

User Manual



WISE-PaaS/RMM 3.1

Wireless IoT Sensing Embedded
Remote Monitoring and Management
WISE-Agent User Manual
V1.6

ADVANTECH

Enabling an Intelligent Planet

Change Log:

Date	Version	Description / Major change
2015/07/18	V0.1	Rison Yeh, create draft document
2015/07/19	V1.0	Tung Yi, 1 st format release
2015/09/16	V1.1	Tung Yi, Revised
2015/10/13	V1.2	Scott Chang, Add Linux installation and configuration
2015/12/22	V1.3	Rison Yeh, Review and revise format
2016/01/29	V1.4	Lillian Tseng, Unify font to Calibri
2016/05/25	V1.5	Winnie Weng, modify the description for installation steps, add document version on the front page, add Support chapter
2016/05/31	V1.6	Zach Chih, change susiaccess to RMM in Linux & add Yocto Scott Chang, add FAQ for fixing depend libraries.

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1. Minimum Requirements

1.1. SW Requirements

- Strongly recommend your Advantech devices should have SUSI API supported:
SUSI API is required for Hardware Monitoring Management function.

If you would like to know more about SUSI API, please contact your Advantech contact window or request Support on http://support.advantech.com/support/new_default.aspx.

- .NET Framework 3.5 (Windows only)
 - .NET Framework Redistributable 2.0 or .NET Framework Redistributable 3.5
- Libraries pre-installed(Linux only)
 - libxml2
 - openssl
 - libcurl
 - libXtst
 - libX11
 - libmosquitto1
 - redhat-lsb-core
 - xterm

1.2. Operating System

WISE-PaaS/RMM 3.1 is compatible with the listed OS below.

- Windows Server 2012/2012 R2 64-bit (*)
- Windows Server 2008 32-bit/64-bit (*)
- Windows 10 IoT Enterprise 32-bit/64-bit
- Window IoT Core 32-bit
- Windows 8/8.1 32-bit/64-bit
- Windows 7 SP1 32-bit/64-bit
- Windows XP SP3 32-bit
- CentOS 6.5 x86 32-bit(*)
- Yocto for Freescale i.MX6(*)
- Other Linux by request(*)
- IDP 3.1 by request(*)

(*)Limited support for System Protection/Recovery. Please contact Advantech if you have advanced requirements.

If you would like to request other OS not listed above, please contact Advantech or visit WISE-PaaS/RMM support website: <http://www.advantech.com/wise-paas/rmm>

1.3. Hardware Requirements

- Minimum 800MB memory available
- HD capacity: 32GB for Win7; 64GB for Win8/Win10

1.4. Allowed TCP ports

- Connection: 80/8080
- FTP: 2121
- KVM1: 5500 ~ 5504
- KVM2: 5900 ~ 5904
- MQTT: 10001
- iAMT: 16992, 16994

1.5. System configuration

2.1.1 Wake On Lan Setting

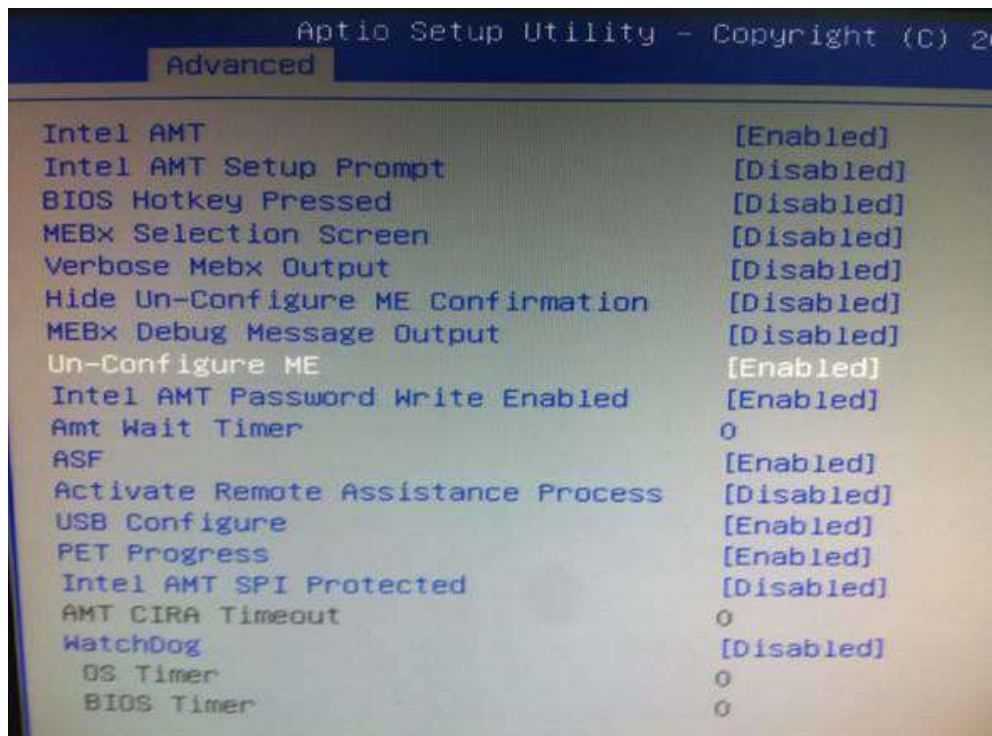
- Enable the Wake On Lan in BIOS setup menu and then enable the WOL of your NIC



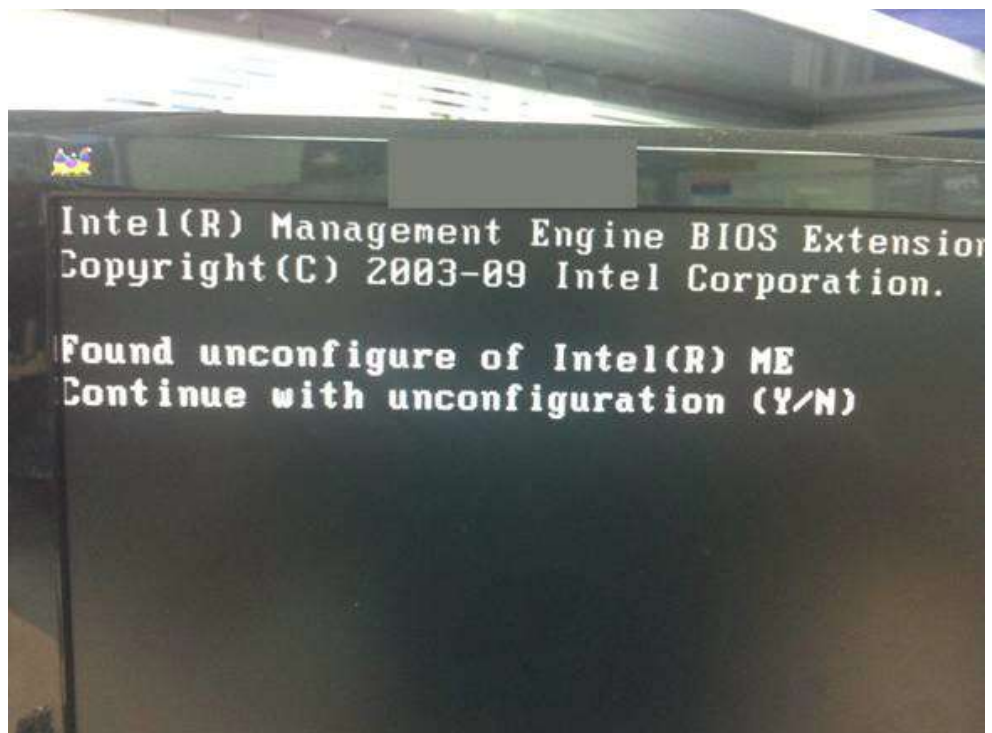
2.1.2 AMT Setting

Note : Before using Intel® AMT, activate ME in BIOS is needed. The basic steps are as below:

