

User Manual

WISE-PaaS/RMM 3.2

**Wireless IoT Sensing Embedded
Remote Monitoring and Management Agent
RMM-Agent User Manual**

V1.6

ADVANTECH

Enabling an Intelligent Planet

Change Log:

Date	Version	Description / Major change
2016/09/30	V1.0	Update the screen shop for installer
2016/10/3	V1.1	Update Linux installer screenshot

Table of Content

1. SOFTWARE INSTALLATION	3
1.1. Windows Agent Installation	3
1.1.1. Installation	3
1.1.2. Uninstallation	11
1.2. Linux Agent Installation - CentOS	13
1.2.1. Installation	13
1.2.2. Uninstallation	15
1.3. Linux Agent Installation – RISC_Yocto.....	16
1.3.1. Installation	16
1.3.2. Uninstallation	18
2. WINDOWS AGENT CONFIGURATION.....	20
2.1. Agent Console	20
2.2. Connect to Server	20
3. LINUX AGENT CONFIGURATION	23
3.1 CentOS	23
3.1.1 Agent Service Control	23
3.1.2 Setup Agent	24
3.1.3 Check Agent Connection Status.....	25
3.2 RISC_Yocto	26
3.2.1 Agent Service Control	26
3.2.2 Setup Agent	26
3.2.3 Check Agent Connection Status.....	28
4. FAQ	29

1. Software Installation

1.1. Windows Agent Installation

1.1.1. Installation

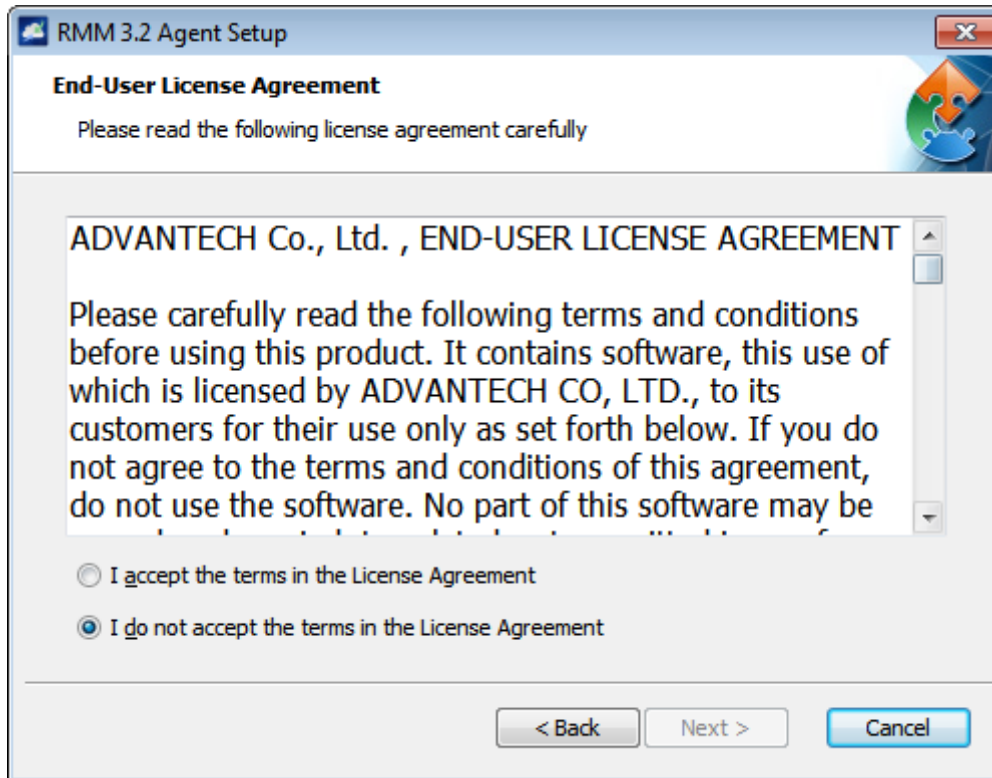
Double click “RMM 3.2 AgentSetup.exe” to install RMM Agent program.

- **Start Installation**



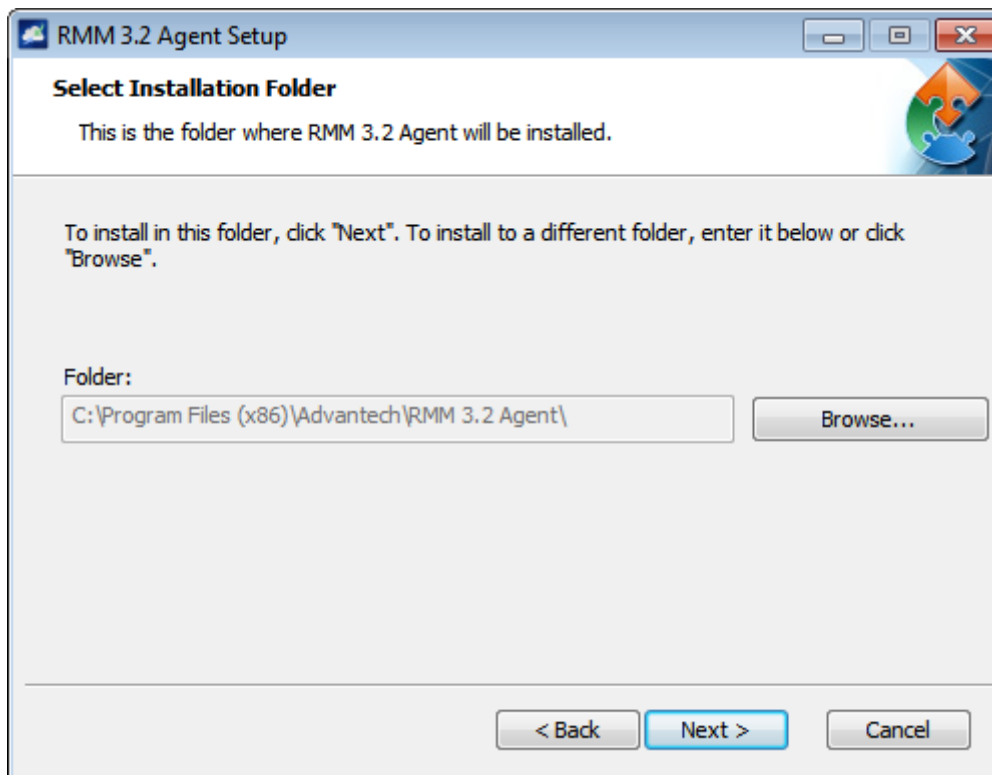
- **Check End-User License Agreement**

Please read the license agreement carefully. Check “I accept the terms in the License Agreement” if you agree. Then click the “Next” button.



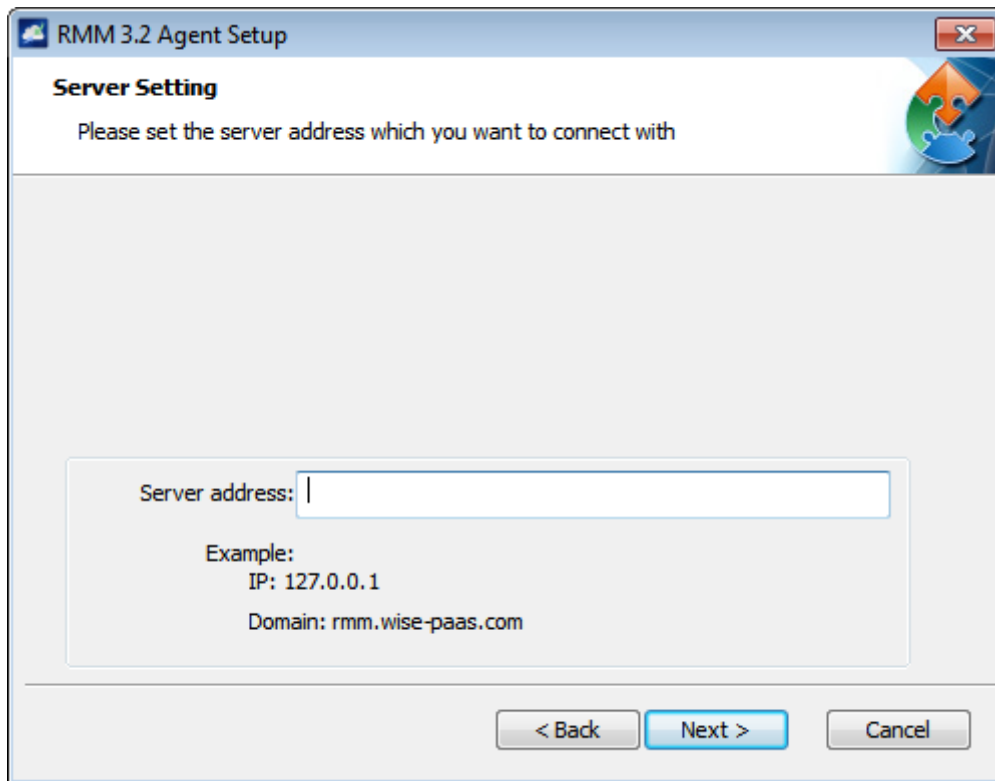
- **Select Installation Folder**

Select the folder to be installed.



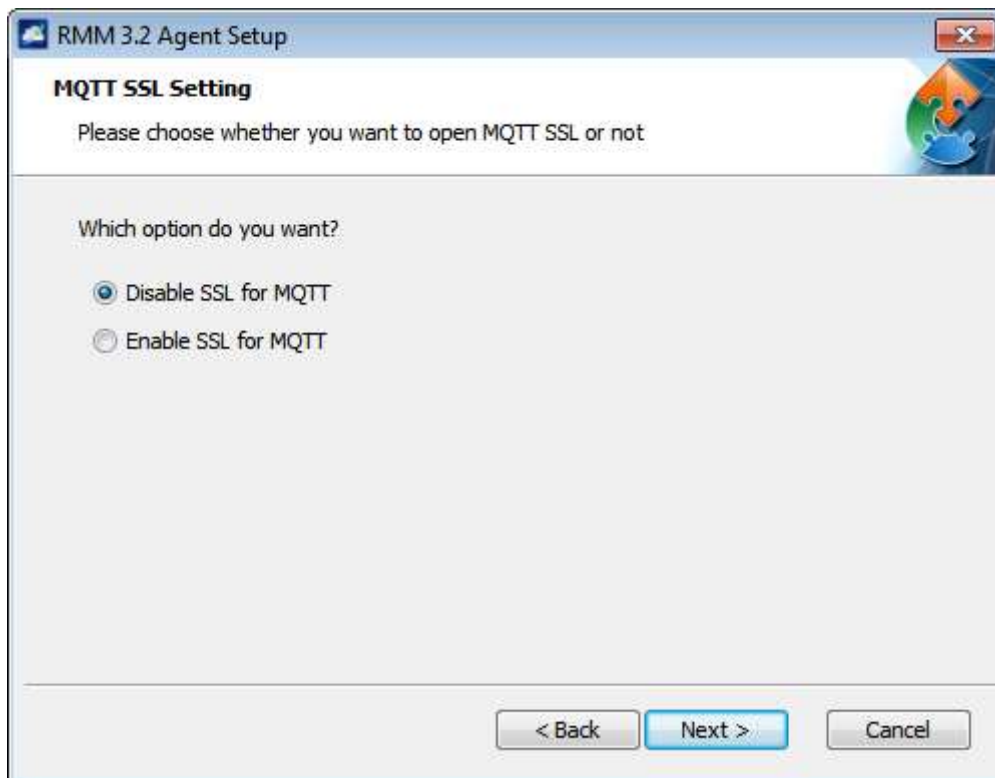
- **Server Settings - Set Remote Management Server URL/IP.**

Set Remote Management Server URL/IP.



- **MQTT SSL Settings**

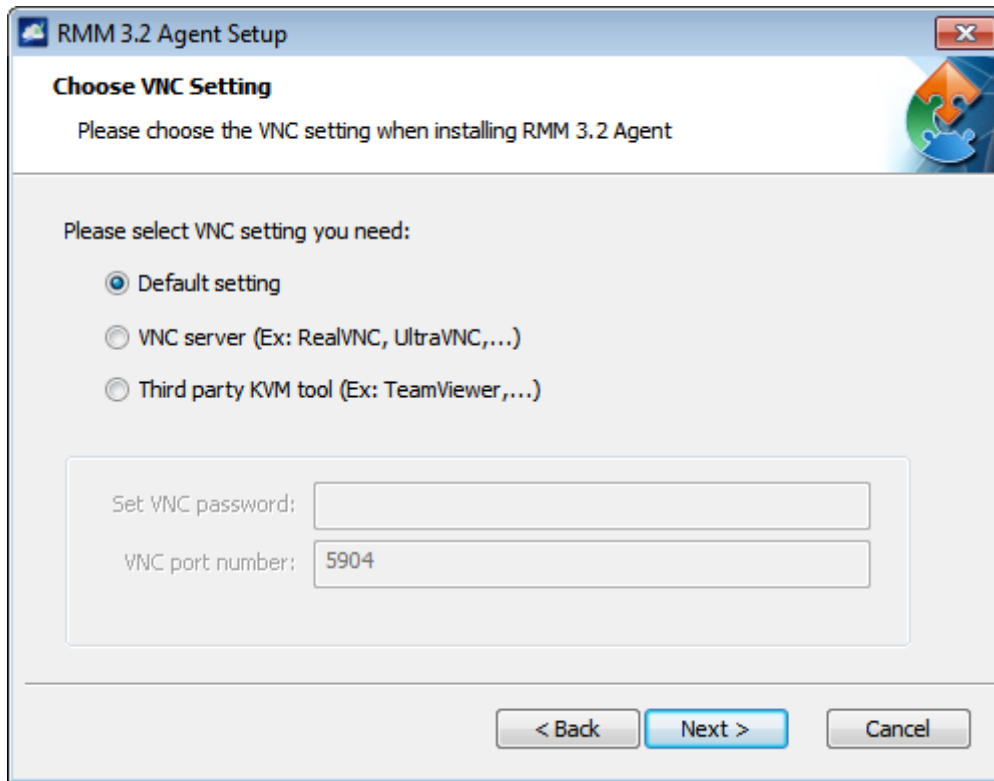
Choose either disable or enable SSL for MQTT.



