

# GRANDSTREAM GWN Manager Software User Guide



**GWN Manager** is a free on-premise enterprise-grade, management platform for Grandstream GWN series devices (Routers, Switches and Access points). Typically deployed on a customer's private network, this flexible, scalable solution offers simplified configuration and management. Thanks to streamlined monitoring and maintenance, managing your network has never been easier. Keep an eye on the network's performance with real-time monitoring, alerts, statistics and reports that can be viewed using a web browser or the mobile application.

This guide describes the steps on how to install **GWN Manager** on CentOS7, AlmaLinux9 or Ubuntu.

Most Linux commands used in this guide will require a Root (Admin) privilege.

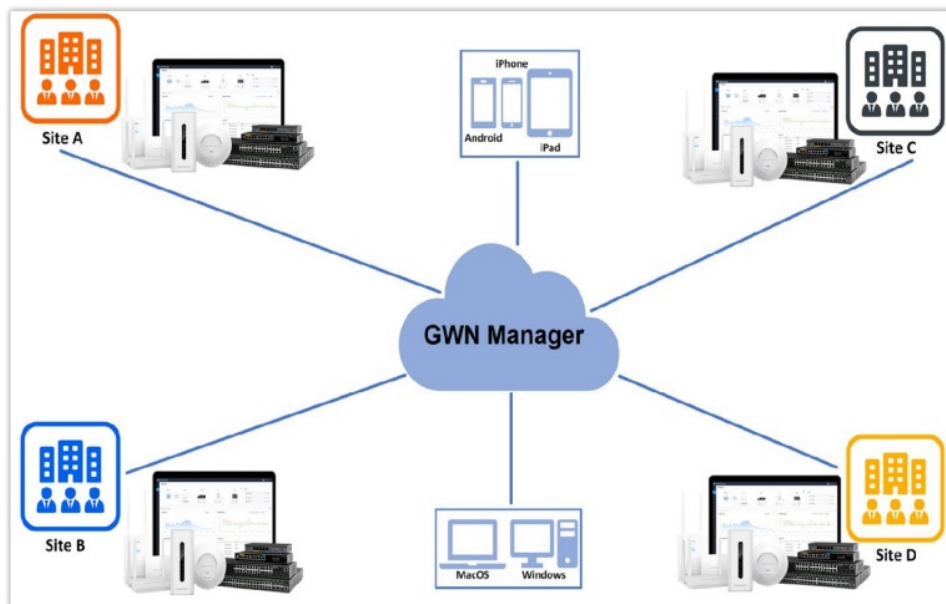
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## GETTING TO KNOW GWN MANAGER

**GWN Manager** is an On-premise Controller used to manage and monitor GWN devices on your network. It provides an easy and intuitive web-based configuration interface, The GWN Manager can control up to 3000 GWN devices (GWN Routers, GWN Switches and GWN APs). Below is the GWN Manager architecture:

GWN Manager Architecture



## System Requirements

**For up to 200 devices and 2000 Clients:**

- **CPU:** Intel® Core™ i3-3240 or above  
RAM: 4GB or above
- **Storage:** 250GB (SSD preferred, depending on retained data size)

**For up to 3000 devices and 30000 Clients:**

- **CPU:** Intel® Xeon® Silver 4210  
RAM: 16GB or above
- **Storage:** 250GB (SSD preferred, depending on retained data size)

## INSTALLING AND CONFIGURING GWN MANAGER

### Installing GWN Manager

**First, download the bundled package according to your Linux distribution (CentOS, AlmaLinux or Ubuntu) from the link:**

