189		Edge				America/New York

JBOD Detailed Status

The user can drill down the JBOD status to determine the state of each disk in the JBOD appliance. User clicks on the device serial on the page and on the right hand side of the screen, the device configuration is presented. In that configuration section, the JBOD summary status is also displayed. The user can click on the JBOD status and drill down to each disk in that JBOD appliance.

IDRAC Settings

HostName:

-

Domain Name:

-

DNS Servers:

-

Time Zone:

-

TLS Version:

-

SNMP:

Disabled

Target Address:

-

NTP:

Disabled

NTP Server:

-

JBOD Details: Serial Number 35SBH04

Chassis Status:

Online

Chassis Model:

MD-2412

Storage Controller:

PERC H840 Adapter

Storage Controller:

PERC H841 Adapter

For each JBOD appliance, there are one or more storage controllers and each storage controller has one or more disks. User can click on each Storage controller to know the status of each disk.

Shared:0

Owner:oantonenko+scale-test@liveaction.com

Backup Settings

Backups enabled:Disabled

Destination:SFTP

SFTP Connection:-

Filename Prefix:b-c411-la01

Date and Time:2025-02-26T16:02:06.355Z

Backup Interval:1 days

Retention Limit:1 backups

Encryption:Not Configured

IDRAC Settings

HostName:-

Domain Name:-

DNS Servers:-

Time Zone:-

TLS Version:-

SNMP:Disabled

Target Address:-

NTP:Disabled

NTP Server:-

JBOD Details: Serial Number 35SBH04

Chassis Status:Online

Chassis Model:MD-2412

Storage Controller:PERC H840 Adapter

Physical Disk 0:0:11Online

Storage Controller:PERC H841 Adapter

Physical Disk 0:0:11Online

JBOD Details: Serial Number 201FG15

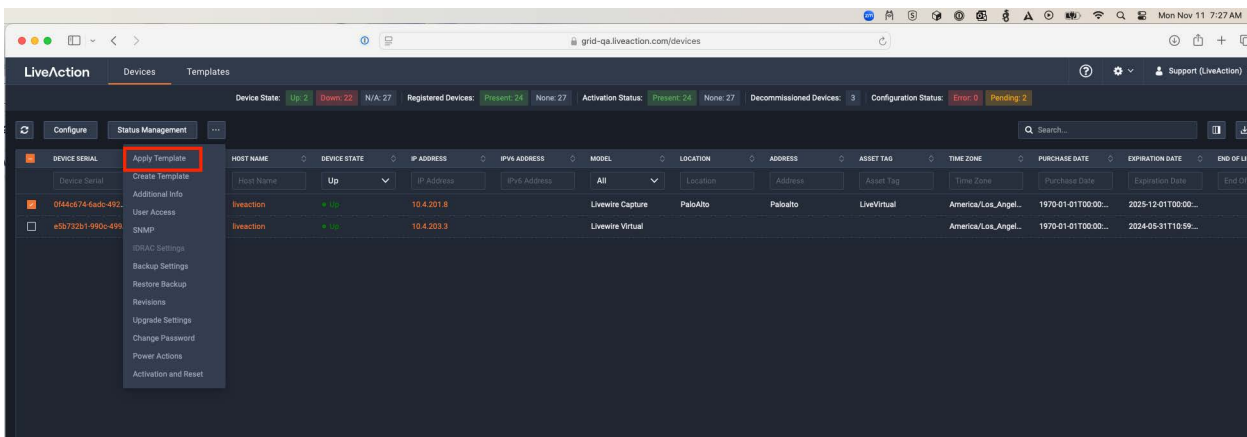
Chassis Status:Online

Chassis Model:MD-5654

Storage Controller:PERC H840 Adapter

Template

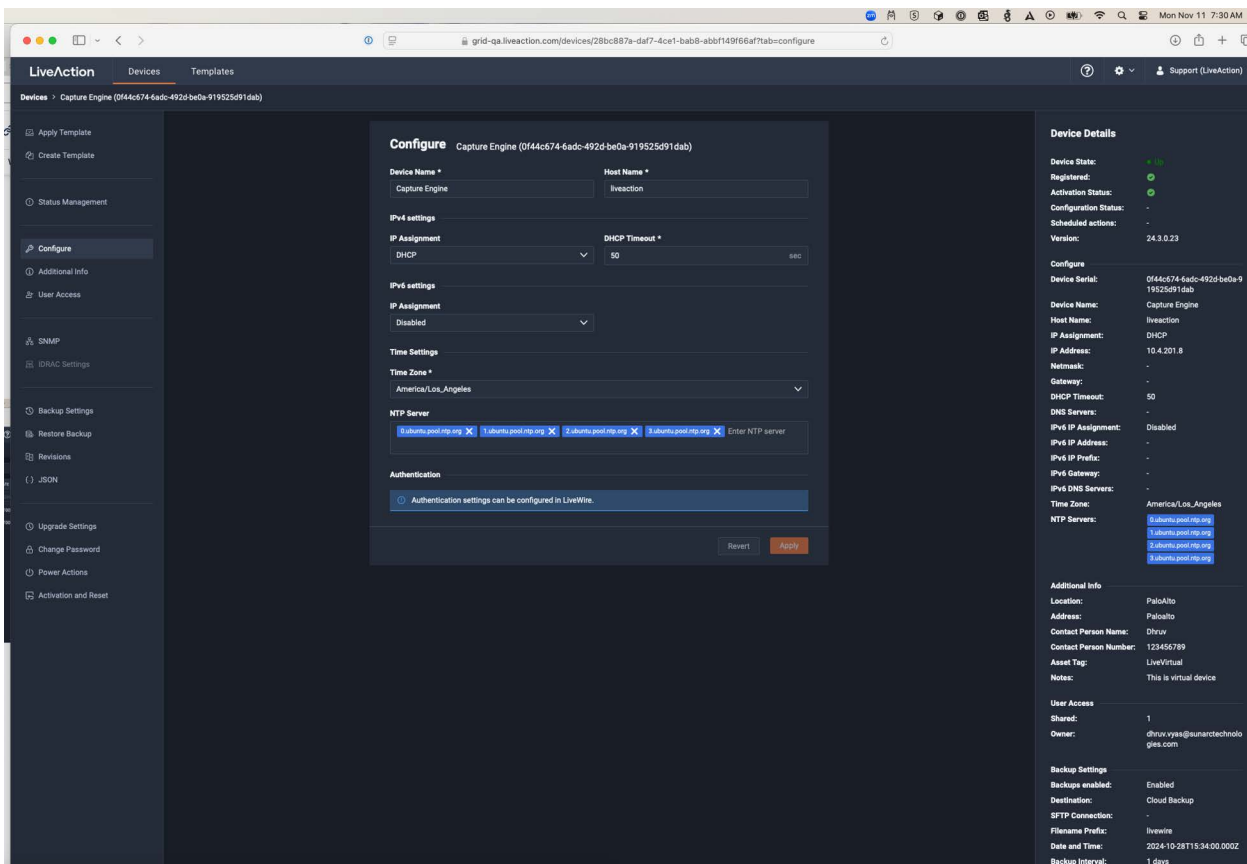
Click the *Template* button to select a template to apply to the selected devices. Templates allow you to apply version-specific settings to one or more devices. To create a template or modify an existing template, see [Grid Templates Tab](#) on page 21.



Configure

Click the *Configure* button to configure the selected devices. If multiple devices are selected, certain configuration options will not be available and greyed out; for example, the *Device Name*. There are tabs available for configuring *Settings*, *Time Settings*, and *Authentication*.

Settings



- *Device Name*: Displays the unique name given to the device. Type a new name to change the name.
- *Host Name*: Displays the host name of the device used by DNS.

-
- *Location*: Displays the general location of the device. Type a new location to change the location. We suggest entering the physical location of the device for the organization. For example, 'Office.'
 - *Address*: Displays the mailing address of the device. For example, 123 Main St., New York, NY.
 - *End of Life Date*: Displays the date when the device should be replaced.
 - *Asset Tag*: Displays the asset tag of the device. Type the asset tag to change it.
 - *Notes*: Type any notes to add to the device you are configuring.
 - *IP Assignment*: Displays the current IP assignment for the device. You can select either DHCP or Static. If the IP Assignment is DHCP, then the IP assignment is configured automatically via the DHCP server. If the IP Assignment is Static, then the options below are available:

Important! LiveWire is pre-configured to obtain an IP address automatically from a DHCP server; however, we strongly recommend the use of a static IP address for LiveWire. If DHCP is selected as the *IP Assignment*, and if the address should change on a new DHCP lease, then you must look up the new IP address assigned to LiveWire.

Note If *DHCP* is selected, you have approximately two minutes to connect LiveWire to your network in order for the DHCP server to assign an IP address. If an IP address is not assigned to LiveWire by the DHCP server within two minutes of being connected to the network, LiveWire defaults to a static address of 192.168.1.21. Please make sure LiveWire is connected to your network within the two minute time period from the time you click *Apply*. If you reboot LiveWire, the two minute clock is also reset.

- *Address*: Displays the IP address assigned to the device. Type a new address to change the IP address.
- *Netmask*: Displays the netmask address assigned to the device. A netmask address, combined with the IP address, defines the network associated with device. Type a new address to change the netmask address.
- *Gateway*: Displays the gateway address, also known as 'default gateway,' assigned to the device. When the device does not have an IP route for the destination, the IP packet is sent to this address as it does not know how to direct it locally. Only a single default gateway can be defined. Type a new address to change the gateway address.
- *DNS*: Enter the address of any DNS (Domain Name Server) servers to add to the configuration. A Domain Name Server translates domain names (e.g., <http://www.liveaction.com>) into an IP address. To add a DNS server, enter the address of the server, and click *Add Server*. Multiple DNS name servers can be defined. You can also edit or delete any defined DNS servers.
- *Add Server*: Click to add the DNS server to the configuration.
- *DNS Servers*: Displays the DNS servers added to the configuration.
- *Edit DNS*: Click to edit or update the DNS server in the configuration.
- *Delete DNS*: Click to delete the DNS server from the configuration.
- *DHCP Timeout*: Displays the amount of time (in seconds) the device will wait for a DHCP address.

Time Settings

The screenshot shows the LiveAction configuration interface for a device named "Capture Engine". The "Configure" tab is active, displaying various settings. The "Time Settings" section is highlighted with a red box, containing a "Time Zone" dropdown set to "America/Los_Angeles" and an "NTP Server" input field with four placeholder URLs. The "Device Details" panel on the right shows device information and a list of configured NTP servers.

Configure Capture Engine (0f44c674-6adc-492d-be0a-919525d91dab)

Device Name * Host Name *

IPv4 settings

IP Assignment DHCP Timeout * sec

IPv6 settings

IP Assignment

Time Settings

Time Zone *

NTP Server

[1.ubantu.pool.ntp.org](#) [2.ubantu.pool.ntp.org](#) [3.ubantu.pool.ntp.org](#) [4.ubantu.pool.ntp.org](#) Enter NTP server

Authentication

☐ Authentication settings can be configured in LiveWire.