- **VNC Setting**

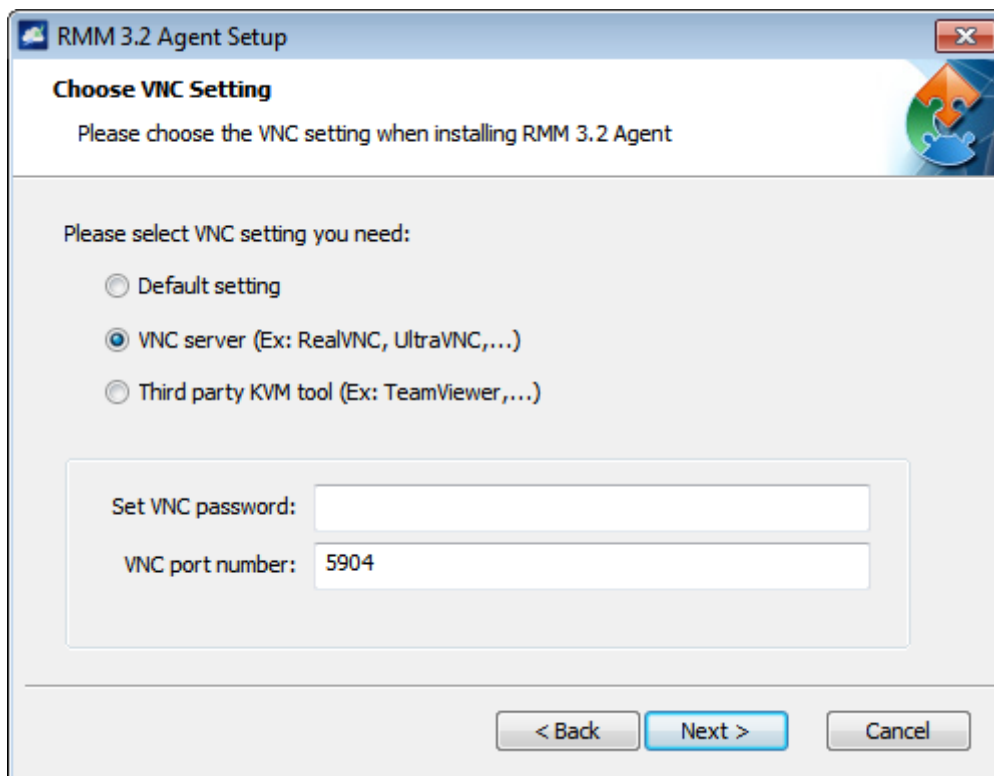
Please select VNC setting when installing RMM 3.2 Agent.

A. Set as Default RMM Built-in VNC.

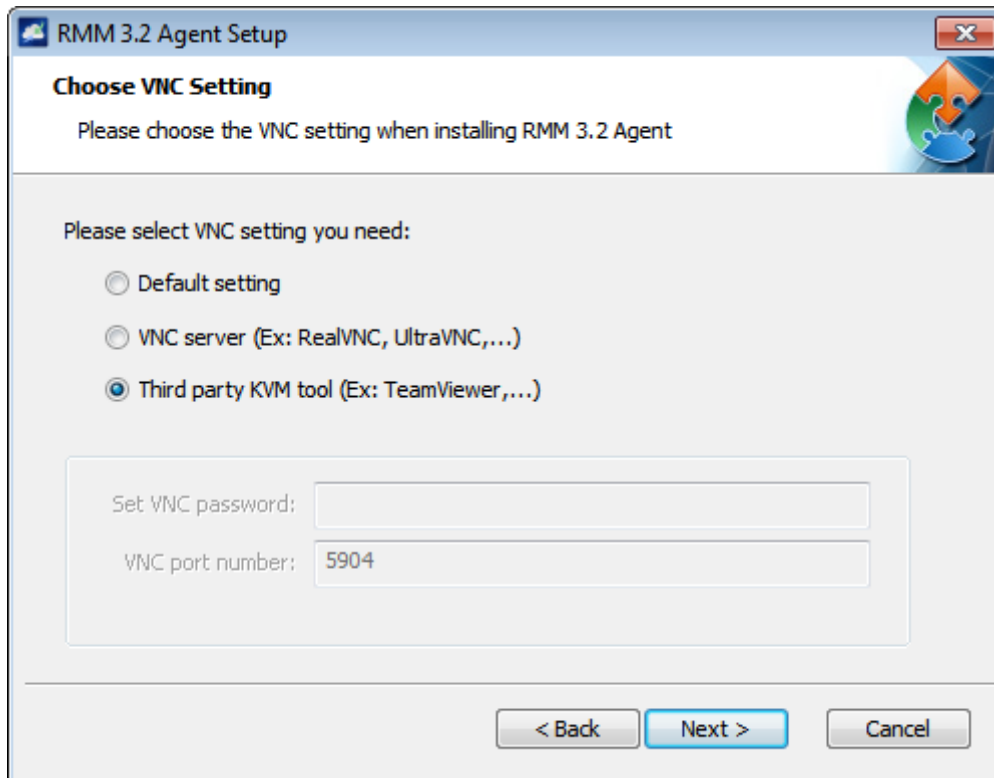


B. Use other User-defined VNC server.

Input VNC server password and port number



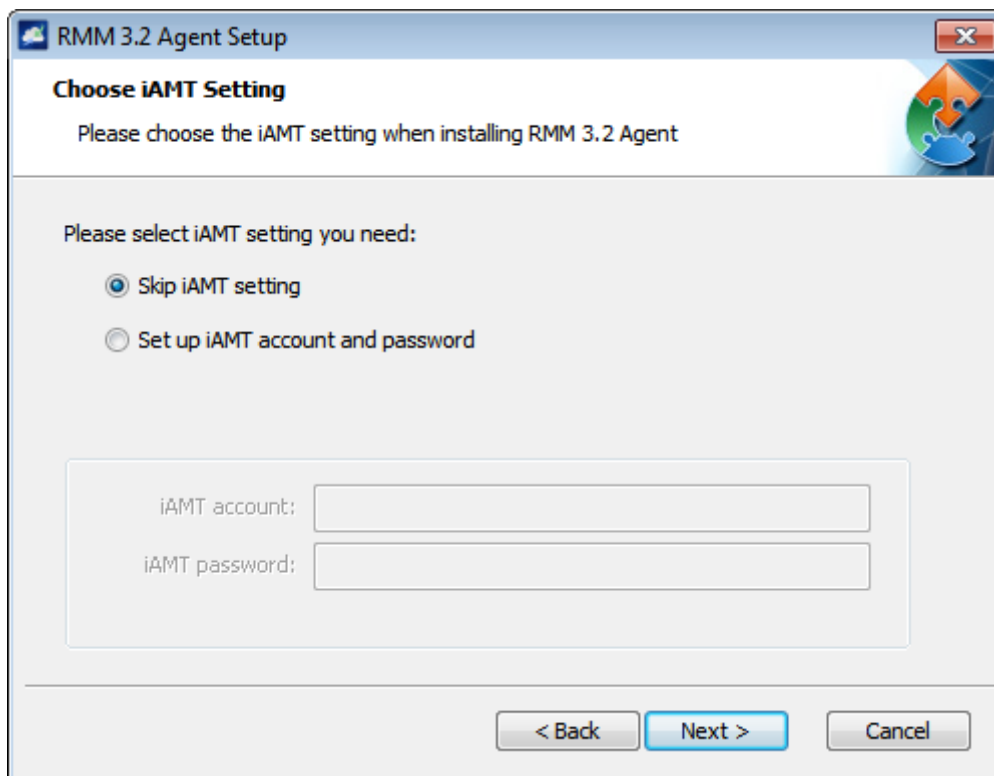
C. Disable RMM Built-in VNC and use other third party KVM tool.



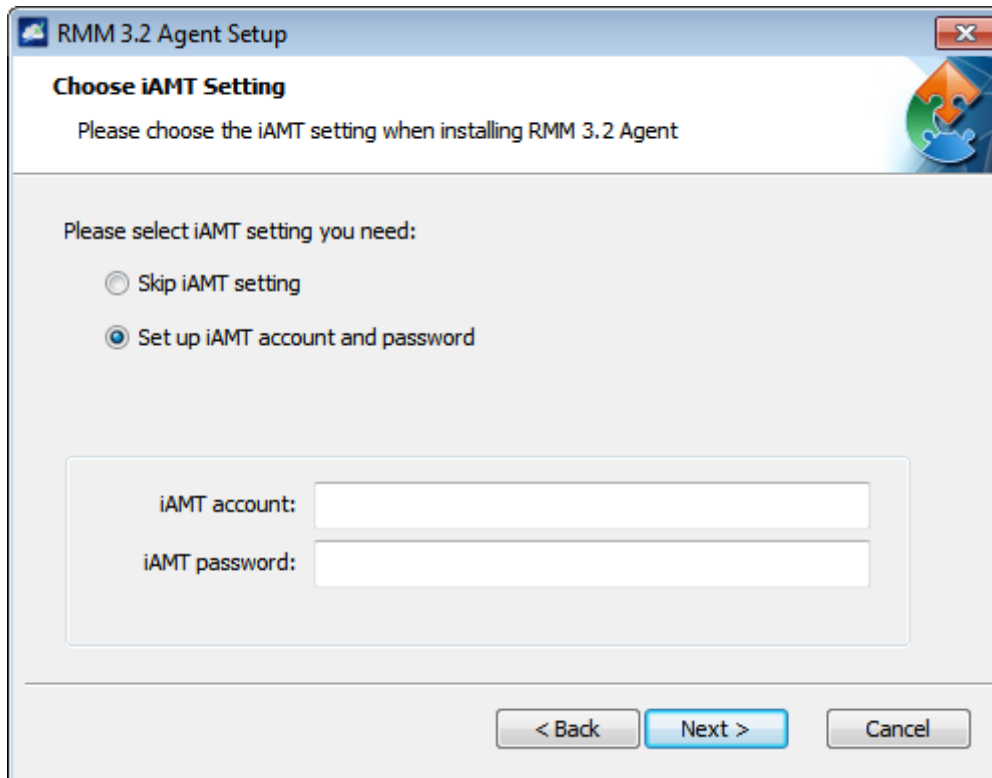
● **iAMT Settings**

Please choose the iAMT setting when installing RMM 3.2 Agent.