- Un-configure ME changes to Enable



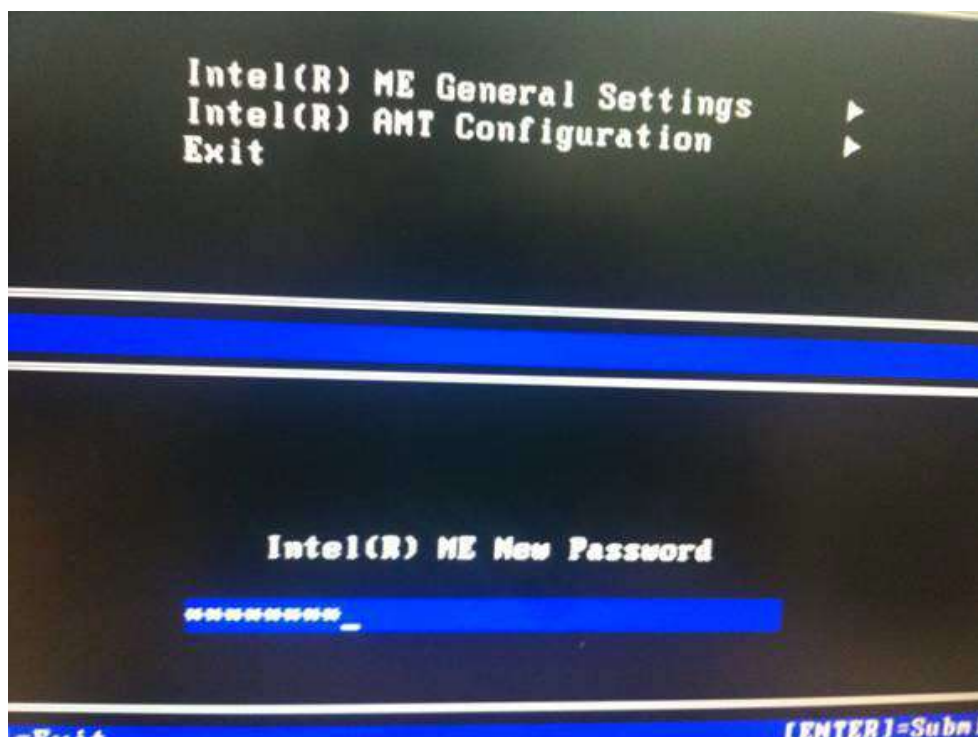
- Press Yes



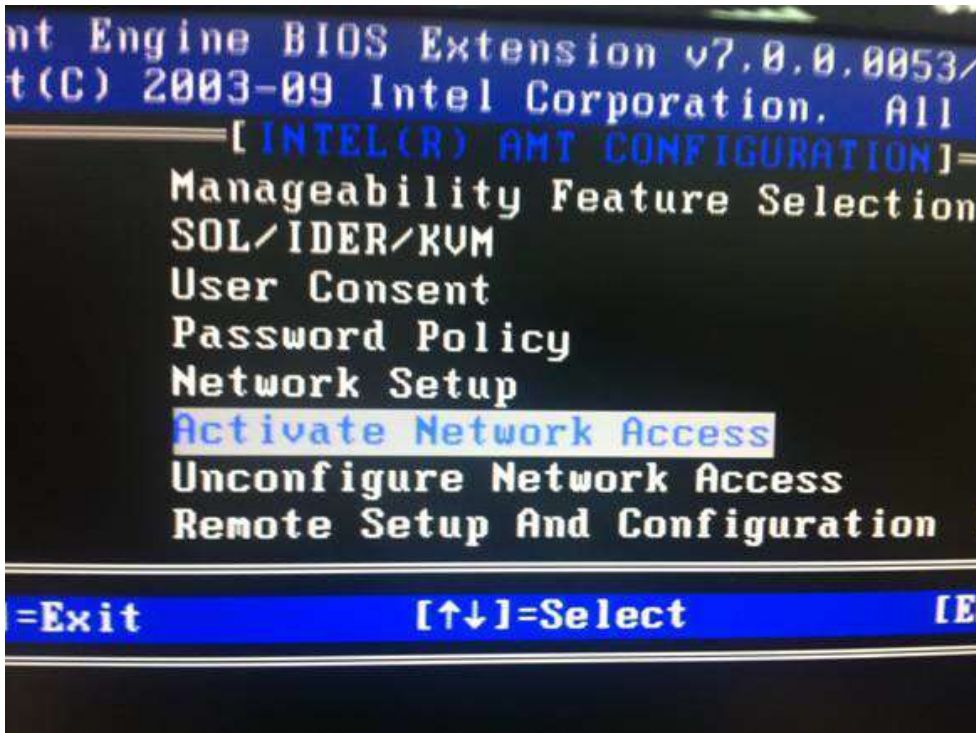
- First time entering ME with original password "admin"



- Change new password



- Activate Network Access



- Exit and reboot

Please Visit Advantech website <http://www.advantech.com/> for more information.

2. Software Installation

2.1. Windows WISE-Agent Installation

2.1.3 Installation

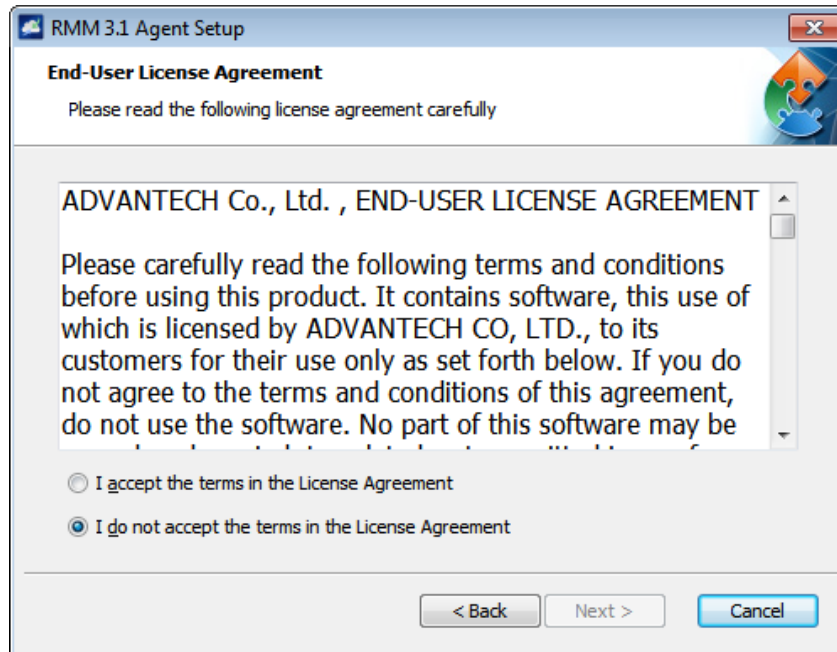
Double click “**WISE-Agent Setup.exe**” to install WISE-Agent program.