Device Details

Device State: ✔ Up

Registered: ✔

Activation Status: ✔

Configuration Status: -

Scheduled actions: -

Version: 24.3.0.23

Configure

Device Serial: 0f44c674-6adc-492d-be0a-919525d91dab

Device Name: Capture Engine

Host Name: liveaction

IP Assignment: DHCP

IP Address: 10.4.201.8

Netmask: -

Gateway: -

DHCP Timeout: 50

DNS Servers: -

IPv6 IP Assignment: Disabled

IPv6 IP Address: -

IPv6 IP Prefix: -

IPv6 Gateway: -

IPv6 DNS Servers: -

Time Zone: America/Los_Angeles

NTP Servers:

[1.ubantu.pool.ntp.org](#)

[2.ubantu.pool.ntp.org](#)

[3.ubantu.pool.ntp.org](#)

[4.ubantu.pool.ntp.org](#)

Additional Info

Location: PaloAlto

Address: PaloAlto

Contact Person Name: Dhruv

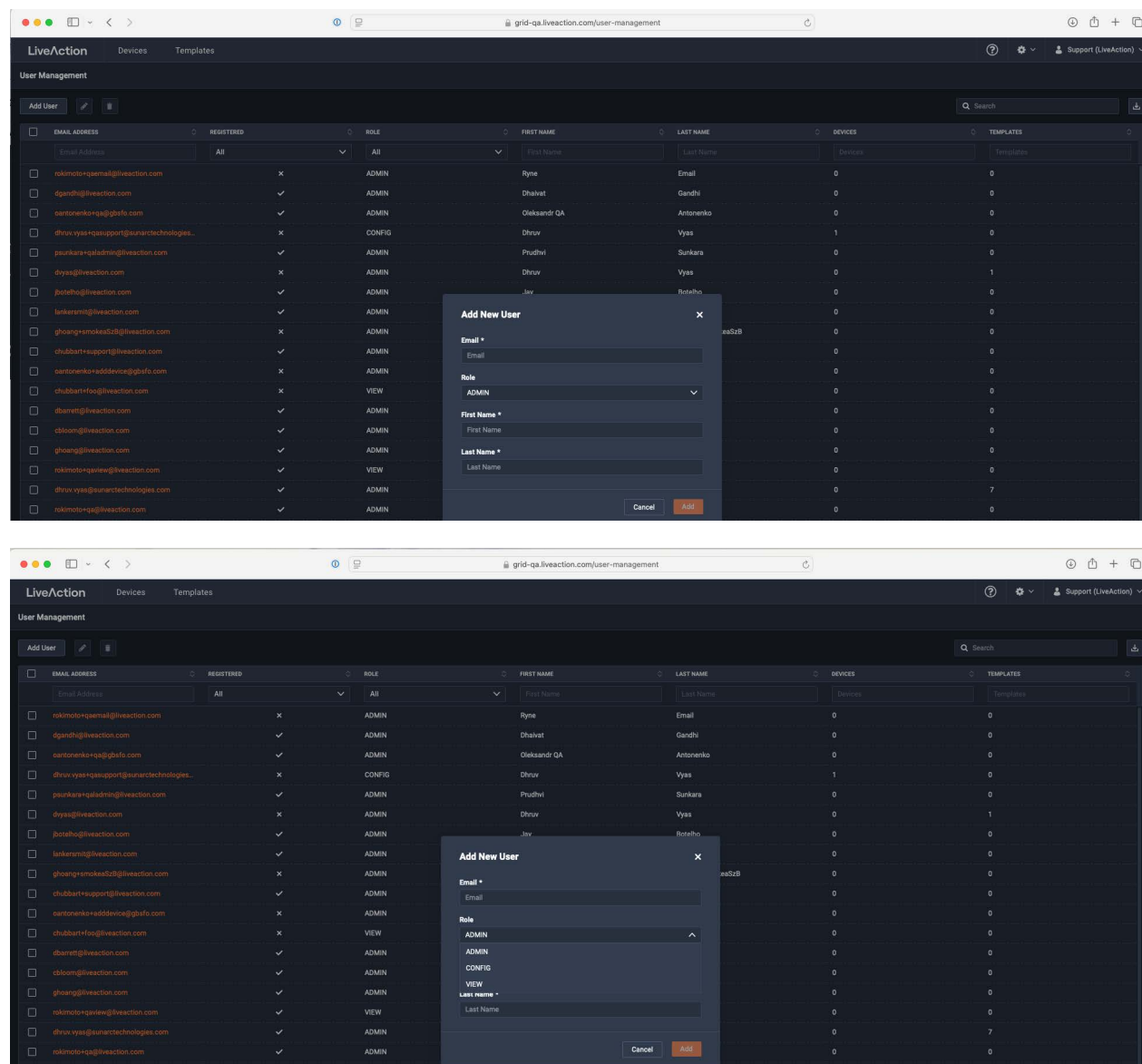
Contact Person Number: 123456789

Asset Tag: LiveVirtual

Notes: This is virtual device

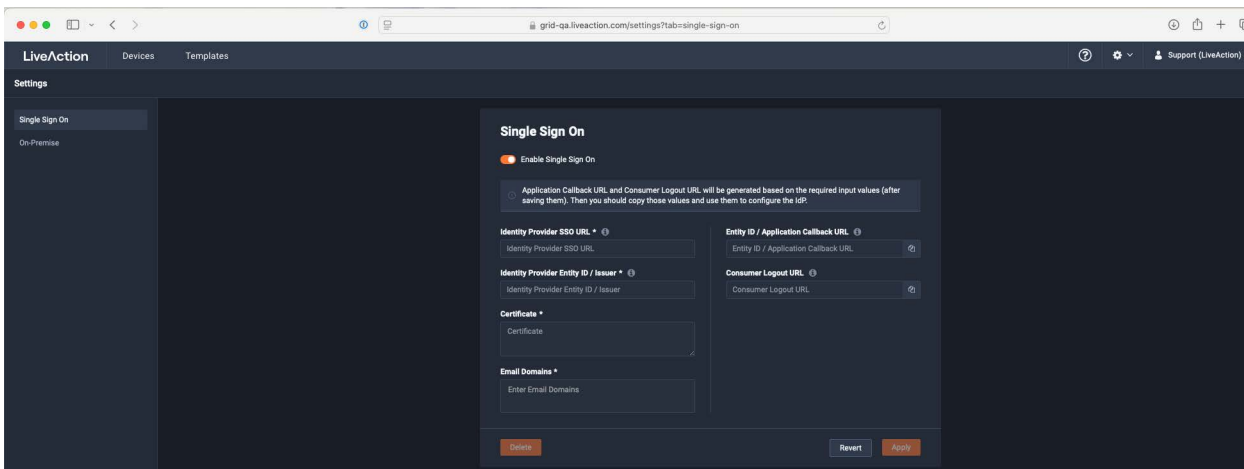
- **Time Zone:** Displays the time zone of the device. Select a different time zone to change the time zone.
- **NTP Server:** Enter the address of any NTP servers to add to the configuration, and then click *Add Server*.
- **NTP Servers:** Displays the list of NTP servers added to *Time Settings*. You can click the *Edit* icon to edit an NTP server in the list, or click the *Trash* icon to remove an NTP server from the list.

Authentication



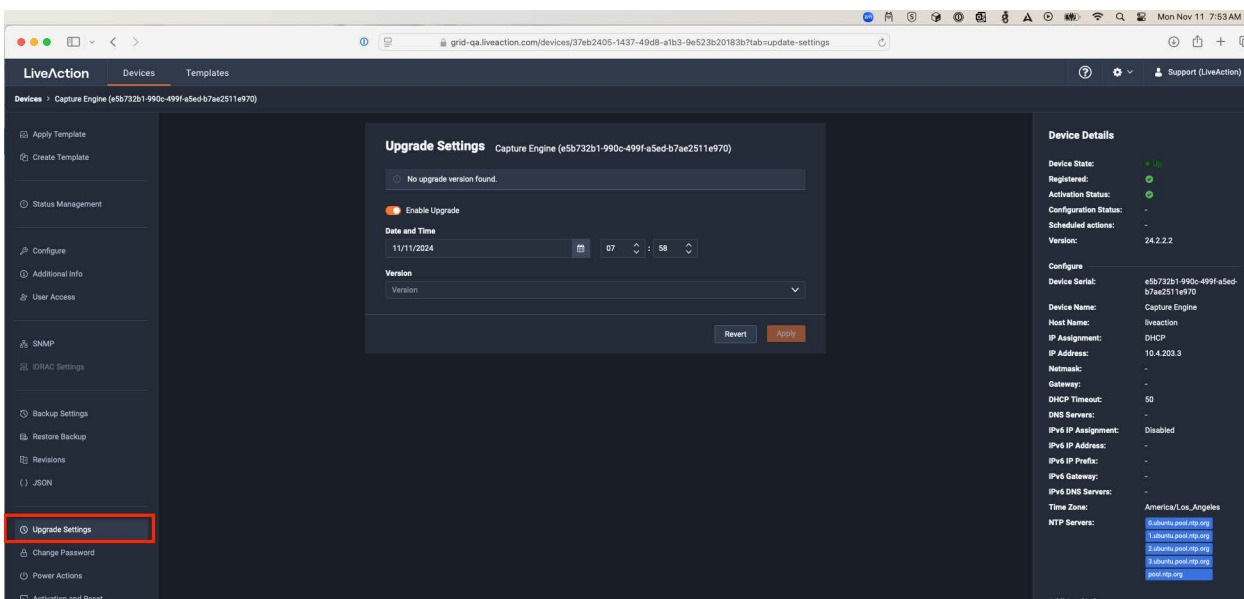
Grid supports adding users via the portal and these users will receive a welcome email from Okta with a link to login.

Additionally, an admin user can configure SAML based SSO access by navigating to Settings (gear icon) and selecting Settings. Users can follow the instructions on screen and configure their IDP.



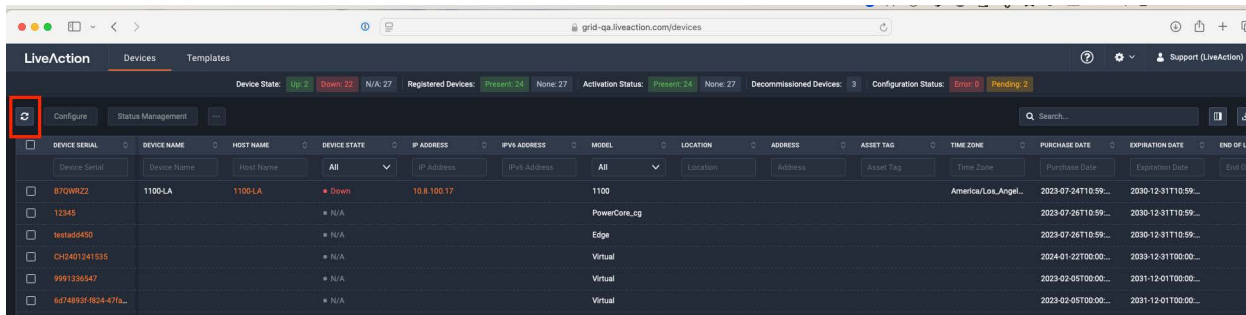
Upgrade

Click the *Upgrade* button to upgrade the selected appliance remotely through Grid. User can choose to upgrade to any newer version than what is running on the device. There is no capability to upgrade to a previously released version.



- *Disable*: Select to disable the upgrade on the selected devices.
- *Enable*: Select to enable the upgrade on the selected devices. If you enable the upgrade, you are presented with settings to specify the date and time the upgrade should take place. Because all communications are initiated from the device once every ten minutes, the upgrade will happen as the result of the device communicating with the network, sometime on or after the selected time.
- *Apply*: Click to save the changes to the selected devices.

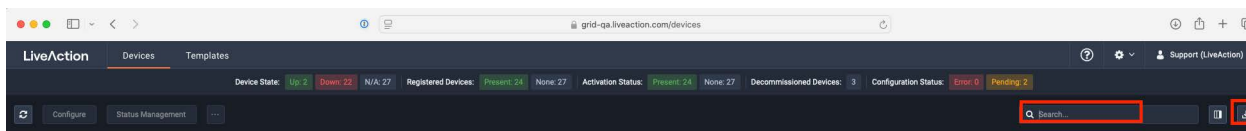
Refresh



Click the *Refresh* button to refresh the list of devices.

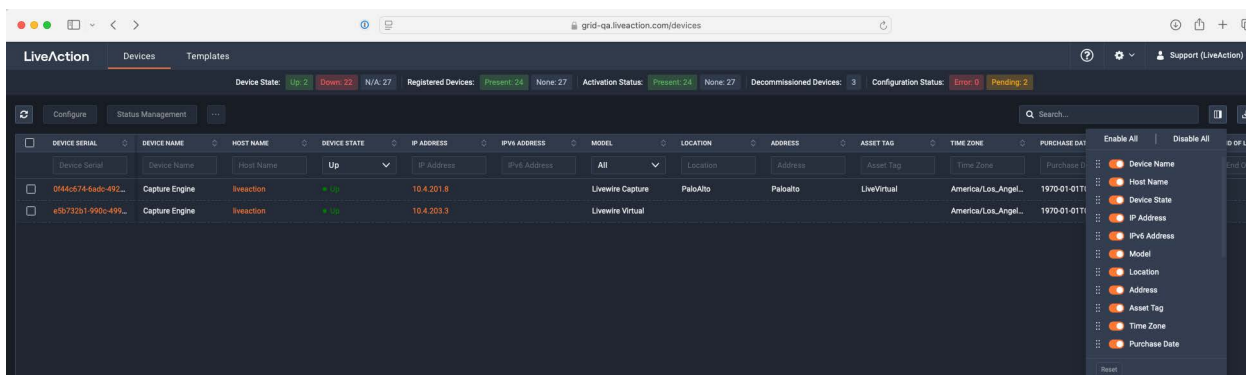
Search

Use the *Search* field to locate a specific device in the list of devices. Simply enter a text string to display all appliances that match the text string.



