



Sixnet® SixView Manager™

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Through Version 3.1.0

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Preface

Disclaimer

This software guide provides guidance on how to use SixView Manager™. It is not intended as a step-by-step guide or a complete set of all procedures necessary and sufficient to complete all operations.

While every effort has been made to ensure that this document is complete and accurate at the time of release, the information that it contains is subject to change. Red Lion Controls, Inc. is not responsible for any additions to or alterations of the original document. Industrial networks vary widely in their configurations, topologies, and traffic conditions. This document is intended as a general guide only. It has not been tested for all possible applications, and it may not be complete or accurate for some situations.

Users of this document are urged to heed warnings and cautions used throughout the document.

Document History and Related Publications

The hard copy and electronic media versions of this document are revised only at major releases and therefore, may not always contain the latest product information. Tech Notes and/or product addendums will be provided as needed between major releases to describe any new information or document changes.

The latest online version of this document can be accessed through the Red Lion website at:
<https://www.redlion.net/support/documentation>.

Additional Product Information

Additional product information can be obtained by contacting your local sales representative or Red Lion through the contact numbers and/or support website address listed on the inside of the front cover.

Chapter 1 Overview

SixView Manager™ provides user-friendly, web-based management and configuration capabilities for supported Red Lion devices. SixView Manager provides all the key metrics required by IT departments or NOC managers such as signal strength, alarms, data usage, connectivity, IP addresses, and other critical elements to effectively manage hundreds of devices.

SixView Manager includes enterprise features such as the ability to update and make field changes to supported Red Lion devices without individual unit access resulting in lower total cost of ownership.

Serial	Interfaces	Major Name	Minor Name	Last Check In	Alert
YU17SEP2000013	eth0 ↑ 172.16.20.16 eth1 ↑ 10.83.4.86 R/H 10.83.4.86 Custom Port GLM	MAJOR_SEP	MINOR_SEP	6/21/2023, 12:58:19 PM	INFO Heartbeat
YU02NOV2000001	eth0 ↑ 172.16.20.18 eth1 ↑ 10.83.4.85 R/H 10.83.4.85 Custom Port GLM	MAJOR_NOV	MINOR_NOV	6/21/2023, 1:01:45 PM	INFO Heartbeat
971X54800150009	usb0 ↑ 192.168.111.1 eth0 ↑ 10.83.4.53 eth1 ↑ 172.16.20.23 R/H 10.83.4.53 Custom Port GLM	MAJOR_971	MINOR_971	6/21/2023, 1:00:50 PM	INFO Heartbeat

Intelligent Management Features – Efficient and Consistent

MASS CONFIGURATION AND AUTO PROVISIONING TOOLS	REMOTE MONITORING AND REPORTING OF KEY METRICS	REMOTE ADMINISTRATION OF MULTIPLE ACCOUNTS/UNITS
<p><i>Improves security and enables efficient, consistent updates</i></p> <ul style="list-style-type: none"> Edit unit configuration Firmware updates VPN configuration Firewall policy enforcement Mass unit control <ul style="list-style-type: none"> Unit grouping control Mass unit migration 	<p><i>Provides visibility and control to cut time troubleshooting</i></p> <ul style="list-style-type: none"> Up-time Utilization Signal strength (RSSI) Firmware version ESN, MDN or IMEI IP address Live unit status with polling Download XLS/CSV reports 	<p><i>Helps reduce deployment cost while increasing management</i></p> <ul style="list-style-type: none"> Configuration changes Remote reboot Job scheduling <ul style="list-style-type: none"> single or multi-unit Save custom views <ul style="list-style-type: none"> Control user permissions Control edit abilities

Display Header



Navigation before authorization (logging in). This is what is seen first after installation restart, as well.



Navigation after authorization. The image above shows superuser logged in. However, menu items are shown based on respective user permissions and roles.



User Account (shown as user’s name)

Change own email and password.

Email Indicator

When the envelope is green, SMTP settings are saved and Alerts/Forgot will be available (up to client to configure correct settings). Longer usernames will be visible in (userna..) format as shown in the screenshot.

Log Out

Terminates authorized session.

Help

Opens SixView Manager™ Software Guide.

System Requirements

HARDWARE MINIMUM	SOFTWARE
<ul style="list-style-type: none">• Quad core processor or higher• 4 GB RAM or higher• 120 GB hard drive or higher<ul style="list-style-type: none">• Multi-drive RAID recommended• Recommended production components<ul style="list-style-type: none">• Redundant power supplies• Redundant network interfaces	<ul style="list-style-type: none">• Modern web browser – examples:<ul style="list-style-type: none">• Chrome™• Firefox™• Microsoft Edge™• Linux® Server Distribution - examples:<ul style="list-style-type: none">• Ubuntu®• Red Hat®• Docker®• Python® (If not installed)

Note: It is HIGHLY recommended that this be installed on a dedicated server for the SixView Manager 3.1.0 (SixView Manager) and not as an additional application on a multi-use system.

List of Supported Devices

Below is the list of all the supported devices:

SIXNET®	DATA ACQUISITION	HMI	GRAPHITE EDGE CONTROLLER
<ul style="list-style-type: none">• Routers	<ul style="list-style-type: none">• DA10D• DA30D• DA50A• DA70A	<ul style="list-style-type: none">• CR1000• CR3000• Graphite HMI	<ul style="list-style-type: none">• GRAC0001

Software Installation Procedures

Docker Installation

For installing Docker on Linux Operating Systems, please visit <https://docs.docker.com/engine/install/ubuntu/>.

Installing SixView Manager™

1. Download the **svm-3.1.0.tar.gz** file.
2. Create a directory name **svm-root** in the home directory and enter it. Create from either the User Interface (UI) or use the below command:

```
mkdir svm-root
```

3. Create the two directories **local-svm** and **svm-3.1.0** using the below commands:

```
mkdir local-svm  
mkdir svm-3.1.0
```

4. Create a file **config.json** and a directory **mongo-data** in the **local-svm** directory using the below commands:

```
touch config.json  
mkdir mongo-data
```

5. Copy the downloaded **svm-3.1.0.tar.gz** file to **svm-3.1.0** directory. Extract the file at the same location using the below command:

```
tar -xvf svm-3.1.0.tar.gz
```

6. After extracting, two files will appear named **install.py** and **svm-3.1.0_docker.tar**. Run the following command to install SixView Manager:

```
./install.py -c ../local-svm/config.json -m ../local-svm/mongo-data/
```

```
*****  
WARNING: Your OS (Ubuntu 20.04) will receive limited support from Red Lion. We will make an attempt to assist if errors are encountered, but resolution is not guaranteed. Proceed at your own risk.  
Supported operating systems are:  
  Ubuntu 19.04  
  Ubuntu 18.04  
  Ubuntu 16.04  
*****  
Should your current Docker settings (if applicable) override any options given to this script. Note that non-conflicting settings from the old containers will still be applied even when the "upgrade" option is disabled. [Y/n]: n  
Should SVM's TCP/HTTP(s) ports be published (disable this option only when proxying via another Docker container) [Y/n]: Y  
Where is the tarball containing the SVM docker image [/home/rahu/SVM/svm-3.1.0-12/svm_docker.tar]:  
Should Mongo's TCP port (27017) be published, allowing for debugging through graphical tools such as Compass [Y/N]: N  
What should Mongo's Docker container be named [mongo]:  
What should SVM's Docker container be named [svm]: svm1  
Provide a comma-separated list of key-value pairs for extra environment variables provided to the SVM Docker container (such as "HTTP_PORT=80,HTTPS_PORT=443") []:  
/usr/bin/docker ps -a  
/usr/bin/docker inspect mongo  
/usr/bin/docker stop mongo  
mongo  
/usr/bin/docker rm mongo  
mongo  
/usr/bin/docker load --input /home/rahu/SVM/svm-3.1.0-12/svm-3.1.0-12_docker.tar  
/usr/bin/docker run --restart always --detach --log-driver json-file --log-opt max-size=10m --log-opt max-file=10 --volume /home/rahu/SVM/local-svm/mongo-data:/data/db --name mongo svm:3.1.0-12 mongod  
732b9bbd95cfba0d64e5d8520a3806520ee2d413895ab7e4804fd9d9d1ba5e391  
/usr/bin/docker run --restart always --detach --log-driver json-file --log-opt max-size=10m --log-opt max-file=10 --link mongo:mongo --volume /home/rahu/SVM/local-svm/config.json:/opt/svm/conf/config.js  
on --volume /dev/log:/dev/log --publish 0.0.0.0:18080:18080 --publish 0.0.0.0:18081:18081 --name svm1 svm:3.1.0-12 node /opt/svm/index.js  
3f8a9d9a339ebc4dc17c1418f5f1924e483292bcf3be0b7fbc4d2cde  
docker: Error response from daemon: driver failed programming external connectivity on endpoint svm1 (b5a1d4c4cd5f4ee91395d8e2bb573e41f591d28241287220f3c653be29c8f97c): Bind for 0.0.0.0:18081 failed: port  
 is already allocated.  
Traceback (most recent call last):  
  File "/usr/bin/install.py", line 694, in <module>  
    run()  
  File "/usr/bin/install.py", line 249, in run  
    start_svm(docker_exe, svm_image, docker_settings.svm_settings, docker_settings.mongo_settings.name)  
  File "/usr/bin/install.py", line 650, in start_svm  
    check_call(svm_args)  
  File "/usr/bin/install.py", line 656, in check_call  
    return subprocess.check_call(args, **kwargs)  
  File "/usr/lib/python3.8/subprocess.py", line 364, in check_call  
    raise CalledProcessError(retcode, cmd)  
subprocess.CalledProcessError: Command '['/usr/bin/docker', 'run', '--restart', 'always', '--detach', '--log-driver', 'json-file', '--log-opt', 'max-size=10m', '--log-opt', 'max-file=10', '--link', 'mongo',  
  'mongo', '--volume', '/home/rahu/SVM/local-svm/config.json:/opt/svm/conf/config.json', '--volume', '/dev/log:/dev/log', '--publish', '0.0.0.0:18080:18080', '--publish', '0.0.0.0:18081:18081', '--name',  
  'svm1', 'svm:3.1.0-12', 'node', '/opt/svm/index.js']' returned non-zero exit status 125.
```

7. Running the installation command will return an output with a series of questions. The questions and the user inputs required are given below:

```
Should your current Docker settings (if applicable) override any options
given to this script. Note that non-conflicting settings from the old
containers will still be applied even when the "upgrade" option is
disabled. [Y/n]: n
```

By entering "n" as an input, you are not overriding any docker settings.

```
Should SVM's TCP/HTTP(s) ports be published (disable this option only when
proxying via another Docker container) [Y/n]: Y
```

By entering "Y" as an input, you are publishing the required ports for the SixView Manager™ container.

```
Where is the tarball containing the SVM docker image
[PATH_TO_SVM_TAR_FILE/svm-3.1.0-12/svm_docker.tar]:
```

No user input required here since the command is taking the correct path. Click the Enter key. If the file path is incorrect, you must update the path as a user input.

```
Should Mongo's TCP port (27017) be published, allowing for debugging
through graphical tools such as Compass [y/N]: N
```

By entering "N" as an input, you are not allowing mongo debugging through graphical user interface.

```
What should Mongo's Docker container be named [mongo]:
```

No user input is required. Click the enter key.

```
What should SVM's Docker container be named [svm]: svm
```

Enter input "svm" to create a new container for running SixView Manager server.

```
Provide a comma-separated list of key-value pairs for extra environment
variables provided to the SVM Docker container (such as "HTTP_PORT=80,
HTTPS_PORT=443") []:
```

No user input is required. Click the enter key.

- Two containers named svm and mongo label will start running on ports 18080 and 18081.
- The output is shown below:

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
b686ae0b538d	svm:3.1.0-12	"node /opt/svm/index..."	4 minutes ago	Up 4 minutes	0.0.0.0:18080-18081->18080-18081/tcp	svm
47f8fdee55dc	svm:3.1.0-12	"mongod"	4 minutes ago	Up 4 minutes	18081/tcp	mongo

- Open the browser and enter the following URL in the address bar: <https://localhost:18081>

The website shows a warning page. Click “Advanced” and then click on Accept the Risk and Continue button for unsafe browsing to continue. The page is redirected to the SixView Manager Setup Wizard.

Upgrading SixView Manager™

The steps for upgrading the SixView Manager setup are minimal. Before upgrading, check the container status by running the following command:

```
docker container ls
```

The command will return the output shown in the image following Step 6.

Upgrading a new container is required. To do this, stop the old container running SixView Manager.