- **Start Installation**



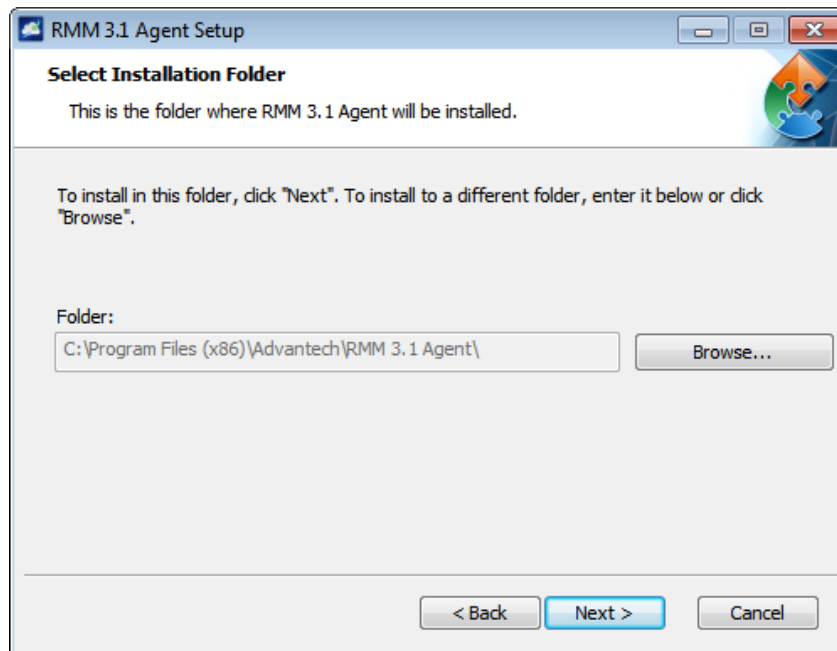
- **Check End-User License Agreement**

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

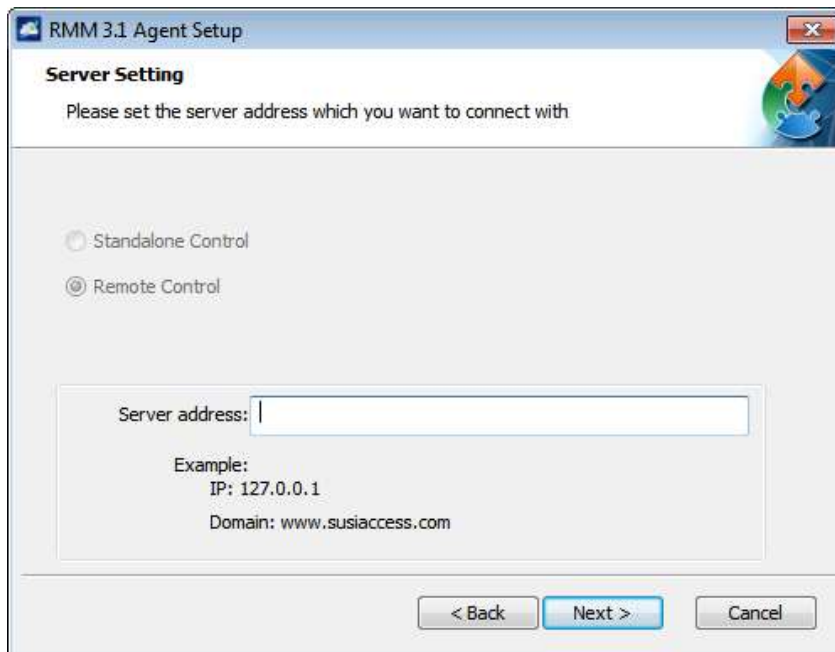


- **Select Installation Folder**

Select the folder to be installed.



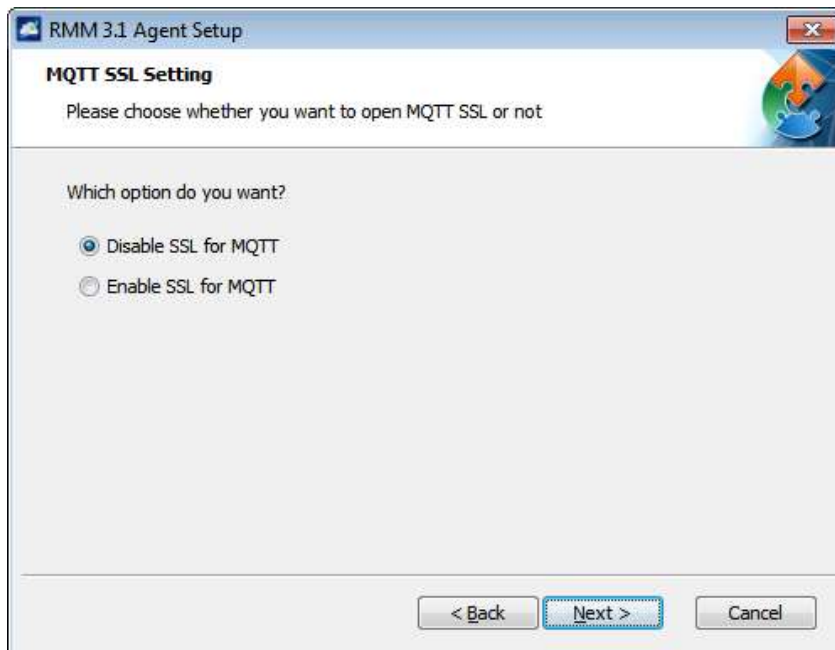
- **Server Settings - Set Remote Management Server URL/IP.**



The screenshot shows the 'RMM 3.1 Agent Setup' window with the 'Server Setting' tab selected. The window title is 'RMM 3.1 Agent Setup'. The tab is 'Server Setting'. The instruction says 'Please set the server address which you want to connect with'. There are two radio buttons: 'Standalone Control' (unselected) and 'Remote Control' (selected). Below the radio buttons is a text box labeled 'Server address:' with a cursor inside. Below the text box, it says 'Example: IP: 127.0.0.1' and 'Domain: www.susiaccess.com'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

- **MQTT SSL Settings**

Choose either disable or enable SSL for MQTT.

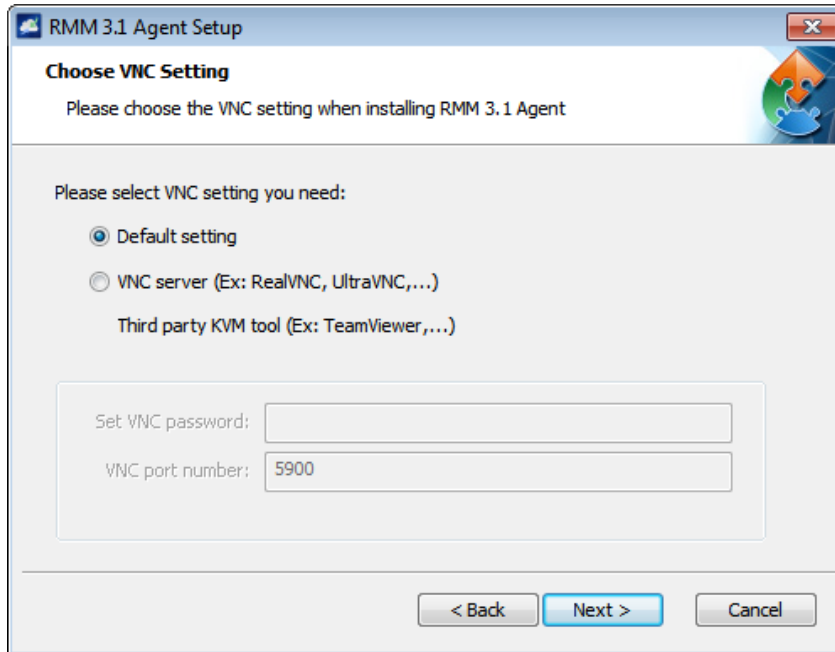


The screenshot shows the 'RMM 3.1 Agent Setup' window with the 'MQTT SSL Setting' tab selected. The window title is 'RMM 3.1 Agent Setup'. The tab is 'MQTT SSL Setting'. The instruction says 'Please choose whether you want to open MQTT SSL or not'. Below the instruction, it says 'Which option do you want?'. There are two radio buttons: 'Disable SSL for MQTT' (selected) and 'Enable SSL for MQTT' (unselected). At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

- **VNC Setting**

Please select VNC setting.

A. Set as Default RMM Built-in VNC.



RMM 3.1 Agent Setup

Choose VNC Setting

Please choose the VNC setting when installing RMM 3.1 Agent

Please select VNC setting you need:

☒ Default setting

☐ VNC server (Ex: RealVNC, UltraVNC,...)