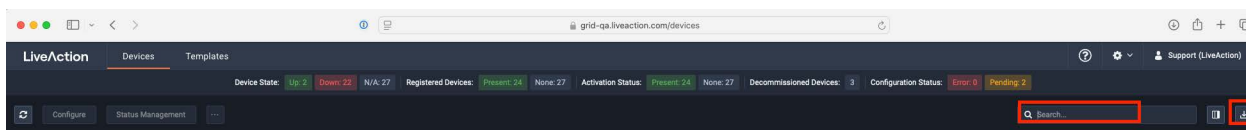
Display Columns

Click the *Display Columns* icon and then select the columns you want to display in the list of devices.



Export to CSV

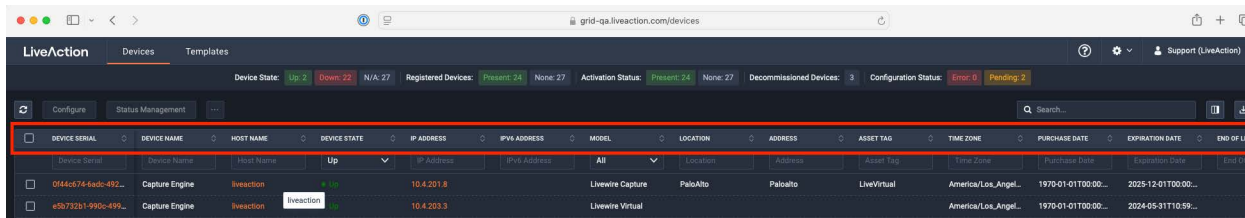
Click the *Download* icon to export list of devices as a .csv file.



Device Column Headings

Descriptions of the columns displayed in the list of devices are provided below.

Below each of the column headings is either a text box or list box that you can use to filter the devices displayed in the list of Devices. To filter using the text box, simply enter a text string to display the devices that match the text string. To filter using a list box, click the box and select an option to display the devices that match that option.



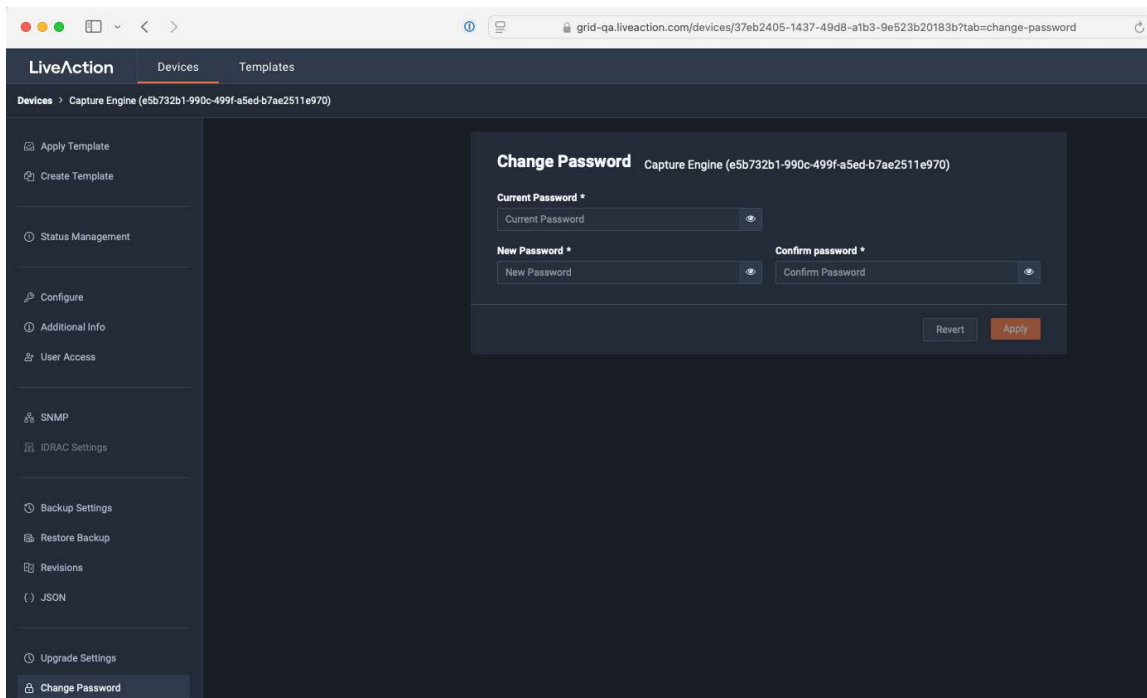
The screenshot shows the LiveAction web interface. At the top, there are tabs for 'Devices' and 'Templates'. Below the tabs, there are summary statistics: Device State (Up: 2, Down: 22, N/A: 27), Registered Devices (Present: 24, None: 27), Activation Status (Present: 24, None: 27), Decommissioned Devices: 3, and Configuration Status (Error: 0, Pending: 2). A search bar is located on the right. Below the statistics, there is a table with columns: Device Serial, Device Name, Host Name, Device State, IP Address, IPv6 Address, Model, Location, Address, Asset Tag, Time Zone, Purchase Date, Expiration Date, and End of Life. The table contains two rows of device data.

Device Serial	Device Name	Host Name	Device State	IP Address	IPv6 Address	Model	Location	Address	Asset Tag	Time Zone	Purchase Date	Expiration Date	End of Life
044dc74-6ad0-492...	Capture Engine	liveaction	Up	10.4.201.8		LiveWire Capture	PaloAlto	PaloAlto	LiveVirtual	America/Los_Angeles	1970-01-01T00:00:00...	2025-12-01T00:00:00...	
e19732b1-990b-499...	Capture Engine	liveaction	Up	10.4.203.3		LiveWire Virtual	PaloAlto	PaloAlto	LiveVirtual	America/Los_Angeles	1970-01-01T00:00:00...	2024-05-31T10:59:00...	

- *Device Serial*: Displays the serial number of the device.
- *Device Name*: Displays the name of the device.
- *Host Name*: Displays the host name of the device used by DNS.
- *Device State*: Displays whether the device is *Up* or *Down*. A device is up if it has contacted Grid in the last 25 minutes.
- *IP Address*: Displays the IP address of the device. The *IP Address* value is a link which can be used to connect directly to Omnipeek running on the device. This makes it easy to use Grid as a launch pad to access all of the devices being managed. It can also be used to discover the *IP Address* in the case where the device is set to DHCP, or for some other reason the *IP Address* is not known. The *IP Address* is provided by the device every time the device connects back to the portal, which by default is every 10 minutes. This way, if the *IP Address* of the device changes, the *IP Address* value displayed in the DMS portal will reflect that.
- *Model*: Displays the model of the device (*Edge*, *1100*, *3100*, or *Virtual*).
- *Location*: Displays the location of the device.
- *Address*: Displays the address of the device. Typically, this is the mailing address where the device is located.
- *Asset Tag*: Displays the asset tag of the device.
- *Time Zone*: Displays the time zone of the device.
- *Expiration Date*: Displays the date that the maintenance on the device will expire. Once the expiration date has passed, you can still access Grid and use it to manage most of the device configuration; however, until the maintenance is renewed, the device cannot be upgraded to a newer version. As LiveAction releases new versions a few times a year with significant improvements, we recommend keeping the devices up to date with the latest releases of the software.
- *End Of Life Date*: Displays the date for when the device should be replaced.
- *Notes*: Displays any notes entered for the device.
- *Version*: Displays the version number of the software installed on the device.
- *Engine Type*: Displays the type of device, which can be *LiveWire*, *LiveCapture*, or *LiveWire Virtual*.
- *Shared Users Count*: Displays the number of secondary users that have access to the device.
- *Scheduled Action(s)*: Displays any 'Actions' scheduled for the device.
- *Configuration Status*: Displays any status associated with configuration of the device.
- *Registered*: Displays a check mark if the device has been registered with LiveAction.
- *Activation Status*: Displays a check mark if the license on the device is valid and not expired.

Change Password

Select the *Change Password* option to change the password of the selected devices.

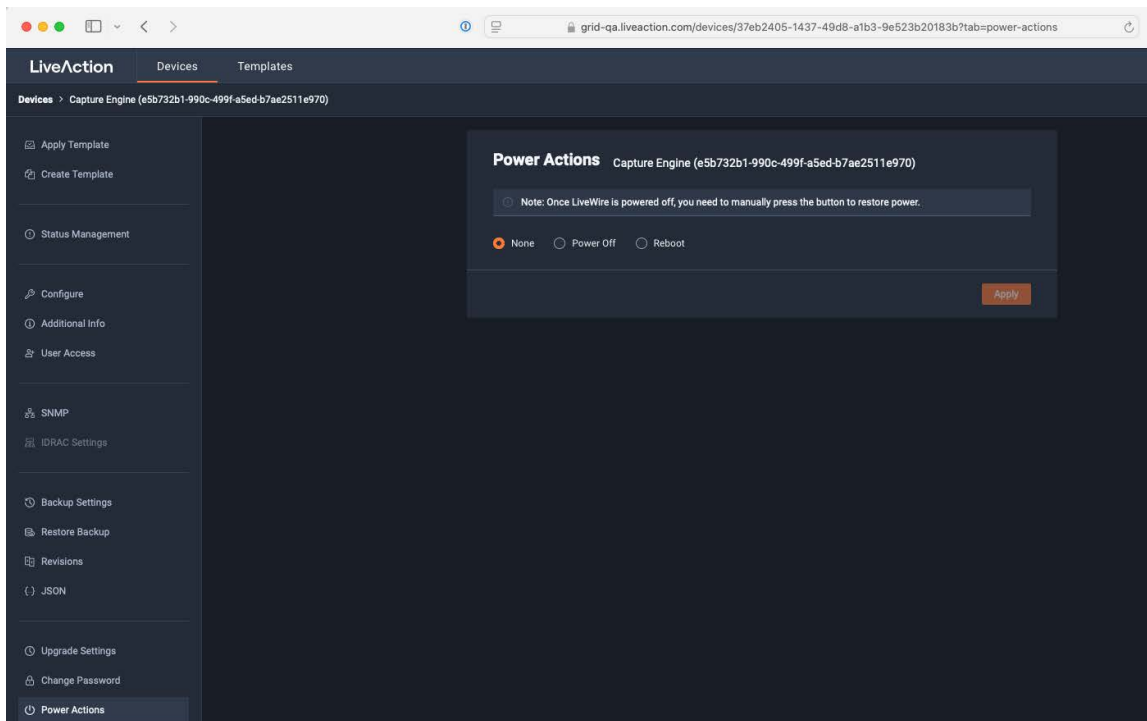


The screenshot shows the LiveAction web interface. The browser address bar displays the URL: `grid-qa.liveaction.com/devices/37eb2405-1437-49d8-a1b3-9e523b20183b?tab=change-password`. The interface has a dark theme. On the left is a sidebar with a menu containing options like 'Apply Template', 'Create Template', 'Status Management', 'Configure', 'Additional Info', 'User Access', 'SNMP', 'iDRAC Settings', 'Backup Settings', 'Restore Backup', 'Revisions', '.JSON', 'Upgrade Settings', and 'Change Password' (which is highlighted). The main content area shows the 'Change Password' form for a 'Capture Engine (e5b732b1-990c-499f-a5ed-b7ae2511e970)'. The form includes three input fields: 'Current Password *', 'New Password *', and 'Confirm password *'. Each field has a toggle icon to show or hide the password. At the bottom right of the form are 'Revert' and 'Apply' buttons.

- *Current Password*: Enter the current password.
- *New Password*: Enter the new password. The new password must meet the following requirements:
 - Must have 5 different characters than the last password.
 - Must be at least 6 characters.
 - Must contain at least 1 number
 - Must contain at least 1 uppercase character.
 - Must contain at least 1 lowercase character.
 - Must contain at least 1 special character.
- *Confirm Password*: Enter the new password again.