1. Run the docker command to stop the **svm** container:

```
docker container stop svm OR docker stop svm
```

2. Run the installation command:

```
./install.py -c ../local-svm/config.json -m ../local-svm/mongo-data
```

3. Running the installation command will return an output with a series of questions. The questions and the user inputs required are given below:

```
Should your current Docker settings (if applicable) override any options  
given to this script. Note that non-conflicting settings from the old  
containers will still be applied even when the “upgrade” option is  
disabled. [Y/n]: n
```

By entering “n” as an input, you are not overriding any docker settings.

```
Should SVM's TCP/HTTP(s) ports be published (disable this option only when  
proxying via another Docker container) [Y/n]: Y
```

By entering “Y” as an input, you are publishing the required ports for the SixView Manager container.

```
Where is the tarball containing the SVM docker image  
[PATH_TO_SVM_TAR_FILE/svm-3.1.0-12/svm_docker.tar]:
```

No user input required here since the command is taking the correct path. Click the Enter key. If the file path is incorrect, you must update the path as a user input.

```
Should Mongo's TCP port (27017) be published, allowing for debugging  
through graphical tools such as Compass [y/N]: N
```

By entering “N” as an input, you are not allowing mongo debugging through graphical user interface.

```
What should Mongo's Docker container be named [mongo]:
```

No user input is required. Click the enter key.

```
What should SVM's Docker container be named [svm]: svm1
```

Enter input “svm1” to create a new container for running SixView Manager™ server.

```
Provide a comma-separated list of key-value pairs for extra environment variables provided to the SVM Docker container (such as "HTTP_PORT=80, HTTPS_PORT=443") []:
```

No user input is required. Click the enter key.

- Two containers named svm1 and mongo label will start running on ports 18080 and 18081.
- Run the docker command to list the running containers:

```
docker container ls
```

- The output is shown below:

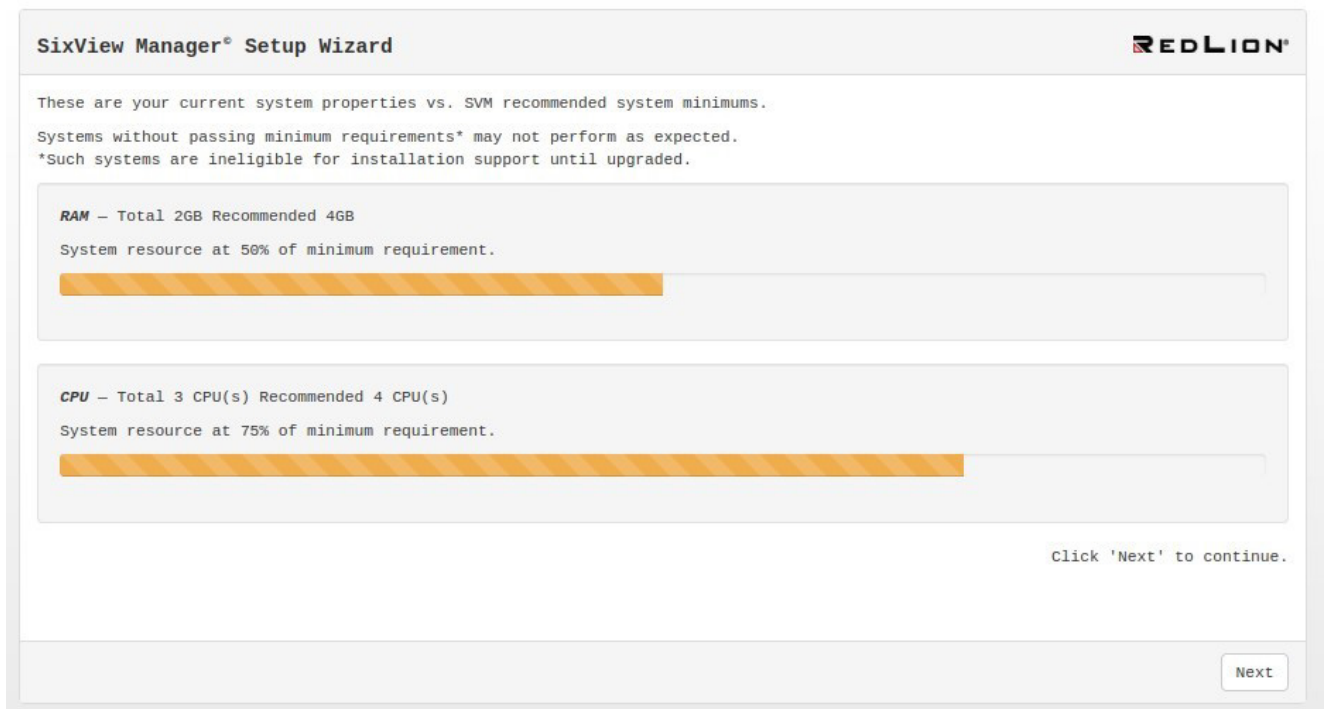
CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
0b3ba9e2d856	svm:3.1.0-12	"node /opt/svm/index..."	About a minute ago	Up 59 seconds	18081/tcp	svm1
e1df6100b252	svm:3.1.0-12	"mongod"	About a minute ago	Up About a minute	18081/tcp	mongo

- Open the browser and enter the following URL in the address bar: <https://localhost:18081>

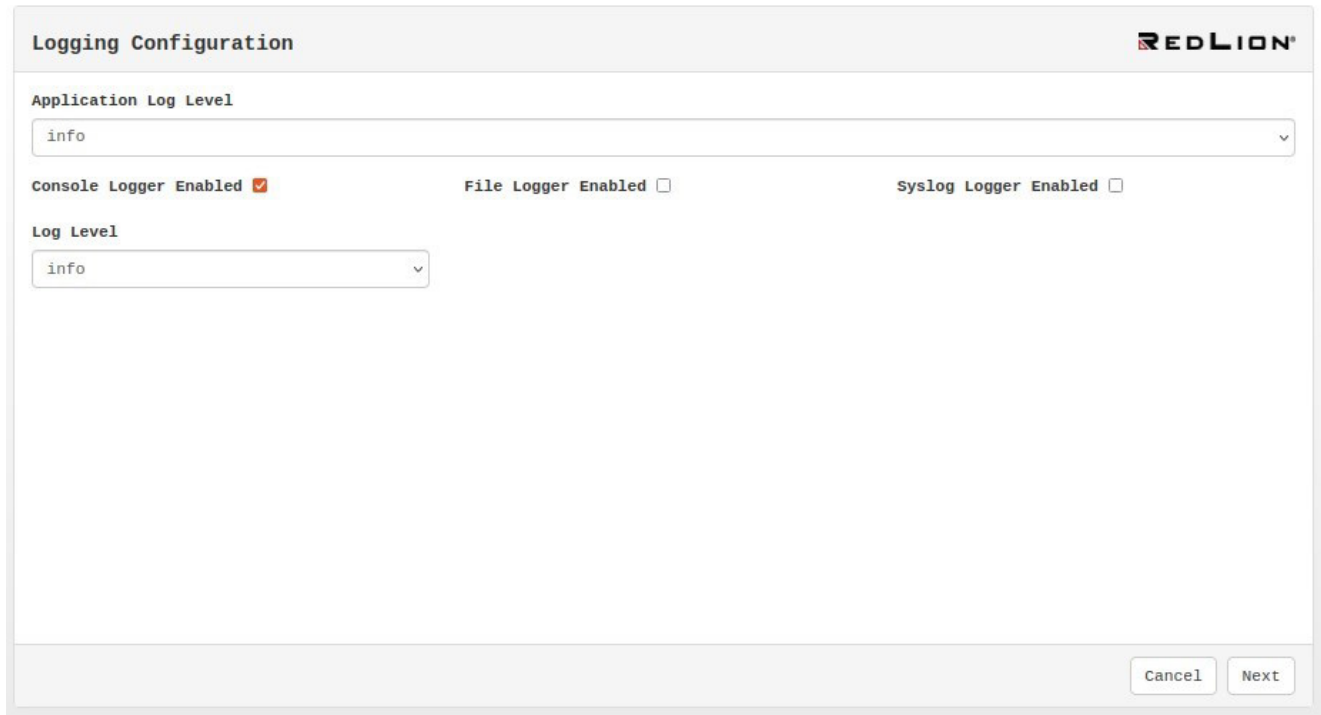
The website shows a warning page. Click “Advanced” and then click on Accept the Risk and Continue button for unsafe browsing to continue. The page is redirected to the SixView Manager login page.

Setup Wizard

For first-time setup, wait for the green bars to appear and then click the Next button:



Make sure “Console Logger Enabled” is checked and click the Next button (or change any settings you would like):

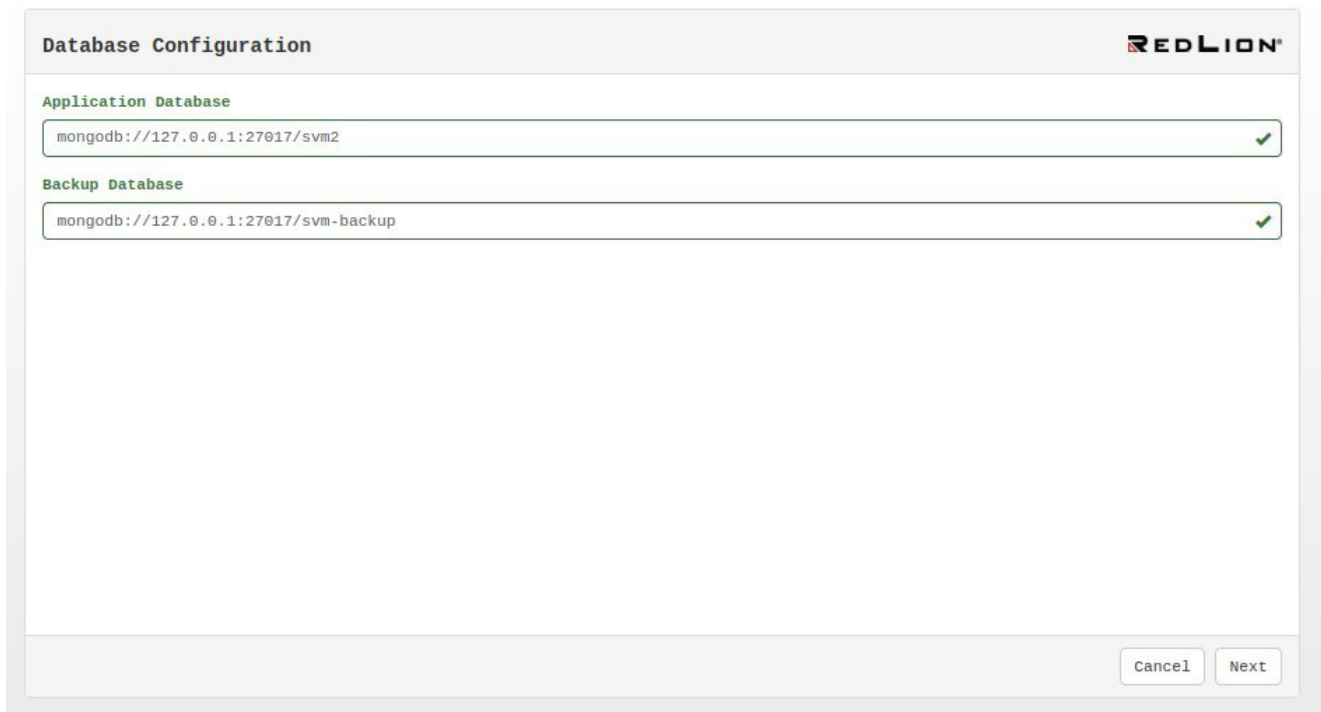


The "Logging Configuration" dialog box, titled "RED LION", contains the following settings:

- Application Log Level:** A dropdown menu set to "info".
- Console Logger Enabled:** A checkbox that is checked.
- File Logger Enabled:** A checkbox that is unchecked.
- Syslog Logger Enabled:** A checkbox that is unchecked.
- Log Level:** A dropdown menu set to "info".

At the bottom right, there are "Cancel" and "Next" buttons.

Green arrows should appear on the right of the text boxes and the Next button becomes enabled. Click the Next button.