A. Skip iAMT setting

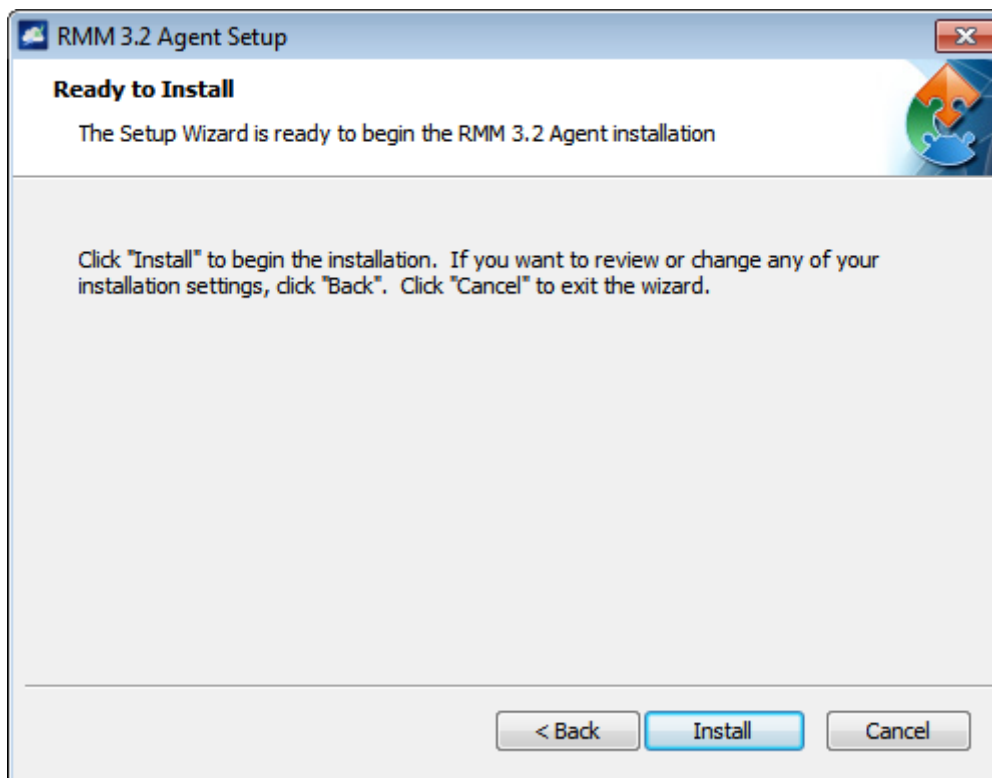


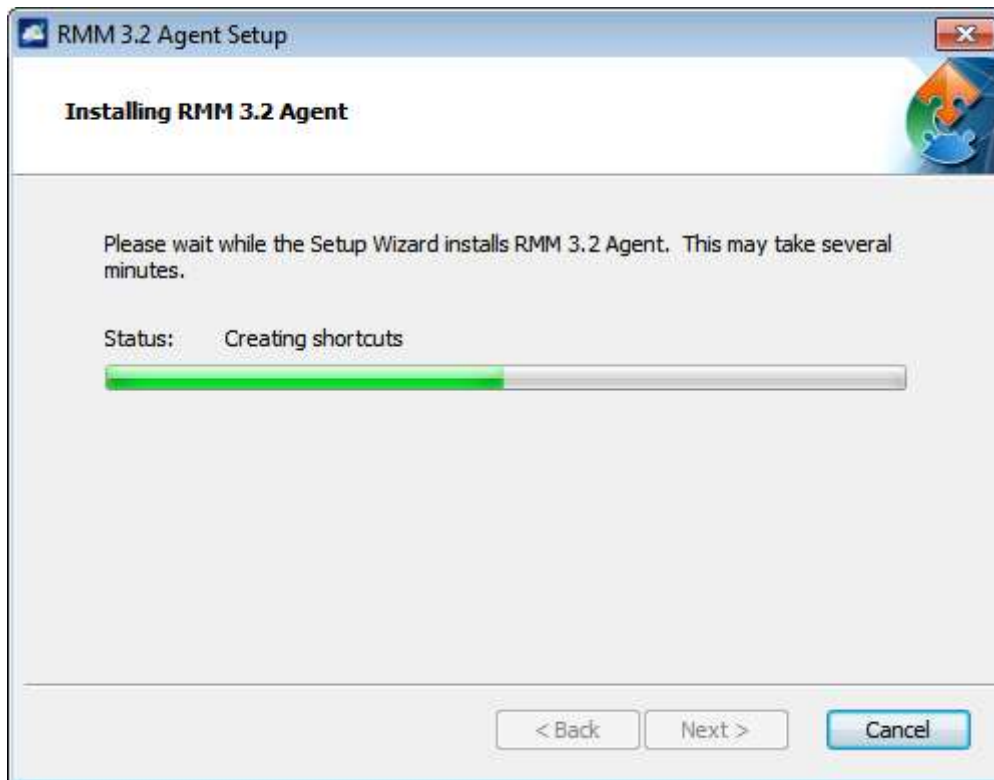
B. Set up iAMT



- **Start Installing.**

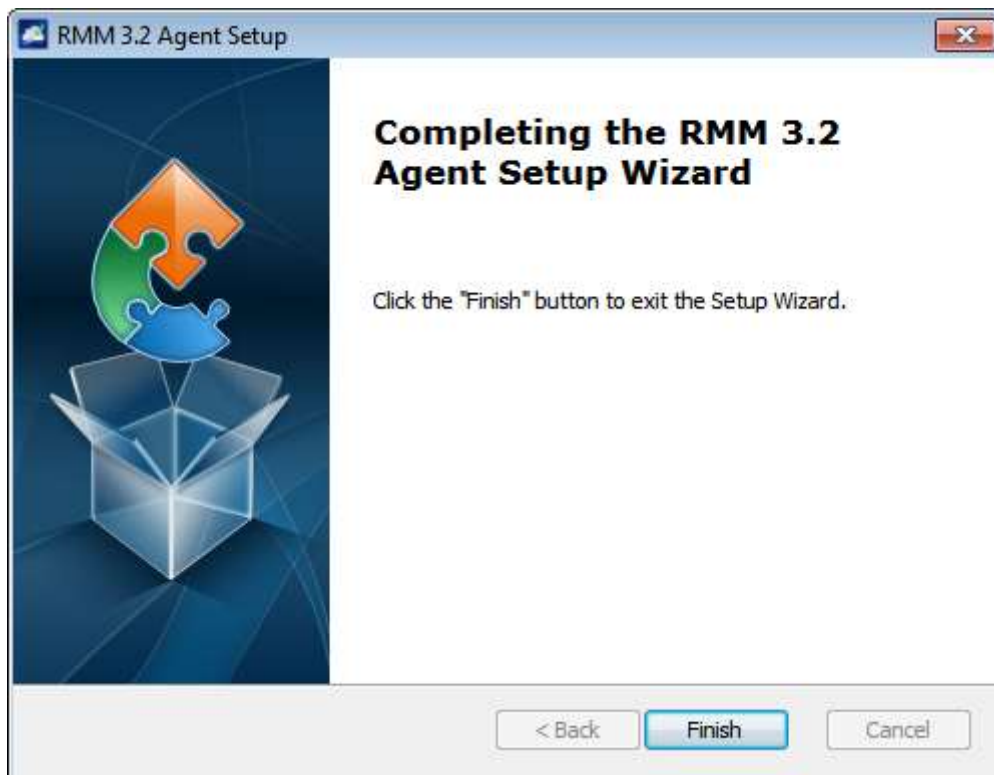
Click the "Install" button to begin the installation.






- **Installation Completed.**

Click the "Finish" button to exit the Setup Wizard.





Click  to start standalone agent.

1.1.2. Uninstallation

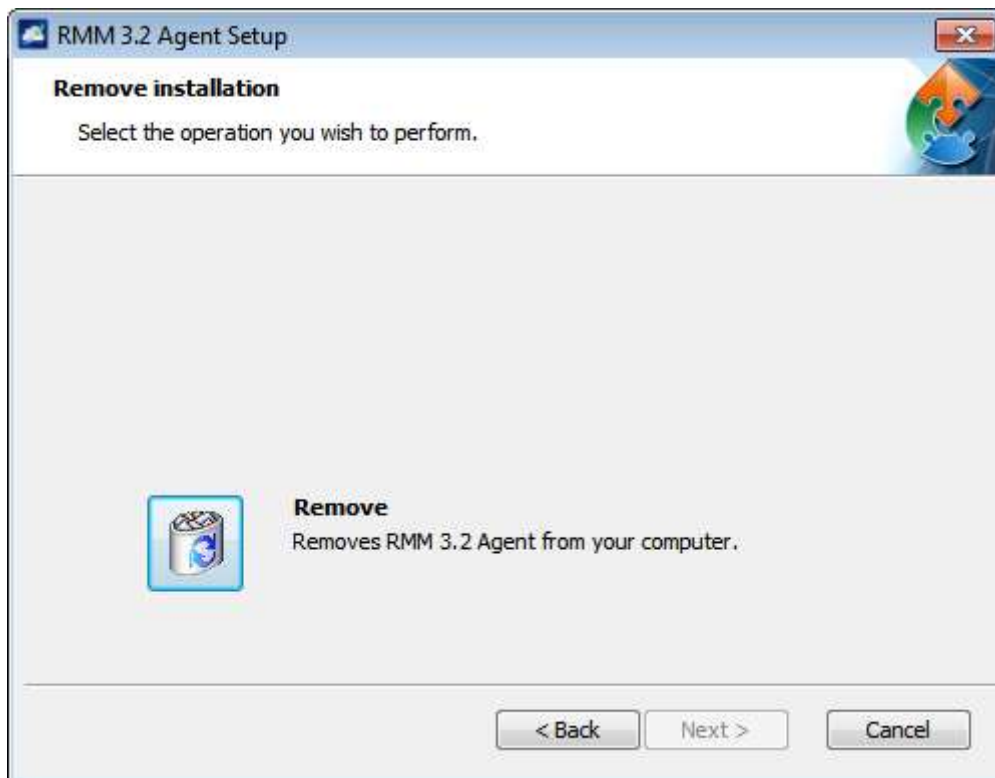
- **Start to uninstall “RMM Agent”**

Double click “RMM 3.2 AgentSetup.exe” to uninstall the RMM Agent program.



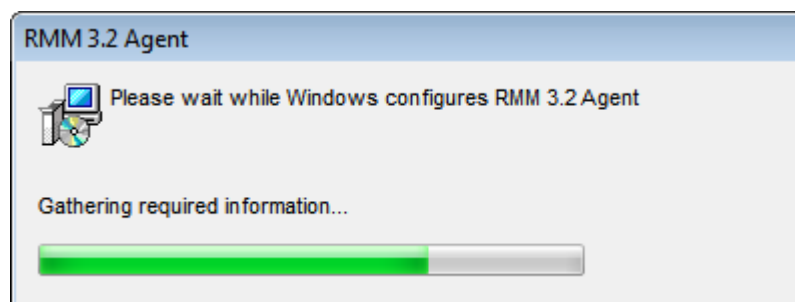
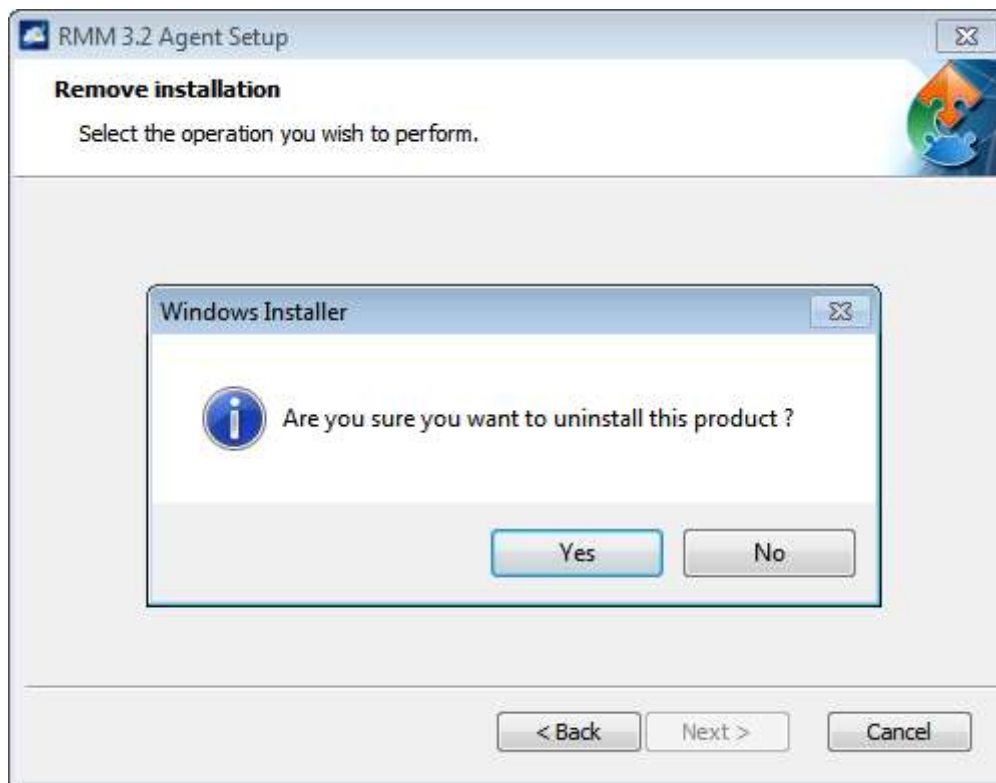
- **Remove installation**

Click the “Remove” icon to start uninstallation.



- **Confirm the uninstallation for RMM Agent**

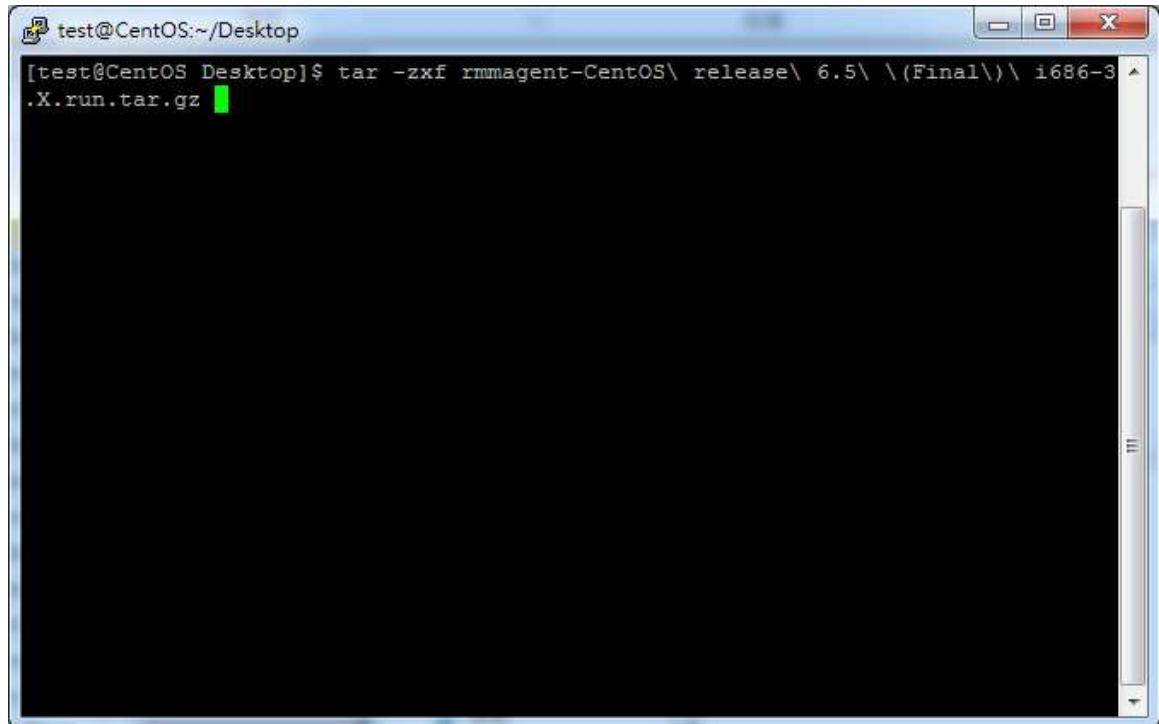
Click the “Yes” button to remove RMM3.2 from your computer.



