Installation of AAP

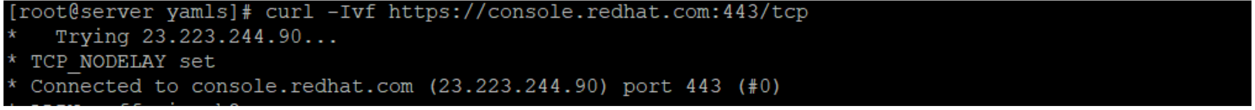
Pre- requisites :-

1. Check for if the urls are whitelisted or not

   curl -Ivf <url with port>

   eg.   curl -Ivf https://console.redhat.com:443/tcp

   o/p:-



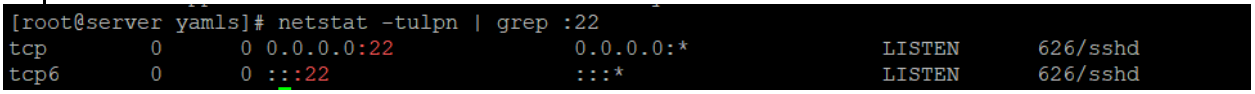
```
[root@server yamls]# curl -Ivf https://console.redhat.com:443/tcp
*   Trying 23.223.244.90...
* TCP_NODELAY set
* Connected to console.redhat.com (23.223.244.90) port 443 (#0)
```

2. Once it is done check if the port for AAP is open to check that

   Note: AAP works on either 443 or 9440 if one of is open it will work

   netstat -tulpn | grep -i <port number>

   o/p:-



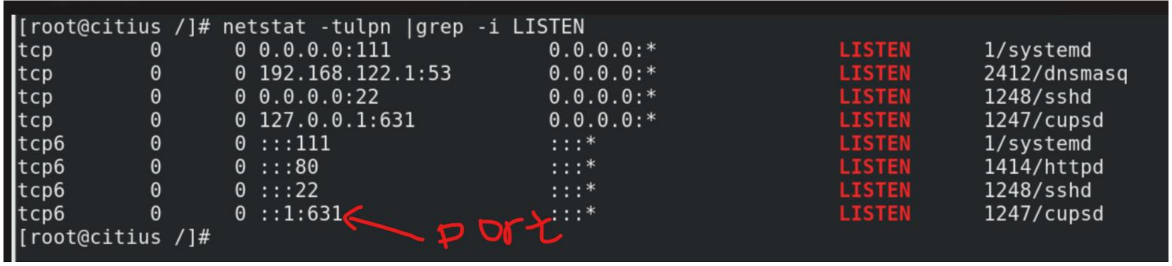
```
[root@server yamls]# netstat -tulpn | grep :22
tcp        0      0 0.0.0.0:22              0.0.0.0:*               LISTEN      626/sshd
tcp6       0      0 :::22                   :::*                    LISTEN      626/sshd
```

Or

If you want to see which ports are open run the following command

netstat -tulpn | grep -i LISTEN

O/p:-



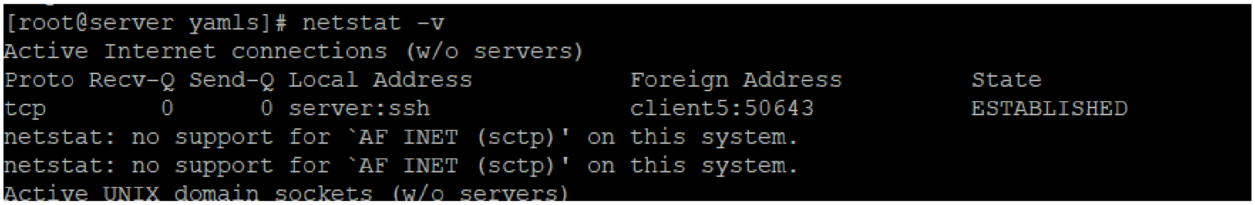
```
[root@citius /]# netstat -tulpn |grep -i LISTEN
tcp        0      0 0.0.0.0:111             0.0.0.0:*               LISTEN      1/systemd
tcp        0      0 192.168.122.1:53        0.0.0.0:*               LISTEN      2412/dnsmasq
tcp        0      0 0.0.0.0:22              0.0.0.0:*               LISTEN      1248/sshd
tcp        0      0 127.0.0.1:631           0.0.0.0:*               LISTEN      1247/cupsd
tcp6       0      0 :::111                  :::*                    LISTEN      1/systemd
tcp6       0      0 :::80                   :::*                    LISTEN      1414/httpd
tcp6       0      0 :::22                   :::*                    LISTEN      1248/sshd
tcp6       0      0 ::1:631                 :::*                    LISTEN      1247/cupsd
[root@citius /]#
```

if netstat is not found while running run this code to install net- tools

yum install net-tools

check version after installing

netstat -v



```
[root@server yamls]# netstat -v
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
tcp        0      0 server:ssh              client5:50643           ESTABLISHED
netstat: no support for `AF INET (sctp)' on this system.
netstat: no support for `AF INET (sctp)' on this system.
Active UNIX domain sockets (w/o servers)
```