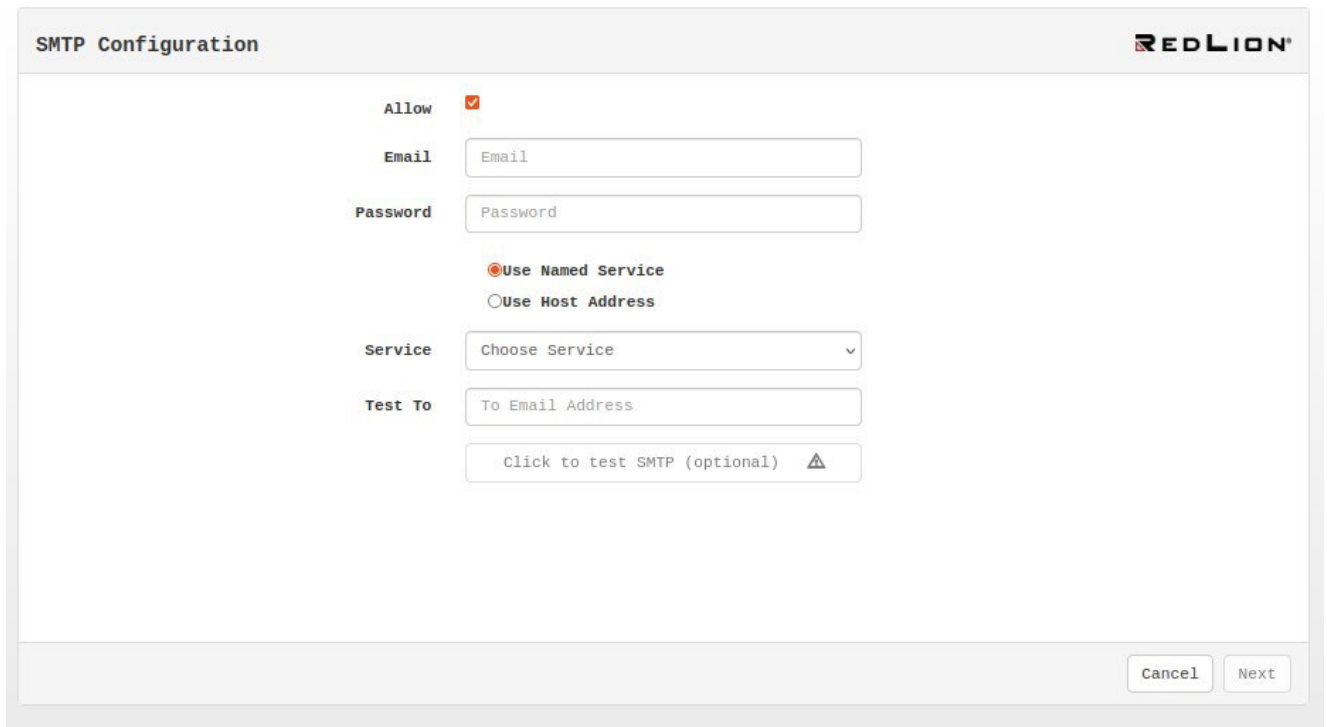


The "Database Configuration" dialog box, titled "RED LION", contains the following settings:

- Application Database:** A text box containing "mongodb://127.0.0.1:27017/svm2" with a green checkmark on the right.
- Backup Database:** A text box containing "mongodb://127.0.0.1:27017/svm-backup" with a green checkmark on the right.

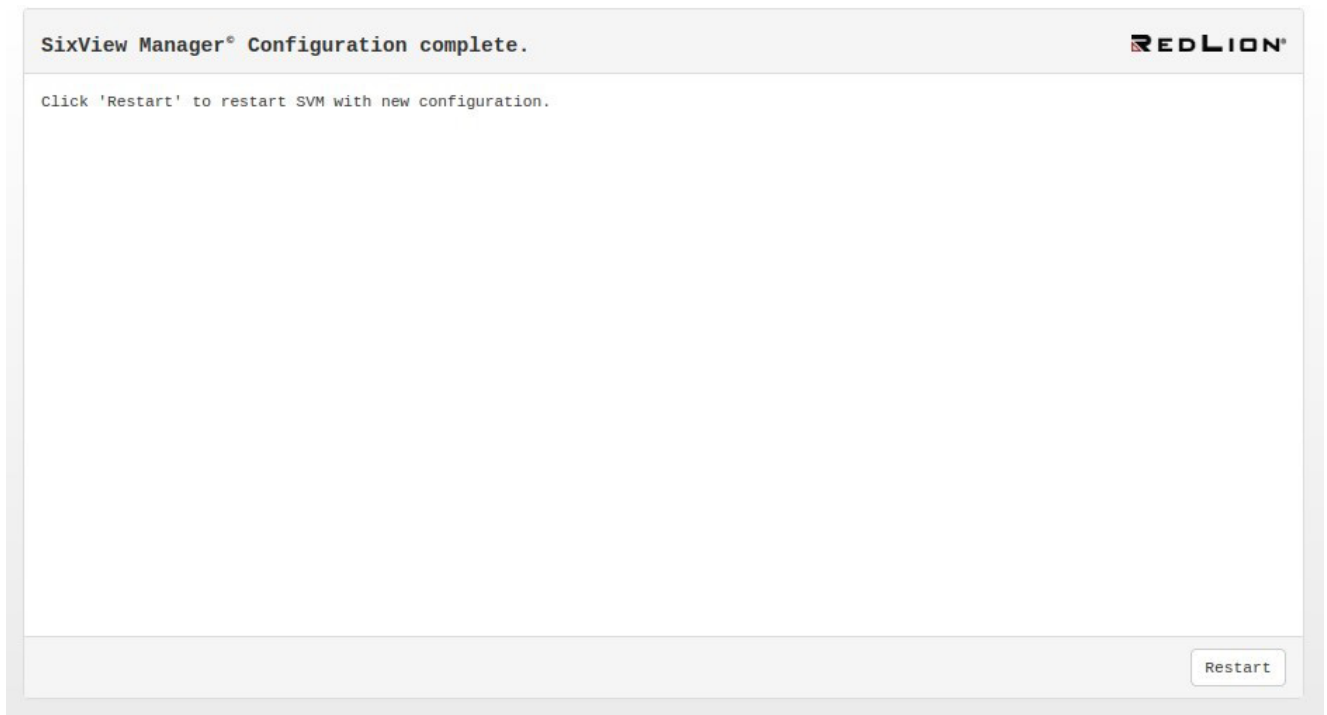
At the bottom right, there are "Cancel" and "Next" buttons.

Enter the respective SMTP configuration data to enable the Next button. On this page, you can also send a test email to the email specified in the test email input.



The image shows the "SMTP Configuration" window from the REDLION software. The window has a title bar with "SMTP Configuration" on the left and the "REDLION" logo on the right. The main area contains several configuration options: "Allow" with a checked checkbox, "Email" with a text input field containing "Email", "Password" with a text input field containing "Password", "Use Named Service" with a selected radio button, "Use Host Address" with an unselected radio button, "Service" with a dropdown menu showing "Choose Service", and "Test To" with a text input field containing "To Email Address". Below these fields is a button labeled "Click to test SMTP (optional)" with a warning icon. At the bottom right, there are "Cancel" and "Next" buttons.

In the "SixView Manager™ Configuration complete" window, click the Restart button to restart the server.



The image shows the "SixView Manager Configuration complete" window from the REDLION software. The window has a title bar with "SixView Manager® Configuration complete." on the left and the "REDLION" logo on the right. The main area contains a message: "Click 'Restart' to restart SVM with new configuration." At the bottom right, there is a "Restart" button.

After reloading the page, you'll be redirected to the Login page. Enter default credentials to access the SixView Manager™.

Default Credentials
Username: sixnet
Password: s1xn3t

REDLION®

Username

Username

Password

Password

Log In

Forgot username/password?

Open a web browser window and navigate to the SixView Manager server: [https://\[ADDRESS\]:18081](https://[ADDRESS]:18081). The Login page will appear.

Enter Username and Password. Click the Log In button to access SixView Manager. Upon successful login, you will be taken directly to the Unit dashboard. The default login for SixView Manager is displayed above.

“sixnet” is the root user with super-user access. You must change the password as soon as you log in for the first time.

If you forget your login, click the “Forgot username/password” link below the login form.

You will be prompted to enter the email associated with your account. After submitting, the interface will be put into a mode of waiting-for-user. An email will be sent that contains a unique one-time password reset link.

1. Check email
2. Click link
3. Return to SixView Manager
4. Set new password

Chapter 2 Using SixView Manager™

Table Controls

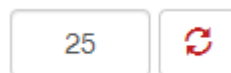
This guide is written as if the user has full system privileges. Some controls may not be visible for some user levels. If you believe any user should have elevated privileges, please contact the SixView Manager administrator.

Set Columns



Click the Set Columns table control to open a list of available columns. This is a drag panel. The headers of a table are drag/drop-able. Drag headers into the columns panel to remove them from the table or drag new columns into the table by dropping them on the table header row.

Page Size/Refresh



Use the Page Size/Refresh to refresh a table and/or cause the table to display desired number of rows per page. Changing the size of pages will cause the pagination buttons in the bottom-right to refresh, reflecting total page count.

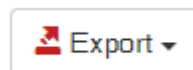


Simple Search



Simple Search table control has a text box for search value and a button to the right for designating what column(s) to search in.

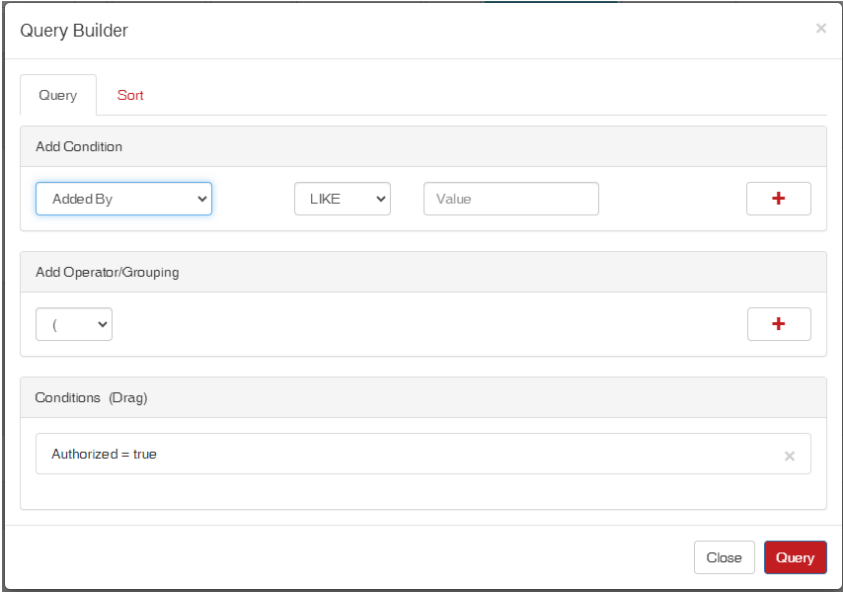
Export CSV



Export various tables via the Export table control. Export is based on a query. A user may choose to export based on a view's default query or use either the Query/Sort or Simple Search to target the data to be exported in a CSV file.

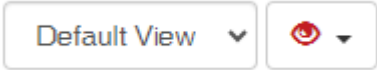
Query/Sort

The Query/Sort button launches a modal window that may be used to create advanced searches with advanced sorts. Use the Add Operator/Grouping dropdown to create sub-queries and extend conditions.



The Query Builder modal window is titled "Query Builder" and has a close button (X) in the top right corner. It features two tabs: "Query" (selected) and "Sort". Below the tabs are three main sections: "Add Condition", "Add Operator/Grouping", and "Conditions (Drag)". The "Add Condition" section contains a dropdown menu with "Added By" selected, a "LIKE" dropdown, a "Value" input field, and a red "+" button. The "Add Operator/Grouping" section contains a dropdown menu with "(" selected and a red "+" button. The "Conditions (Drag)" section contains a list of conditions, with "Authorized = true" currently visible. At the bottom right, there are "Close" and "Query" buttons.

Views



The Default View button is a rectangular button with a light gray border. It contains the text "Default View" in blue, followed by a downward-pointing arrow. To the right of the text is a red eye icon with a downward-pointing arrow.

Every view has a default set of columns showing a default sort and a default query (e.g., Units shows only authorized units by default). Using different table controls alters this default(s). To save a view, use the button to the right of the dropdown. Users can set an altered view to be their own default. Set multiple views and choose the desired view via the dropdown.

Alerts

SixView Manager™ Alerts are used to email or send SMS text messages when a unit in a unit group is late by a certain number of minutes. There are three different increasing minute levels. Alerts are user specific, and the same unit may be watched by several different users at different levels. All alerts are given a one-minute buffer to account for possible timing issues. This means if an alert notification is set to be sent after a unit is five minutes late (past expected next check-in), the alert is not actually sent until the sixth minute.