Power Actions

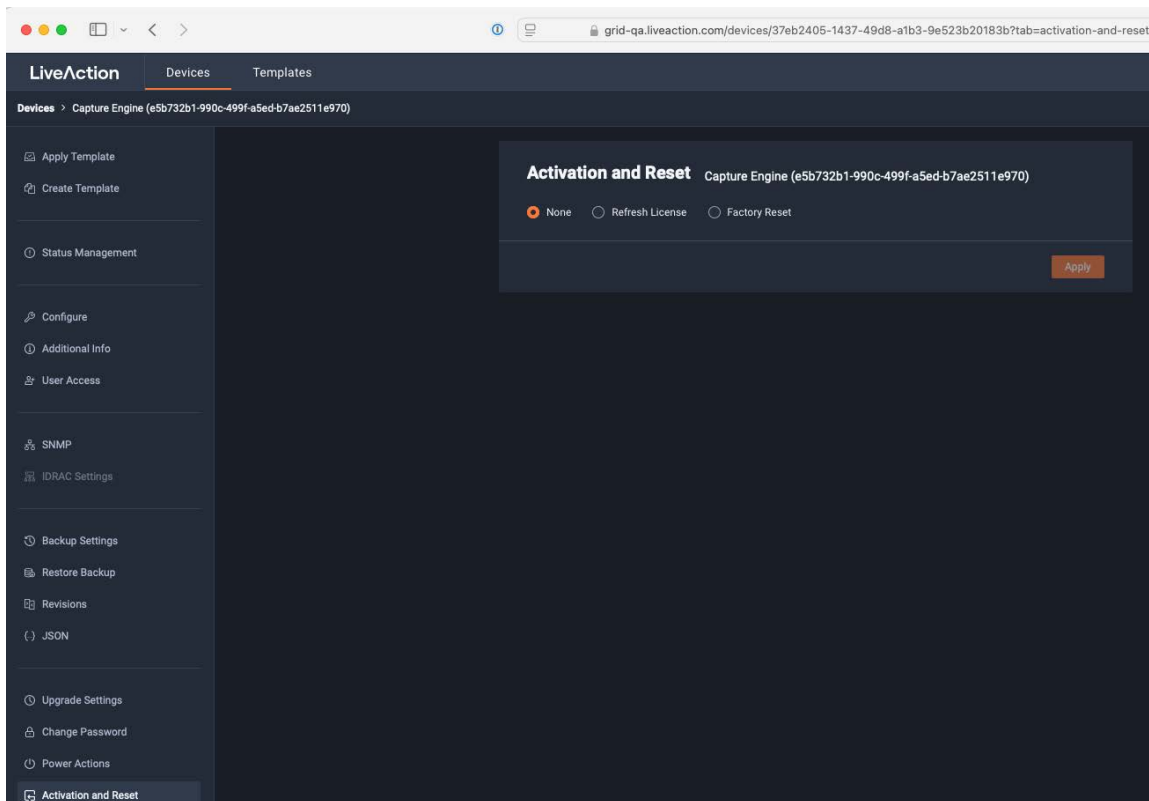
Select the *Power Actions* option to perform the actions below on the device.



- *None*: Select to not perform an action on the selected appliances.
- *Power Off*: Select to power off the selected device. Once the device is powered off, you must manually press the power-on button on each of the devices to power them back on.
- *Reboot*: Select to reboot the selected appliances.

Activation and Reset

Select the *Activations and Reset Actions* option to perform the actions below on the device.

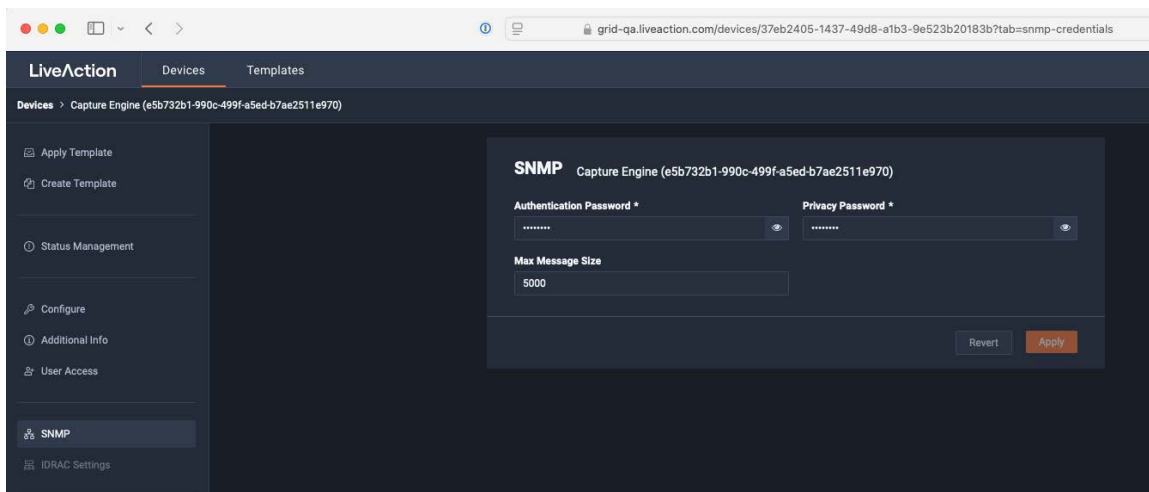


The screenshot shows the LiveAction web interface. The top navigation bar includes 'LiveAction', 'Devices', and 'Templates'. The breadcrumb trail is 'Devices > Capture Engine (e5b732b1-990c-499f-a5ed-b7ae2511e970)'. The left sidebar lists various configuration options: 'Apply Template', 'Create Template', 'Status Management', 'Configure', 'Additional Info', 'User Access', 'SNMP', 'iDRAC Settings', 'Backup Settings', 'Restore Backup', 'Revisions', '.JSON', 'Upgrade Settings', 'Change Password', 'Power Actions', and 'Activation and Reset' (which is highlighted). The main content area is titled 'Activation and Reset' for the device 'Capture Engine (e5b732b1-990c-499f-a5ed-b7ae2511e970)'. It contains three radio buttons: 'None' (selected), 'Refresh License', and 'Factory Reset'. An 'Apply' button is located at the bottom right of the configuration area.

- *None*: Select to not perform an action on the selected appliances.
- *Factory Reset*: Select to reset the selected appliances to their factory default settings.
- *Clear Activation ID*: Select the check box to clear the activation ID.

Important! If you select *Factory Reset* on a LiveWire Edge (or by either pressing the reset button or from the command line), then you will also need to also select *Clear Activation ID* for that appliance in Grid.

SNMP



The screenshot shows the LiveAction web interface with the 'SNMP' configuration page selected. The breadcrumb trail is 'Devices > Capture Engine (e5b732b1-990c-499f-a5ed-b7ae2511e970)'. The left sidebar is the same as in the previous screenshot, with 'SNMP' highlighted. The main content area is titled 'SNMP' for the device 'Capture Engine (e5b732b1-990c-499f-a5ed-b7ae2511e970)'. It contains two password fields: 'Authentication Password *' and 'Privacy Password *', both with masked characters and toggle icons. Below these is a 'Max Message Size' field with the value '5000'. At the bottom right, there are 'Revert' and 'Apply' buttons.

Backup Settings

Select the *Backup Settings* option to configure backup options for a specific device.

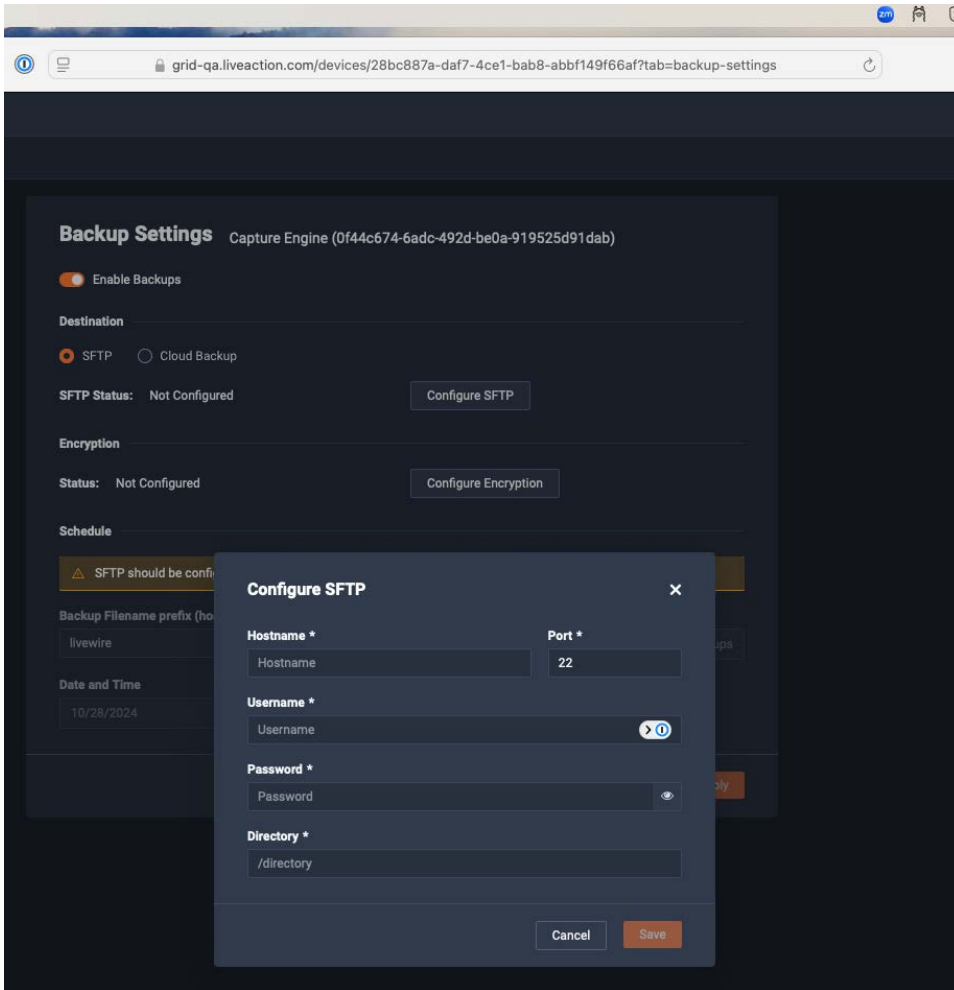
The screenshot shows the 'Backup Settings' page for a 'Capture Engine' device. The left sidebar has 'Backup Settings' highlighted. The main content area is titled 'Backup Settings' and includes a toggle for 'Enable Backups'. Below this, there are sections for 'Destination' (SFTP or Cloud Backup), 'Encryption' (Status: Not Configured), and 'Schedule' (Backup Filename prefix, Backup Interval, Retention Limit, Date and Time). A 'Revert' button and an 'Apply' button are at the bottom. The right sidebar shows 'Device Details' including Device State, Registered, Activation Status, Configuration Status, Scheduled actions, Version, and various network settings like IP Address, Netmask, Gateway, DHCP Timeout, DNS Servers, and NTP Servers.

- *Enable backups* - A toggle to enable or disable configuration backup
- Destination
 - *SFTP*

This screenshot shows the 'Backup Settings' page with the 'SFTP' option selected. A 'SECURITY SETTINGS' dialog box is open, prompting the user to 'Encrypt backups' and enter a 'Password' and 'Repeat Password'. The background settings are partially visible, showing 'SFTP Status: Not Configured' and a message 'SFTP should be configured first'.

Customers can configure backups to be sent to an SFTP server of their choice inside their environment.

- *SFTP Status* - Indicates if SFTP server is configured.



- *SFTP Status* - Indicates if SFTP server is configured or not
- *Configure SFTP* field:
 - Hostname* - the hostname of the SFTP server
 - Port* - the port number of the server FTP application
 - Username* - the username for SFTP user
 - Password* - the password for the SFTP user
 - Directory* - Where the backups are to be stored on the SFTP server
- *Cloud Backup* - When selected, the configuration backup is stored in Grid SaaS as an encrypted backup.
- *Schedule* - The frequency of backup and how many backups to be stored and a time selector for the backup needs to be taken.