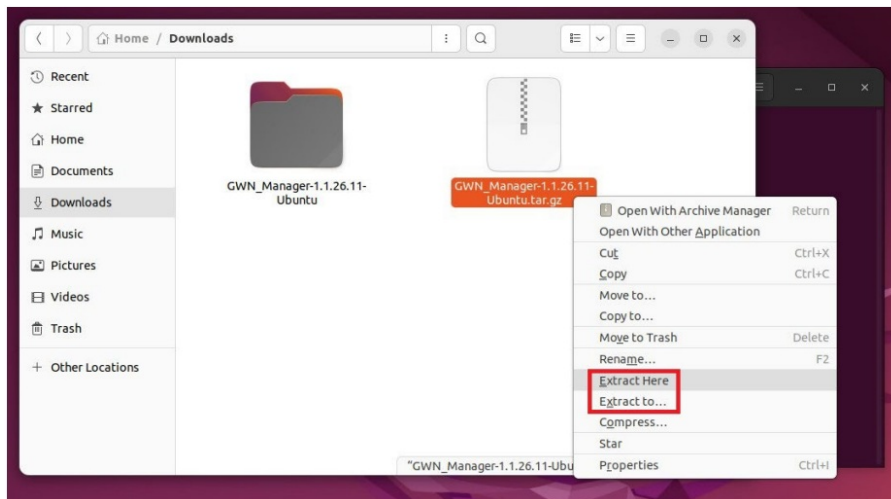
GWN Manager bundle package

	1.1.26.11 Release Note	Quick Installation Guide	User Guide for OVA Format
GWN Manager	For AlmaLinux9: 1.1.26.11	OVA format: 1.1.26.11	
	For CentOS7: 1.1.26.11	OVA format: 1.1.26.11	
	For Ubuntu: 1.1.26.11	OVA format: 1.1.26.11	

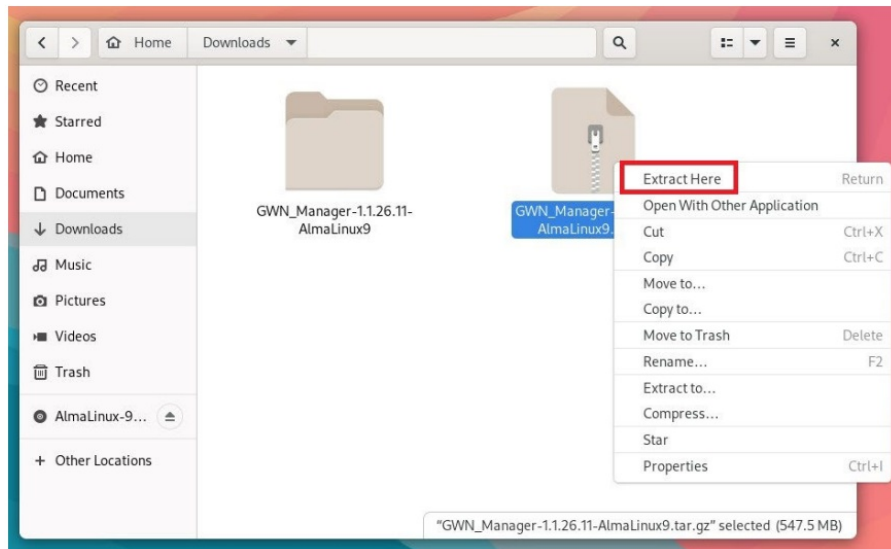
Then, extract the file.

To extract the file using GUI, please refer to the figure below:

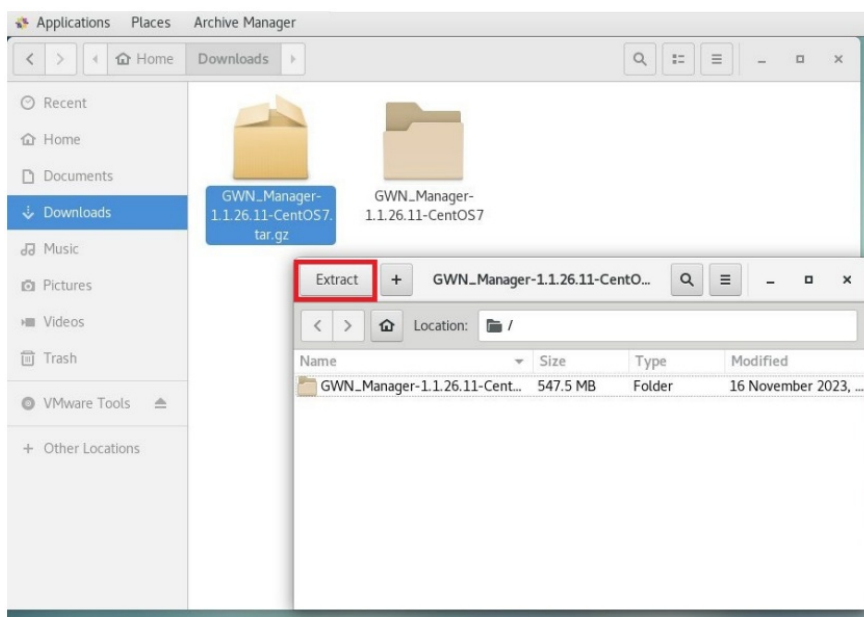
### Ubuntu – Extract file



### AlmaLinux – Extract file



### CentOS – Extract file



Alternatively, under CentOS7/AlmaLinux9 using terminal run the command below:

```
tar -zxvf GWN_Manager-1.0.0.13-201912121121.tar.gz
```