Add Alerts

The screenshot shows the 'Add Alert' dialog box in the REDLION SixView Manager interface. The dialog is titled 'Add Alert' and has a close button in the top right corner. It is divided into three main sections: 'Groups', 'Units', and 'Alert Parameters'. The 'Groups' and 'Units' sections are empty tables with a single column header 'Name'. The 'Alert Parameters' section contains several input fields: 'Name' (Alert Name), 'Minutes' (0), 'Group' (empty), 'Team' (Select Team...), and 'Notify' (Email Address(es) and Phone Number(s)). There is a 'Set Alert Level' button with a level indicator '1'. At the bottom right are 'Close' and 'Add Alert' buttons.

To add an alert, click the Add Alert button in the table controls of the Alerts view. The Add Alert interface has three columns. In the first column are all the groups a user is allowed to see. Here the user would choose a group to add an alert to. The second column shows the units of the selected group.

In the third column is a form to set alert parameters. Define any emails or SMS text addresses, separated by comma, for a notification of a specific alert level.

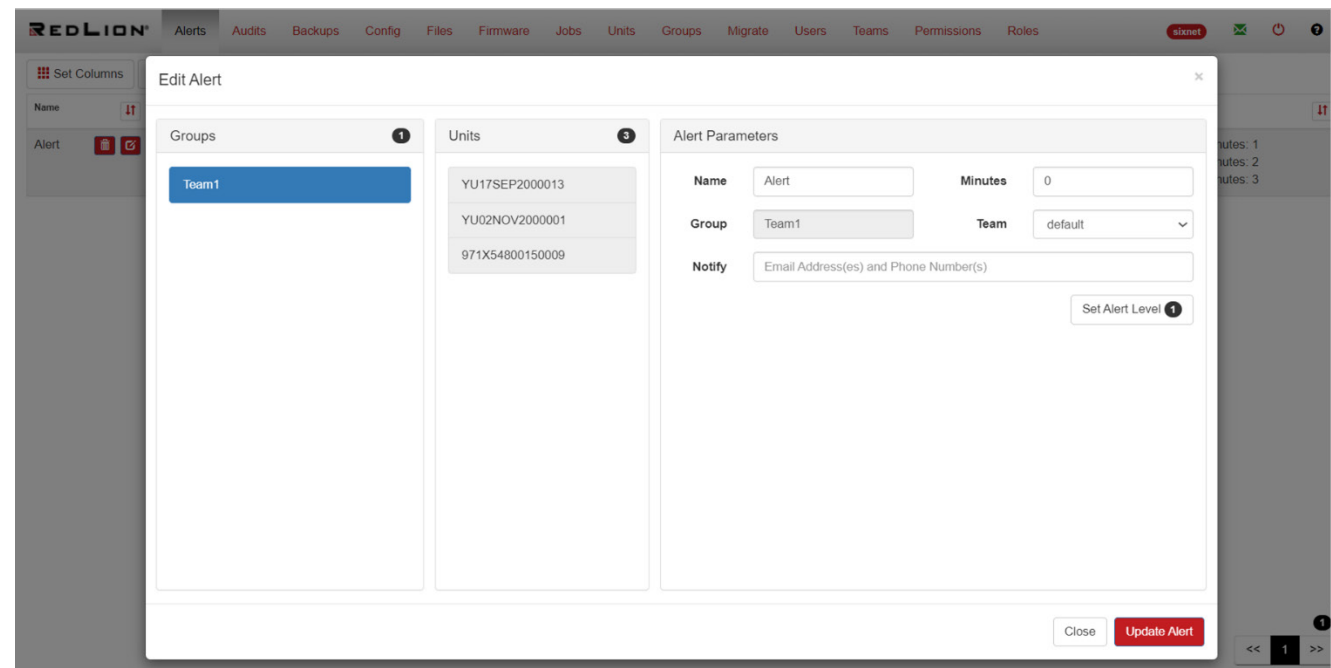
Define the number of minutes past expected check-in that the devices of a group are supposed to be before the alert email/text is sent out.

Click Set Alert Level to bind the parameters to a specific level. Not all three levels must be set, but the Minutes Late value must increase in ascending levels.

To edit an alert level, click on the level in the display at the bottom of the parameters form to load that level into the form above.

When finished with setting all parameters for all desired levels, click Add Alert.

Edit Alerts



As shown in the screenshot, an entry is added whenever an alert is added using the Add Alert button. In the Alerts view, there is an edit icon next to the trashcan (delete) icon.

When you click on the edit icon, a modal window opens as shown in the screenshot.

Audits

REDLION® Alerts Audits Backups Config Files Firmware Jobs Units Groups Migrate Users Teams Permissions Roles			
Set Columns	Query/Sort	Search	1
Export	Default View		
User	Event Description	Event Date	IP Address
sixnet	Alert 'Alert' added.	6/21/2023, 12:27:27 PM	10.83.11.16
sixnet	Role 'UPLOAD' was added to 'sagarsatpute'	6/21/2023, 12:26:28 PM	10.83.11.16
sixnet	Role 'DELEGATE' was added to 'sagarsatpute'	6/21/2023, 12:26:27 PM	10.83.11.16
sixnet	Role 'ADMIN' was added to 'sagarsatpute'	6/21/2023, 12:26:25 PM	10.83.11.16
sixnet	User 'sagarsatpute' added to Team 'test'.	6/21/2023, 12:26:10 PM	10.83.11.16
sixnet	'sixnet' logged in.	6/21/2023, 12:21:59 PM	10.83.11.16
sagarsatpute	'sagarsatpute' logged out.	6/21/2023, 12:21:51 PM	10.83.11.16
sagarsatpute	'sagarsatpute' logged in.	6/21/2023, 12:21:24 PM	10.83.11.16
sixnet	'sixnet' logged out.	6/21/2023, 12:21:12 PM	10.83.11.16
sixnet	User 'sagarsatpute' added to Team 'default'.	6/21/2023, 12:21:10 PM	10.83.11.16
sixnet	User 'sagarsatpute' created.	6/21/2023, 12:21:10 PM	10.83.11.16
sixnet	'sixnet' logged in.	6/21/2023, 12:20:07 PM	10.83.11.16
sixnet	'sixnet' logged in.	6/20/2023, 4:27:59 PM	10.83.11.19
rahul123	'rahul123' logged in.	6/20/2023, 3:24:08 PM	10.83.11.12
sixnet	'sixnet' logged out.	6/20/2023, 3:24:01 PM	10.83.11.12
sixnet	User 'rahul123' added to Team 'test'.	6/20/2023, 3:23:59 PM	10.83.11.12
sixnet	'sixnet' logged in.	6/20/2023, 3:23:50 PM	10.83.11.12

Audits list all user activity. Searchable data include: User name, Event Description, Event Date, and IP Address of the users.

Backups

Name	Date Created	Size	Logs
1688648999986.zip	7/6/2023, 9:09:59 AM	759m 867k 500b	
1688648921562.zip	7/6/2023, 9:08:41 AM	759m 867k 681b	
1688644613844.zip	7/6/2023, 7:56:53 AM	759m 867k 529b	
1688390807185.zip	7/3/2023, 9:26:47 AM	759m 867k 598b	
1688374971534.zip	7/3/2023, 5:02:51 AM	759m 867k 605b	
1688374599877.zip	7/3/2023, 4:56:39 AM	759m 867k 722b	
1688374141093.zip	7/3/2023, 4:49:01 AM	759m 867k 635b	

The Backups feature allows users to create a backup of the SixView Manager system only. This is not used to back up unit configurations. Backups consist of:

- All job files
- A full database backup, which includes the following important information:
 - User passwords at the time of backup
 - User preferences/views
 - Unit detail (e.g., interfaces)
 - Unit history
 - Audits

Note: When running a backup or restore operation, ALL USERS AND UNITS are locked out of SixView Manager except for the initiating user.

Table Controls

- Backup:** Run Backups by clicking the button in the table controls.
- Upload:** Import a backup by clicking the button in the table controls.
- Restore:** Restore from a backup by clicking the button in the backup Name column.
- Delete:** Delete backups by clicking the icon in the backup Name column.
- Download:** Download a backup file by clicking icon in the backup Name column.
- Logs:** View the log of a backup by clicking the icon in the Logs column.

SixView Manager™ Configuration

The Config view allows the SixView Manager system admin user to change some of the core settings that affect features of SixView Manager. In the Config view, a tabbed interface with two tabs allows the admin to change SMTP and Server settings.

SMTP

- Allow (checkbox)
 - Allow or disallow sending emails from SixView Manager. When disallowed, two features of SixView Manager remain unusable/unseen: “Forgot username/password” link will not be available at login for the reset password process, and the “Alerts” view will not load, along with any existing alerts that will not be sent (no attempt will be made to send email(s) or SMS messages).
- Email (text input)
 - Enter the FROM email used in both “Forgot username/password” link and the Alerts view
- Password (text input)
 - Enter the FROM email’s password

- Named Service or Host Address (radio buttons)
 - Choose from commonly used Named Services (e.g. Gmail™, Godaddy™) or Host Address for IP based SMTP configuration
- Service (dropdown) or Host (text input)
 - Pre-populated list of common Named Service or text input for Host Address
- Test To (text input)
 - Enter optional TO email address to test the SMTP settings
- Click to test SMTP (optional) (button)
 - This button will enable if there is a Test To email address entered. Click it to use the SMTP settings in the form to send a test email

Server and Unit

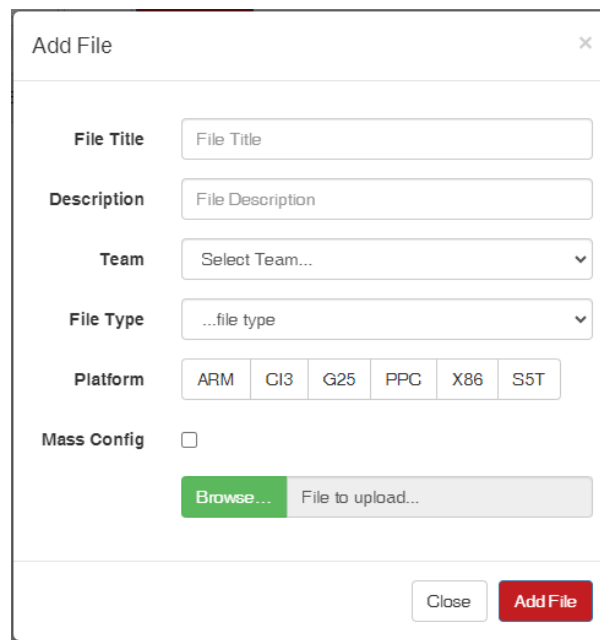
- Logging
 - Set up to three logging destinations:
 - Console - SVM will use the standard error channel
 - File - Choose a location on your system for the log file(s)
 - Syslog - Provide the system logging socket
- Unit
 - Unit Max History (number input)
 - How many records to keep of a unit's history. Default: 500, but this may be increased or decreased.
 - Comm Interface (dropdown)
 - The interface to use in Trigger to open GAU actions. Default: Remote Host.
 - GAU Port (number input)
 - The port to use when opening a web view onto GAU. Default: 10001.

Files

Title	Type	Date Added	Description	Platform
c13_file	CFG	6/20/2023, 3:19:39 PM	c13 file	C13

Job files are listed in this view. In the Title column, a user may delete or download/save job files. When the delete icon is selected, the user is shown a report of all jobs that the file is used for. When the file is removed, all associated jobs (and queue entries) are removed.

There is one special table control—an Add File button. Click the Add File button to open a modal window with a form. Specify File Title, File Type, Platform(s), and upload the job file using the Browse button.



The 'Add File' modal window contains the following fields and controls:

- File Title:** Text input field with placeholder 'File Title'.
- Description:** Text input field with placeholder 'File Description'.
- Team:** Dropdown menu with 'Select Team...'.
- File Type:** Dropdown menu with '...file type'.
- Platform:** Radio button group with options: ARM, CI3, G25, PPC, X86, S5T.
- Mass Config:** Checkbox.
- File Selection:** A green 'Browse...' button followed by a grey 'File to upload...' button.
- Footer:** 'Close' and 'Add File' buttons.