Steps:-

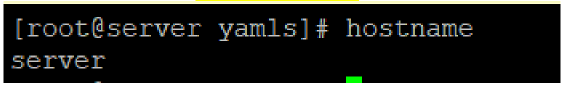
1. Set the hostname of the system using the following command

   hostnamectl set-hostname <hostname>

   eg. hostnamectl set-hostname server

   To check if it is set or not run command:

   hostname

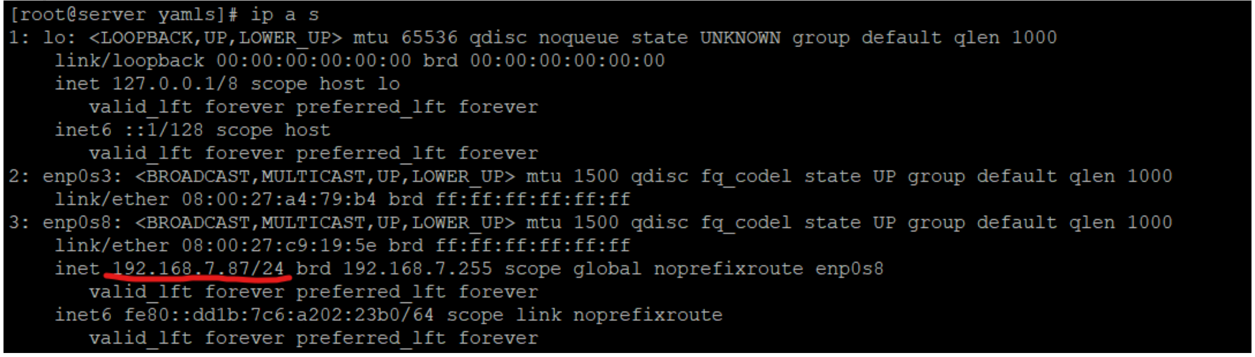


```
[root@server yamls]# hostname
server
```

2. Check the ip address of the system using

   ip a s

   o/p:-

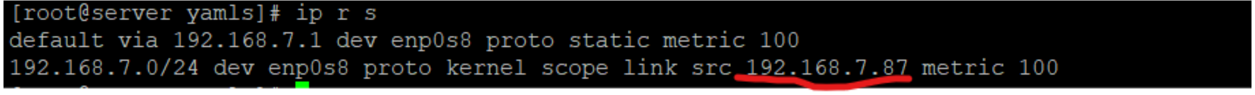


```
[root@server yamls]# ip a s
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
       valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:a4:79:b4 brd ff:ff:ff:ff:ff:ff
3: enp0s8: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:c9:19:5e brd ff:ff:ff:ff:ff:ff
    inet 192.168.7.87/24 brd 192.168.7.255 scope global noprefixroute enp0s8
       valid_lft forever preferred_lft forever
    inet6 fe80::dd1b:7c6:a202:23b0/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
```

or

   ip r s

   o/p:-

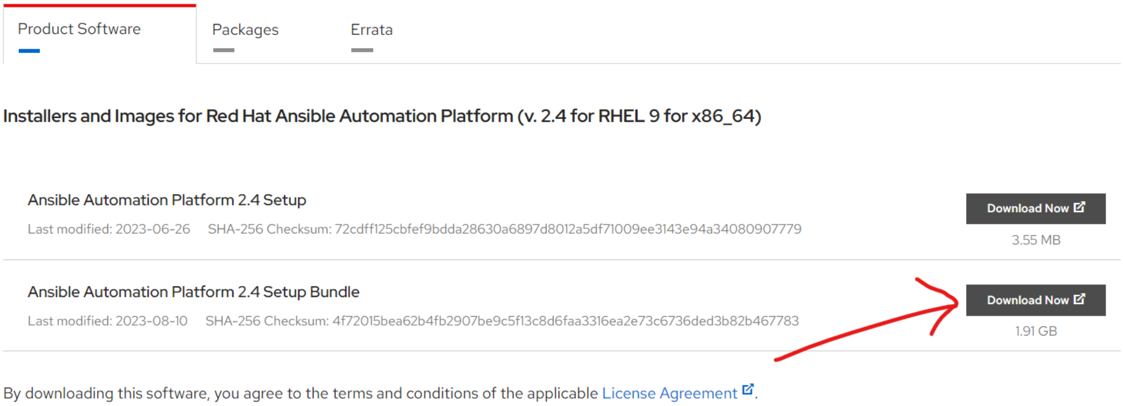


```
[root@server yamls]# ip r s
default via 192.168.7.1 dev enp0s8 proto static metric 100
192.168.7.0/24 dev enp0s8 proto kernel scope link src 192.168.7.87 metric 100
```