Restore Backup

Users may introduce changes to the configuration that is not desired and want the ability to revert to an older configuration state. Restore backup allows users to be able to choose a backup version of the configuration. When backups are configured, the list of backups for each device is visible in this section. The list includes

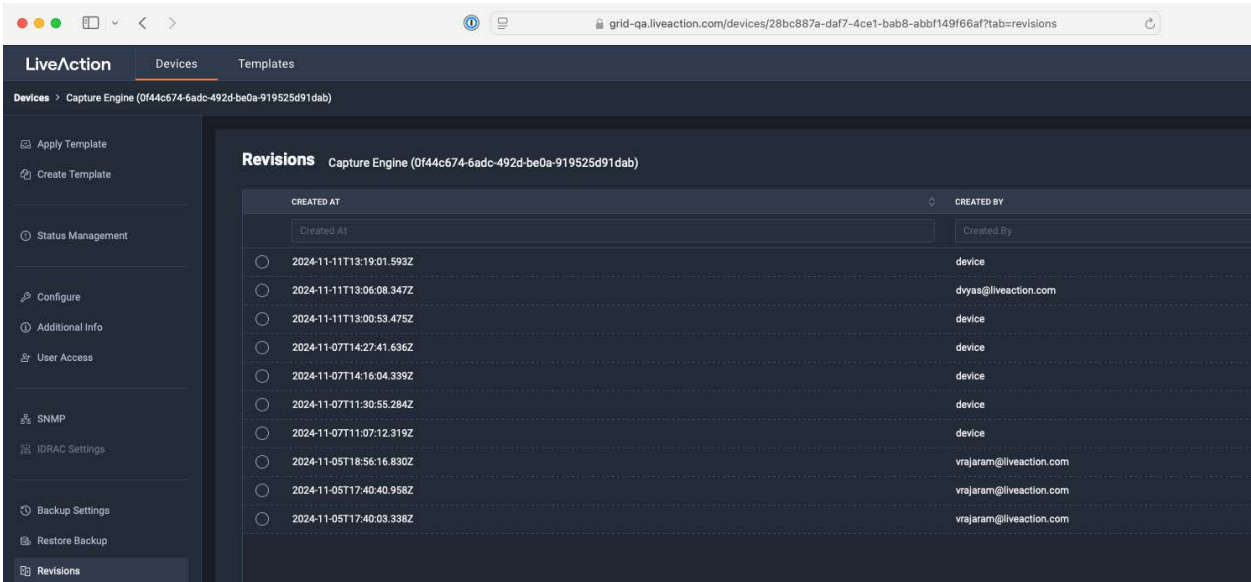
1. *Status* - indicates whether the backup is successful or not
2. *Filename* - the filename of the backup file
3. *Backup Time* - When the backup took place
4. *Location* - The location of the backup file (indicating the full path for the file)
5. *Action* - A user can select a backup and apply that configuration to the device.

Revisions

Admin users can click *Revisions* to view the configuration changes made against a LiveWire device.

Admin users can create and edit configuration of LiveWire devices from the Grid UI. When a LiveWire device is connected to Grid, it receives any configuration updates made on the LiveWire device and is stored as a revision. Any configuration made on the device and pushed to Grid is shown as Created by the device.

If an admin user creates or updates the device configuration from Grid, a copy of the device configuration made by that user is also stored under *Revisions*.



Application Config

The current running configuration of a LiveWire device is shown here. If the device is running 24.3 or newer version, then all the configuration (including, Alerts, alarms, Filters, Captures etc) are shown in the section as a JSON document. If the device is running an older version, then only the ACL and user permission configuration is shown in this section.

The screenshot displays the LiveAction web interface for configuring a device. The browser address bar shows the URL: `grid-qa.liveaction.com/devices/28bc887a-daf7-4ce1-bab8-abb149f66aff?tab=config-json`.

Left Sidebar (Navigation):

- Apply Template
- Create Template
- Status Management
- Configure
- Additional Info
- User Access
- SNMP
- DRAC Settings
- Backup Settings
- Restore Backup
- Revisions
- JSON**
- Upgrade Settings
- Change Password
- Power Actions
- Activation and Reset

Central JSON Editor:

JSON Capture Engine (0f44c674-6adc-492d-be0a-919525d91dab)

```
1 {
2   "engineAlarms": {
3     "alarms": [
4       {
5         "id": "E1B48467-0C9F-4C91-A030-4CEAE1F0934D",
6         "name": "ICMP Dest Unreach",
7         "trackType": 3,
8         "created": "2003-10-14T21:48:27.46875000Z",
9         "modified": "2003-10-14T21:48:27.46875000Z",
10        "id": "7A758D85-28F6-49F6-820A-406137885BC",
11        "conditions": [
12          {
13            "conditionType": 3,
14            "enabled": true,
15            "duration": 1,
16            "comparisonType": 1,
17            "value": 1,
18            "severity": 0,
19          },
20        ],
21        "conditionType": 1,
22        "enabled": true,
23        "duration": 1,
24        "comparisonType": 3,
25        "value": 1,
26        "severity": 0,
27      },
28      {
29        "conditionType": 2,
30        "enabled": true,
31        "duration": 1,
32        "comparisonType": 3,
33        "value": 10,
34        "severity": 0,
35      },
36    ],
37    "statisticsTracker": {
38      "id": "7D5C4632-EF09-4395-A66A-71A7F5618C05",
39      "statisticsType": 6,
40      "history": 60,
41      "summary": {
```

Right Sidebar (Device Details):

Device Status:

- Device Status: + Info
- Registered: ✔
- Activation Status: ✔
- Configuration Status: -
- Scheduled actions: -
- Version: 24.3.0.23

Configure:

- Device Serial: 0f44c674-6adc-492d-be0a-919525d91dab
- Device Name: Capture Engine
- Host Name: liveaction
- IP Assignment: DHCP
- IP Address: 10.4.201.8
- Netmask: -
- Gateway: -
- DHCP Timeout: 50
- DNS Servers: -
- IPv6 IP Assignment: Disabled
- IPv6 IP Address: -
- IPv6 IP Prefix: -
- IPv6 Gateway: -
- IPv6 DNS Servers: -
- Time Zone: America/Los_Angeles
- NTP Servers: [3.ubuntu.pool.ntp.org](#), [1.ubuntu.pool.ntp.org](#), [2.ubuntu.pool.ntp.org](#), [3.ubuntu.pool.ntp.org](#)

Additional Info:

- Location: PaloAlto
- Address: Paloalto
- Contact Person Name: Dhruv
- Contact Person Number: 123456789
- Asset Tag: LiveVirtual
- Notes: This is virtual device

User Access:

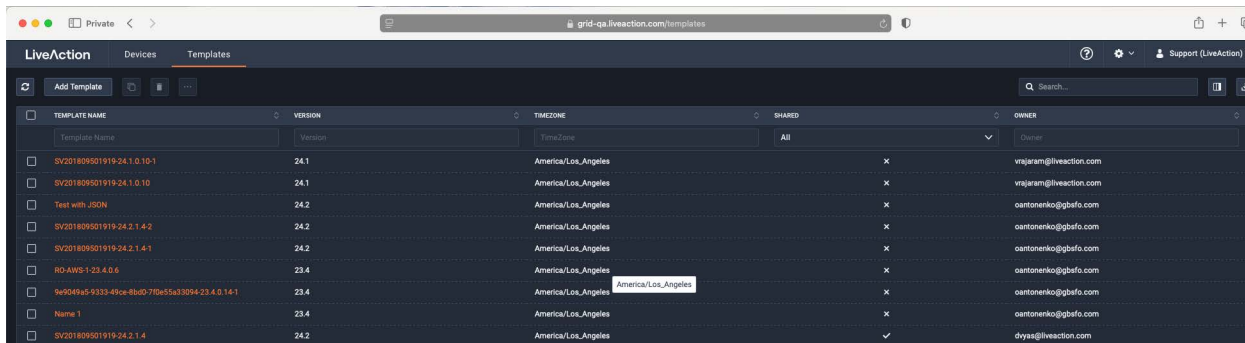
- Shared: 1
- Owner: dhruv.vyas@sunarctechnologies.com

Backup Settings:

- Backups enabled: Enabled

Grid Templates Tab

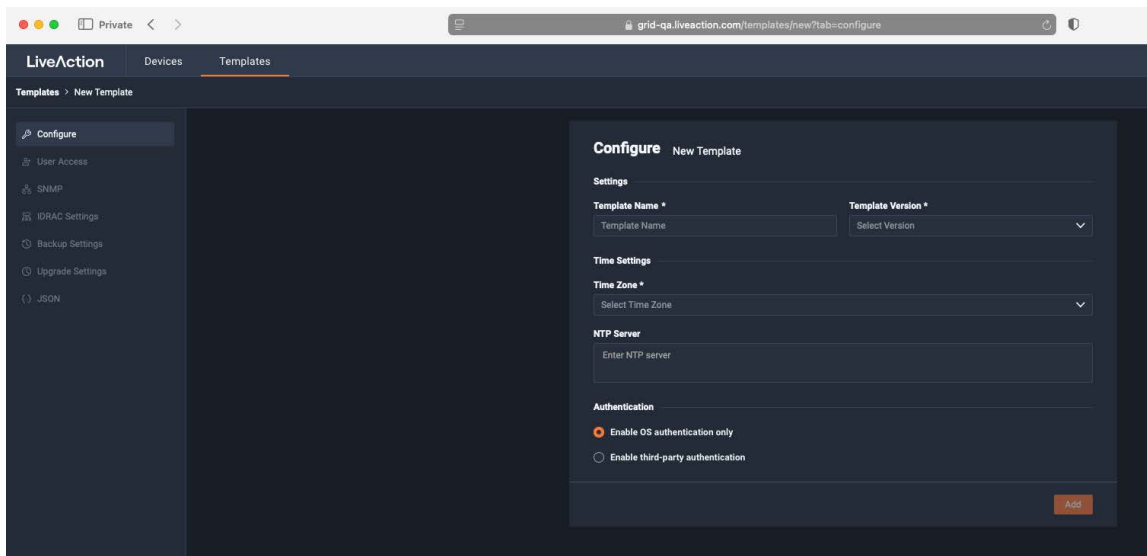
The *Grid Templates* tab displays the templates associated with your account. Ten plates allow you to configure settings independent of a particular device, and then apply the template, and thus the settings, to a device, or multiple devices in bulk at the same time. A description of each of the available options and settings in the *Templates* tab is provided below:



TEMPLATE NAME	VERSION	TIMEZONE	SHARED	OWNER
Template Name	Version	TimeZone	All	Owner
SV201809501919-24.1.0.10-1	24.1	America/Los_Angeles	X	vrajaram@liveaction.com
SV201809501919-24.1.0.10	24.1	America/Los_Angeles	X	vrajaram@liveaction.com
Test with JSON	24.2	America/Los_Angeles	X	cantonenko@gbfo.com
SV201809501919-24.2.1.4.2	24.2	America/Los_Angeles	X	cantonenko@gbfo.com
SV201809501919-24.2.1.4.1	24.2	America/Los_Angeles	X	cantonenko@gbfo.com
RD-AWS-1-23.4.0.6	23.4	America/Los_Angeles	X	cantonenko@gbfo.com
9e904945-9333-49ce-8bd0-776e55a33094-23.4.0.16-1	23.4	America/Los_Angeles	X	cantonenko@gbfo.com
Name 1	23.4	America/Los_Angeles	X	cantonenko@gbfo.com
SV201809501919-24.2.1.4	24.2	America/Los_Angeles	✓	dyas@liveaction.com

Add Template

Click the *Add Template* button to display the *Add Template* dialog to add a new template to the configuration.



The 'Configure New Template' dialog is shown with the following fields and options:

- Settings**
 - Template Name ***: A text input field with a placeholder 'Template Name'.
 - Template Version ***: A dropdown menu with a placeholder 'Select Version'.
- Time Settings**
 - Time Zone ***: A dropdown menu with a placeholder 'Select Time Zone'.
- NTP Server**
 - A text input field with a placeholder 'Enter NTP server'.
- Authentication**
 - ☒ Enable OS authentication only
 - ☐ Enable third-party authentication
- Add**: An orange button at the bottom right.

- *Template Name*: Type a name for the template.
- *Template Version*: Click to select the version of the template you are configuring.
- *Timezone*: Click to select the timezone for the template.
- *NTP Server*: Enter the address of any NTP servers to add to the configuration, and then click *Add Server*.
- *NTP Servers*: Displays the list of NTP servers added to *Settings*. You can click the *Edit* icon to edit an NTP server in the list, or click the *Trash* icon to remove an NTP server from the list.

Authentication

Note Authentication configuration has been disabled on Grid beginning with version 24.2.0. To configure authentication, please follow instructions in [How to configure Third-Party Authentication for many LiveWire devices](#) on page 36.

