

# Server Requirement

Production	Minimum
100G Disk Space, 2 CPU, 4G RAM 1 Ethernet interface	10G Disk Space, 1 CPU, 512M RAM 1 Ethernet interface

## Install Network Automation Assistant

To install NAA on your laptop, follow these steps.

Note that the free version support up to 50 devices. But you can increase to 100 devices for free. See Update the License.

### Step 1: Create VM Guest with Virtualbox to run Centos.

Download [Centos NetInstall iso](#)

Pick the one that says CentOS-7-x86\_64-NetInstall-xxxx.iso

Create VM Guest. We use Virtualbox as example, you should be able to use any hypervisor of your choice.

Run Virtualbox

New > Name:Ironwood-NAA , Type:Linux , RedHat (64-bit)

RAM: 1024 MB or more

HD: Create HD Now

HD File type: VDI

Storage: Dynamically allocated

File location and Size: 8GB or more

Settings > Storage > CD icon > Optical Drive > CD icon > Choose Virtual Optical Disk File > CentOS-7-x86\_64-NetInstall-1511

Settings > Network > Attached to: NAT

Settings > Network > Advanced > Port Forwarding > Add > TCP Host Port: 8022 , Guest Port: 22

Settings > Network > Advanced > Port Forwarding > Add > TCP Host Port: 8443 , Guest Port: 443

Start VM Guest

### Step 2: Install Centos.

Network & Hostname > Ethernet: ON , Hostname: naa.yourdomain.com

Installation Source > On the Network: mirror.centos.org/centos/7/os/x86\_64/

Installation Destination > Automatic partition

Software Selection > Base Environment: Basic Web Server

KDUMP > Disable KDUMP

Begin Installation

Root Password > your choice

### Step 3: Setup necessary services.

From Host laptop

```
ssh root@127.0.0.1 -p 8022
```

```
yum -y update
```

```
yum -y install php gcc ntp net-snmp-utils telnet cpan dos2unix sendmail sendmail-cf
```

```
cpan // Accept all default questions
cpan> install CPAN
cpan> reload cpan
cpan> o conf build_requires_install_policy yes
cpan> o conf prerequisites_policy follow
cpan> o conf commit
cpan> install YAML Net::Telnet Socket Net::Appliance::Session Parallel::ForkManager
cpan> quit
```

#### Setup Timezone

```
ntpdate pool.ntp.org
timedatectl set-timezone America/Los_Angeles (your choice)
```

#### Setup User naa

```
useradd -d /home/naa naa
passwd naa
sudo visudo
Add this line
naa ALL=(ALL) ALL
```

#### Setup HTTPD

```
mv /var/www/html /var/www/naa
chown -R naa:naa /var/www/naa
chown -R naa:naa /var/lib/php/session
cp /etc/httpd/conf/httpd.conf /etc/httpd/conf/httpd.conf.bk
sed -i "s/User apache/User naa/" /etc/httpd/conf/httpd.conf
sed -i "s/Group apache/Group naa/" /etc/httpd/conf/httpd.conf
sed -i "s/DocumentRoot \"\var\www\html\"/DocumentRoot \"\var\www\naa\"/" /etc/httpd/conf/httpd.conf
firewall-cmd --permanent --zone=public --add-service=https
systemctl restart firewalld.service
systemctl enable httpd
sed -i "s/SELINUX=enforcing/SELINUX=disabled/" /etc/selinux/config
reboot
```

#### Disable root login

```
ssh naa@127.0.0.1:8022
sudo nano -w /etc/ssh/sshd_config
Add this line
PermitRootLogin no
sudo systemctl restart sshd
```

### Step 4: Install NAA application.

```
wget http://ironwoodnetworks.com/download/naa.tgz
tar xzf naa.tgz -C /var/www/naa
```

Done

## Login NAA GUI

To login to NAA GUI. Open a browser from your host machine to this URL.

https://127.0.0.1:8443

user: admin

password: admin

## Update to the Latest Version

To update to the latest version.

(NAA have Internet access)

Step 1: Login to NAA as user “admin” (default password admin)

At the bottom panel

Licensed Devices > System Update > Software > Download and Update Now

Done

(NAA have NO Internet access)

Step 1: Open your browser to the Download site.

<http://ironwoodnetworks.com/download>

Download the latest update to your PC

naa-vX.X\_<date>.tgz

Note that some browsers rename the file type to “.tar”, it causes NAA’s Software Update to fail because it is expecting a “.tgz” extension.

Please rename the file back to .tgz extension on your PC.

Step 2: Login to NAA as user “admin” (default password admin)

At the bottom panel

Licensed Devices > System Update > Software > Choose File > naa-vX.X\_<date>.tgz > Software Update

Done

## Update the License

You can request a new license when...

- i) you want to **increase to 100 devices for free**
- ii) you need to support more devices than the free version’s limit, you can purchase a new license

To update the license, please follow the follow steps to send a request email.

**Step 1: Login to NAA as user “admin” (default password admin)**

At the bottom panel

Licensed Devices > Request license Update

Send the email with the included system information for license request

Our customer support will generate a new license and reply to you with the new license file.

**Step 2: Login to NAA as user “admin” (default password admin)**

At the bottom panel

Licensed Devices > System Update > License > Choose File > <license file> > Import License