3. Add the ipaddress and hostname in /etc/hosts
   a. vi /etc/hosts
   b. <ip address> <TAB> <hostname>

Save and exit the file :wq!

4. Download the ansible bundle from this site
   https://access.redhat.com/downloads/content/480/ver=2.4/rhel---9/2.4/x86_64/product-software



Installers and Images for Red Hat Ansible Automation Platform (v. 2.4 for RHEL 9 for x86_64)

Ansible Automation Platform 2.4 Setup
Last modified: 2023-06-26   SHA-256 Checksum: 72cdff125cbfef9bdda28630a6897d8012a5df71009ee3143e94a34080907779

Ansible Automation Platform 2.4 Setup Bundle
Last modified: 2023-08-10   SHA-256 Checksum: 4f72015bea62b4fb2907be9c5f13c8d6faa3316ea2e73c6736ded3b82b467783

By downloading this software, you agree to the terms and conditions of the applicable License Agreement.

   This will download the tar file

5. Extract the downloaded tar file

```
 tar xvzf ansible-automation-platform-setup-<latest-version>.tar.gz
```

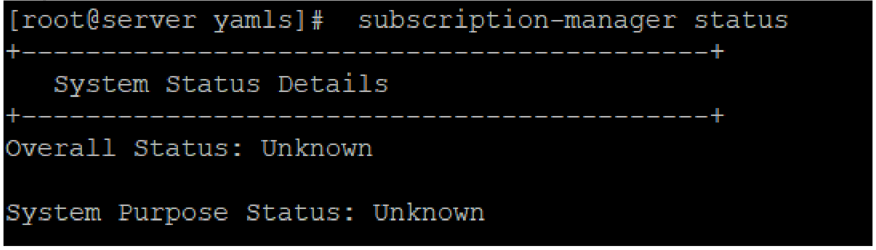
6. After the extraction cd into the file and edit the inventory file as following
   a. cd ansible-automation-platform-setup-2.4.1
   b. vi inventory
      i. below [automationcontroller]
         add <hostname><SPACE>ansible_connection=local
      ii. set admin_password
         admin_password=<password> lets take redhat as password
      iii. set pg_password
         pg_password=<password> lets take redhat as password
      iv. If licenced subscritption is there add registry_username as well as add registry_password

   Screenshots of how a inventory file should look is included in the end

   c. Check if the machine contains subscription or not

7. Check if the machine contains subscription or not
   subscription-manager status

a. machine is not registered
o/p:-



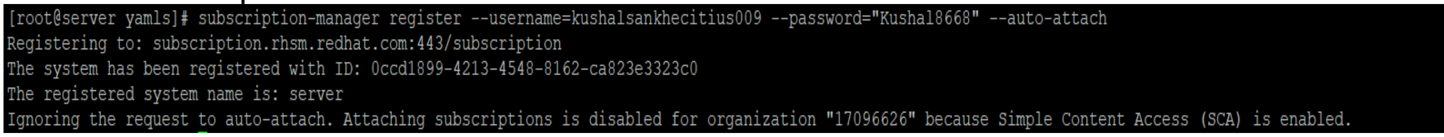
```
[root@server yamls]#  subscription-manager status
+-------------------------------------------+
   System Status Details
+-------------------------------------------+
Overall Status: Unknown

System Purpose Status: Unknown
```

To register the machine run the following command

subscription-manager register –username=<username> --password=<password> --auto-attach

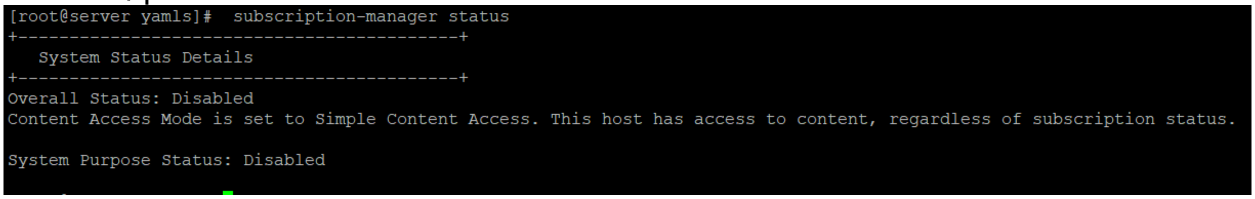
Note: --auto-attach → Automatically attaches compatible subscriptions to this system.