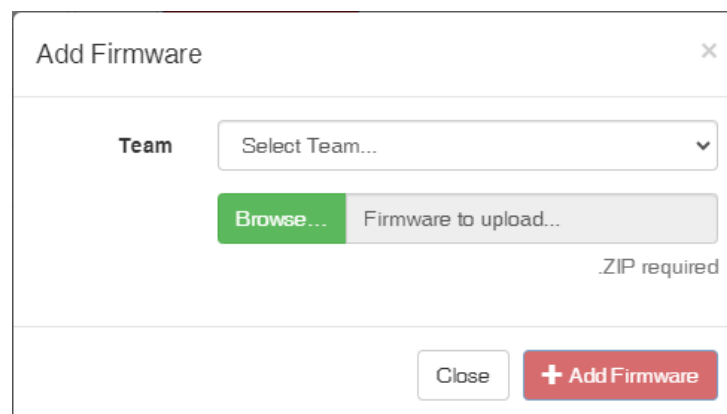
Adding Files to SixView Manager™

DEVICE TYPE	FILE TYPE	PLATFORM
Sixnet® Routers	CMD	G25
Crimson® Devices	CFG	CI3

Firmware

Firmware job files are listed in this view. In the FW Version column, a user may delete or download/save unit firmware. When the trashcan icon is clicked, the user is shown a report of all jobs the firmware is used. When the firmware is removed, all associated jobs (and queue entries) are removed.

There is one special table control—an Add Firmware button. Click the Add Firmware button to open a modal window with the form shown below.



The 'Add Firmware' modal window contains the following fields and controls:

- Team:** Dropdown menu with 'Select Team...'.
- File Selection:** A green 'Browse...' button followed by a grey 'Firmware to upload...' button.
- Requirement:** '.ZIP required' text.
- Footer:** 'Close' and '+ Add Firmware' buttons.

Adding Firmware to SixView Manager

DEVICE TYPE	FILE TYPE	PLATFORM
Sixnet Routers	Firmware ZIP file	N/A

SixView Manager™ Firmware Packages

Note: Applicable for Sixnet® routers only.

Firmware may be added in a variety of ways. Packages from Red Lion's website (<http://www.redlion.net/industrial-wireless-software-firmware>) may be directly uploaded, while the old standard—a boot and root (jffs2) pair in a zip file—will also work. A new option is the ability to upload multiple firmware versions all in one zip file.

Another new feature since v3.0.10 is auto-detection of version. A user no longer must specify a package Version or Name (and can no longer specify these). The new method to upload is simply choose what Team to add the firmware under, select the Browse button to upload the zip file, and click Add Firmware. SixView Manager automatically determines the version and platform.

Jobs

Status	Unit	Changed Date	Name	Team
PENDING	YU17SEP2000013	21/6/2023, 2:33:33 pm	Testing_job	test
PENDING	YU02NOV2000001	21/6/2023, 2:33:33 pm	Testing_job	test
PENDING	971X54800150009	21/6/2023, 2:33:33 pm	Testing_job	test

The Jobs view lists job queue entries and their status. From within the table rows, a queue entry may be deleted in any status. Delete a single entry via the trashcan icon with the number one beside it. Delete an entire job via the trashcan icon with the asterisk beside it.

Unit Group

Query Unit List

To add a job, click the Add Job button above the job queue table. To add a unit job, click the Add Job button at the top of the Job list in the Jobs view. This action opens a view with two different paths to add a job target by Unit Group or by Query Unit List.

Unit Group allows assignment of the job to a group of units as defined in the Groups view. Query Unit List is the more traditional way of adding jobs. Use the Query Builder or Simple Search to search for the unit(s) that should receive the job. After defining the Job Target, choose the Job Name, Job Type, Platform, and Job File. Finally, Review Job and Submit (or cancel/go back) the new job. Once completed (or canceled), the Job Queue shows an entry for each unit assigned to the new job.

Job Name

Start :
8/23/2023, 11:55:00 AM

Team

Job Type

Platform

Job File

Finalize ➡➡

Adding Jobs to SixView Manager™

DEVICE TYPE	FILE TYPE	PLATFORM
Sixnet® Routers	Command	G25
	G25 SN Configuration	N/A
Crimson® Devices	Configuration	CI3

Units

Serial	Interfaces	Major Name	Minor Name	Last Check In	Alert
YU17SEP2000013	eth0 172.16.20.16 eth1 10.83.4.86 R/H Custom Port	MAJOR_SECP	MINOR_SECP	8/21/2023, 12:50:19 PM	INFO Heartbeat
YU02NOV2000001	eth0 172.16.20.18 eth1 10.83.4.85 R/H Custom Port	MAJOR_NOV	MINOR_NOV	8/21/2023, 1:01:45 PM	INFO Heartbeat
971X54600150009	usb0 192.168.111.1 eth0 10.83.4.53 eth1 172.16.20.23 R/H Custom Port	MAJOR_971	MINOR_971	8/21/2023, 1:00:50 PM	INFO Heartbeat

The Units view lists all the units that are connected to SixView Manager in a tabular format. The default table columns show a unit's Serial, Interfaces, Major Name, Minor Name, Last Check In, and the Alert status of the device. There are additional features in table controls, namely Import, the authorized filter, and Select Port.

Additional Table Controls

Authorized Filter



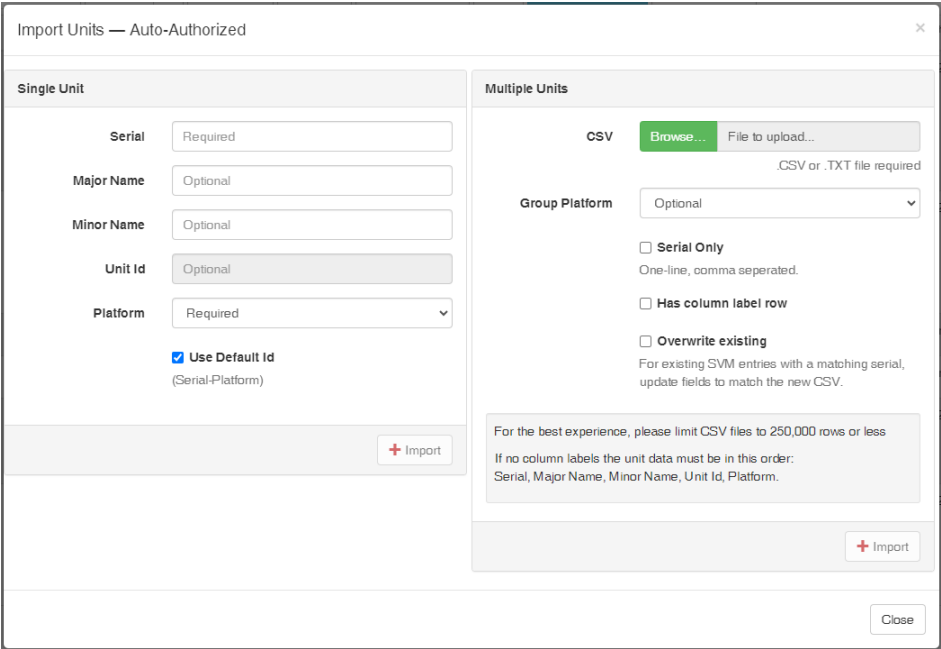
Authorize filter shows units that are either authorized, unauthorized, or all units. Select the Only Authorized button to show a dropdown for the three options available to select to update table content.

Select Port

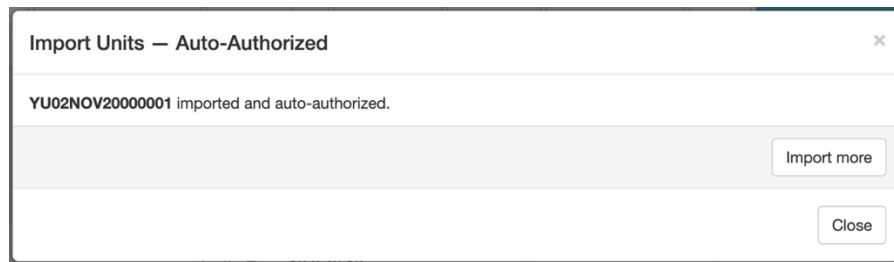


The Select Port dropdown is for selecting the default port of access. Currently, two ports—4443 and 10000—are added to the dropdown for accessing the device when the user clicks on the GUI button or lock icon.

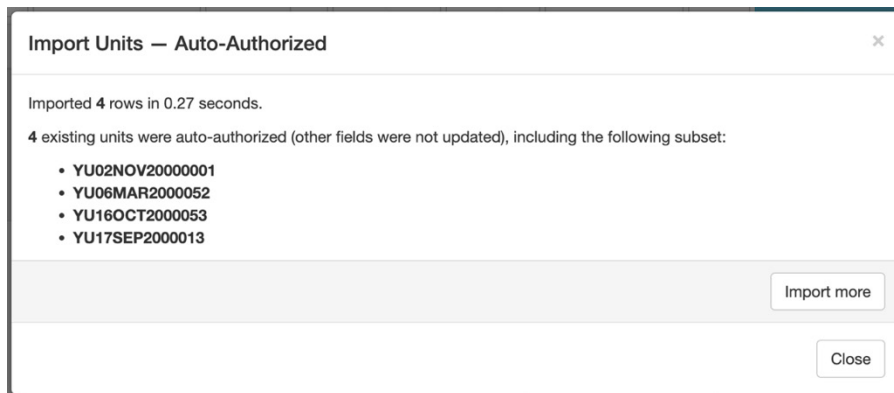
Import



The Import button launches a modal window to import units with their metadata (e.g., Serial, Major Name, Minor Name, Platform). Once the Platform is selected, the Unit ID is auto generated. Multiple units can be added by uploading a CSV or text file.



Success modal window after importing a single unit



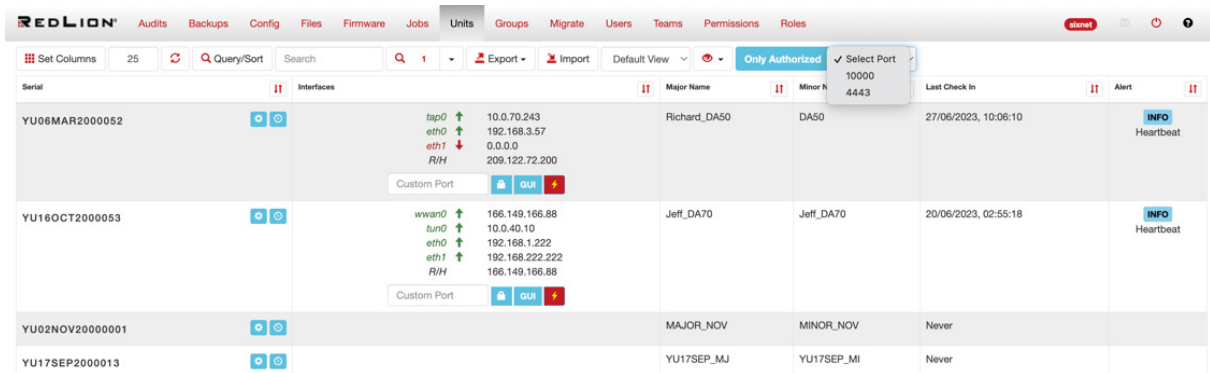
Success modal window after importing multiple units

Support for Custom Port

As shown in the screenshot (Units view), the location for the custom port for a respective unit is kept in the unit table's interface column as is. The only change implemented is that the field is dedicated to that respective unit.

Click the lock icon or the GUI button to check for the custom field. When the port number is present, then a new window opens and shows the device GUI with the custom port number in the URL. When the custom port number field is empty, it checks for the global port selection and opens a new window to the device GUI with the global port number in the URL.

As shown in the screenshot below, the location of the Select Port dropdown (global port) has been moved from the unit table's interface column to the top action panel on the far right. Now there are two ports: 10000 and 4443 for global port assignments.



Unit History

Serial

YU06MAR2000052

Unit History YU06MAR2000052

Set Columns

Search

0

Export

Unit Id	Major Name	Minor Name	Last Check In	Alert
YU06MAR2000052-CI3	Richard_DA50	DA50	22/06/2023, 11:08:09	INFO Heartbeat
YU06MAR2000052-CI3	Richard_DA50	DA50	22/06/2023, 07:48:06	INFO Heartbeat
YU06MAR2000052-CI3	Richard_DA50	DA50	22/06/2023, 04:28:03	INFO Heartbeat
YU06MAR2000052-CI3	Richard_DA50	DA50	22/06/2023, 01:08:00	INFO Heartbeat
YU06MAR2000052-CI3	Richard_DA50	DA50	21/06/2023, 21:47:57	INFO Heartbeat
YU06MAR2000052-CI3	Richard_DA50	DA50	21/06/2023, 18:27:54	INFO Heartbeat
YU06MAR2000052-CI3	Richard_DA50	DA50	21/06/2023, 15:07:51	INFO Heartbeat

177 records

<<

1

2

6

>>

Close

The clock icon in the Serial column launches a modal window that shows details on the unit history in a tabular format. The columns are similar to the Units view table.