Third party KVM tool (Ex: TeamViewer,...)

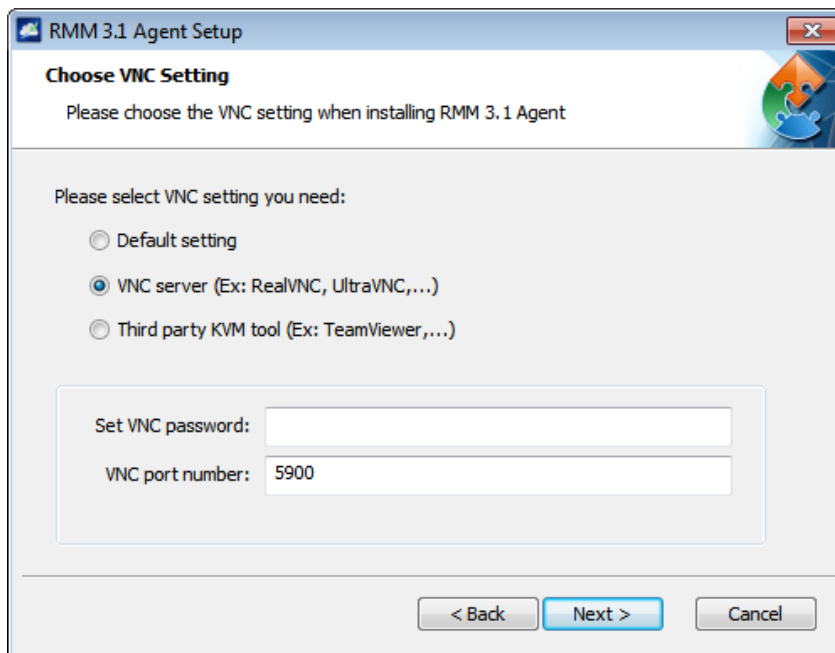
Set VNC password:

VNC port number:

< Back Next > Cancel

B. Use other User-defined VNC server.

Input VNC server password and port number



RMM 3.1 Agent Setup

Choose VNC Setting

Please choose the VNC setting when installing RMM 3.1 Agent

Please select VNC setting you need:

☐ Default setting

☒ VNC server (Ex: RealVNC, UltraVNC,...)

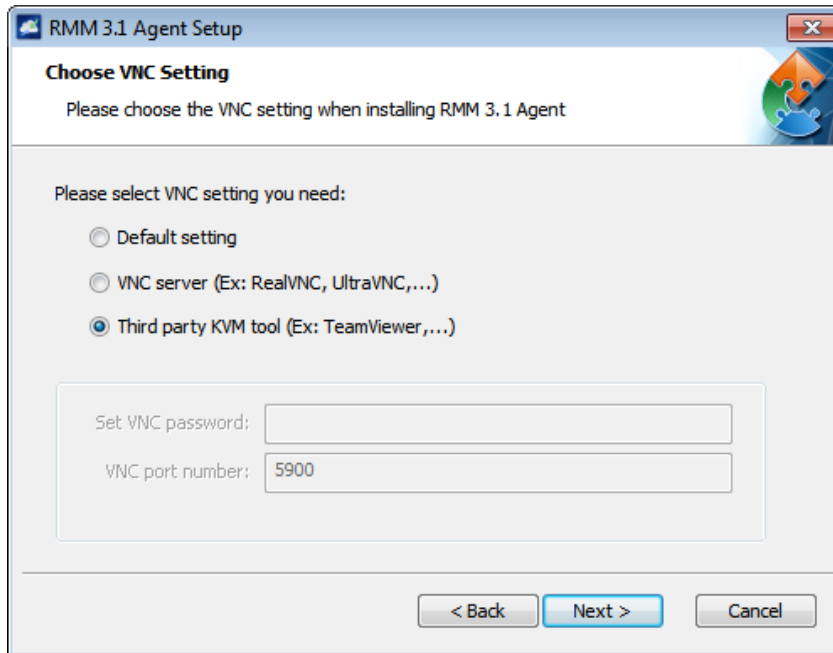
☐ Third party KVM tool (Ex: TeamViewer,...)

Set VNC password:

VNC port number:

< Back Next > Cancel

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

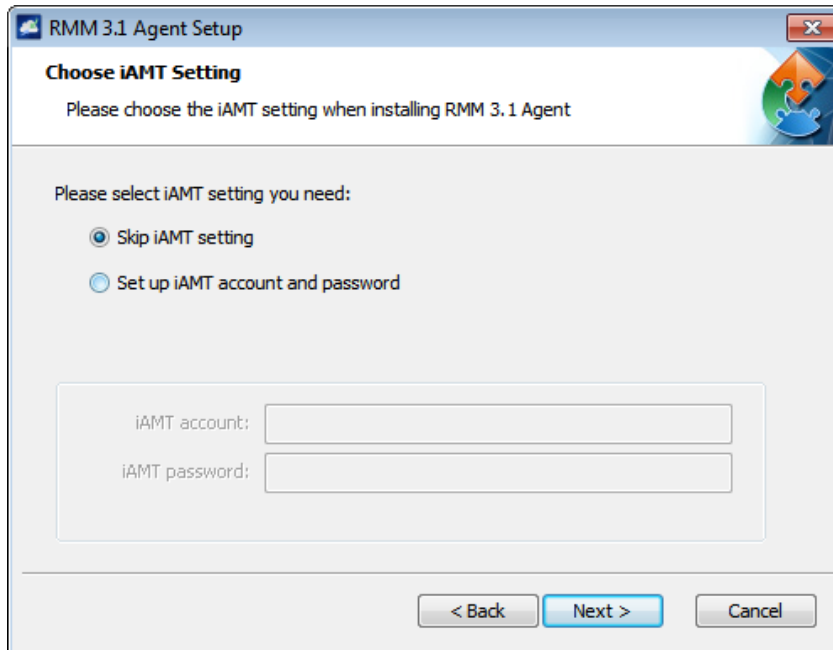


The dialog box is titled "RMM 3.1 Agent Setup" and "Choose VNC Setting". It contains the instruction "Please choose the VNC setting when installing RMM 3.1 Agent". Below this, it says "Please select VNC setting you need:" followed by three radio button options: "Default setting", "VNC server (Ex: RealVNC, UltraVNC,...)", and "Third party KVM tool (Ex: TeamViewer,...)". The "Third party KVM tool" option is selected. Below the options are two text input fields: "Set VNC password:" (empty) and "VNC port number:" (containing "5900"). At the bottom are three buttons: "< Back", "Next >", and "Cancel".

- **iAMT Settings**

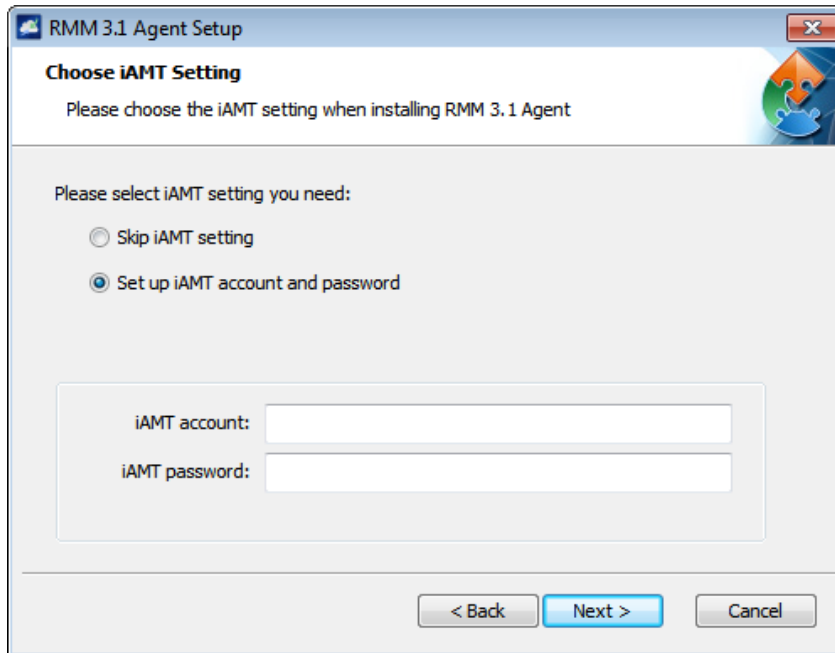
Please choose the iAMT..