1.2. Linux Agent Installation - CentOS

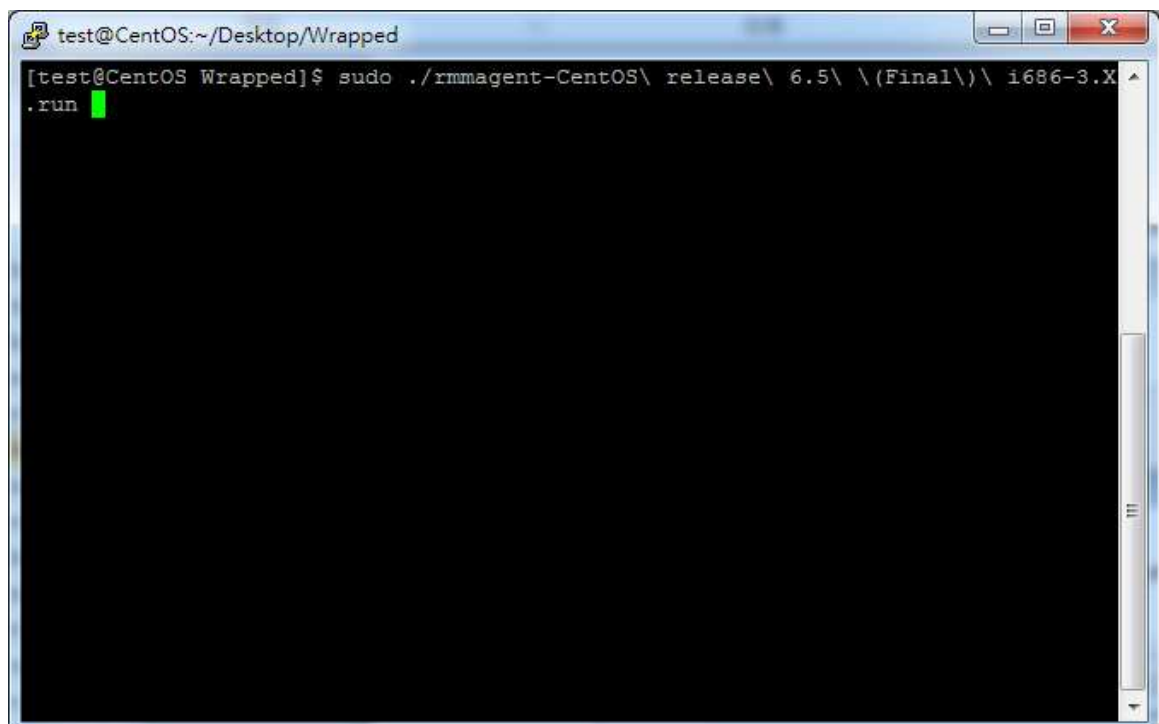
1.2.1. Installation

- Untar the “RMM Agent” installer to “Wrapped” folder



```
test@CentOS:~/Desktop
[test@CentOS Desktop]$ tar -zxvf rmmagent-CentOS\ release\ 6.5\ \ (Final)\ \ i686-3
.X.run.tar.gz
```

- Change directory to “Wrapped” folder and execute the installer with superuser permissions



```
test@CentOS:~/Desktop/Wrapped
[test@CentOS Wrapped]$ sudo ./rmmagent-CentOS\ release\ 6.5\ \ (Final)\ \ i686-3.X
.run
```

- Enter the setup mode by clicking y

```

test@CentOS:~/Desktop/Wrapped
`./AgentService/libSAHandlerLoader.so' -> `/usr/local/AgentService/libSAHandlerLoader.so'
`./AgentService/libSueClient.so' -> `/usr/local/AgentService/libSueClient.so'
`./AgentService/libSAGeneralHandler.so.3.2.9.6480' -> `/usr/local/AgentService/libSAGeneralHandler.so.3.2.9.6480'
restore config files
`/tmp/tmp.UQRggBAq7U/agent_config.xml' -> `/usr/local/AgentService/agent_config.xml'
`/tmp/tmp.UQRggBAq7U/agent_config_def.xml' -> `/usr/local/AgentService/agent_config_def.xml'
`/tmp/tmp.UQRggBAq7U/log.ini' -> `/usr/local/AgentService/log.ini'
`/tmp/tmp.UQRggBAq7U/Modbus_Handler.ini' -> `/usr/local/AgentService/Modbus_Handler.ini'
`/tmp/tmp.UQRggBAq7U/OTAHandler.ini' -> `/usr/local/AgentService/OTAHandler.ini'
Install SAWatchdog service
Install SAWebsockify service
Install SAAGENT service
=====
Now will check whether the following packages installed:
  libxml2 openssl libcurl libXtst libX11 libmosquitto1 redhat-lsb-core xterm sqlite
y=====
All the packages is installed!
Setup Agent [y/n] (default:n): y

```

- Complete the configuration step by step

```

test@CentOS:~/Desktop/Wrapped
*****
*****
FireWall is disabled
/var/run/saagent.pid not found.
AgentService Path: /usr/local/AgentService
sending request to stop AgentService
RMM Watchdog daemon is not running. [WARNING]
RMM Websockify daemon is not running. [WARNING]
RMM Agent daemon is not running. [WARNING]
*****
*****
Do you want to configure RMM Agent now? [y/n] (default: y)
Input Server IPAddress (default:127.0.0.1):
Input Server Port (default:1883):
Enalbe TLS [y/n] (default: n):
Input Device Name[Len:4--35] (default:CentOS):
Input AMT ID[Len:4--35, or na] (default:):
Input AMT password[Len:8--16, or na] (default:):
Select KVM Mode[0:default, 1:custom VNC, 2:disable] (default:0):
Input VNC Port[1--65535] (default :5900):
Enable auto reconnect[enable/disable] (default: enable):
*****
*****
Do you want to start RMM Agent now? [y/n] (default: y)

```

- Install Completed

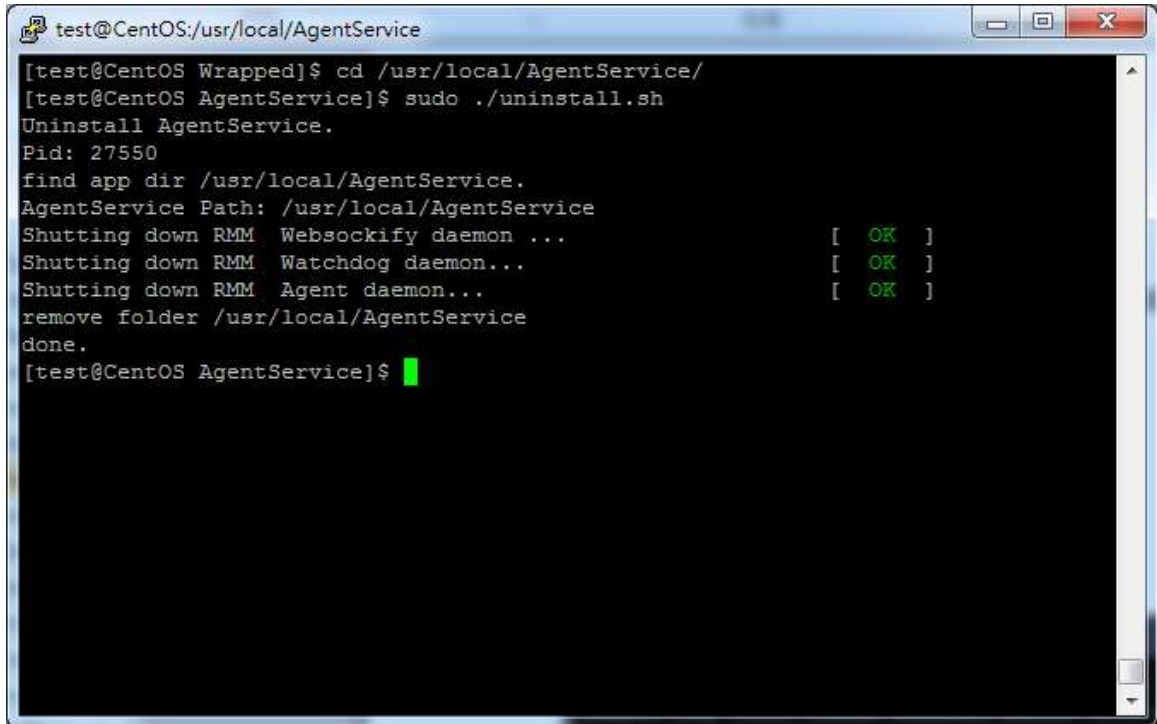
```
test@CentOS:~/Desktop/Wrapped
RMM Websockify daemon is not running. [WARNING]
RMM Agent daemon is not running. [WARNING]
*****
Do you want to configure RMM Agent now? [y/n] (default: y)
Input Server IPAddress(default:127.0.0.1):
Input Server Port(default:1883):
Enalbe TLS [y/n] (default: n):
Input Device Name[Len:4--35] (default:CentOS):
Input AMT ID[Len:4--35, or na] (default:):
Input AMT password[Len:8--16, or na] (default:):
Select KVM Mode[0:default, 1:custom VNC, 2:disable] (default:0):
Input VNC Port[1--65535] (default :5900):
Enable auto reconnect[enable/disable] (default: enable):
*****
Do you want to start RMM Agent now? [y/n] (default: y)
/usr/local/AgentService/setup.sh: line 565: [: too many arguments
RMM Agent daemon is not running. [WARNING]
Starting RMM Agent daemon... [ OK ]
Starting RMM Websockify daemon... [ OK ]
Starting RMM Watchdog daemon... [ OK ]
RMM Agent Linux setup successfully!
[test@CentOS Wrapped]$
```

1.2.2. Uninstallation

- Change directory to `/usr/local/AgentService`, and execute `uninstall.sh` with superuser permissions

```
test@CentOS:/usr/local/AgentService
[test@CentOS Wrapped]$ cd /usr/local/AgentService/
[test@CentOS AgentService]$ sudo ./uninstall.sh
```


- **Uninstall Completed**

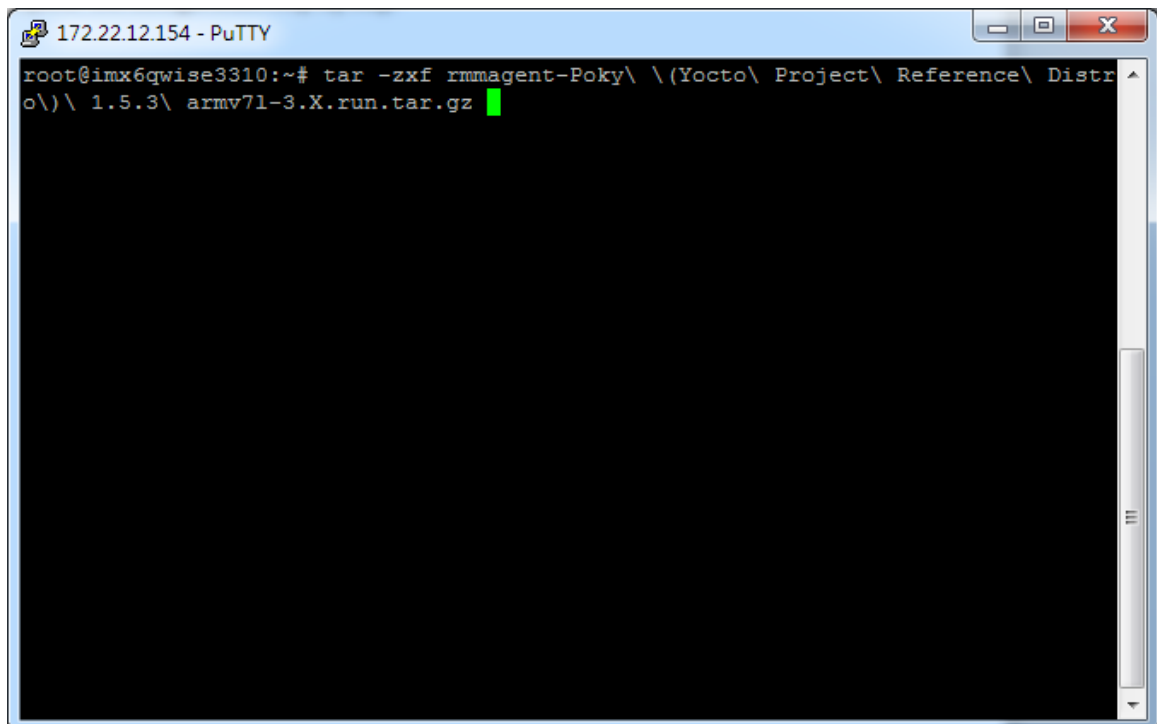


```
test@CentOS:/usr/local/AgentService
[test@CentOS Wrapped]$ cd /usr/local/AgentService/
[test@CentOS AgentService]$ sudo ./uninstall.sh
Uninstall AgentService.
Pid: 27550
find app dir /usr/local/AgentService.
AgentService Path: /usr/local/AgentService
Shutting down RMM Websockify daemon ... [ OK ]
Shutting down RMM Watchdog daemon... [ OK ]
Shutting down RMM Agent daemon... [ OK ]
remove folder /usr/local/AgentService
done.
[test@CentOS AgentService]$
```