O/p:-



```
[root@server yamls]# subscription-manager register --username=kushalsankhecitius009 --password="Kushal8668" --auto-attach
Registering to: subscription.rhsm.redhat.com:443/subscription
The system has been registered with ID: 0ccd1899-4213-4548-8162-ca823e3323c0
The registered system name is: server
Ignoring the request to auto-attach. Attaching subscriptions is disabled for organization "17096626" because Simple Content Access (SCA) is enabled.
```

b. If machine is subscribed either it will show subscribed, insufficient or something else rather than unknown
O/p:-



```
[root@server yamls]#  subscription-manager status
+-------------------------------------------+
   System Status Details
+-------------------------------------------+
Overall Status: Disabled
Content Access Mode is set to Simple Content Access. This host has access to content, regardless of subscription status.

System Purpose Status: Disabled
```

8. Enable Ansible Automation Repo

   sudo subscription-manager repos --enable ansible-automation-platform-2.4-for-rhel-8-x86_64-source-rpms

9. Check subscription manager list and look for the pool id which contains support for Ansible-Automation-Platform

   subscription-manager list –-available --all

   To check if it is there

   subscription-manager list --available –all | grep -i “ansible”

   Shortcut:

```
subscription-manager list --available --all | awk -v RS= '/Red Hat Ansible Automation Platform/ { for(i=1; i<=NF; i++) if($i == "Pool") print $(i+2); exit }'
```

This command directly prints the pool id which contains Red Hat Ansible Automation Platform.

10. Attach the pool id which supports Red Hat Ansible Automation

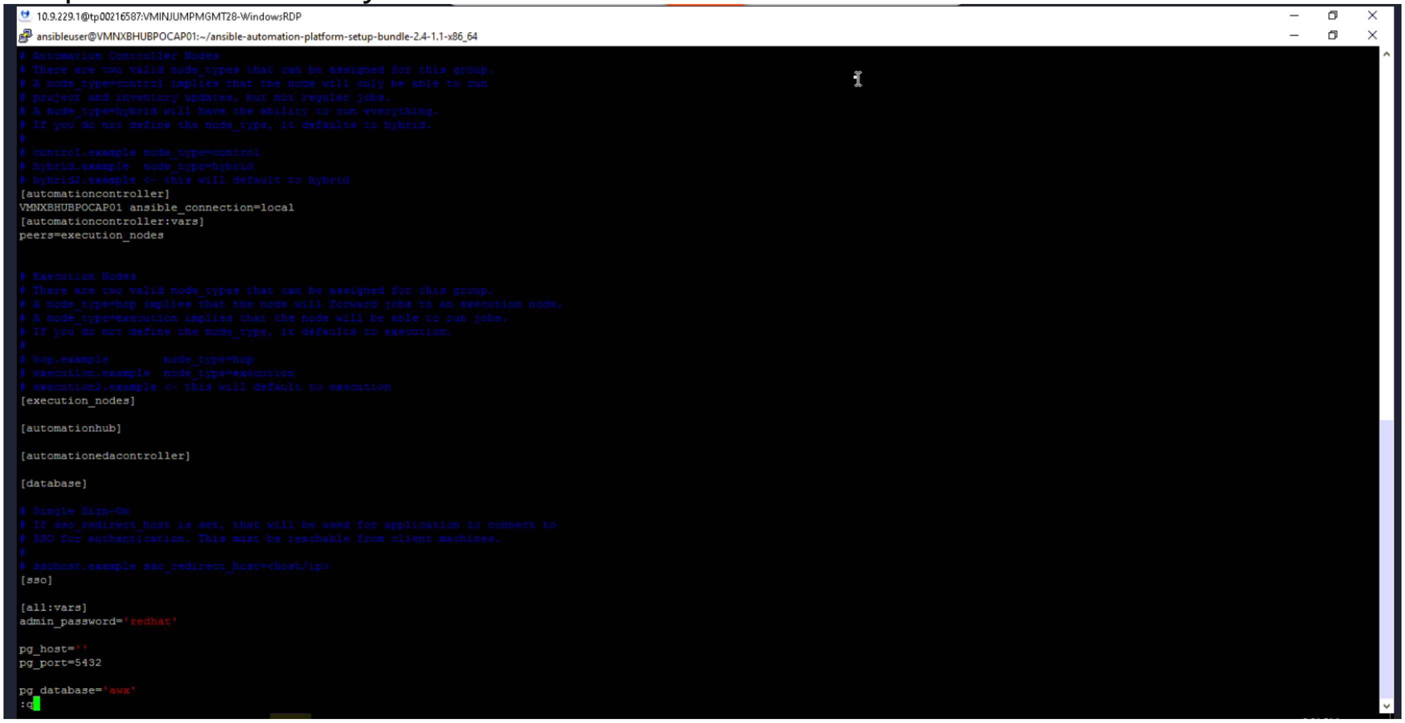
```
subscription-manager attach --pool= <pool id>
```