A. Skip iAMT setting



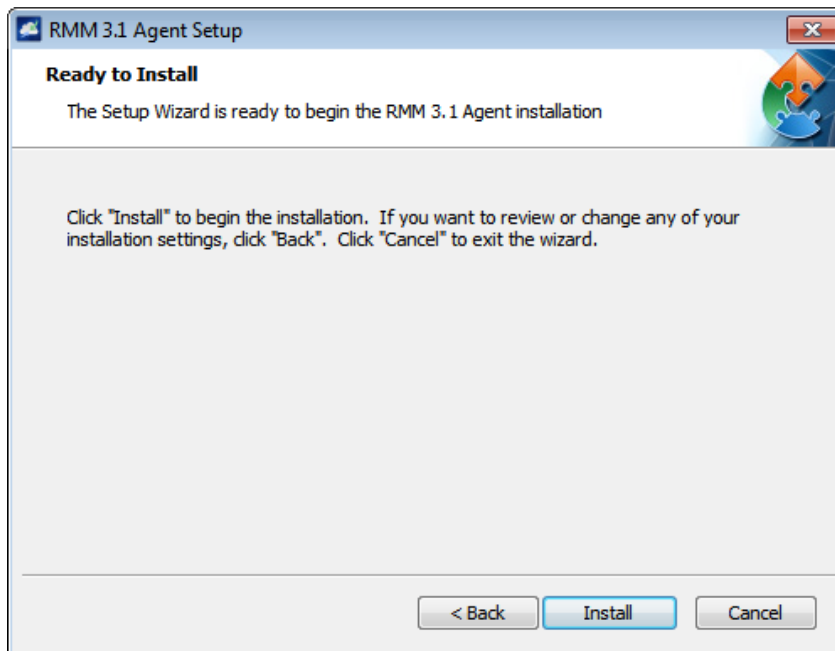
The dialog box is titled "RMM 3.1 Agent Setup" and "Choose iAMT Setting". It contains the instruction "Please choose the iAMT setting when installing RMM 3.1 Agent". Below this, it says "Please select iAMT setting you need:" followed by two radio button options: "Skip iAMT setting" and "Set up iAMT account and password". The "Skip iAMT setting" option is selected. Below the options are two text input fields: "iAMT account:" (empty) and "iAMT password:" (empty). At the bottom are three buttons: "< Back", "Next >", and "Cancel".

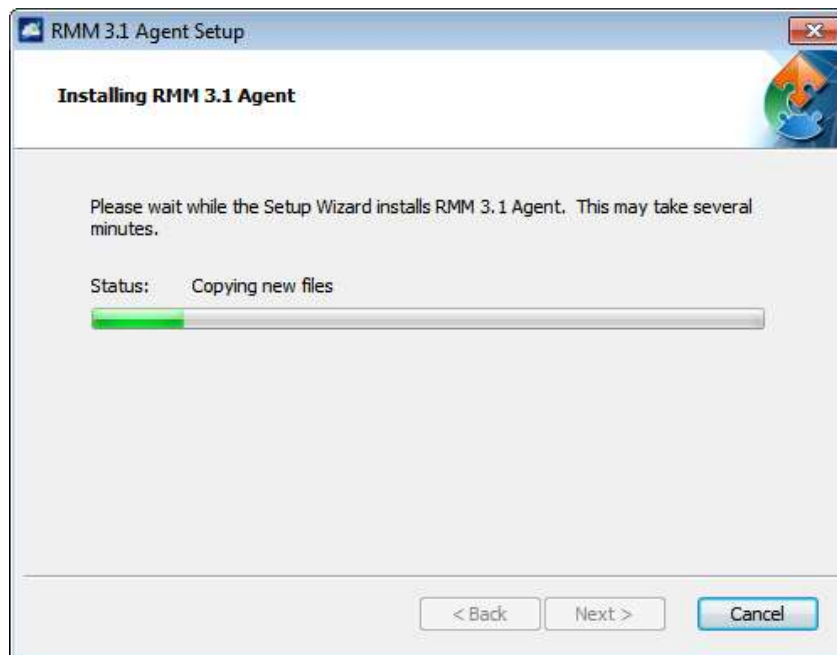
B. Set up iAMT



- **Start Installing.**

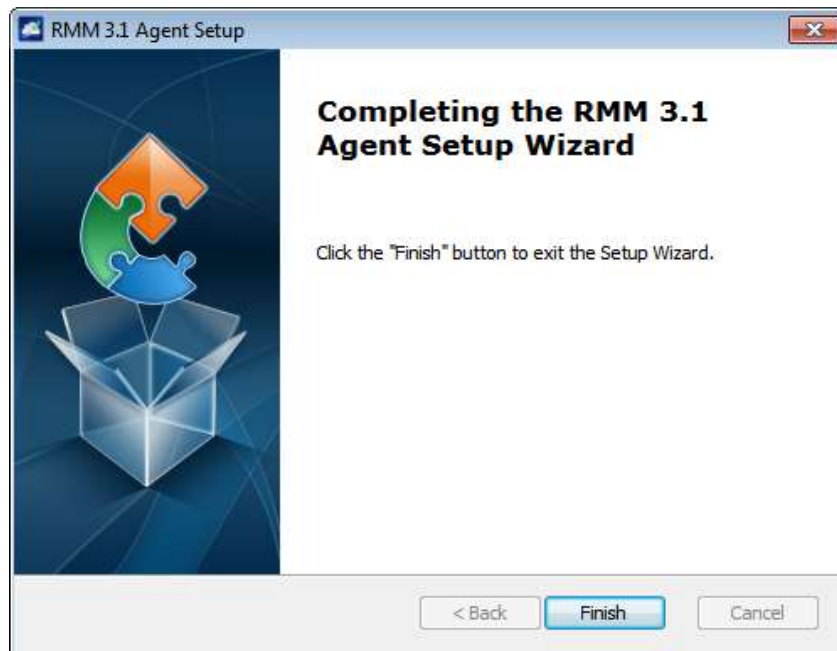
Click the "Install" button to begin the installation.





- **Installation Completed.**

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



2.1.4 Uninstallation

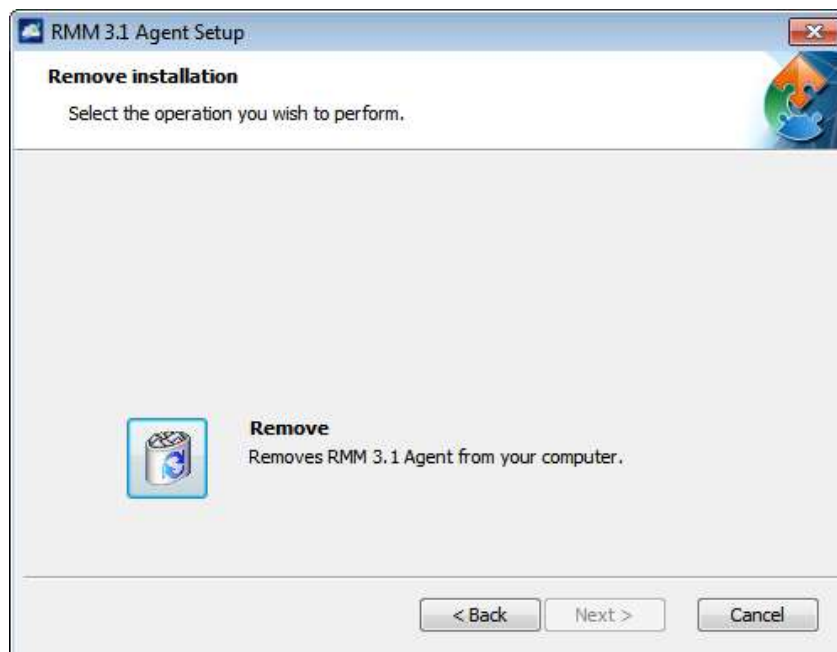
- **Start to uninstall “WISE-Agent”**

Double click “WISE-Agent Setup.exe” to uninstall the WISE-Agent program.