Unit Detail

Serial

YU06MAR2000052

Unit Detail: YU06MAR2000052

Information

Cell / GPS

Settings

Actions

Data Usage

Remove

Added By

sixnet

Firmware Version

3.2.0355.0

Host Name

da50-08d4ab

Model

DA50

Serial

YU06MAR2000052

Smart Modem

false

Source IP

209.122.72.200

Uptime

2d 18h 41m 18s

Interfaces

tap0	UP	10.0.70.243
eth0	UP	192.168.3.57
eth1	DOWN	0.0.0.0

Check In

Last	22/06/2023, 14:28:12
Delta	19w 5d 22h 8m 2s
Next	22/06/2023, 17:48:12

Close

The gear icon in the Serial column launches a modal window that shows unit details. The Unit Detail modal window gives a closer look at the specifics of a unit. This section has information such as the platform/architecture the unit belongs to (which is important when adding a job), firmware version, the unit's wireless module (when unit is equipped with one), etc.

Information

The Information tab offers basic information about the unit. The tab lists who authorized the unit, as well as the serial number and the platform the unit is available under.

Cell/GPS

The Cell/GPS tab shows any cell and GPS data available for a particular unit.

Settings

The Settings tab is where the unit's Major and Minor Name can be changed, as well as authorizing or de-authorizing units. Also, check-in intervals can be changed in this tab. To do this, place a checkmark in the poll interval checkbox and adjust the time by either clicking the up or down arrows or highlighting the number and typing the desired time (the poll intervals are in minutes). Click Save when finished.

Note: The interval will not take effect until the next scheduled check-in unless manually triggered.

Actions

The Actions tab allows the user to download the configuration, system log, GWLNX log, or GPS information (when unit is equipped with GPS functionality). To take advantage of these options, place a checkmark in the checkbox of the desired action. Upon next scheduled check-in, the unit downloads the desired action. To view the information, select the [more] button on the unit's status page.

Data Usage

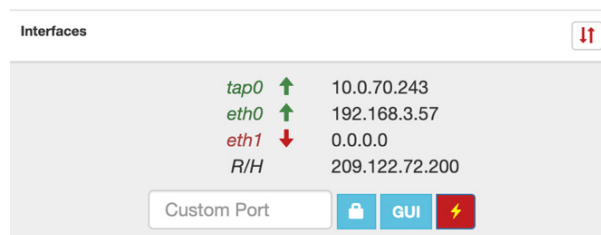
The Data Usage tab assists users with tracking how much data the unit is using.

The **Reset** button takes the value from the *Current Total* and adds it to *Previous Data*. The *Current Total* resets to zero.

Remove

In the Remove tab, a pre-removal report can be generated on the unit before it is erased, and the user can indicate whether or not to proceed. The report includes whether there is existing unit history (that would be wiped) and any jobs for the unit (which would also be wiped).

Interface Data



Interfaces		
tap0	↑	10.0.70.243
eth0	↑	192.168.3.57
eth1	↓	0.0.0.0
R/H		209.122.72.200

Custom Port [] [Lock] GUI [Lightning Bolt]

Interfaces

The column shows the interface types, their status, and the address through which they are connected.

Custom Port

Adding a port number to the field updates the port number when the unit's GUI is accessed.

Device GUI

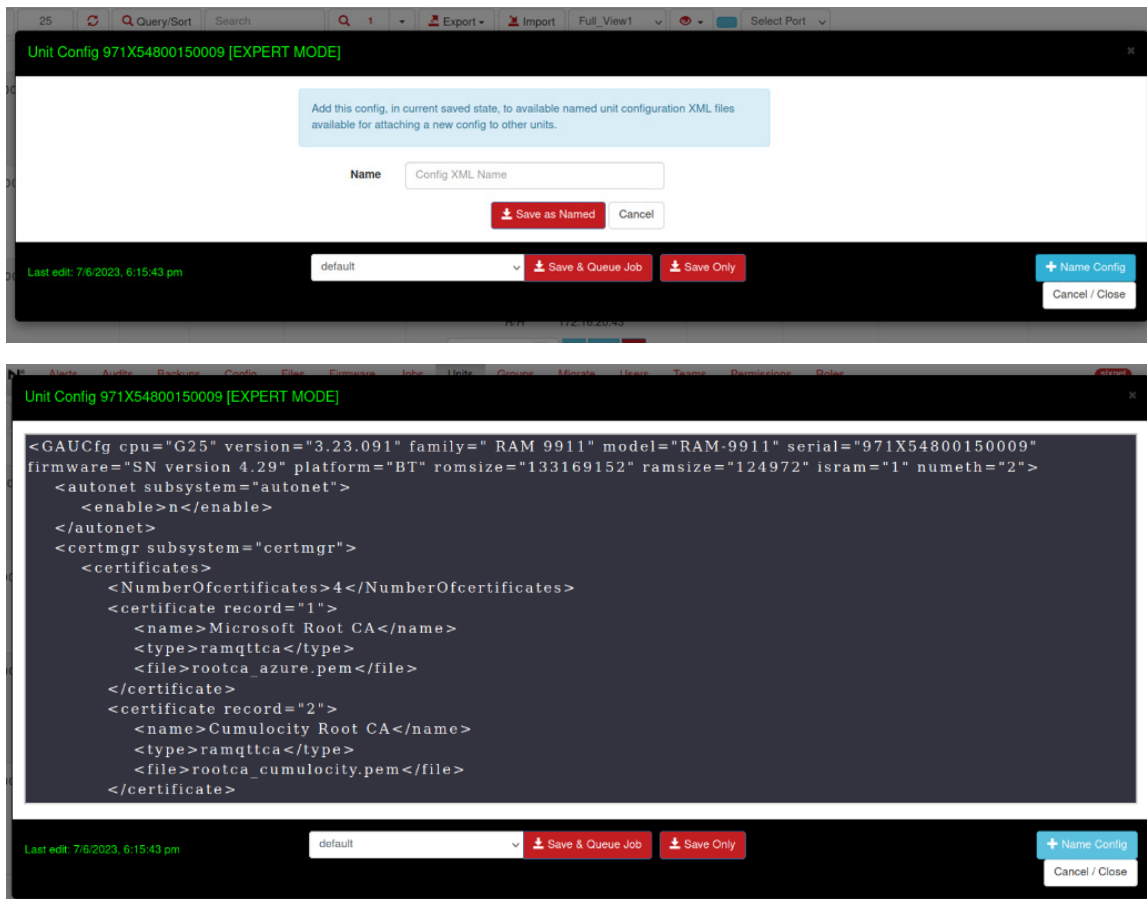
Click the GUI icon to be redirected to the device GUI with TLS (HTTPS) and TCP (HTTP) connection, respectively.

Triggering a Unit

To test the unit to ensure it is still communicating, especially when the Last Check In column shows the unit has not checked in for an abnormally long period of time, select the lightning bolt icon in the Interfaced column to trigger the unit.

Unit Config Editing

Note: Applicable for Sixnet® routers only.



To request a unit config, select the Export Unit Config option in the Unit Detail modal window (launched from the Serial column), under the Actions tab. To use the Config XML editor, drag the Config column into the header of the unit list so that the Config column shows. The pencil icon opens the Config XML editor. Alternatively, configurations from a Named Config list can be attached to a unit by clicking the plus icon in the Config column (a unit may only receive config.xml(s) that were based on a config from a model that match the unit's model). To add a configuration XML to the Named Configs list, click the Save Named Config. Enter the name and click Save. Changes to a unit's configuration never affect the newly named config. They are copies made from a file in one state and become unchangeable. When a config is attached to a unit, what is actually "attached" is a copy of the named config, which is particular to the unit it was attached to.

After editing or attaching a config, save changes by clicking the Save Only button in the Editor modal footer. There is also the option to Save and Queue Job that automatically prepares a job to send the config to the unit when it checks in.

Still Cannot See My Device

If your units still do not display, it is likely the unit is authorized and checking into another server. When that happens, forward the issue to Red Lion Support. When a unit does appear unauthorized, then you can authorize it either through the Migrate view or through searching for the unit directly in the Units view.

Remember to check Query Builder to see if the default unit view includes Authorized = true condition. Clearing the authorized true condition is required to see unauthorized units.

Accessing the GUI on Cellular Routers or RTUs

The GUI is a web-based configuration tool loaded on Red Lion supported devices. There are two choices to access the GUI, either through HTTP or secure HTTP (HTTPS). To access the GUI, select either GUI for HTTP access or GUI for HTTPS under the Interfaces column in the Units view.

The GUI access page loads along with a Username and Password dialog box. Enter as the login “admin” (all lowercase). For the password, enter the serial number of the unit (all lowercase). The unit’s GUI status page loads.

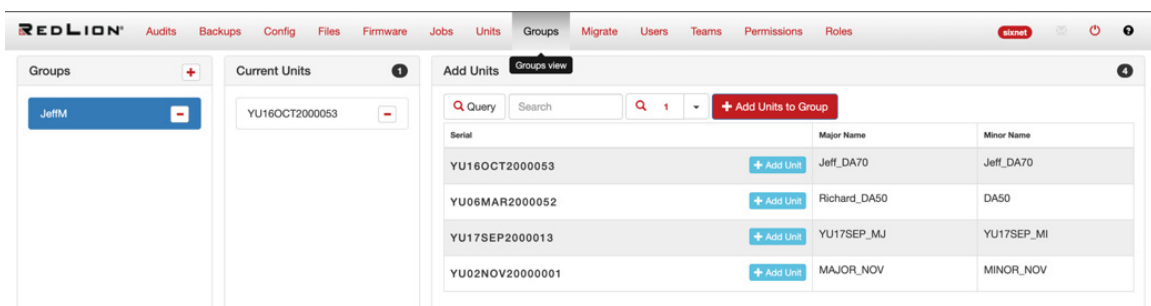
Note: If “admin” does not work, try “jbmadmin” for username.

Note: Are you sure of your password? The device-owner has the right to change the password. Perhaps the password has changed?

If the GUI times out, try selecting the other (either GUI or secure GUI, depending on what was selected initially). Some carriers block the standard port we use to access the routers (10000). In that case, we have a back door approach of using port 443 on HTTP to get access. Go to the window where the GUI attempted to load and change the URL where the port is tagged on (using “:10000”) to 443. If they both time out, and it is not a carrier-port-issue, attempt a unit trigger. Refer to the Triggering a Unit section.

For instructions on how to navigate through the GUI, refer to the Red Lion supported devices user manual.

Groups



Users are assigned groups that are named sets of units. To define a group, click the plus icon above the Groups panel on the left. Enter a Group Name and hit the Create button. Query for unit(s) in the table on the right.

When the desired unit(s) are shown, click the Add Units to Group button above the table in the third panel on the right. The unit(s) is added to the group and shown in the Current Units panel in the middle. The owner of a group may add and delete units as desired. Delegate Groups to subordinates using the Permissions view. There is a new Add Unit button next to the Serial number. When clicked, the respective unit is added to the selected group in the first panel.

Migrate

Q Query

Search

Q 1

Export

Choose Action

Migrate allows the user to perform actions based on the Migrate units table search results: Migrate, Disable, Ignore, Ignore Until Next Check in, Change Architecture, and Export a Unit List as CSV, tab or comma delimited.

REDLION® Audits Backups Config Files Firmware Jobs Units Groups Migrate Users Teams Permissions Roles									
Q Query Search Q 1 Export Choose Action									
Serial	Unit Id	Major Name	Minor Name	Last Check In	Primary Server	Secondary Server	Server Mode	Client Poll Interval	Platform
YU06MAR2000052	YU06MAR2000052-CI3	Richard_DA50	DA50	24/06/2023, 06:28:53	13.58.58.212		none	200	CI3
YU16OCT2000053	YU16OCT2000053-CI3	Jeff_DA70	Jeff_DA70	20/06/2023, 02:55:18	13.58.58.212	13.58.58.212	both	1	CI3
YU17SEP2000013	YU17SEP2000013-CI3	YU17SEP_MJ	YU17SEP_MI	Never			error		CI3
YU02NOV20000001	YU02NOV20000001-CI3	MAJOR_NOV	MINOR_NOV	Never			error		CI3

Basic interaction of Migrate Units includes: define units to take action upon using the search plugin(s), click the Choose Action button to launch the Migrate Actions modal window, select the appropriate tab from the modal window. A form relevant to the selected action is shown. Click Submit Action to execute.

Migrate Actions

Authorize/Unauthorize Change Major Change Minor Disable Ignore Ignore Until Next Check-in Migrate Set Platform Stop Ignoring

Authorize

Unauthorize

Submit Action

Authorize/Unauthorize
Authorize or unauthorize all the units listed on Migrate page.

Change Major
Change major names for all the units listed on Migrate page.

Change Minor
Change minor names for all the units listed on Migrate page.

Disable
Disable primary or secondary server or both servers.