11. Just run setup file

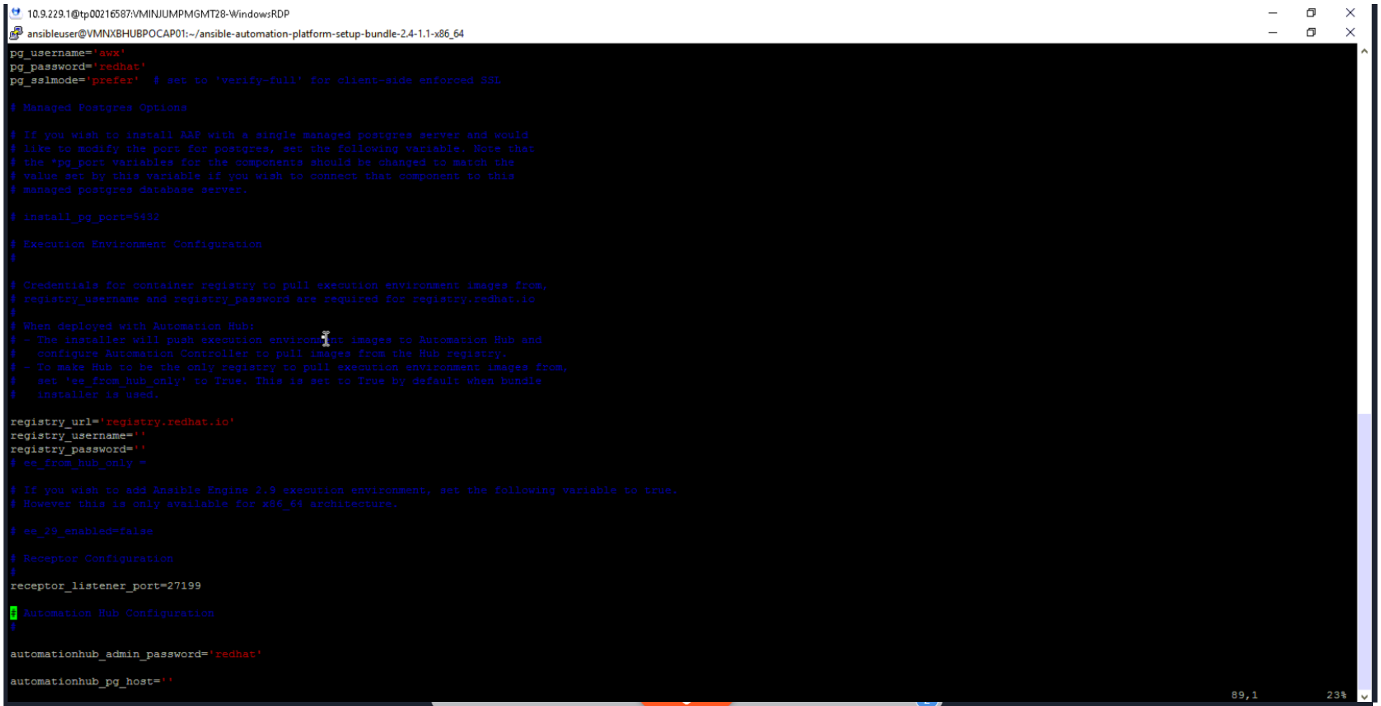
```
./setup.sh
```

12. Once successful installation is done. Navigate to the IP address specified for the automation controller node in the inventory file
13. Log in with the Admin credentials you set in the inventory file
14.