## CentOS7 – Extract file

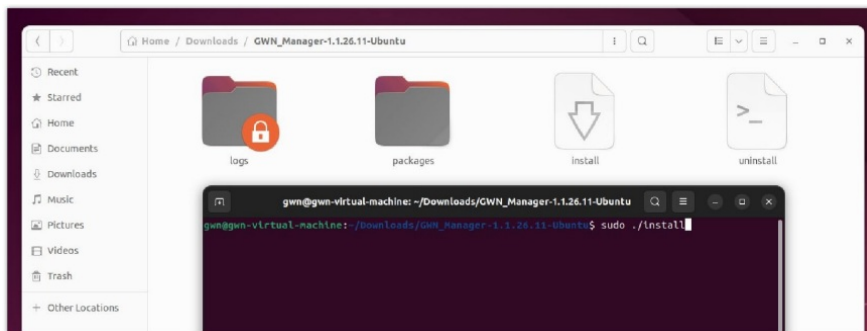
```
[root@2 gwn]# tar -zxvf GWN_Manager-1.0.0.13-201912121121.tar.gz
gwn-1.0.0.13-1.el7.x86_64.rpm
gwn-nginx-1.0.0.13-1.el7.x86_64.rpm
gwn-redis-1.0.0.13-1.el7.x86_64.rpm
gwn-mariadb-1.0.0.13-1.el7.x86_64.rpm
```

Finally, run the file “install” to install GWN Manager.

To execute the “install” file, run the following command:

```
sudo ./install
```

## Ubuntu – Install GWN Manager



### Note:

The user could be prompted to install these dependencies under Ubuntu if they are not already installed.

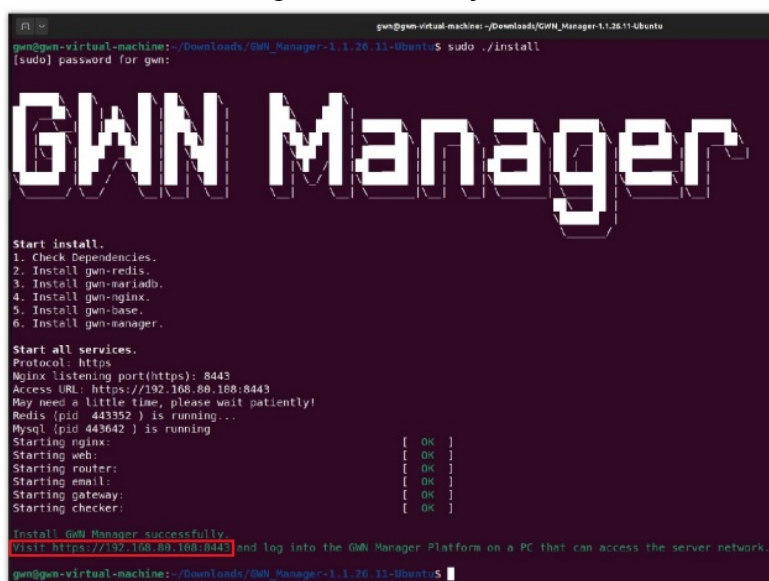
```
sudo apt install libaio1
```

```
sudo apt install openssh-server
```

```
sudo apt --fix-broken install (only if prompted to do so).
```

Once installed, the current display will be shown with GWN Manager address and port.

## Ubuntu – GWN Manager successfully installed



## Running GWN Manager

Before running GWN Manager services, you will need to add firewall exceptions (only for CentOS7 and AlmaLinux9) using the following commands:

```
firewall-cmd --zone=public --  
add-port=8443/tcp --permanent  
firewall-cmd --zone=public --  
add-port=10014/tcp --permanent  
firewall-cmd --reload
```

### CentOS/AlmaLinux – Adding Firewall exceptions

```
[root@2 gwn]# firewall-cmd --zone=public --add-port=8443/tcp --permanent  
success  
[root@2 gwn]# firewall-cmd --zone=public --add-port=10014/tcp --permanent  
success  
[root@2 gwn]# firewall-cmd --reload  
success
```

By default, GWN Manager uses port 8443 for the web service (Nginx) and port 10014 for gateway communication separately.