Ignore
Ignore all the devices listed on Migrate page. Ignoring units means as good as the units are disconnected or removed.

Ignore Until Next Check-in

Ignore all the devices listed on Migrate page until the next check-in of the respective unit.

Migrate

Change primary server, secondary server, and server mode for all the devices listed on Migrate page.

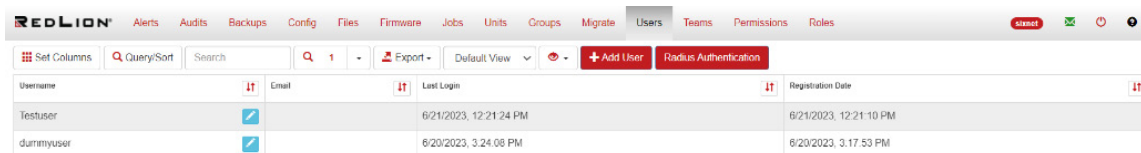
Set Platform

Select a common platform for all the devices listed on Migrate page.

Stop Ignoring

Stop ignoring the ignored units listed on the Migrate page.

Users

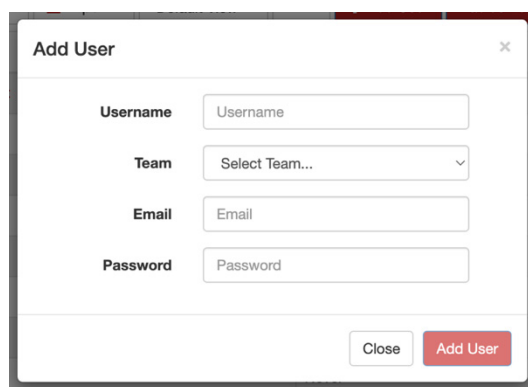


The screenshot shows the REDLION Users page. At the top is a navigation bar with tabs: Alerts, Audits, Backups, Config, Files, Firmware, Jobs, Units, Groups, Migrate, Users (selected), Teams, Permissions, and Roles. Below the navigation bar is a toolbar with buttons: Set Columns, Query/Sort, Search, Export, Default View, Add User, and Radius Authentication. The main content is a table with columns: Username, Email, Last Login, and Registration Date. There are two users listed: Testuser and dummyuser.

Username	Email	Last Login	Registration Date
Testuser		6/21/2023, 12:21:24 PM	6/21/2023, 12:21:10 PM
dummyuser		6/20/2023, 3:24:08 PM	6/20/2023, 3:17:53 PM

SixView Manager™ has a user hierarchy system wherein the superuser is the top user listed, and they may add users and delegate roles to them. Those users may then add their own users and may delegate any roles that they were given along to new users. See the Roles view to examine delegation.

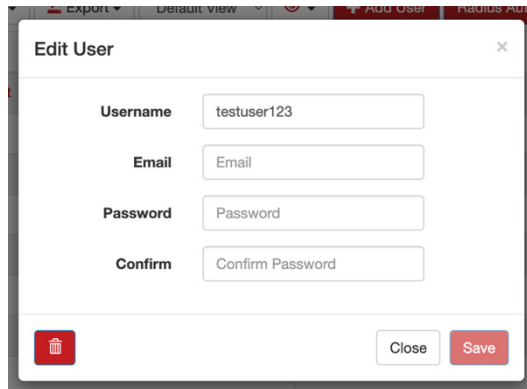
Add a New User



The screenshot shows the 'Add User' modal window. It has a title bar with a close button. The form contains four fields: Username (text input), Team (dropdown menu with 'Select Team...' selected), Email (text input), and Password (text input). At the bottom right are two buttons: 'Close' and 'Add User'.

Select the Add User button on the Users page to launch a modal window that shows a form for adding a new user to the portal. Fields include Username, Team, Email, and Password for login. The Add User button on the modal window is disabled until the form is filled in with valid data. Click on the Add User button to add the user to the Users List and close the modal window.

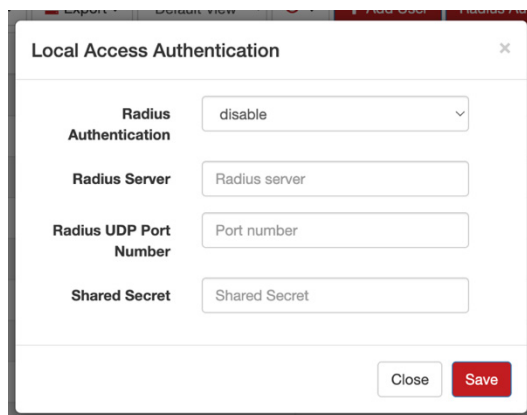
Edit/Remove User



Users may be edited by themselves or by the user that added them (their superior). Edits to Password are only allowed for a user's own password. A user may not remove oneself. Users may only be deleted from the system by their superiors.

In the case where a user is removed, any users created under the removed user are adjusted so that they become underlings of the removing user (superior is adjusted).

Radius Authentication



Enable Radius Authentication login as a superuser by going to the Users page and clicking on the Radius Authentication button.

Select Enable from the Radius Authentication dropdown. The Radius Server field allows setting the IP address of the Radius server. Specify a port number in the Radius UDP Port Number field. The default is typically 1812. Finally, the client password of the Radius server can be entered in the Shared Secret field.

Radius User Limitations

Since Radius users are defined in a separate server, there are certain limitations to what they can do. These limitations include:

- Radius users cannot be modified in SixView Manager™. Changing the user email and the password has no effect.
- User permissions cannot be changed for Radius users with SixView Manager.
- User team memberships for Radius users cannot be modified in SixView Manager.
- There may be a mismatch between the teams and groups of Radius users. Whenever teams or groups assigned to a user are removed or modified in SixView Manager, the Radius information should be manually updated.

Teams

Teams are user groups, used to share common job files, firmware files, and job viewing/adding. There is one team “default” that may never be removed. The superuser “sixnet” is on every team and cannot be removed.

The image shows four overlapping modal windows from the SixView Manager interface:

- Add File:** Fields for File Title (GATEWAY PASS), Description (Change password to gateway SN u...), Team (Team STL), File Type (CMD), Platform (ARM, BLX, G25, PPC, X86), and Job File (4_23a.zip). A 'Finalize' button is at the bottom right.
- Add User:** Fields for User Name (edisonmc), Team (Solar Controller), Email (edisonmc@teslathouse.com), and Password.
- Add Firmware:** Fields for Version (4.23a), Team (Team STL), and Platform (ARM, G25).
- Alert Parameters:** Fields for Name (Late in STL), Minutes (5), Group (STL 6021s), Team (Team STL), and Notify (neil.lindberg@...).

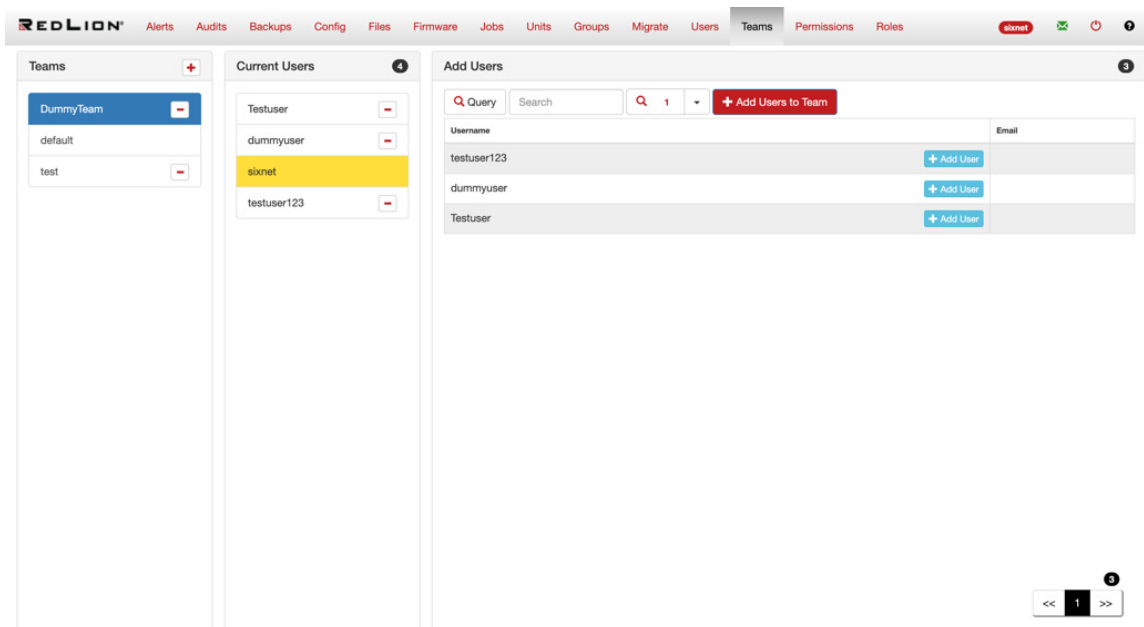
Add and Remove Users

The image shows two panels from the SixView Manager interface:

- Teams:** A list of teams: DummyTeam (highlighted in blue), default, and test. Each team has a minus icon to its right.
- Current Users:** A list of users: Testuser, dummyuser, sixnet (highlighted in yellow), and testuser123. Each user has a minus icon to its right.

Much like unit groups in the Groups view, a team can be added in the Teams view by clicking the plus icon in the Teams panel on the left. Clicking the icon launches a modal window for naming the new team. To add users, use the search plugins on the table in the third panel on the right to find users. When the desired user(s) is listed, click the Add Users to Team button.

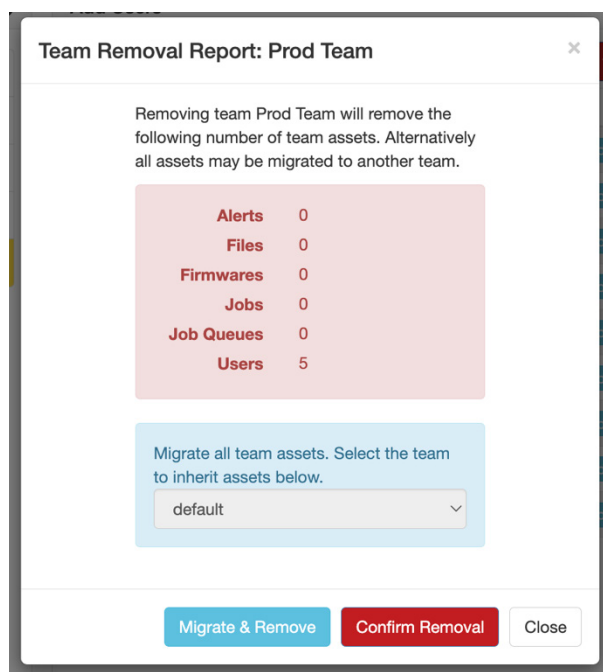
To remove team members, select the Team in the first panel. This causes the middle panel to populate with the team members. Click the minus icon next to the team member to remove.



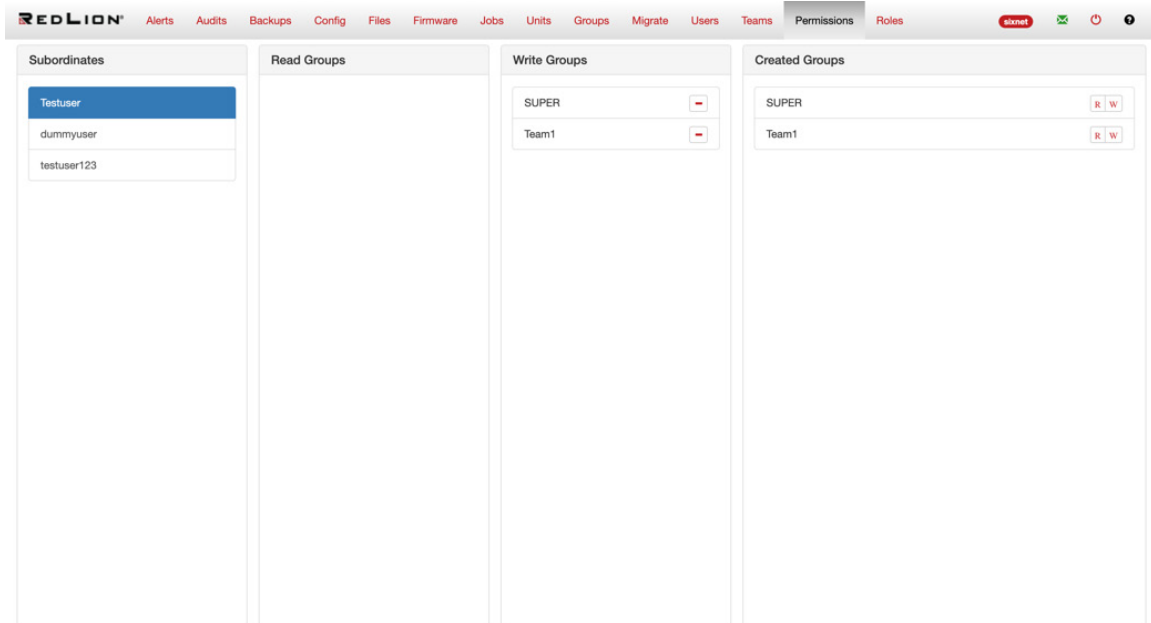
The Add User button is a new, additional button located next to the Username. Click the Add User button to add that user to the team selected in the Teams panel.