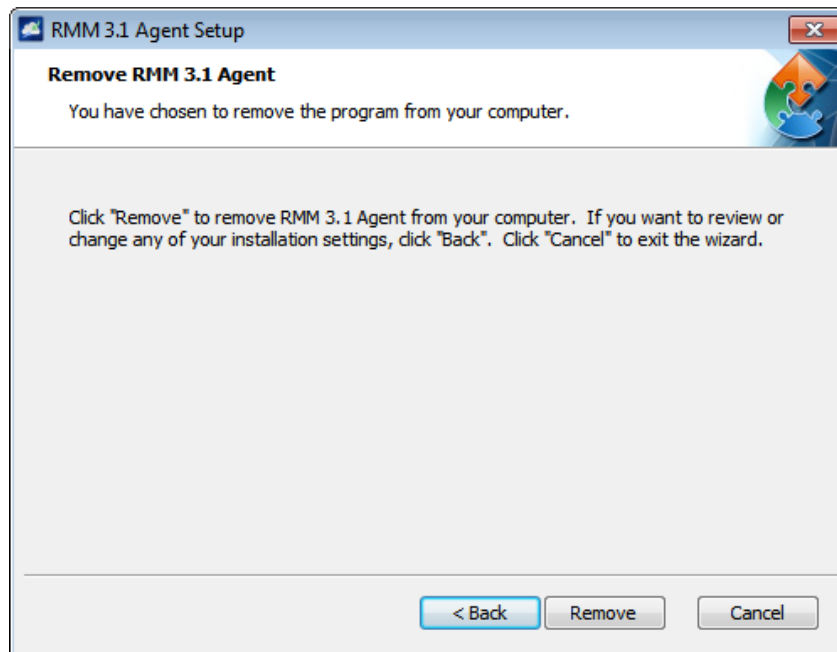
- **Remove installation**

Click the “Remove” icon to start uninstallation.



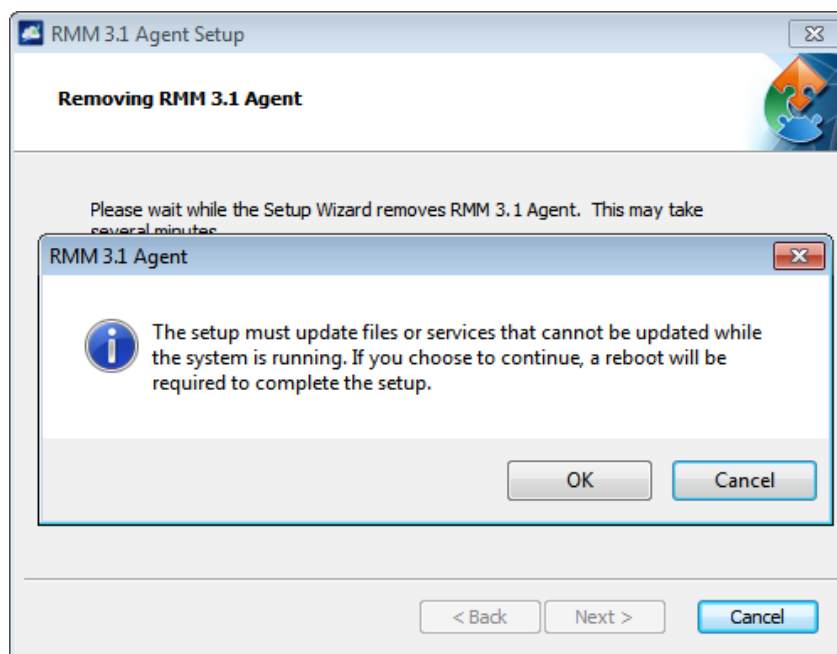
- **Confirm the uninstallation for WISE-Agent**

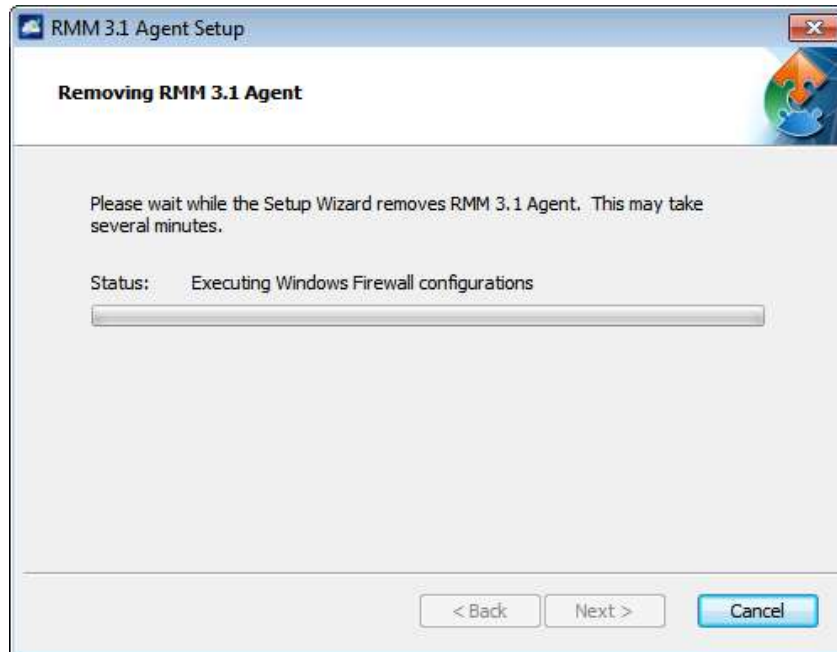
Click the “Remove” button to remove WISE-Agent from your computer.



- **Confirm that running services will being stopped and removed.**

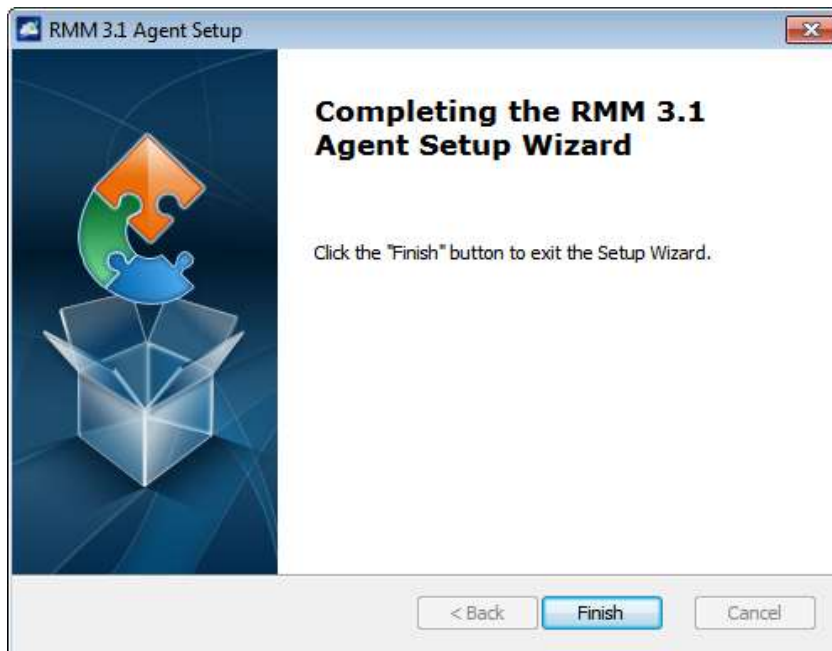
Click “OK” to continue the uninstallation process.