The screenshot shows the 'Configure' page for a 'New Template'. It includes sections for 'Settings', 'Time Settings', 'NTP Server', and 'Authentication'. The 'Authentication' section has two radio buttons: 'Enable OS authentication only' and 'Enable third-party authentication'. Below these are an 'Add' button, a trash icon, and a search bar. At the bottom is a table with columns 'NAME', 'TYPE', and 'IN USE', which is currently empty with a 'No Data' message. An 'Add' button is also at the bottom right of the table area.

Configure New Template

Settings

Template Name * Template Version *

Time Settings

Time Zone *

NTP Server

Authentication

☐ Enable OS authentication only

☒ Enable third-party authentication

<input type="checkbox"/>	NAME	TYPE	IN USE
No Data			

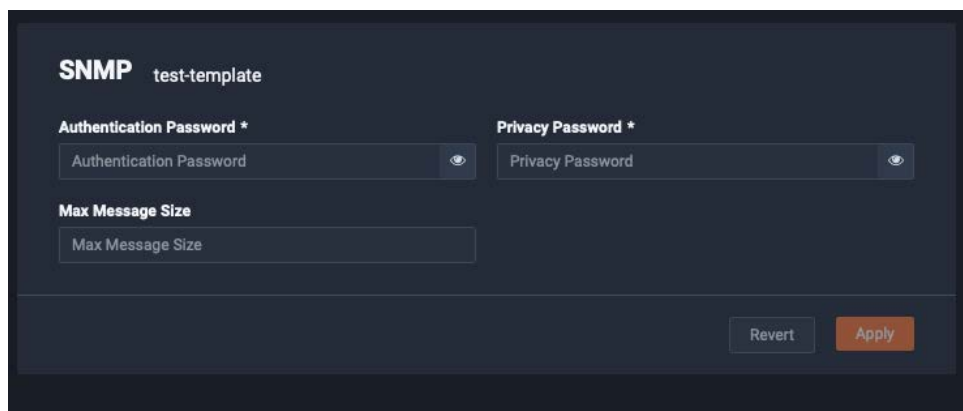
- *Enable OS authentication only*: Select this option to use the local OS authentication.
- *Enable third-party authentication*: Select this option to use TACACS+ or RADIUS authentication. If this option is selected, click *Add* to configure the new authentication setting.
- *Add*: Click to add a new authentication setting. You will need to configure the new authentication setting.
- *Search*: Enter the text string to search the list of authentication settings.
- *Name*: Displays the name of the authentication setting.
- *Type*: Displays the type of authentication, which can be either 'RADIUS' or 'TACACS+'.
- *Host*: Displays the host of the authentication setting.

- *Port*: Displays the port of the authentication setting.
- *Secret*: Displays the secret key of the authentication setting.
- *In Use*: Displays whether or not the authentication setting is in use.
- *Action*: Click the *Edit* icon to edit the authentication setting, or click the *Trash* icon to delete the authentication setting.
- *Save*: Click to save the authentication setting.

User Access

The *User Access* setting is similar to the *Authentication* section above where the admin user can configure additional users and set their roles.

SNMP



The screenshot shows a dark-themed configuration window titled "SNMP test-template". It contains three input fields: "Authentication Password *" with an eye icon, "Privacy Password *" with an eye icon, and "Max Message Size". At the bottom right, there are "Revert" and "Apply" buttons.

Admin can configure SNMP settings such as:

- Authentication password
- Privacy password
- Max Message size

IDRAC Settings

The Integrated Remote Access Controller (iDRAC) firmware and hardware built into LiveWire (LiveWire Core/PowerCore only) lets you remotely access LiveWire as if you were in the same room as the LiveWire. Using an Internet browser, you can easily perform tasks such as accessing a remote console, reimaging LiveWire, rebooting, shutting down, and starting LiveWire (even if LiveWire is off).

These settings are only applicable to physical appliances and not for Virtual ones. These are Dell hardware settings.

IDRAC Settings

test-template

Time Zone *

Select Time Zone

DNS Server 1

DNS Server 1

DNS Server 2

DNS Server 2

Web Server TLS Version *

Select Version

☐

Host Header Check

Update Settings

☒ Enable Updates

Update Proxy Server *

Proxy Server

Update Proxy User *

Username

Update Proxy Password *

Password

SNMP

☒ Enable SNMP

☐ Enable SNMP Alert 1

☒ Enable SNMP Alert 2

SNMP Community *

SNMP Community

Alert 1 Target Address *

Alert 1 Target Address

Alert 2 Target Address *

Alert 2 Target Address

NTP

☐ Enable NTP

NTP Server *

NTP Server

Event Filters

Alert

Example: -c idrac.alert.storage.stor.critical -n snmp -a none

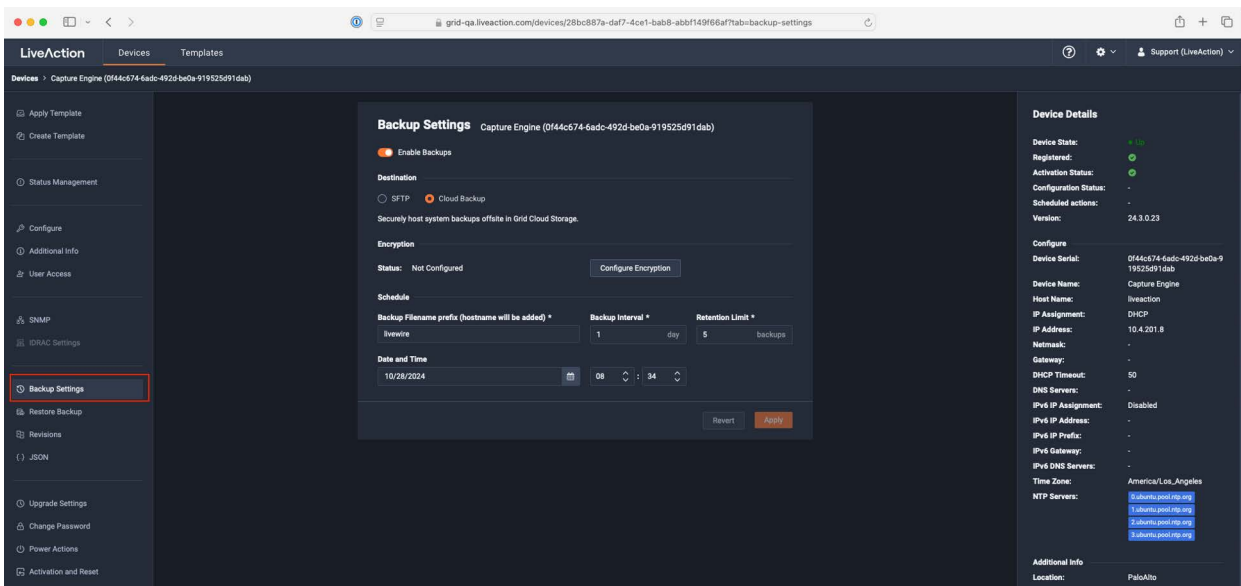
+

Revert

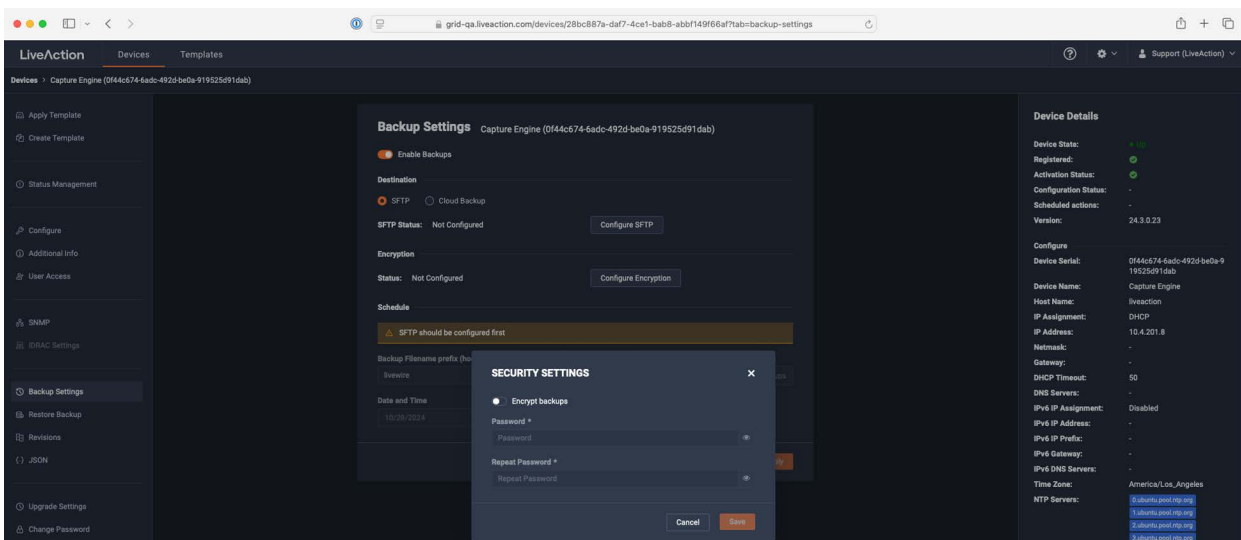
Apply

Backup Settings

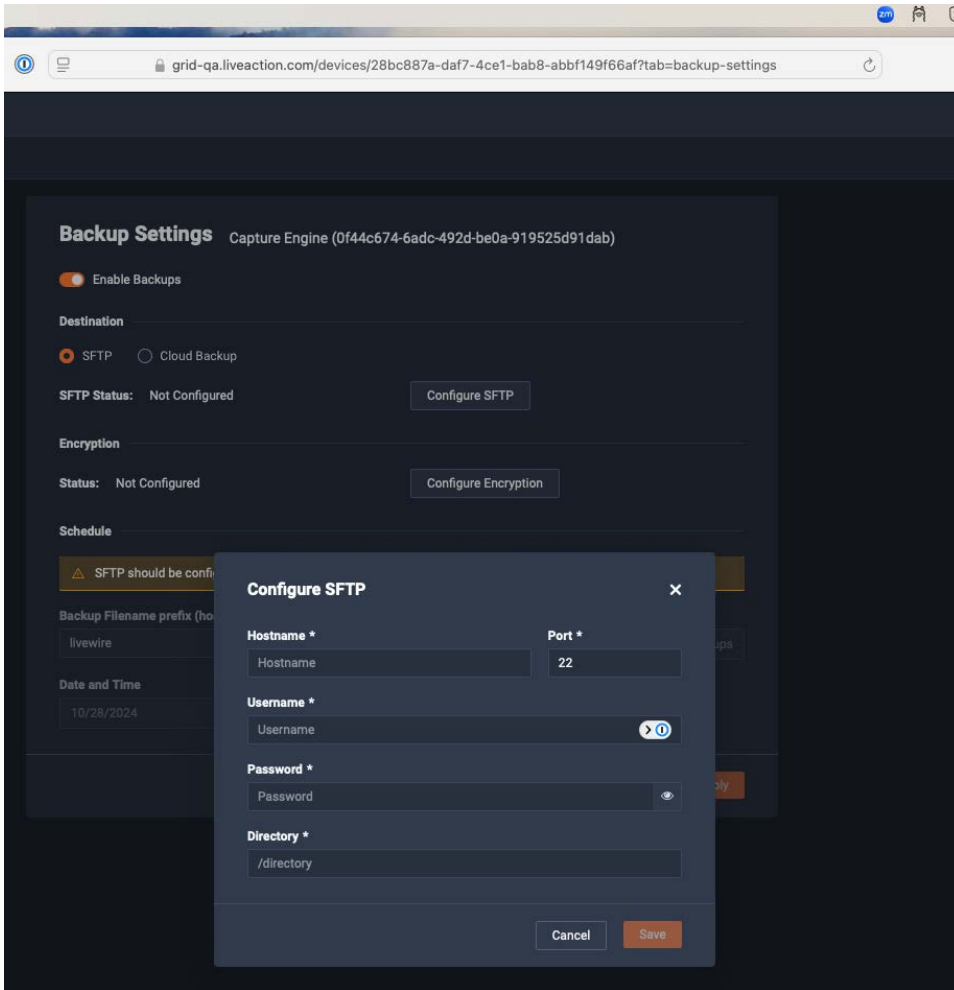
Select the *Backup Settings* option to configure backup options for a specific device.