1.3. Linux Agent Installation – RISC_Yocto

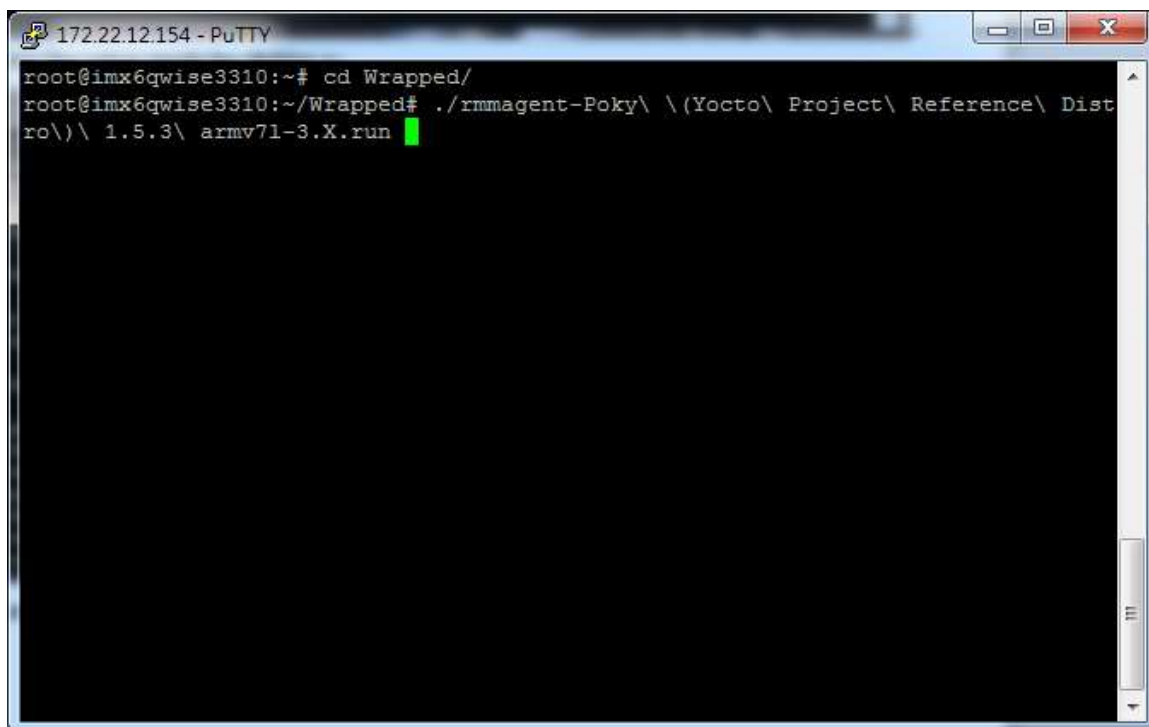
1.3.1. Installation

- **Untar the “RMM Agent” installer to “Wrapped” folder**



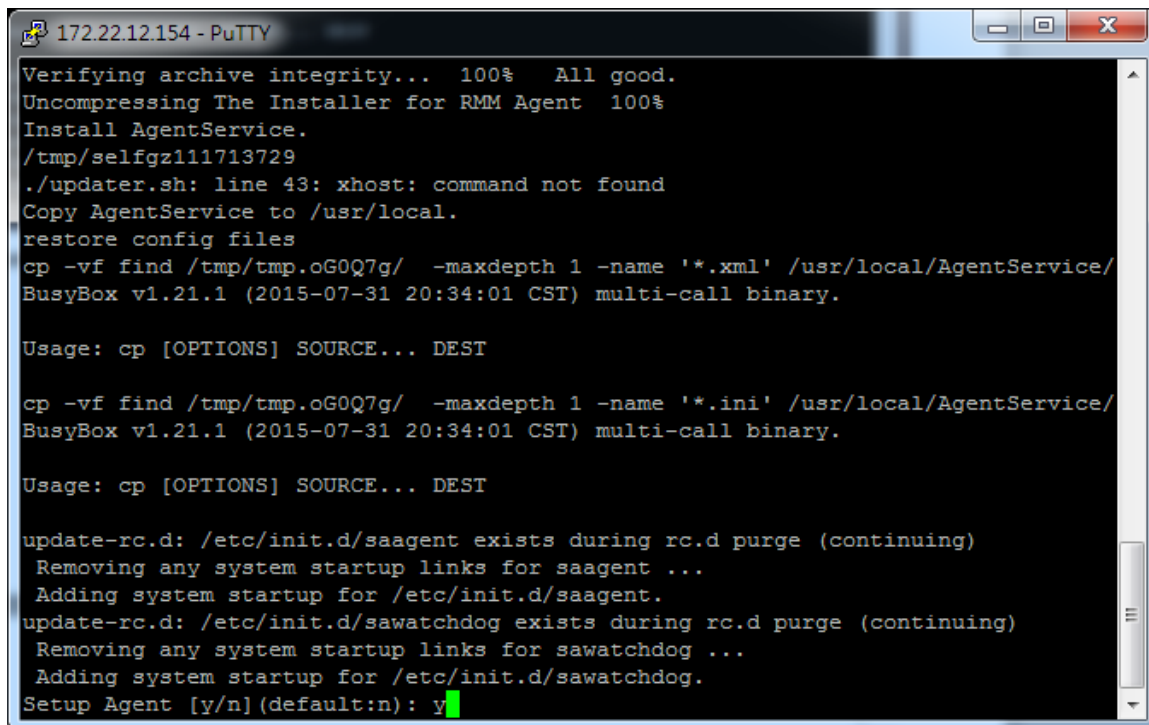
```
172.22.12.154 - PuTTY
root@imx6qwise3310:~# tar -zxf rmmagent-Poky\ \ (Yocto\ Project\ Reference\ Distr
o)\ 1.5.3\ armv7l-3.X.run.tar.gz
```

- Change directory to “Wrapped” folder and execute the installer with superuser permissions



```
172.22.12.154 - PuTTY
root@imx6qwise3310:~# cd Wrapped/
root@imx6qwise3310:~/Wrapped# ./rmmagent-Poky\ \ (Yocto\ Project\ Reference\ Dist
ro)\ 1.5.3\ armv7l-3.X.run
```

- Enter the setup mode by clicking y



```
172.22.12.154 - PuTTY
Verifying archive integrity... 100% All good.
Uncompressing The Installer for RMM Agent 100%
Install AgentService.
/tmp/selfgz111713729
./updater.sh: line 43: xhost: command not found
Copy AgentService to /usr/local.
restore config files
cp -vf find /tmp/tmp.oG0Q7g/ -maxdepth 1 -name '*.xml' /usr/local/AgentService/
BusyBox v1.21.1 (2015-07-31 20:34:01 CST) multi-call binary.

Usage: cp [OPTIONS] SOURCE... DEST

cp -vf find /tmp/tmp.oG0Q7g/ -maxdepth 1 -name '*.ini' /usr/local/AgentService/
BusyBox v1.21.1 (2015-07-31 20:34:01 CST) multi-call binary.

Usage: cp [OPTIONS] SOURCE... DEST

update-rc.d: /etc/init.d/saagent exists during rc.d purge (continuing)
Removing any system startup links for saagent ...
Adding system startup for /etc/init.d/saagent.
update-rc.d: /etc/init.d/sawatchdog exists during rc.d purge (continuing)
Removing any system startup links for sawatchdog ...
Adding system startup for /etc/init.d/sawatchdog.
Setup Agent [y/n] (default:n): y
```

- Complete the configuration step by step

```
172.22.12.154 - PuTTY
===== AgentService Linux Setup =====
*****
FireWall is disabled
/var/run/saagent.pid not found.
AgentService Path: /usr/local/AgentService
sending request to stop AgentService
RMM Agent daemon is not running.
RMM Agent daemon is not running.
*****
Do you want to configure RMM Agent now? [y/n] (default: y)
Input Server IPAddress(default:127.0.0.1):
Input Server Port(default:1883):
Enalbe TLS [y/n] (default: n):
Input Device Name[Len:4--35] (default:imx6qwise3310):
Input AMT ID[Len:4--35, or na] (default:):
Input AMT password[Len:8--16, or na] (default:):
Select KVM Mode[0:default, 1:custom VNC, 2:disable] (default:0):
Input VNC Port[1--65535] (default :5900):
Enable auto reconnect[enable/disable] (default: enable):
*****
Do you want to start RMM Agent now? [y/n] (default: y)
```

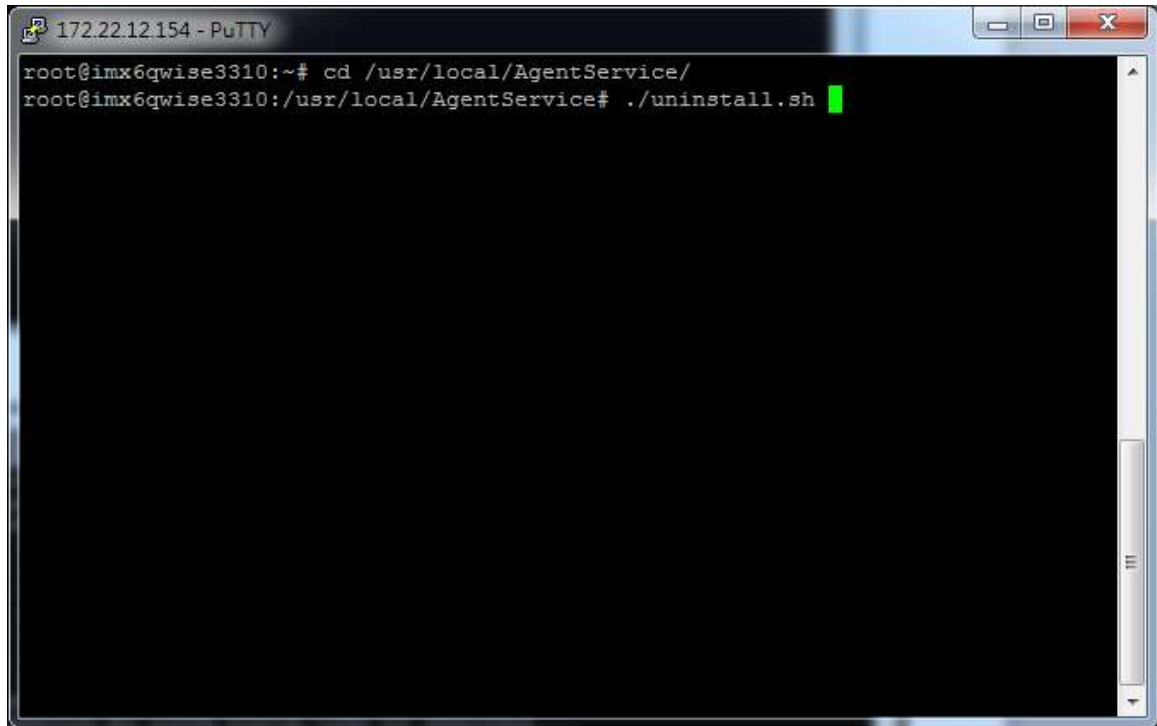
- **Install Completed**

```
172.22.12.154 - PuTTY
sending request to stop AgentService
RMM Agent daemon is not running.
RMM Agent daemon is not running.
*****
Do you want to configure RMM Agent now? [y/n] (default: y)
Input Server IPAddress(default:127.0.0.1):
Input Server Port(default:1883):
Enalbe TLS [y/n] (default: n):
Input Device Name[Len:4--35] (default:imx6qwise3310):
Input AMT ID[Len:4--35, or na] (default:):
Input AMT password[Len:8--16, or na] (default:):
Select KVM Mode[0:default, 1:custom VNC, 2:disable] (default:0):
Input VNC Port[1--65535] (default :5900):
Enable auto reconnect[enable/disable] (default: enable):
*****
Do you want to start RMM Agent now? [y/n] (default: y)

RMM Agent Service Starting...
Starting RMM Agent daemon...
Starting RMM watchdog daemon...
RMM Linux setup successfully!
root@imx6qwise3310:~/Wrapped#
```