- **Uninstallation completed.**

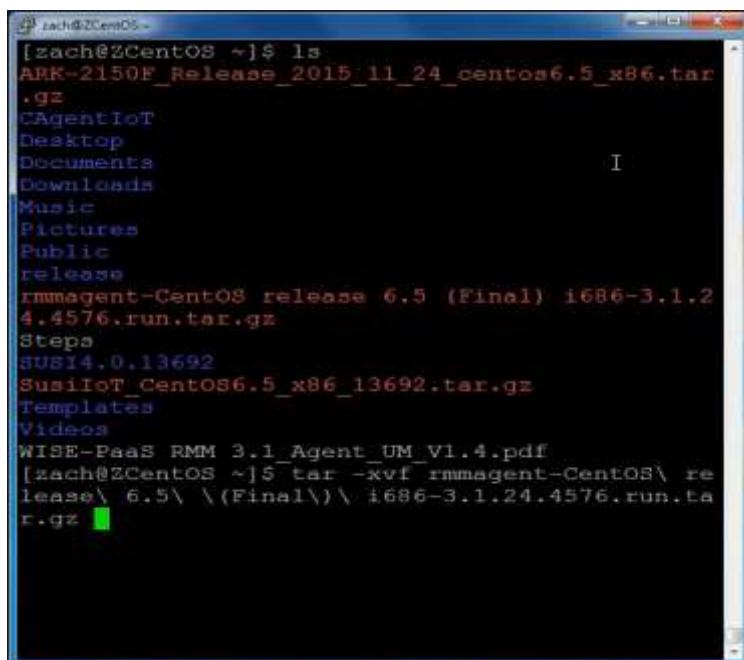
Click the "Finish" button to exit the Setup Wizard.



2.2. Linux WISE-Agent Installation - CentOS

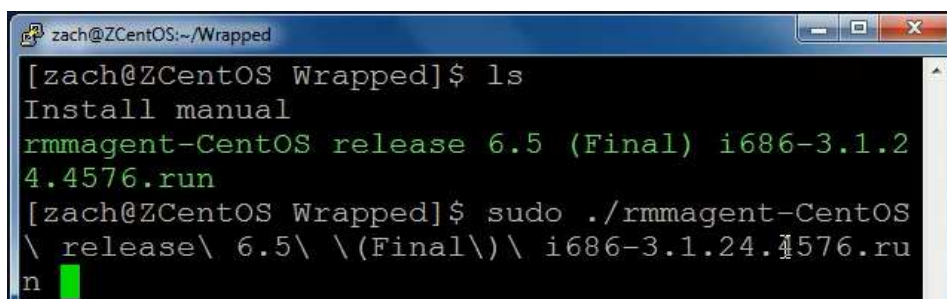
2.2.1 Installation

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



```
zach@ZCentOS ~]$ ls
ARK-2150F_Release_2015_11_24_centos6.5_x86.tar.gz
CAgentIoT
Desktop
Documents
Downloads
Music
Pictures
Public
release
rmmagent-CentOS release 6.5 (Final) i686-3.1.2
4.4576.run.tar.gz
Steps
SUS14.0.13692
SusIoT_CentOS6.5_x86_13692.tar.gz
Templates
Videos
WISE-PaaS RMM 3.1 Agent UM V1.4.pdf
[zach@ZCentOS ~]$ tar -xvf rmmagent-CentOS\ re
lease\ 6.5\ \ (Final\)\ i686-3.1.2.4.4576.run.ta
r.gz
```

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



```
zach@ZCentOS:~/Wrapped
[zach@ZCentOS Wrapped]$ ls
Install manual
rmmagent-CentOS release 6.5 (Final) i686-3.1.2
4.4576.run
[zach@ZCentOS Wrapped]$ sudo ./rmmagent-CentOS
\ release\ 6.5\ \ (Final\)\ i686-3.1.2.4.4576.ru
n
```

- Enter the setup mode by clicking y

```

zach@localhost:~/Wrapped
./AgentService/VNC' -> '/usr/local/AgentService/VNC'
./AgentService/VNC/x11vnc' -> '/usr/local/AgentService/VNC/x11vnc'
./AgentService/VNC/websockify' -> '/usr/local/AgentService/VNC/websockify'
./AgentService/libSAGatherInfo.so' -> '/usr/local/AgentService/libSAGatherI
nfo.so'
./AgentService/libSAConfig.so.3.1.30.5430' -> '/usr/local/AgentService/libS
AConfig.so.3.1.30.5430'
restore config files
/tmp/tmp.U1XF562Ptf/agent_config.xml' -> '/usr/local/AgentService/agent_con
fig.xml'
/tmp/tmp.U1XF562Ptf/agent_config_def.xml' -> '/usr/local/AgentService/agent
_config_def.xml'
/tmp/tmp.U1XF562Ptf/logger.ini' -> '/usr/local/AgentService/logger.ini'
/tmp/tmp.U1XF562Ptf/log.ini' -> '/usr/local/AgentService/log.ini'
/tmp/tmp.U1XF562Ptf/Modbus_Handler.ini' -> '/usr/local/AgentService/Modbus_
Handler.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
=====
All the packages is installed!
Setup Agent [y/n] (default:n): y

```

- Complete the configuration step by step

```

zach@localhost:~/Wrapped
===== 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):
Enalbe 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) y

```

- Install Completed

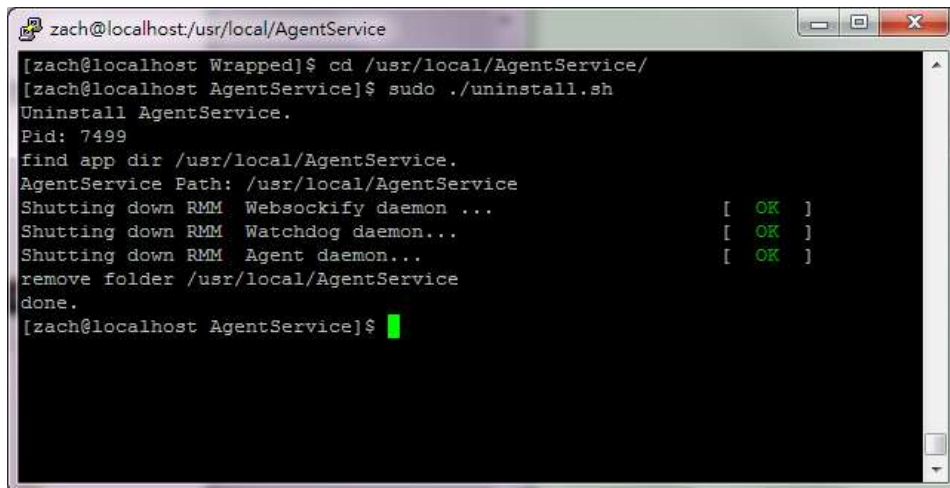
```
zach@localhost:~/Wrapped
/var/run/saagent.pid not found.
AgentService Path: /usr/local/AgentService
sending request to stop AgentService
RMM Watchdog daemon is not running. [WARNING]
RMM Websockify daemon is not running. [WARNING]
RMM Agent daemon is not running. [WARNING]
*****
Do you want to configure 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) y
Starting RMM Agent daemon... [ OK ]
Starting RMM Websockify daemon... [ OK ]
Starting RMM Watchdog daemon... [ OK ]
RMM Agent Linux setup successfully!
[zach@localhost Wrapped]$
```