Snapshots of inventory file:-


10.9.229.1@tp00216587:VMINJUMPMGMT28-WindowsRDP
ansibleuser@VMNXBHUBPOCAP01:~/ansible-automation-platform-setup-bundle-2.4-1.1-x86_64

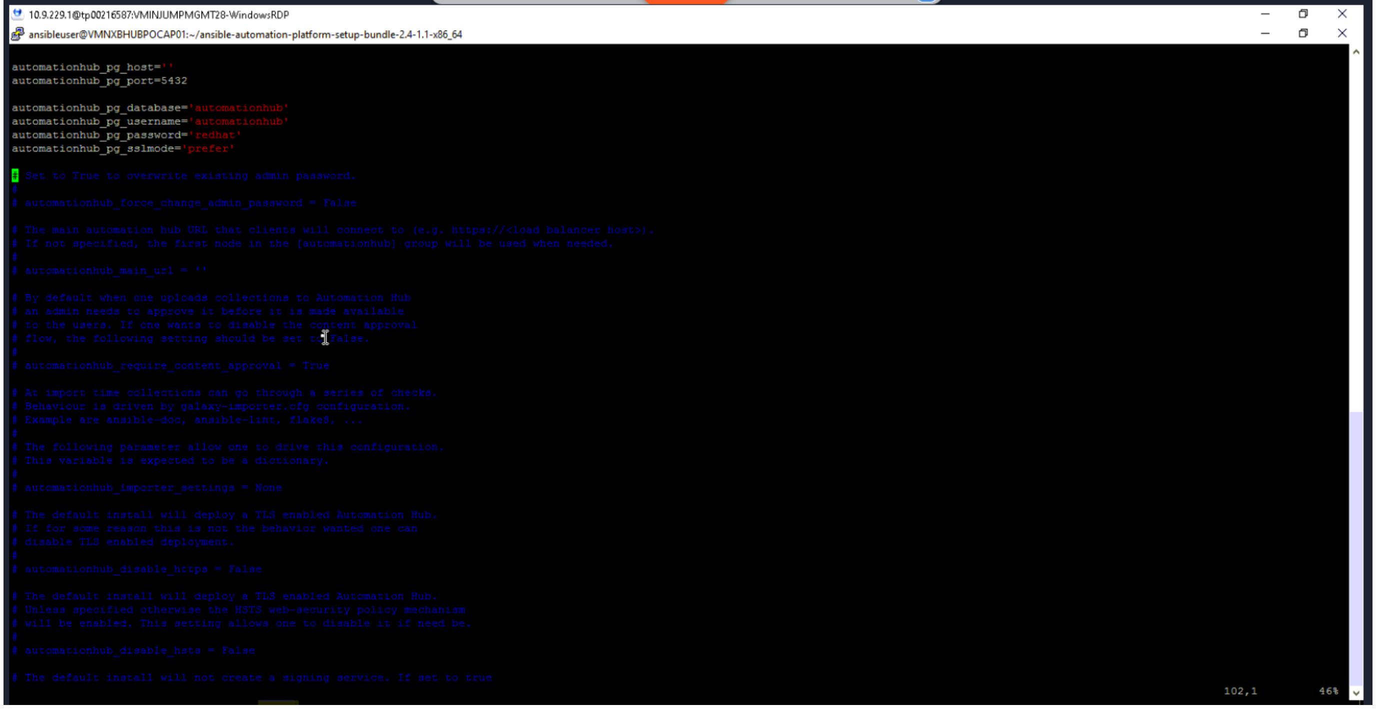
```
# Automation Controller Nodes
# There are two valid node_types that can be assigned for this group.
# A node_type=control implies that the node will only be able to run
# project and inventory updates, but not regular jobs.
# A node_type=hybrid will have the ability to run everything.
# If you do not define the node_type, it defaults to hybrid.
#
# control.example node_type=control
# hybrid.example  node_type=hybrid
# hybrid2.example <- this will default to hybrid
[automationcontroller]
VMNXBHUBPOCAP01 ansible_connection=local
[automationcontroller:vars]
peers=execution_nodes


# Execution Nodes
# There are two valid node_types that can be assigned for this group.
# A node_type=hop implies that the node will forward jobs to an execution node.
# A node_type=execution implies that the node will be able to run jobs.
# If you do not define the node_type, it defaults to execution.
#
# hop.example         node_type=hop
# execution.example  node_type=execution
# execution2.example <- this will default to execution
[execution_nodes]

[automationhub]

[automationedacontroller]

[database]

# Single Sign-On
# If sso_redirect_host is set, that will be used for application to connect to
# SSO for authentication. This must be reachable from client machines.
#
# ssohost.example sso_redirect_host=<host/ip>
[sso]

[all:vars]
admin_password='redhat'

pg_host=''
pg_port=5432

pg_database='awx'
:q
```