- *Enable backups* - A toggle to enable or disable configuration backup
- Destination
 - *SFTP*



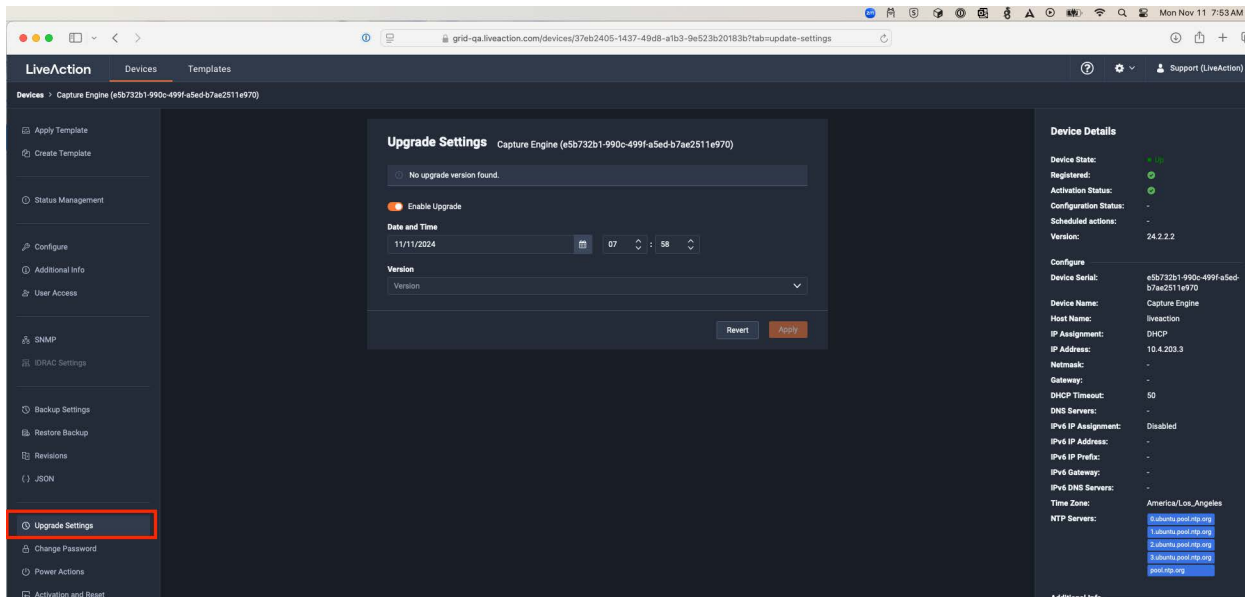
Customers can configure backups to be sent to an SFTP server of their choice inside their environment.



- *SFTP Status* - Indicates if SFTP server is configured or not
- Configure SFTP fields:
 - Hostname* - the hostname of the SFTP server
 - Port* - the port number of the server FTP application
 - Username* - the username for SFTP user
 - Password* - the password for the SFTP user
 - Directory* - Where the backups are to be stored on the SFTP server
- *Cloud Backup* - When selected, the configuration backup is stored in Grid SaaS as an encrypted backup.
- *Schedule* - The frequency of backup and how many backups to be stored and a time selector for the backup needs to be taken.

Upgrade Settings

Click the *Upgrade* button to upgrade the selected appliance remotely through Grid. User can choose to upgrade to any newer version than what is running on the device. There is no capability to upgrade to a previously released version.



- *Disable*: Select to disable the upgrade on the selected devices.
- *Enable*: Select to enable the upgrade on the selected devices. If you enable the upgrade, you are presented with settings to specify the date and time the upgrade should take place. Because all communications are initiated from the device once every ten minutes, the upgrade will happen as the result of the device communicating with the network, sometime on or after the selected time.
- *Apply*: Click to save the changes to the selected devices.

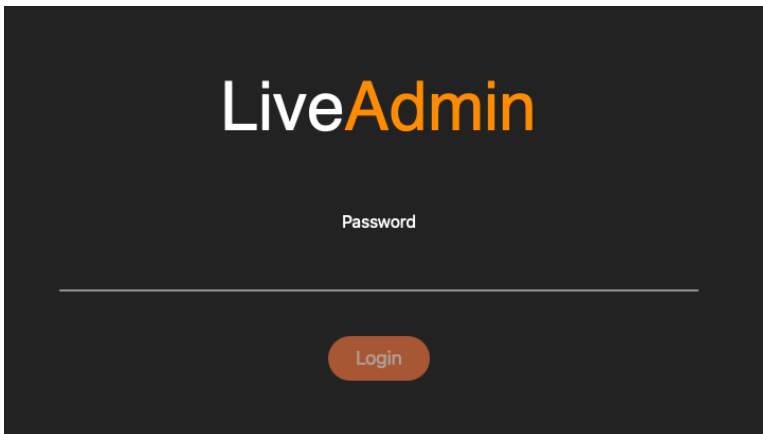
Enabling Grid Support

Grid Support from LiveAdmin Utility

The LiveAdmin utility on LiveWire lets you view and configure a variety of settings from the LiveAdmin views in the left-hand navigation pane of the utility. Before you can use Grid for LiveWire, you must enable *Centralized Management* support (enabled by default) in the *Omni* view of the LiveAdmin utility, as described below.

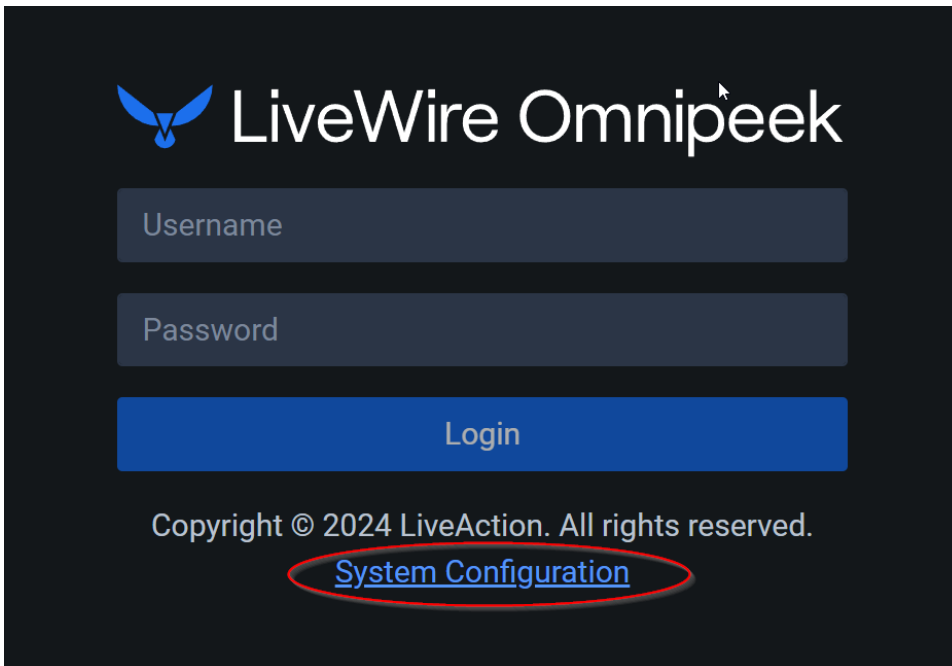
To enable *Centralized Management* support in the LiveAdmin utility:

1. From a browser window on a computer connected to the same network as LiveWire, enter the IP address for LiveWire in the URL box as *IP ADDRESS:8443* (e.g., 192.168.1.21:8443). The LiveAdmin Login screen appears.

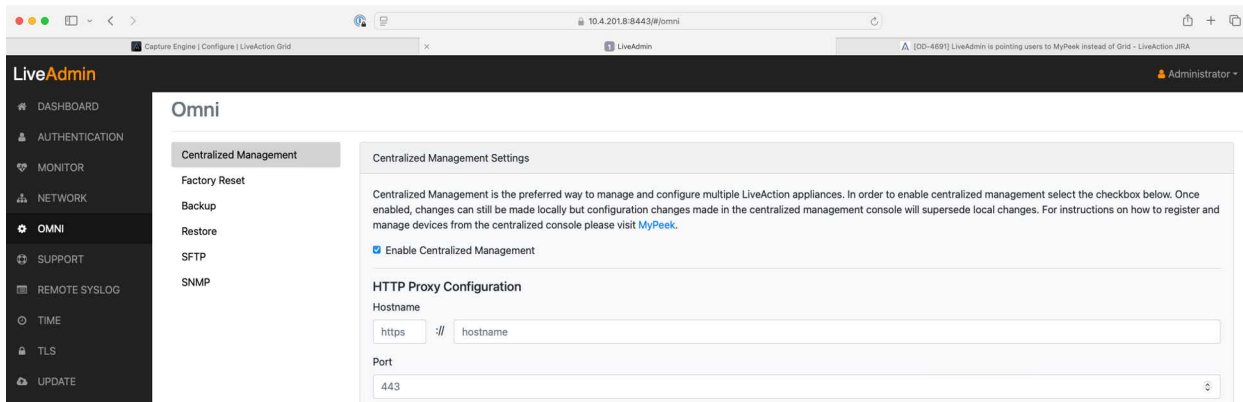


2. Enter the default password 'admin' and click *Login*.

Note If you are using LiveWire Omnippeek, you can also access the LiveAdmin Login screen by clicking *System Configuration* from either the Omnippeek Login screen, or by clicking *Configure System* from within Omnippeek itself.



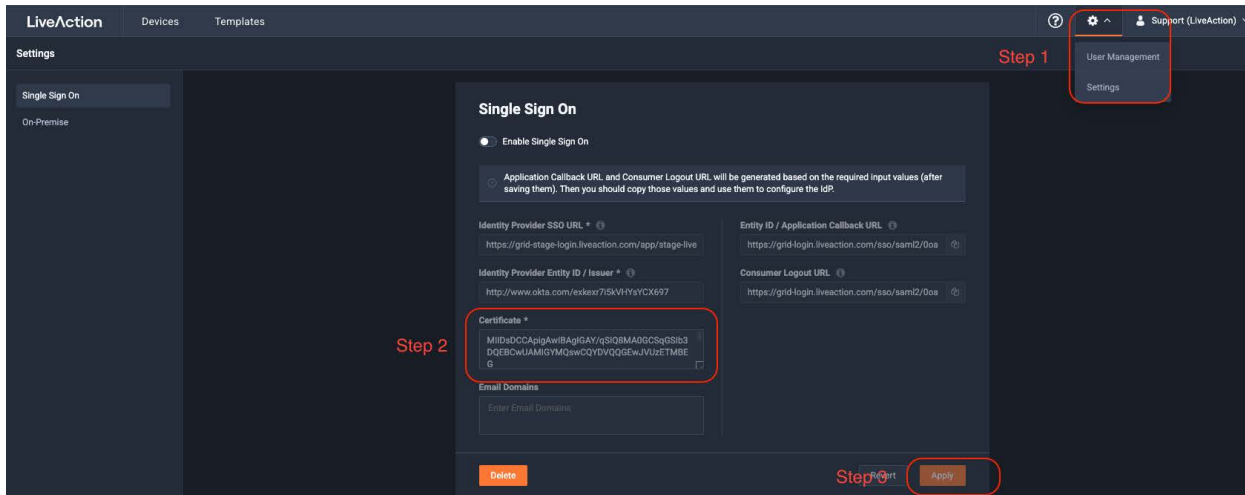
3. Go to the *Omni* view, select the *Centralized Management* option, and then click the *Enable Centralized Management* check box to enable Grid support. To learn more about each of the LiveAdmin views, see the *LiveWire User Guide*.



4. Click *Apply*.

How to update Grid SSO Certificate

Updating the Grid SSO certificate is only required if you have enabled SAML single sign on. Additionally, this certificate needs to be updated only when it will be expiring which will depend on the certificate and the customer.



Steps to update the certificate:

1. Login to Grid.
2. Click *Settings* (the gear icon) left of your name (top right), and select *Settings*.
3. Update the certificate with the new one.
4. Click *Apply*

Device Configuration

Device configuration consists of:

- Appliance configuration
- Application configuration

Appliance configuration can be done using:

- Device configuration page
- Template configuration page
- Apply existing template to a device

Appliance Configuration

Device configuration

To configure a device on Grid:

1. Navigate to <https://grid.liveaction.com> and login using your credentials.
2. Select the device to be configured on the UI under the Devices tab.

LiveAction

Devices

Templates

?