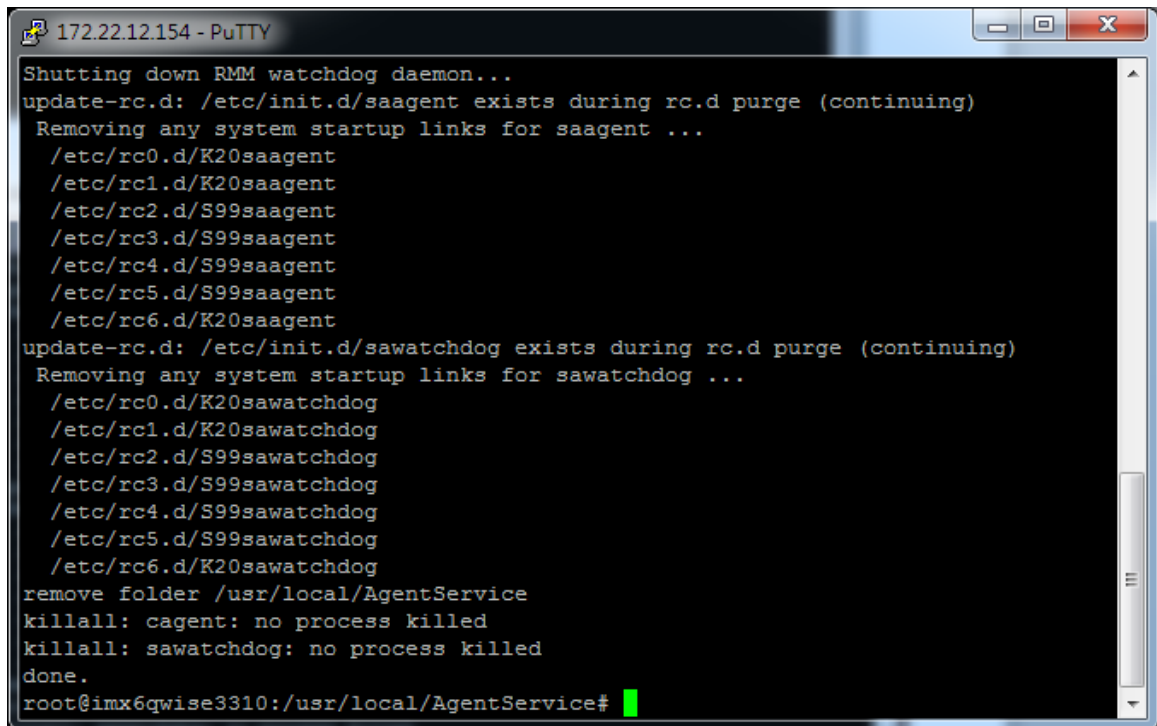
1.3.2. Uninstallation

- Change directory to `‘/usr/local/AgentService’`, and execute `‘uninstall.sh’` with superuser permissions



```
172.22.12.154 - PuTTY
root@imx6qwise3310:~# cd /usr/local/AgentService/
root@imx6qwise3310:/usr/local/AgentService# ./uninstall.sh
```

● **Uninstall Completed**



```
172.22.12.154 - PuTTY
Shutting down RMM watchdog daemon...
update-rc.d: /etc/init.d/saagent exists during rc.d purge (continuing)
Removing any system startup links for saagent ...
/etc/rc0.d/K20saagent
/etc/rc1.d/K20saagent
/etc/rc2.d/S99saagent
/etc/rc3.d/S99saagent
/etc/rc4.d/S99saagent
/etc/rc5.d/S99saagent
/etc/rc6.d/K20saagent
update-rc.d: /etc/init.d/sawatchdog exists during rc.d purge (continuing)
Removing any system startup links for sawatchdog ...
/etc/rc0.d/K20sawatchdog
/etc/rc1.d/K20sawatchdog
/etc/rc2.d/S99sawatchdog
/etc/rc3.d/S99sawatchdog
/etc/rc4.d/S99sawatchdog
/etc/rc5.d/S99sawatchdog
/etc/rc6.d/K20sawatchdog
remove folder /usr/local/AgentService
killall: cagent: no process killed
killall: sawatchdog: no process killed
done.
root@imx6qwise3310:/usr/local/AgentService#
```

2. Windows Agent Configuration

2.1. Agent Console

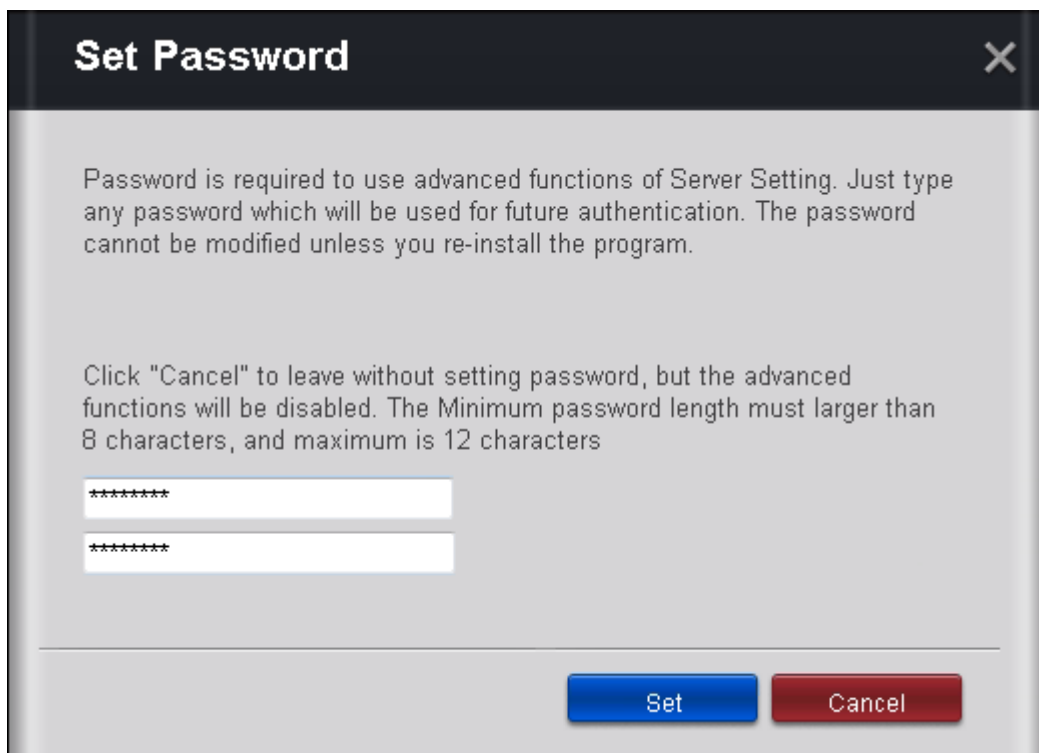
To use WISE-PaaS/RMM, users must install the Agent software on the monitored device. After installing the agent software, users can launch the agent program from the desktop shortcut.



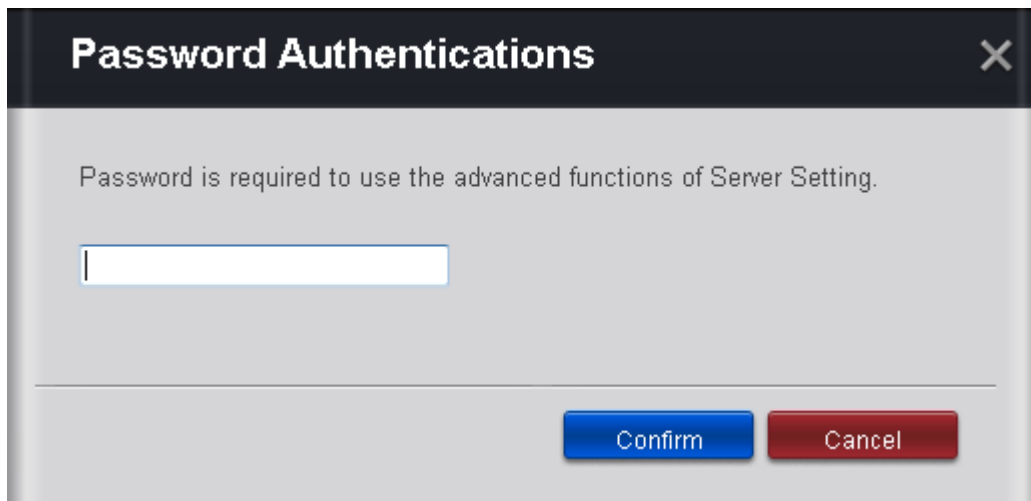
2.2. Connect to Server

Double-click the agent shortcut under desktop to call agent standalone.

In first time execution, user needs to setup the password to protect the Agent.



After the password setup, user needs to enter the password to lunch the Server Setting dialog.



In the following window, enter the server IP address or server name and the device name, and then click “Save & Connect” button to establish the connection to server. If the device’s motherboard supports Intel AMT, users can also enter AMT’s account ID and password here, then after connecting to the server, the administrator can use Remote KVM to connect to the device via Intel AMT even when the device is powered off.

Note: The device’s BIOS must be pre-configured to enable Intel AMT so that RMM can use it.

Server Setting



Agent ID: 000008002711EE1B

Version: 1.0.0

Device Setting

Server Name or Address

Device Name

Connect to server on system startup

Intel AMT Setting

Please confirm that the motherboard and BIOS supports Intel AMT before entering ID and password

Intel AMT ID

Intel AMT Password

Save

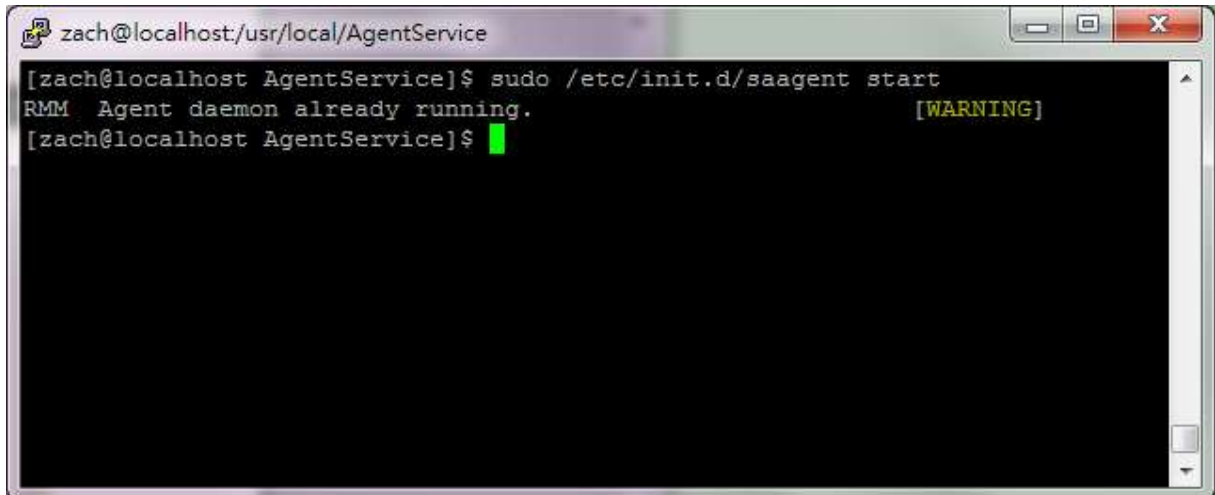
Cancel

3. Linux Agent Configuration

3.1 CentOS

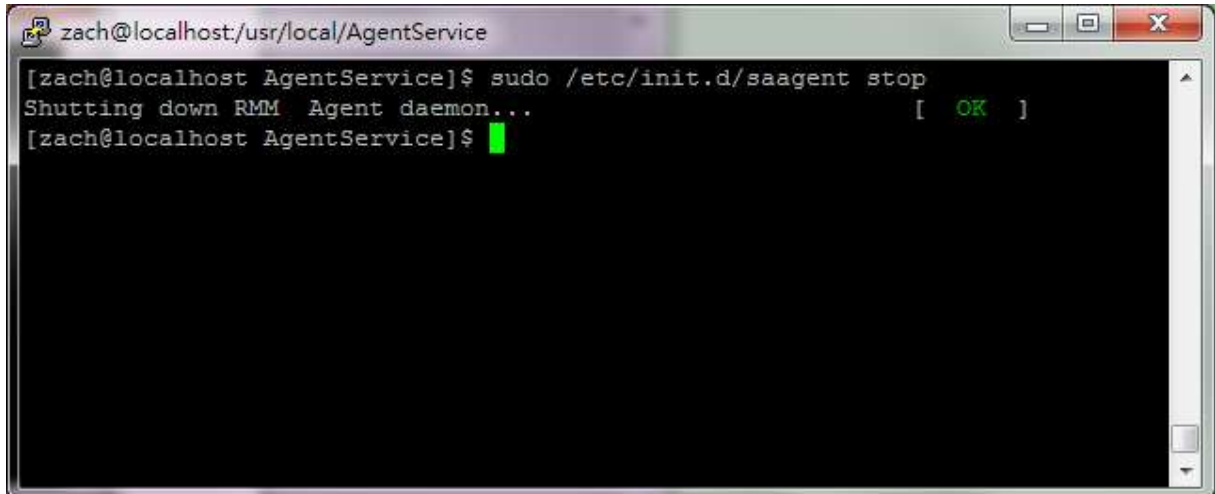
3.1.1 Agent Service Control

- Start Agent Service



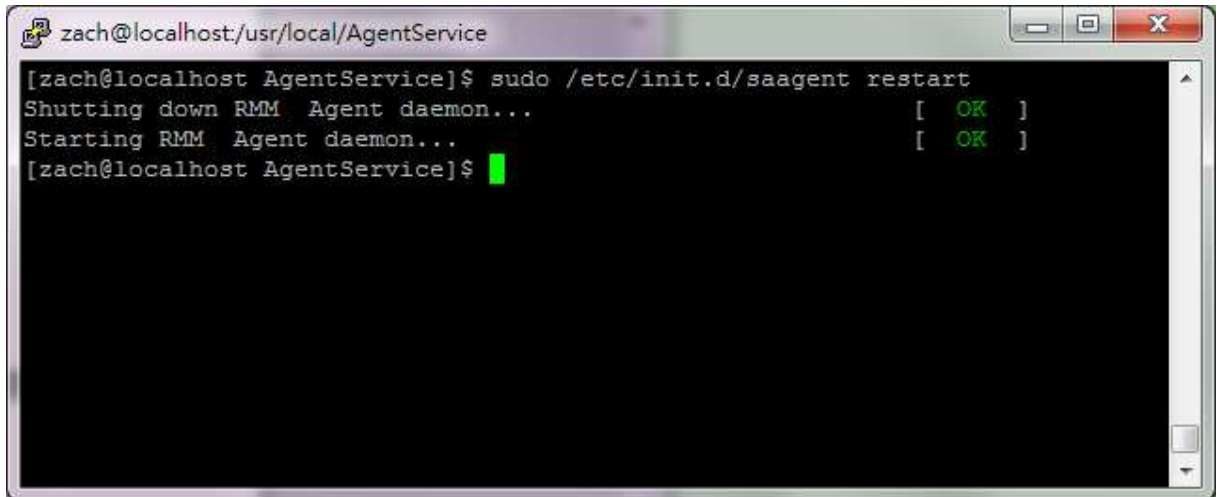
```
zach@localhost:/usr/local/AgentService
[zach@localhost AgentService]$ sudo /etc/init.d/saagent start
RMM Agent daemon already running. [WARNING]
[zach@localhost AgentService]$
```