10.9.229.1@tp00216587:VMINJUMPMGMT28-WindowsRDP

ansibleuser@VMNXBHUBPOCAP01:~/ansible-automation-platform-setup-bundle-2.4-1.1-x86_64

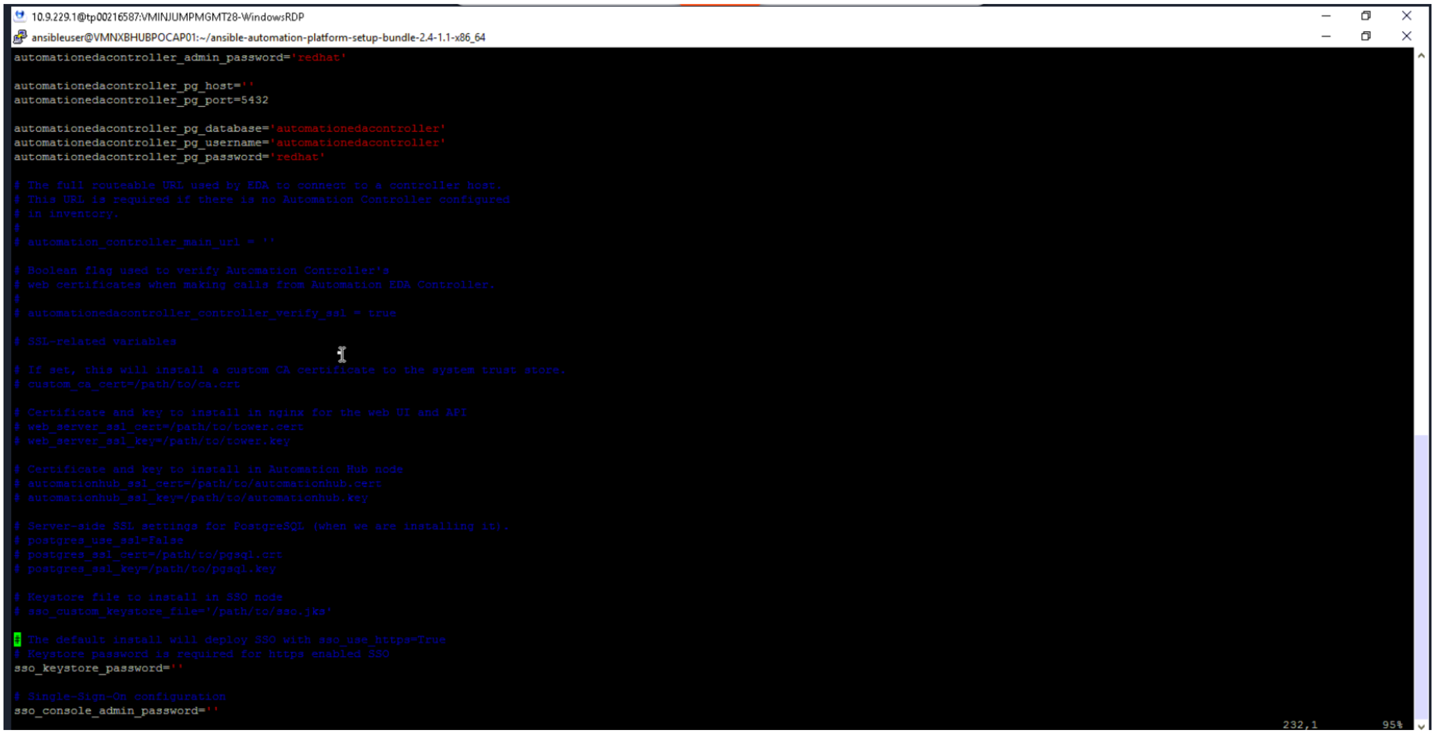
```
pg_username='awx'
pg_password='redhat'
pg_sslmode='prefer'  # set to 'verify-full' for client-side enforced SSL

# Managed Postgres Options

# If you wish to install AAP with a single managed postgres server and would
# like to modify the port for postgres, set the following variable. Note that
# the *pg_port variables for the components should be changed to match the
# value set by this variable if you wish to connect that component to this
# managed postgres database server.

# install_pg_port=5432

# Execution Environment Configuration
#

# Credentials for container registry to pull execution environment images from,
# registry_username and registry_password are required for registry.redhat.io
#
# When deployed with Automation Hub:
# - The installer will push execution environment images to Automation Hub and
#   configure Automation Controller to pull images from the Hub registry.
# - To make Hub to be the only registry to pull execution environment images from,
#   set 'ee_from_hub_only' to True. This is set to True by default when bundle
#   installer is used.

registry_url='registry.redhat.io'
registry_username=''
registry_password=''
# ee_from_hub_only =

# If you wish to add Ansible Engine 2.9 execution environment, set the following variable to true.
# However this is only available for x86_64 architecture.

# ee_29_enabled=false

# Receptor Configuration
#
receptor_listener_port=27199

# Automation Hub Configuration
#

automationhub_admin_password='redhat'

automationhub_pg_host=''
                                                                                          89,1          23%
```