⚙

Support (LiveAction)

Device State: Up: 3Down: 21N/A: 27

Registered Devices: Present: 24None: 27

Activation Status: Present: 24None: 27

Decommissioned Devices: 3

Configuration Status: Error: 0Pending: 0

↺

Configure

Status Management

⋮

1 – 54 of 54

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🔍 Search...

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<input type="checkbox"/>	DEVICE SERIAL	DEVICE NAME	HOST NAME	DEVICE STATE	JBOD STATE	IP ADDRESS	IPv6 ADDRESS	MODEL	LOCATION
	Device Serial	Device Name	Host Name	Up	All	IP Address	IPv6 Address	All	Location
<input type="checkbox"/>	7B5Y4Z2	Capture Engine	Gen2-PowerCore-T...	Up		10.8.100.19		PowerCore	India-Pune
<input type="checkbox"/>	0f44c674-6adc-492...	Capture Engine de...	liveaction	Up		10.4.201.8		Livewire Capture	PaloAlto
<input type="checkbox"/>	e5b732b1-990c-499...	Capture Engine de...	liveaction	Up		10.4.203.3		Livewire Virtual	
	e5b732b1-990c-499f-a5ed-b7ae2511e970								

3. Configure the appliance with the desired configuration. The following information can be configured using Grid

The screenshot shows the 'Configure' page for a device in the LiveAction interface. The left sidebar contains navigation options: Apply Template, Create Template, Status Management, Configure (selected), Additional Info, User Access, SNMP, IDrac Settings, Backup Settings, Restore Backup, Revisions, Application Config, Upgrade Settings, and Change Password. The main content area is titled 'Configure Capture Engine demo test (e5b732b1-990c-499f-a5ed-b7ae2511e970)'. It includes sections for Device Name and Host Name, IPv4 settings (IP Assignment: DHCP, DHCP Timeout: 51 sec), IPv6 settings (IP Assignment: Disabled), Time Settings (Time Zone: UTC), NTP Server (a list of servers with edit and delete icons), and Authentication (a note that settings can be configured in LiveWire). A 'Revert' button and an 'Apply' button are at the bottom. On the right, the 'Device Details' panel shows the device's status (Up), registration information, configuration status, version (25.1.1.5), and a detailed list of configuration parameters including Device Serial, Device Name, Host Name, IP Assignment, IP Address, Netmask, Gateway, DHCP Timeout, DNS Servers, IPv6 IP Assignment, IPv6 IP Address, IPv6 IP Prefix, IPv6 Gateway, IPv6 DNS Servers, Time Zone, and NTP Servers.

- *Device Name*: A user friendly name to identify the device
- *Hostname*: The device hostname in the environment
- *IPv4 settings*: Static or DHCP IP address assignment. For Static IP address the following fields are required.
 - *Address*: Displays the IP address assigned to the device. Type a new address to change the IP address.
 - *Netmask*: Displays the netmask address assigned to the device. A netmask address, combined with the IP address, defines the network associated with device. Type a new address to change the netmask address.
 - *Gateway*: Displays the gateway address, also known as 'default gateway,' assigned to the device. When the device does not have an IP route for the destination, the IP packet is sent to this address as it does not know how to direct it locally. Only a single default gateway can be defined. Type a new address to change the gateway address.
 - *DNS*: Enter the address of any DNS (Domain Name Server) servers to add to the configuration. A Domain Name Server translates domain names (e.g., Network Performance Monitoring Software - LiveAction) into an IP address. To add a DNS server, enter the address of the server, and click Add Server. Multiple DNS name servers can be defined. You can also edit or delete any defined DNS servers.
 - *Add Server*: Click to add the DNS server to the configuration.
 - *DNS Servers*: Displays the DNS servers added to the configuration.
- For DHCP
 - *DHCP Timeout*: Displays the amount of time (in seconds) the device will wait for a DHCP address.
- *Timezone*: Select the timezone for the device.
- *NTP Server*
 - *NTP Server*: Enter the address of any NTP servers to add to the configuration, and then click Add Server.
 - *NTP Servers*: Displays the list of NTP servers added to Settings. You can click the Edit icon to edit an NTP server in the list, or click the Trash icon to remove an NTP server from the list.

- *Additional Info*: Select to associate additional information about the device such as Location, Address, Contact person, Asset Tag (for CMDB applications such as ServiceNow) and other Notes.

- *User Access*: Select to configure users who can configure devices.

- Click the *Add* button to select users from Grid's user management and associate a role with the device.
- Select one or more users and click the *Trash* icon to delete users from the device.
- *SNMP*: Select to enter SNMP configuration.
 - *Authentication Password*: Type a new Authentication Password to change it from the default Authentication Password displayed in 'LiveNX SNMP Configuration' in LiveFlow
 - *Privacy Password*: Type a new Privacy Password to change it from the default Authentication Password displayed in 'LiveNX SNMP Configuration' in LiveFlow.
 - *Max Message Size*: Max message size in bytes for each poll. This field can be empty

- *iDRAC configuration*: Same as above
- *Backup settings*: Same as above
- *Upgrade settings*: Same as above

Template Configuration

The template can also be configured as described above in the *Device Configuration* section. Once the template is saved, it can be applied to one or more devices.

Note Template configuration is tied to the LiveWire version. Templates can be applied to devices that run the same LiveWire version as defined in the template.

Select the device to apply a template and then select the template from the drop down

The screenshot shows the LiveAction interface with the 'Devices' tab selected. A sidebar on the left lists various configuration options for a selected device (e5b732b1-990c-499f-a5ed-b7ae2511e970). The 'Apply Template' option is highlighted, opening a dropdown menu. The main area displays a table of devices with columns for Host Name, Device State, JBOD State, IP Address, IPv6 Address, Model, and Location. The table shows three devices: Gen2-PowerCore-T..., liveaction, and liveaction, all with a state of 'Up'.

The screenshot shows the 'Apply Template' dialog in the LiveAction interface. The dialog is titled 'Apply Template' and 'Capture Engine demo test (e5b732b1-990c-499f-a5ed-b7ae2511e970)'. It features a table with columns for 'TEMPLATE NAME' and 'VERSION'. The table lists three templates: fajsdfafdwef (version 25.1), e5b732b1-990c-499f-a5ed-b7ae2511e970-25.1.... (version 25.1), and D4C8243-25.1.0.17 (version e5b732b1-990c-499f-a5ed-b7ae2511e970-25.1.0.12). The 'Apply' button is located at the bottom right of the dialog.

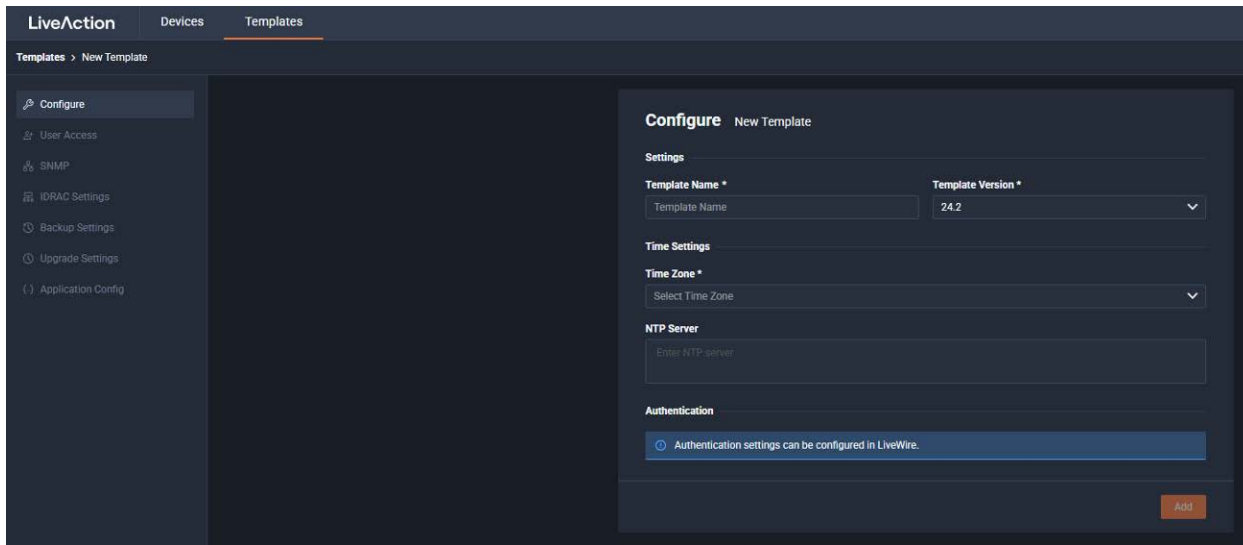
Application configuration

Application configuration can only be done using the LiveWire UI. This configuration can be synced with Grid. The application configuration will create a new revision. The user can create a template with that revision. This template can be applied to other devices in Grid running the same LiveWire version.

How to configure Third-Party Authentication for many LiveWire devices

Note This section applies only for devices running LiveWire 24.2.0 or later.

For devices running LiveWire 24.2.0 or later, *Authentication* configuration is disabled, as shown below.

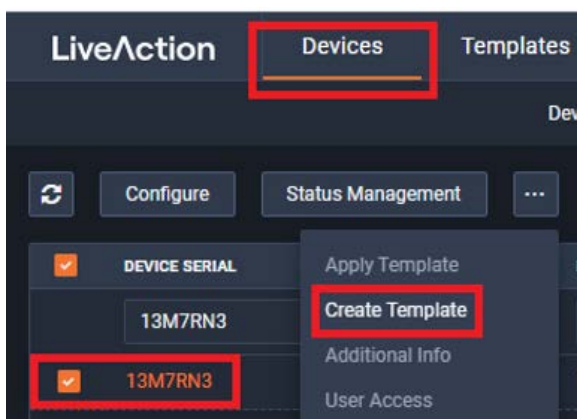


In order to setup third party authentication, follow these steps.

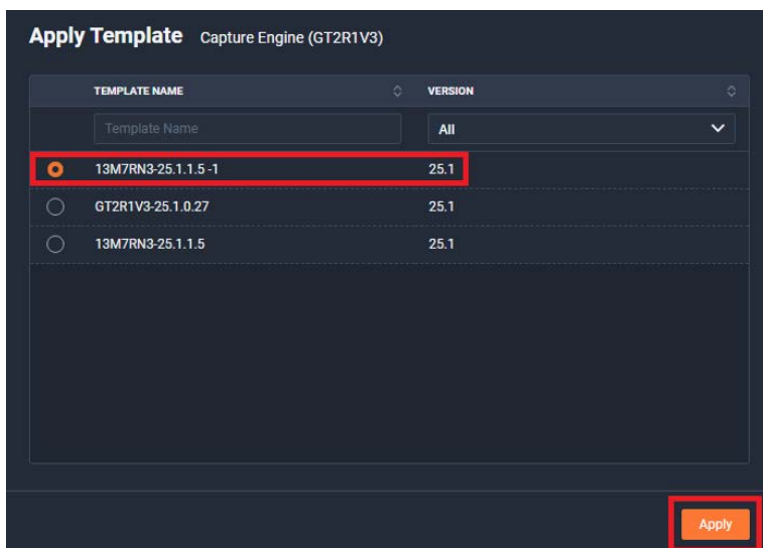
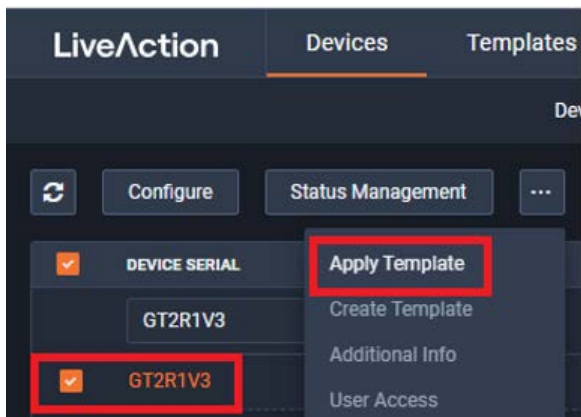
1. Configure one LiveWire device with the third party authentication settings by going to *Home > Configure Engine*.



2. Save the configuration on this LiveWire device. The saved configuration will be pushed automatically to Grid.
3. On Grid, select the device (i.e., SN: 13M7RN3) then select that *Device* and *Create Template* as shown below.



4. Select the devices you want to apply the same third party authentication to and apply template and choose the most recent updated template, and click *Apply*



5. Confirm the changes by clicking *Apply* again.