Remove and Migrate Team

To remove an entire team, click the minus icon to the right of the team's name (this action does not remove users from SixView Manager™). This opens a modal window to migrate the team's assets. When a team has users that would be without any team upon removal, the team is not allowed to be removed until the users are either removed or migrated to another team.



Permissions

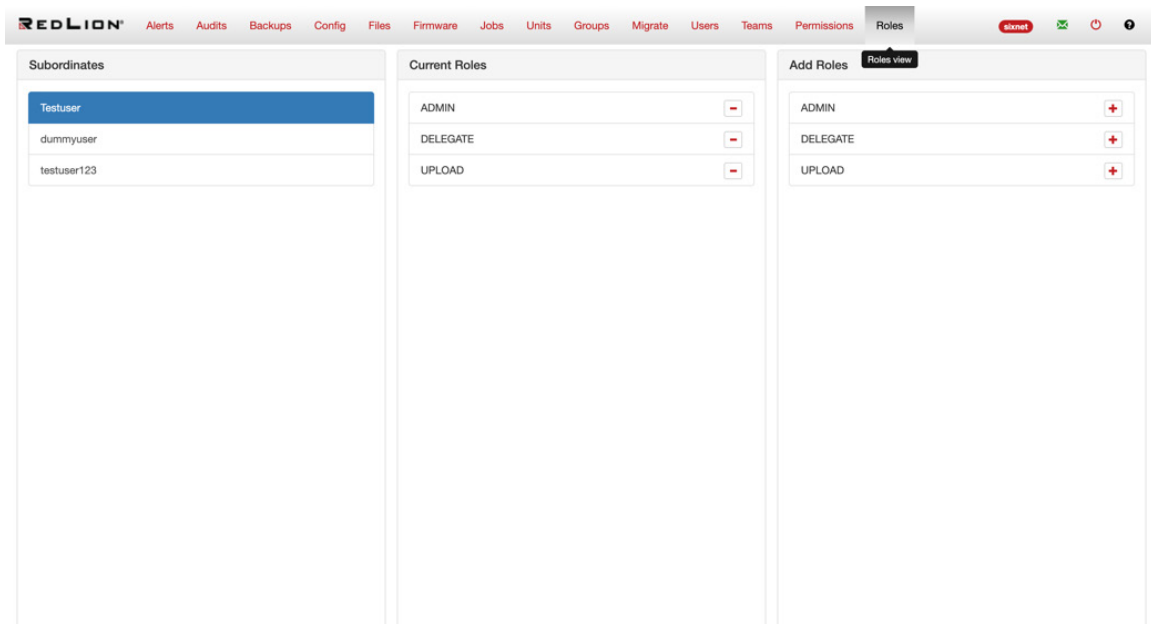


Permissions view is where a user allows read and write access to their subordinates. There are four panels: Subordinates, Read Groups, Write Groups, and Created Groups. To delegate read and/or write privileges:

- Select the Subordinate to whom you want to delegate permissions to.
- To add read permissions, find the desired group in the Created Groups panel and click the R icon.
- To add write permissions, click the W icon in the Created Groups panel for the designated group.

The read and write groups of a subordinate show in their respective panels. To remove read or write permissions, click the minus icon on the group in the Read or Write Group panel.

Roles



The Roles view is where roles may be granted to the subordinates of a user. There are three panels: Subordinates, Current Roles, and Add Roles. To grant roles to a user:

- Select the Subordinate to whom you want to add roles.
- Click the plus icon to the right of the desired role in the Add Roles panel.

The roles of a Subordinate are listed in the Current Roles panel. To remove roles, click the minus icon next to the role in the Current Roles panel.

Roles – Admin

Admin role allows a user to run backups and set system configuration settings.

Roles – Delegate

Delegate role allows for creating groups and delegating permissions.

Roles – Upload

Upload role allows for uploading file actions and actions such as adding jobs.

Local User vs Radius User Roles

Below are two tables that elaborate on the access level for local SixView Manager™ users and Radius users.

Local User

ROLES	PAGES	DESCRIPTION
Admin	Alerts	Can add and edit their alerts
	Audits	Can view and export audits
	Backups	Can upload, download, and restore backups
	Units	Can view and edit unit configuration depending on permissions
	Groups	Can create and delete groups and add or remove units from the groups they are assigned
	Migrate	Migrate access
	Users	Can view Users
Delegate	Units	Can view and edit unit configuration depending on permissions
	Groups	Can create and delete groups and add or remove units from the groups User is assigned
	Migrate	Migrate access
	Users	Can add and delete Users
	Permissions	Can assign groups permissions to the user they created
	Roles	Can assign only delegate role to the user they created
Upload	Files	Can add and delete files
	Firmware	Can add and delete firmware
	Jobs	Can add and remove jobs
	Units	Can view units
	Groups	Can create and delete groups and add or remove units from the groups User is assigned
	Migrate	Migrate access
	Users	Can view Users
	Teams	Can view Users in their team

Radius Users

ROLES	PAGES	DESCRIPTION
Admin	Alerts	Can add and edit their alerts
	Audits	Can view and export audits
	Backups	Can upload, download, and restore backups
	Units	Can view and edit unit configuration depending on permissions
	Groups	Can create and delete groups and add or remove units from the groups they are assigned
	Migrate	Migrate access
Delegate	Units	Can view and edit unit configuration depending on permissions
	Groups	Can create and delete groups and add or remove units from the groups User is assigned
	Migrate	Migrate access
Upload	Files	Can add and delete files
	Firmware	Can add and delete firmware
	Jobs	Can add and remove jobs
	Units	Can view units
	Groups	Can create and delete groups and add or remove units from the groups User is assigned
	Migrate	Migrate access

Erratum

List of known issues.

Firefox™ Web Browser and Saving Passwords

There is a known issue with Firefox web browser (and some phone browsers) when a form has a password field and is set to auto-populate from a saved password, the validation of some login forms fail. Ideally, a user should never save their SixView Manager™ password in any browser, but especially Firefox web browser.

Appendix A License Agreements

Open Source Software

The Software provided with the SixView Manager™ may contain programming, scripts, tools, modules, libraries, components, or other items that were developed using "open source" code (the "Open Source Software"). Open Source Software is provided to you under one or more open source license agreements that contain important information concerning ownership, terms of use, and rights, and restrictions for the applicable element of the Open Source Software. By obtaining, accessing, downloading and/or using Software or the Open Source Software, you agree that you have read, and understood, and will comply with, the terms and conditions of the applicable Open Source Licenses in addition to all other the terms applicable to Software under this Agreement.

SOFTWARE	VERSION	LICENSE
async	2.1.4	MIT
body-parser	1.19.0	MIT
bootstrap	3.3.0	MIT
bower	1.8.4	MIT
chai	2.0.0	MIT
chownr	0.0.1	BSD
connect-mongo	1.3.2	MIT
cookie-parser	1.3.4	MIT
csv-parse	2.5.0	MIT
eslint	5.3.0	MIT
eventEmitter	1.0.0	MIT
excel-export	0.4.1	BSD
express	4.17.1	MIT
express-session	1.17.0	MIT
find	0.1.7	MIT
forever	0.15.3	MIT
forever-monitor	1.7.1	MIT
fs-extra	3.0.1	MIT
grunt	0.4.5	MIT
grunt-bump	0.3.0	MIT
grunt-contrib-clean	0.6.0	MIT
grunt-contrib-symlink	0.3.0	MIT
grunt-eslint	21.0.0	MIT
hashit.js	*	MIT
jquery	2.1.1	MIT
knockoutjs	3.4.2	MIT
linestream	0.1.4	ISC

SOFTWARE	VERSION	LICENSE
md5-file	3.1.1	MIT
method-override	2.3.1	MIT
mongodb	2.2.19	Apachev2
mongoose	4.7.6	MIT
mongoose-idexists	1.0.5	MIT
morgan	1.9.1	MIT
node-fork-rpc	0.2.13	BSD
nodemailer	4.0.1	MIT-0
open	0.0.5	MIT
passport	0.3.2	MIT
passport.socketio	3.7.0	MIT
requirejs	*	MIT
semver	4.3.0	ISC
serve-favicon	2.5.0	MIT
socket.io	1.7.2	MIT
socket.io-client	1.7.2	MIT
stream-to-json	0.0.1	MIT
systeminformation	3.16.0	MIT
walk	2.3.9	MIT, Apachev2
winston	3.1.0	MIT
winston-daily-rotate-file	1.4.0	MIT
winston-syslog	2.3.0	MIT
zip-stream	0.5.2	MIT
boost-iostreams	1.62.0-r5	BSLv1
xxd	8.2.4836-r0	Vim
boost-system	1.62.0-r5	BSLv1
nghttp2-libs	1.41.0-r0	MIT
musl	1.1.24-r10	MIT
snappy	1.1.4-r1	BSD
libbz2	1.0.8-r1	bzip2v1.0.6
db	5.3.28-r1	Oracle Berkley DB Open-Source License (AGPLv3)
gdbm	1.13-r1	GPLv3+
pcre	8.44-r0	BSD-3-Clause
npm	12.22.12-r0	MIT
libstdc++	9.3.0-r2	GPLv2+, LGPLv2.1+
yaml-cpp	0.5.3-r3	MIT
ncurses-libs	6.2_p20200523-r1	MIT
zlib	1.2.12-r3	Zlib
libpcap	1.9.1-r2	BSD-3-Clause

SOFTWARE	VERSION	LICENSE
apk-tools	2.10.8-r1	GPLv2
readline	8.0.4-r0	GPLv2+
boost-filesystem	1.62.0-r5	BSLv1
musl-utils	1.1.24-r10	MIT, BSD, GPLv2+
libssl1.1	1.1.1o-r0	OpenSSL
boost-regex	1.62.0-r5	BSLv1
ncurses-terminfo-base	6.2_p20200523-r1	MIT
alpine-baselayout	3.2.0-r7	GPLv2
xz-libs	5.2.5-r1	GPLv2+, LGPLv2.1+, Public Domain
boost-thread	1.62.0-r5	BSLv1
ca-certificates	20220614-r0	MPLv2, MIT
libressl2.5-libssl	2.5.5-r2	OpenSSL, ISC
libgcc	9.3.0-r2	GPLv2+, LGPLv2.1+
c-ares	1.17.2-r0	MIT
net-tools	1.60_git20140218-r2	GPLv2
libsasl	2.1.28-r0	Cyrus SASL
alpine-keys	2.4-r0	MIT
boost-program_options	1.62.0-r5	BSLv1
busybox	1.31.1-r22	GPLv2
brotli-libs	1.0.9-r1	MIT
wiredtiger-libs	2.9.1.3.4.3-r0	GPLv2+, MIT, BSD
scanelf	1.2.6-r0	GPLv2
lua5.3-libs	5.3.5-r6	MIT
vim	8.2.4836-r0	Vim
ca-certificates-bundle	20220614-r0	MPLv2, GPLv2+
libc-utils	0.7.2-r3	BSD-2-Clause, BSD-3-Clause
unzip	6.0-r9	info-zip-2009-01
libffi	3.3-r2	MIT
libtls-standalone	2.9.1-r1	ISC
ssl_client	1.31.1-r22	GPLv2
boost	1.62.0-r5	BSLv1
python3	3.8.10-r0	PSFv2
nodejs	12.22.12-r0	MIT
mii-tool	1.60_git20140218-r2	GPLv2
expat	2.2.10-r4	MIT
mongodb	3.4.4-r0	AGPLv3
zip	3.0-r8	Info-ZIP
libcrypto1.1	1.1.1o-r0	OpenSSL
libressl2.5-libcrypto	2.5.5-r2	OpenSSL, ISC

SOFTWARE	VERSION	LICENSE
libpcrecpp	8.44-r0	BSD-3-Clause
Linux kernel	6.2.0-36-generic	GPLv2

Notes:

Listing includes both permissive and copyleft licensed software.

Listing does NOT include software that is not licensed (i.e., no license).