10.9.229.1@tp00216587:VMINJUMPMGMT28-WindowsRDP

ansibleuser@VMNXBHUBPOCAP01:~/ansible-automation-platform-setup-bundle-2.4-1.1-x86_64

```

automationhub_pg_host=''
automationhub_pg_port=5432

automationhub_pg_database='automationhub'
automationhub_pg_username='automationhub'
automationhub_pg_password='redhat'
automationhub_pg_sslmode='prefer'

# Set to True to overwrite existing admin password.
#
# automationhub_force_change_admin_password = False

# The main automation hub URL that clients will connect to (e.g. https://<load balancer host>).
# If not specified, the first node in the [automationhub] group will be used when needed.
#
# automationhub_main_url = ''

# By default when one uploads collections to Automation Hub
# an admin needs to approve it before it is made available
# to the users. If one wants to disable the content approval
# flow, the following setting should be set to False.
#
# automationhub_require_content_approval = True

# At import time collections can go through a series of checks.
# Behaviour is driven by galaxy-importer.cfg configuration.
# Example are ansible-doc, ansible-lint, flake8, ...
#
# The following parameter allow one to drive this configuration.
# This variable is expected to be a dictionary.
#
# automationhub_importer_settings = None

# The default install will deploy a TLS enabled Automation Hub.
# If for some reason this is not the behavior wanted one can
# disable TLS enabled deployment.
#
# automationhub_disable_https = False

# The default install will deploy a TLS enabled Automation Hub.
# Unless specified otherwise the HSTS web-security policy mechanism
# will be enabled. This setting allows one to disable it if need be.
#
# automationhub_disable_hsts = False

# The default install will not create a signing service. If set to true
                                                                                          102,1         46%
```


10.9.229.1@tp00216587:VMINJUMPMGMT28-WindowsRDP
ansibleuser@VMNXBHUBPOCAP01:~/ansible-automation-platform-setup-bundle-2.4-1.1-x86_64

```
automationedacontroller_admin_password='redhat'

automationedacontroller_pg_host=''
automationedacontroller_pg_port=5432

automationedacontroller_pg_database='automationedacontroller'
automationedacontroller_pg_username='automationedacontroller'
automationedacontroller_pg_password='redhat'

# The full routeable URL used by EDA to connect to a controller host.
# This URL is required if there is no Automation Controller configured
# in inventory.
#
# automation_controller_main_url = ''

# Boolean flag used to verify Automation Controller's
# web certificates when making calls from Automation EDA Controller.
#
# automationedacontroller_controller_verify_ssl = true

# SSL-related variables

# If set, this will install a custom CA certificate to the system trust store.
# custom_ca_cert=/path/to/ca.crt

# Certificate and key to install in nginx for the web UI and API
# web_server_ssl_cert=/path/to/tower.cert
# web_server_ssl_key=/path/to/tower.key

# Certificate and key to install in Automation Hub node
# automationhub_ssl_cert=/path/to/automationhub.cert
# automationhub_ssl_key=/path/to/automationhub.key

# Server-side SSL settings for PostgreSQL (when we are installing it).
# postgres_use_ssl=False
# postgres_ssl_cert=/path/to/pgsql.crt
# postgres_ssl_key=/path/to/pgsql.key

# Keystore file to install in SSO node
# sso_custom_keystore_file='/path/to/sso.jks'

# The default install will deploy SSO with sso_use_https=True
# Keystore password is required for https enabled SSO
sso_keystore_password=''

# Single-Sign-On configuration
sso_console_admin_password=''
                                                                                                   232,1         95%
```