Run the script to start the services using the below command:

```
/gwn/gwn start
```

### Starting GWN services

```
[root@2 gwn]# /gwn/gwn start  
Protocol: https  
Nginx listening port(https): 8443  
Access URL: https://192.168.5.213:8443  
May need a little time, please wait patiently!  
Starting redis: [ OK ]  
Starting mysql: [ OK ]  
Starting nginx: [ OK ]  
Starting web: [ OK ]  
Starting email: [ OK ]  
Starting gateway: [ OK ]
```

### Information:

Starting version 1.0.20.22.23, GWN Manager service will start automatically after rebooting the Linux host machine.

After all services start up, please go to the Web Portal for further configuration. By default, the Web Portal address is:

**https://server\_ipaddress:8443**

In our case it will be as follows:

### GWN Manager Address and Port

```
Install GWN Manager successfully.  
Visit https://192.168.80.108:8443 and log into the GWN Manager Platform  
gwn@gwn-virtual-machine:~/Downloads/GWN_Manager-1.1.26.11-Ubuntu$
```

## First Use

The below figures show the initial page after installation. On first use, users need to fill in additional information

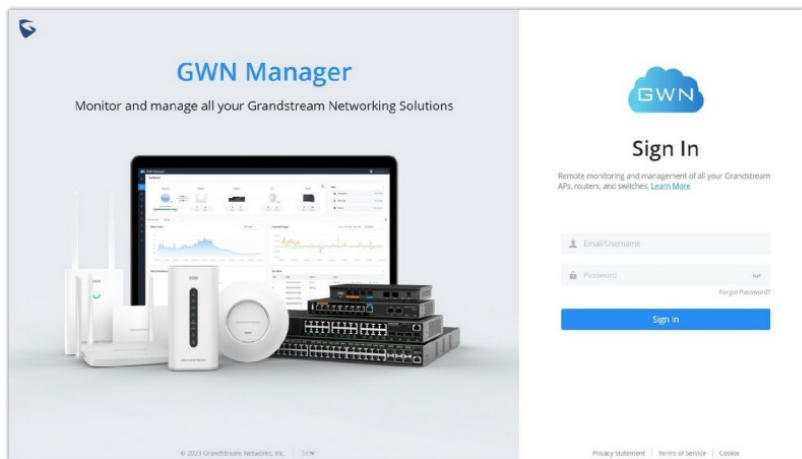
following the initiation Wizard. Click start to begin. For more detailed information please refer to the GWN Manager User Guide.

### GWN Manager initial Web page



Once finishing the Wizard, the login page of the GWN Manager will be displayed as below:

### Login Page



### Configuring GWN Manager

Users can change the Nginx binding protocol, port as well as the access address for communication (You do not need to change the default settings in general).

`/gwn/gwn config`

1. If you change the Nginx binding port, you will need to add a new firewall Exception. Moreover, for security considerations, GWN Manager runs as a non-root user, so please consider using a number larger than 1024 as the Nginx binding port number, or the service may fail to start due to denied permission.
2. **HTTPS** is used by default due to its security, and GWN Manager will automatically generate a certificate along with the private key after installation. You can also apply for a certificate signed by a trusted authority to replace it.
3. Below system paths are where you can replace the SSL certificate and private key

#### certificate:

`/gwn/conf/nginx/s`

`sl.pem` private key:

```
/gwn/conf/nginx/ss  
l.key
```

**After replacing the two files, restart the GWN service to validate the configuration change:**

```
/gwn/gwn restart
```

### Restarting GWN services

```
[root@02 gwn]# /gwn/gwn restart  
Stopping web: [ OK ]  
Stopping email: [ OK ]  
Stopping gateway: [ OK ]  
Stopping nginx: [ OK ]  
Stopping mysql: [ OK ]  
Stopping redis: [ OK ]  
  
Protocol: https  
Nginx listening port(https): 8443  
Access URL: https://192.168.5.213:8443  
May need a little time, please wait patiently!  
Starting redis: [ OK ]  
Starting mysql: [ OK ]  
Starting nginx: [ OK ]  
Starting web: [ OK ]  
Starting email: [ OK ]  
Starting gateway: [ OK ]
```

### Information:

Starting version 1.0.20.22.23, GWN Manager service will start automatically after rebooting the Linux host machine.