- Stop Agent Service



```
zach@localhost:/usr/local/AgentService
[zach@localhost AgentService]$ sudo /etc/init.d/saagent stop
Shutting down RMM Agent daemon... [ OK ]
[zach@localhost AgentService]$
```

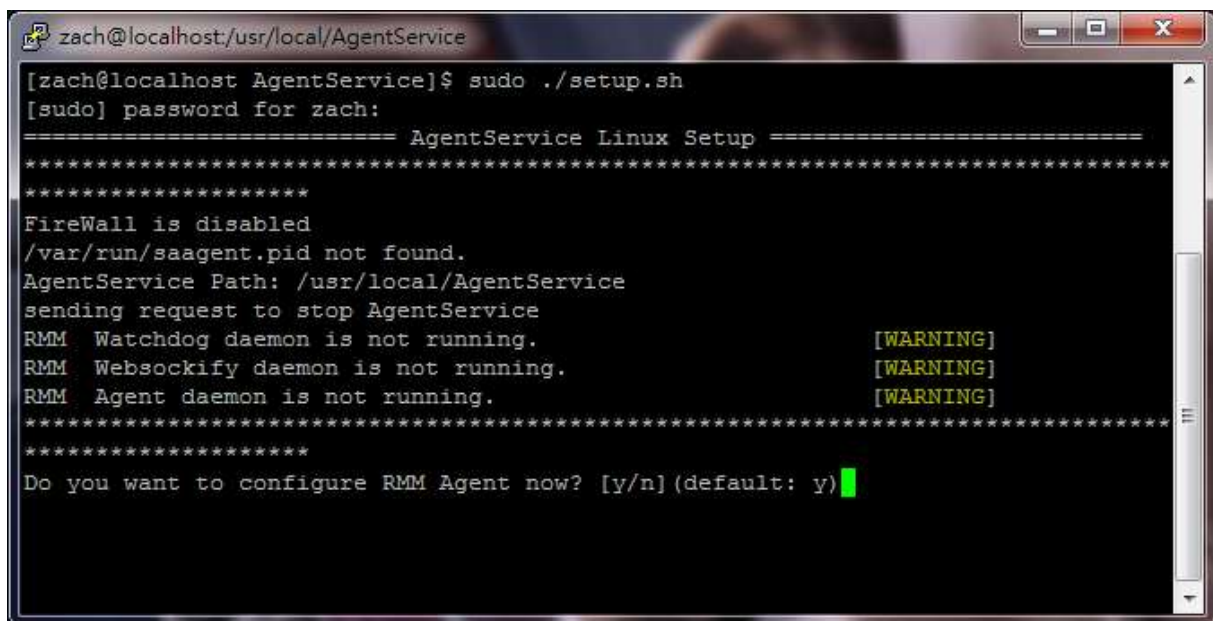

- **Restart Agent Service**



```
zach@localhost:/usr/local/AgentService
[zach@localhost AgentService]$ sudo /etc/init.d/saagent restart
Shutting down RMM Agent daemon... [ OK ]
Starting RMM Agent daemon... [ OK ]
[zach@localhost AgentService]$
```

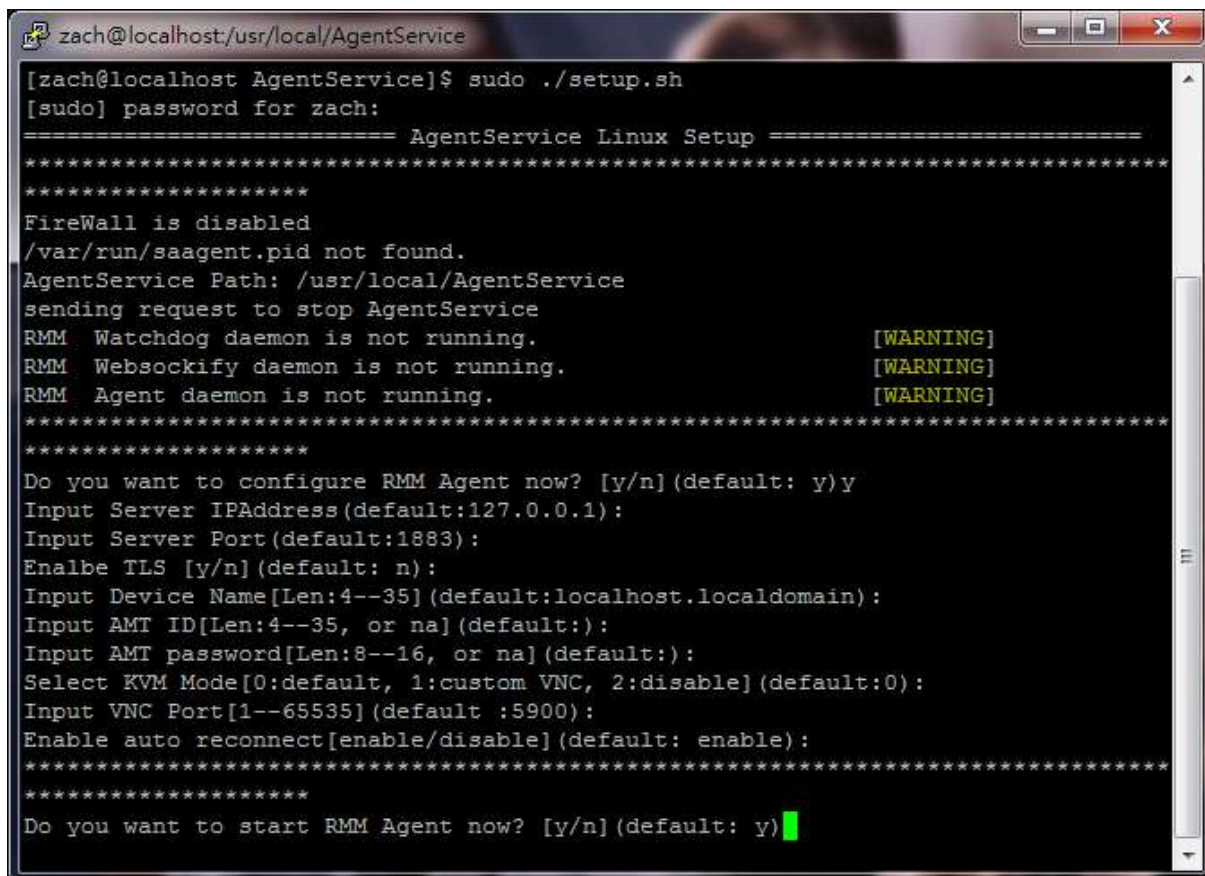
3.1.2 Setup Agent

- **Change directory to '/usr/local/AgentService' and execute 'setup.sh' with superuser permissions.**



```
zach@localhost:/usr/local/AgentService
[zach@localhost AgentService]$ sudo ./setup.sh
[sudo] password for zach:
===== AgentService Linux Setup =====
*****
*****
FireWall is disabled
/var/run/saagent.pid not found.
AgentService Path: /usr/local/AgentService
sending request to stop AgentService
RMM Watchdog daemon is not running. [WARNING]
RMM Websockify daemon is not running. [WARNING]
RMM Agent daemon is not running. [WARNING]
*****
*****
Do you want to configure RMM Agent now? [y/n] (default: y)
```

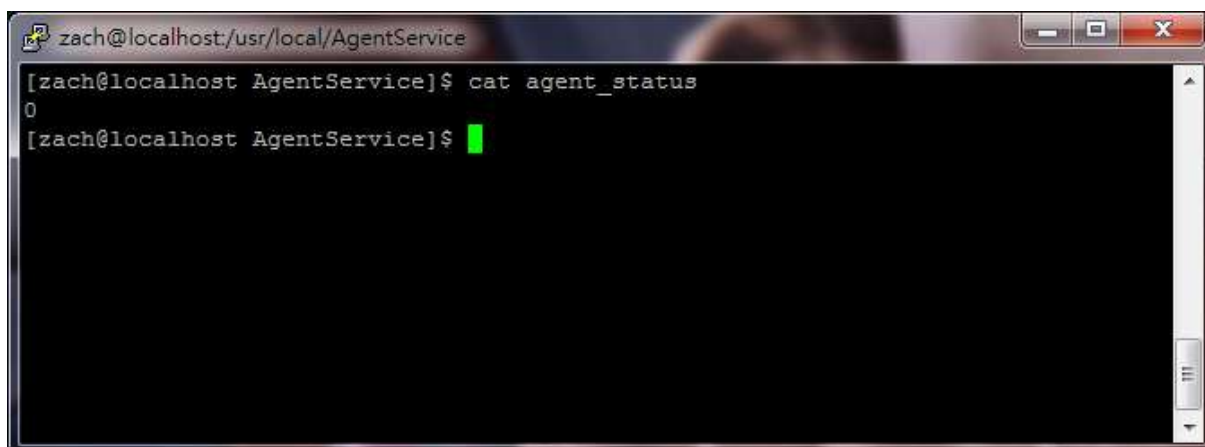
- Complete the configuration step by step to setup the agent.



```
zach@localhost/usr/local/AgentService
[zach@localhost AgentService]$ sudo ./setup.sh
[sudo] password for zach:
===== AgentService Linux Setup =====
*****
*****
FireWall is disabled
/var/run/saagent.pid not found.
AgentService Path: /usr/local/AgentService
sending request to stop AgentService
RMM Watchdog daemon is not running. [WARNING]
RMM Websockify daemon is not running. [WARNING]
RMM Agent daemon is not running. [WARNING]
*****
*****
Do you want to configure RMM Agent now? [y/n] (default: y)y
Input Server IPAddress (default:127.0.0.1):
Input Server Port (default:1883):
Enable TLS [y/n] (default: n):
Input Device Name[Len:4--35] (default:localhost.localdomain):
Input AMT ID[Len:4--35, or na] (default:):
Input AMT password[Len:8--16, or na] (default:):
Select KVM Mode[0:default, 1:custom VNC, 2:disable] (default:0):
Input VNC Port[1--65535] (default :5900):
Enable auto reconnect[enable/disable] (default: enable):
*****
*****
Do you want to start RMM Agent now? [y/n] (default: y) █
```

3.1.3 Check Agent Connection Status

- Change directory to '/usr/localAgentService' and use 'cat' command to check 'agent_status' file. If return 0 means the agent cannot connect to server, return 1 means the agent connected to server.