## ADDITIONNAL INFORMATION

### Configuring GWN Manager to Auto-Start

In case of GWN Manager service is not starting after a reboot, the user can make GWN Manager starts every time the computer boots up, for example in case of a power outage or just a reboot after an update.

```
sudo echo "/gwn/gwn start >  
/dev/null &" >> /etc/rc.local  
sudo chmod +x /etc/rc.local
```

### Modifying GWN Manager Password

**If the user forgets the web login password and didn't configure the SMTP server as well, he can modify the password from backstage using the below command:**

```
/gwn/gwn modify-password
```

### Upgrading GWN Manager

GWN Manager will check for the new firmware version automatically when you log into web GUI, if a new version is found, a notification will pop up and you may click to complete the upgrade. You can also upgrade manually by running the "install" file of the new version.

```
sudo ./install
```

### Uninstalling GWN Manager

To uninstall GWN Manager, please execute the "**uninstall**" file

```
sudo ./uninstall
```

Help

For discover more commands, please run:

GWN Manager help

```
[gwn@localhost ~]$ /gwn/gwn -h
gwn [OPTIONS...] {COMMAND}

Options:
  -h, --help            Display this help and exit.
  -v, --version          Print the version.


Commands:
  start                Start the stopped services.
  stop                Stop the running services.
  restart              Start or restart all services.
  status               Show status of all services and access url.
  config               Change configurations and then restart services.
  modify-password      Modify password for web portal.
  remove-mfa           Remove two-factor authentication.
  gencert-gateway       Regenerate certificate for gateway and then restart it.
  gencert-nginx         Regenerate certificate for nginx and then restart it.
  update-tz            Update JRE software with more recent timezone data and restart
  web service.
```

Important Notes







- GWN Manager only supports one access address at present, so if your machine has more than one network interface, you should set the access address to the one (IP address) that you expect to communicate with the Access point.  
Please consider setting the right time zone of your machine before running GWN Manager, modifying the time zone may cause data corruption.








Documents / Resources

  <small>Grandstream Networks, Inc. GWN Manager - Open Source Software Linux CentOS 7 / Ubuntu 18.04 / Ubuntu 20.04</small>	<a href="#">GRANDSTREAM GWN Manager Software</a> [pdf] User Guide GWN Manager Software, GWN, Manager Software, Software
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References

-  [documentation.grandstream.com/wp-content/uploads/2023/12/Screenshot-2023-12-06-145639.png](#)
-  [documentation.grandstream.com/wp-content/uploads/2023/12/Screenshot-2023-12-06-155323-1.jpg](#)
-  [documentation.grandstream.com/wp-content/uploads/2023/12/Screenshot-2023-12-06-160137-1.jpg](#)
-  [documentation.grandstream.com/wp-content/uploads/2023/12/Screenshot-2023-12-06-160440.jpg](#)
-  [documentation.grandstream.com/wp-content/uploads/2023/12/Screenshot-2023-12-06-173622-1.jpg](#)
-  [documentation.grandstream.com/wp-content/uploads/2023/12/Screenshot-2023-12-06-174557.jpg](#)



-  [documentation.grandstream.com/wp-content/uploads/2023/12/Screenshot-2023-12-06-175004.jpg](https://documentation.grandstream.com/wp-content/uploads/2023/12/Screenshot-2023-12-06-175004.jpg)
-  [documentation.grandstream.com/wp-content/uploads/2023/12/Screenshot-2023-12-06-175141.jpg](https://documentation.grandstream.com/wp-content/uploads/2023/12/Screenshot-2023-12-06-175141.jpg)
-  [documentation.grandstream.com/wp-content/uploads/2023/12/Screenshot-2023-12-06-175426.jpg](https://documentation.grandstream.com/wp-content/uploads/2023/12/Screenshot-2023-12-06-175426.jpg)
-  [documentation.grandstream.com/wp-content/uploads/2023/12/Screenshot-2023-12-07-091950.jpg](https://documentation.grandstream.com/wp-content/uploads/2023/12/Screenshot-2023-12-07-091950.jpg)
-  [Tools- Grandstream Networks](#)
- [User Manual](#)