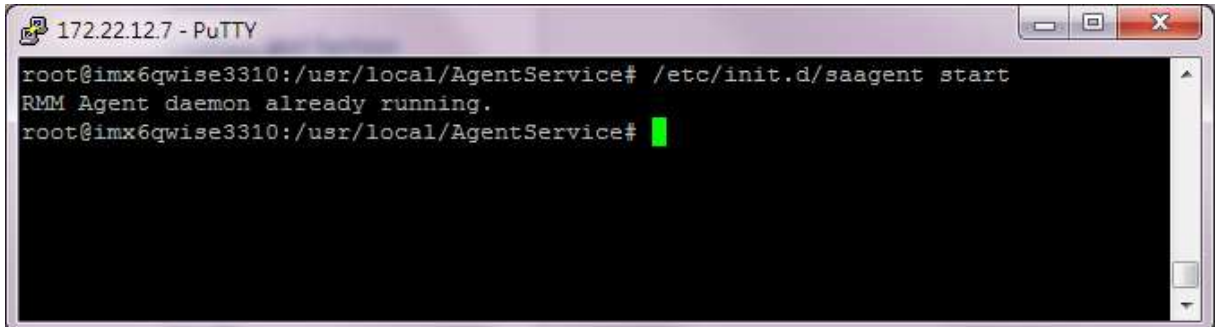


```
zach@localhost/usr/local/AgentService
[zach@localhost AgentService]$ cat agent_status
0
[zach@localhost AgentService]$ █
```

3.2 RISC_Yocto

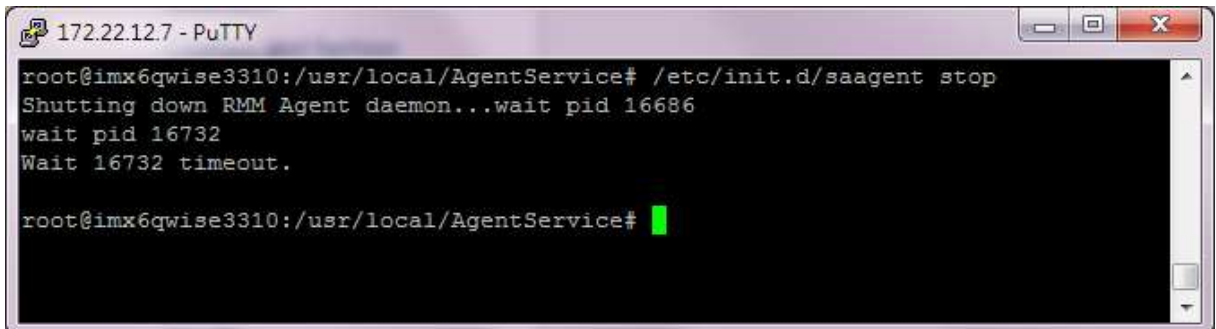
3.2.1 Agent Service Control

- **Start Agent Service**



```
172.22.12.7 - PuTTY
root@imx6qwise3310:/usr/local/AgentService# /etc/init.d/saagent start
RMM Agent daemon already running.
root@imx6qwise3310:/usr/local/AgentService#
```

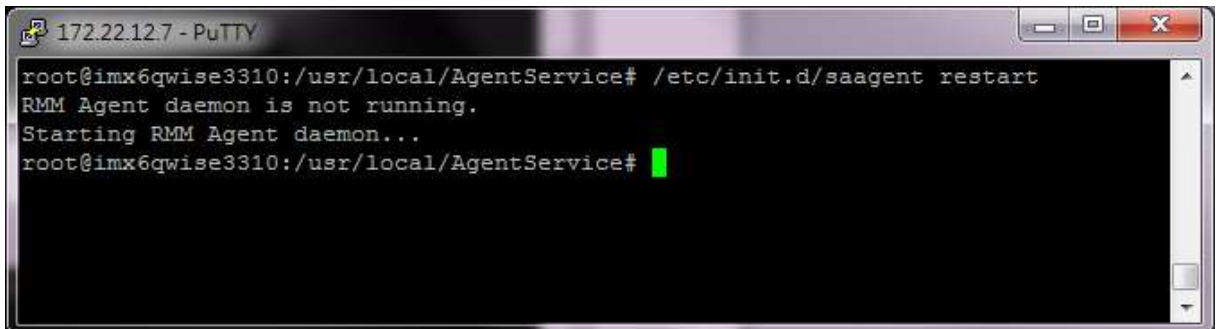
- **Stop Agent Service**



```
172.22.12.7 - PuTTY
root@imx6qwise3310:/usr/local/AgentService# /etc/init.d/saagent stop
Shutting down RMM Agent daemon...wait pid 16686
wait pid 16732
Wait 16732 timeout.

root@imx6qwise3310:/usr/local/AgentService#
```

- **Restart Agent Service**



```
172.22.12.7 - PuTTY
root@imx6qwise3310:/usr/local/AgentService# /etc/init.d/saagent restart
RMM Agent daemon is not running.
Starting RMM Agent daemon...
root@imx6qwise3310:/usr/local/AgentService#
```

3.2.2 Setup Agent

- **Change directory to '/usr/local/AgentService' and execute 'setup.sh' with superuser permissions.**

```
172.22.12.7 - PuTTY
root@imx6qwise3310:/usr/local/AgentService# ./setup.sh
===== AgentService Linux Setup =====
*****
*****
FireWall is disabled
Pid: 21870
find app dir /usr/local/AgentService.
AgentService Path: /usr/local/AgentService
sending request to stop AgentService
Shutting down RMM Agent daemon...wait pid 21870
wait pid 21915
Wait 21915 timeout.

Shutting down RMM watchdog daemon...
*****
*****
Do you want to configure RMM Agent now? [y/n] (default: y) █
```

- Complete the configuration step by step to setup the agent.

```
172.22.12.7 - PuTTY
root@imx6qwise3310:/usr/local/AgentService# ./setup.sh
===== AgentService Linux Setup =====
*****
*****
FireWall is disabled
Pid: 21870
find app dir /usr/local/AgentService.
AgentService Path: /usr/local/AgentService
sending request to stop AgentService
Shutting down RMM Agent daemon...wait pid 21870
wait pid 21915
Wait 21915 timeout.

Shutting down RMM watchdog daemon...
*****
*****
Do you want to configure RMM Agent now? [y/n] (default: y) y
Input Server IPAddress(default:127.0.0.1):
Input Server Port(default:1883):
Enable TLS [y/n] (default: n):
Input Device Name[Len:4--35] (default:imx6qwise3310):
Input AMT ID[Len:4--35, or na] (default:):
Input AMT password[Len:8--16, or na] (default:):
Select KVM Mode[0:default, 1:custom VNC, 2:disable] (default:0):
Input VNC Port[1--65535] (default :5900):
Enable auto reconnect[enable/disable] (default: enable):
*****
*****
Do you want to start RMM Agent now? [y/n] (default: y) █
```

3.2.3 Check Agent Connection Status

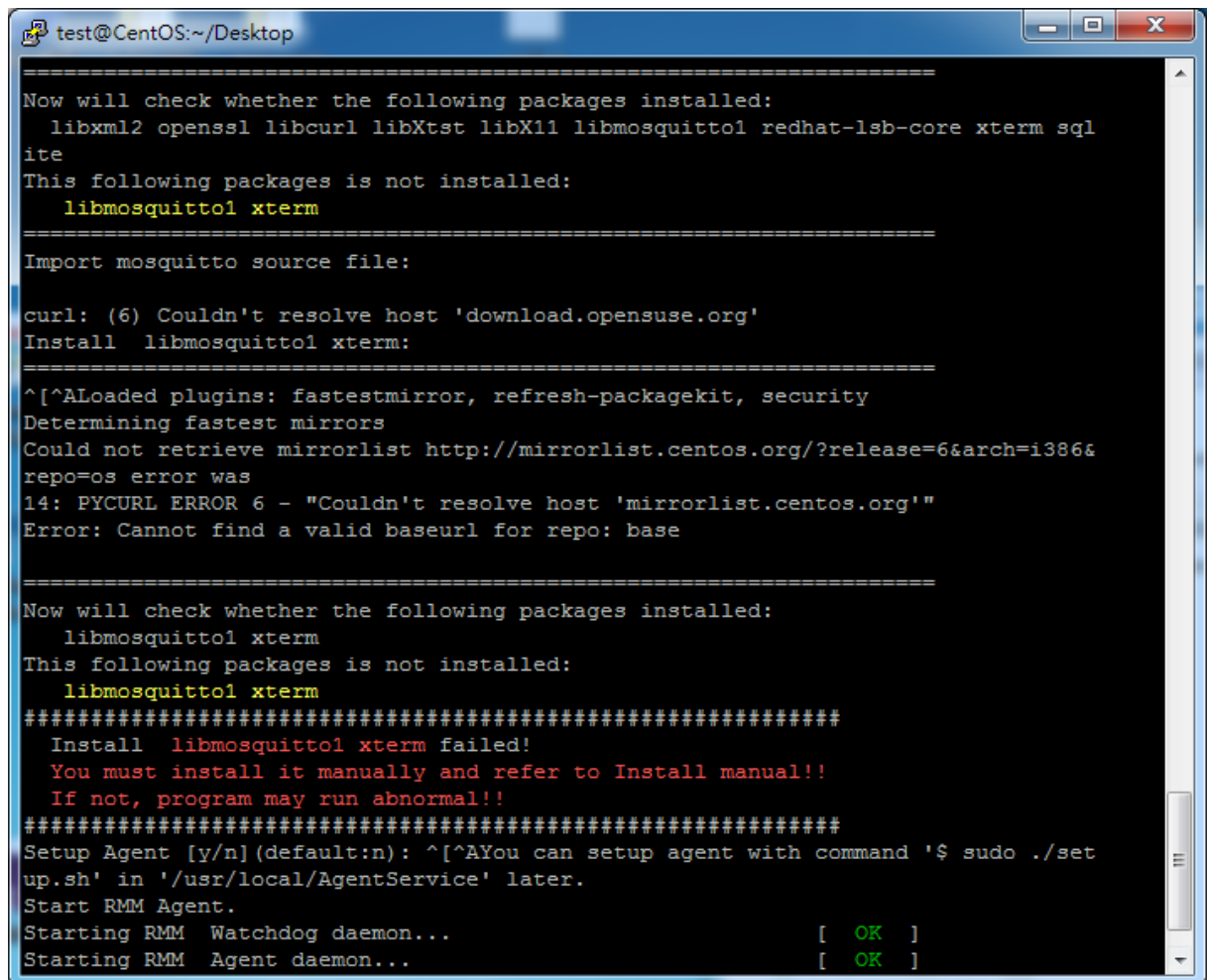
- Change directory to '/usr/local/AgentService' and use 'cat' command to check 'agent_status' file. If return 0 means the agent cannot connect to server, return 1 means the agent connected to server.



```
172.22.127 - PuTTY
root@imx6qwise3310:/usr/local/AgentService# cat agent_status
1
root@imx6qwise3310:/usr/local/AgentService#
```

4. FAQ

Q1. How to fix the loss of depend libraries while install RMMAgent?



```
test@CentOS:~/Desktop
=====
Now will check whether the following packages installed:
  libxml2 openssl libcurl libXtst libX11 libmosquittol redhat-lsb-core xterm sql
ite
This following packages is not installed:
  libmosquittol xterm
=====
Import mosquitto source file:
curl: (6) Couldn't resolve host 'download.opensuse.org'
Install libmosquittol xterm:
=====
^[[^Aloaded plugins: fastestmirror, refresh-packagekit, security
Determining fastest mirrors
Could not retrieve mirrorlist http://mirrorlist.centos.org/?release=6&arch=i386&
repo=os error was
14: PYCURL ERROR 6 - "Couldn't resolve host 'mirrorlist.centos.org'"
Error: Cannot find a valid baseurl for repo: base
=====

Now will check whether the following packages installed:
  libmosquittol xterm
This following packages is not installed:
  libmosquittol xterm
#####
Install libmosquittol xterm failed!
You must install it manually and refer to Install manual!!
If not, program may run abnormal!!
#####
Setup Agent [y/n] (default:n): ^[[^AYou can setup agent with command '$ sudo ./set
up.sh' in '/usr/local/AgentService' later.
Start RMM Agent.
Starting RMM Watchdog daemon... [ OK ]
Starting RMM Agent daemon... [ OK ]
```

Ans:

User should connect to internet and restart the pre-install procedure with the following SOP:

1. # cd /usr/local/AgentService
2. # su root
3. # ./pre-install_chk.sh

NOTICE:

Actually 'pre-install_chk.sh' is run automatically when execute 'rmmagent-platform_name-version.run'.

And run './pre-install_chk.sh -devel' is install the depend packages for RMM Agent development.

```

test@CentOS:/usr/local/AgentService
[test@CentOS AgentService]$ sudo ./pre-install_chk.sh
[sudo] password for test:
=====
Now will check whether the following packages installed:
  libxml2 openssl libcurl libXtst libX11 libmosquitto1 redhat-lsb-core xterm sql
ite
This following packages is not installed:
  libmosquitto1 xterm
=====
Import mosquitto source file:
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left   Speed
136  272  136  272    0    0   119     0  0:00:02  0:00:02  --:--:--  888
Install libmosquitto1 xterm:
=====
Loaded plugins: fastestmirror, refresh-packagekit, security
Loading mirror speeds from cached hostfile
* base: mirror01.idc.hinet.net
* extras: mirror01.idc.hinet.net
* updates: mirror01.idc.hinet.net
base                               | 3.7 kB    00:00

```

```

Running Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing : libXpm-3.5.10-2.el6.i686                1/4
  Installing : libXaw-1.0.11-2.el6.i686                2/4
  Installing : xterm-253-1.el6.i686                    3/4
  Installing : libmosquitto1-1.4.8-1.1.i686            4/4
  Verifying  : libmosquitto1-1.4.8-1.1.i686            1/4
  Verifying  : libXpm-3.5.10-2.el6.i686                2/4
  Verifying  : xterm-253-1.el6.i686                    3/4
  Verifying  : libXaw-1.0.11-2.el6.i686                4/4

Installed:
  libmosquitto1.i686 0:1.4.8-1.1                xterm.i686 0:253-1.el6

Dependency Installed:
  libXaw.i686 0:1.0.11-2.el6                libXpm.i686 0:3.5.10-2.el6

Complete!

=====
Now will check whether the following packages installed:
  libmosquitto1 xterm
All the packages is installed!
[test@CentOS AgentService]$ █

```