2.2.2 Uninstallation

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

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

- **Uninstall Completed**

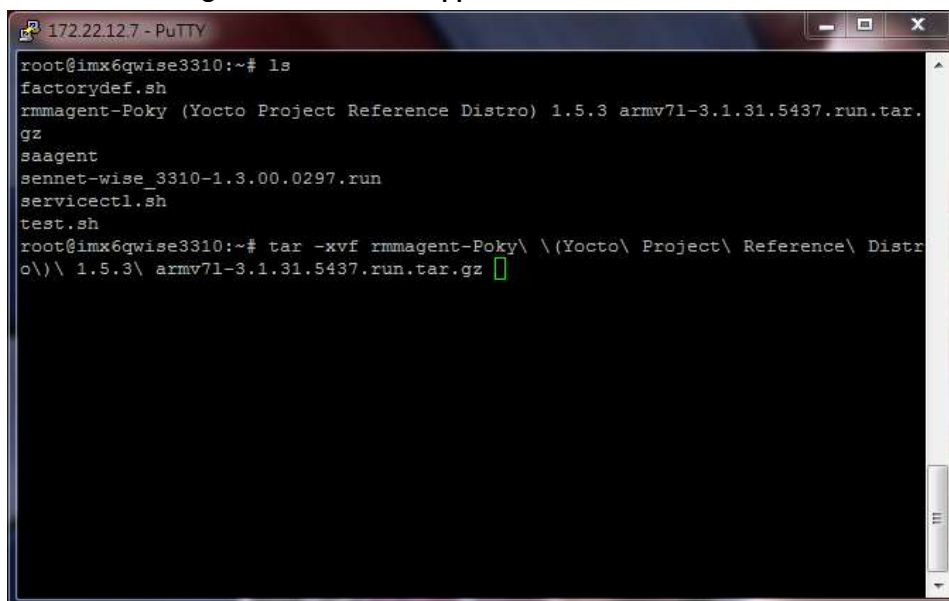


```
zach@localhost:usr/local/AgentService
[zach@localhost Wrapped]$ cd /usr/local/AgentService/
[zach@localhost AgentService]$ sudo ./uninstall.sh
Uninstall AgentService.
Pid: 7499
find app dir /usr/local/AgentService.
AgentService Path: /usr/local/AgentService
Shutting down RMM Websockify daemon ... [ OK ]
Shutting down RMM Watchdog daemon... [ OK ]
Shutting down RMM Agent daemon... [ OK ]
remove folder /usr/local/AgentService
done.
[zach@localhost AgentService]$
```

2.3. Linux WISE-Agent Installation – RISC_Yocto

2.3.1 Installation

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



```
172.22.12.7 - PuTTY
root@imx6qwise3310:~# ls
factorydef.sh
rmmagent-Poky (Yocto Project Reference Distro) 1.5.3 armv7l-3.1.31.5437.run.tar.
gz
saagent
sennet-wise_3310-1.3.00.0297.run
servicectl.sh
test.sh
root@imx6qwise3310:~# tar -xvf rmmagent-Poky\ \ (Yocto\ Project\ Reference\ Distr
o\)\ 1.5.3\ armv7l-3.1.31.5437.run.tar.gz
```

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


```
172.22.12.7 - PuTTY
root@imx6qwise3310:~/Wrapped# ls
Install manual
rmmagent-Poky (Yocto Project Reference Distro) 1.5.3 armv7l-3.1.31.5437.run
root@imx6qwise3310:~/Wrapped# ./rmmagent-Poky \ (Yocto\ Project\ Reference\ Dist
ro)\ 1.5.3\ armv7l-3.1.31.5437.run
```

- Enter the setup mode by clicking y

```
172.22.12.7 - PuTTY
./updater.sh: line 43: xhost: command not found
Copy AgentService to /usr/local.
restore config files
cp -vf find /tmp/tmp.uVJ3aQ/ -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.uVJ3aQ/ -maxdepth 1 -name '*.ini' /usr/local/AgentService/
BusyBox v1.21.1 (2015-07-31 20:34:01 CST) multi-call binary.

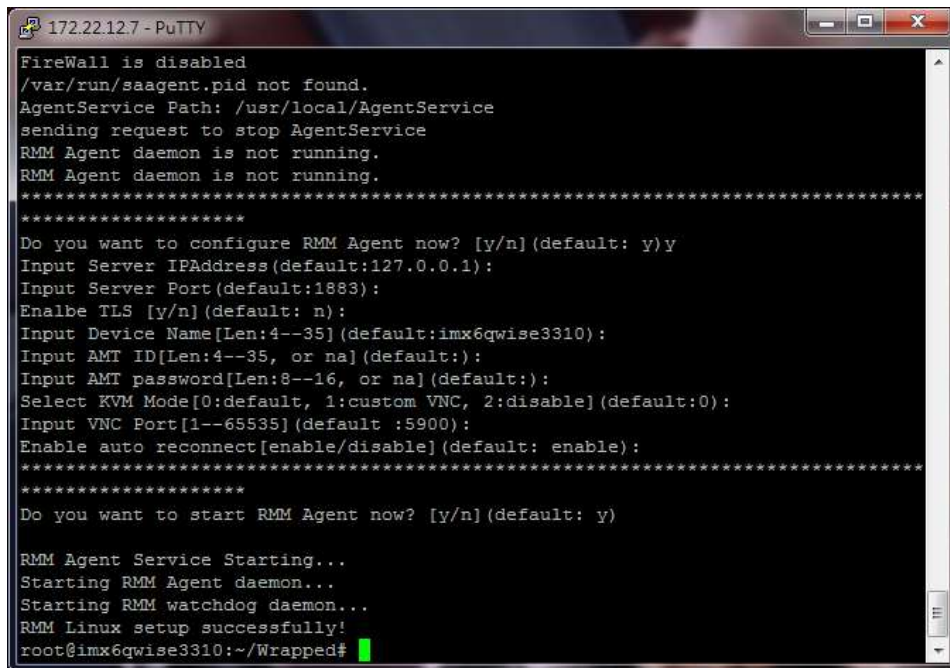
Usage: cp [OPTIONS] SOURCE... DEST

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

```
172.22.12.7 - PuTTY
Removing any system startup links for sawatchdog ...
Adding system startup for /etc/init.d/sawatchdog.
Setup Agent [y/n] (default:n): y
===== 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) 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)
```


- **Install Completed**

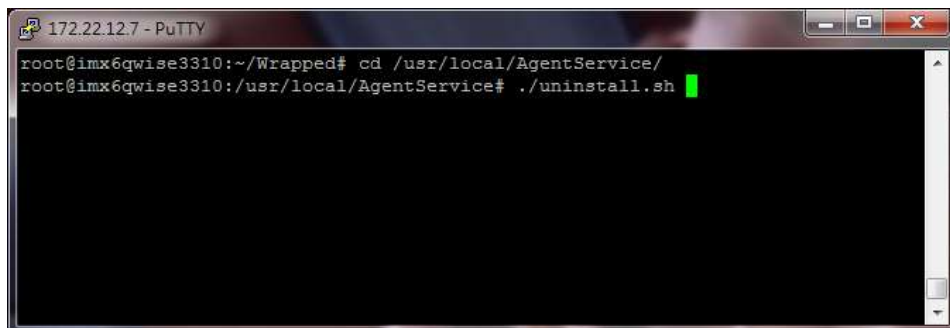


```
172.22.12.7 - PuTTY
FireWall is disabled
/var/run/saagent.pid not found.
AgentService Path: /usr/local/AgentService
sending request to stop AgentService
RMM Agent daemon is not running.
RMM Agent daemon is not running.
*****
Do you want to configure RMM Agent now? [y/n] (default: y)y
Input Server 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#
```

2.3.2 Uninstallation

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



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

- **Uninstall Completed**

```
172.22.12.7 - 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#
```

3. Windows WISE-Agent Configuration

3.1. WISE-Agent Console

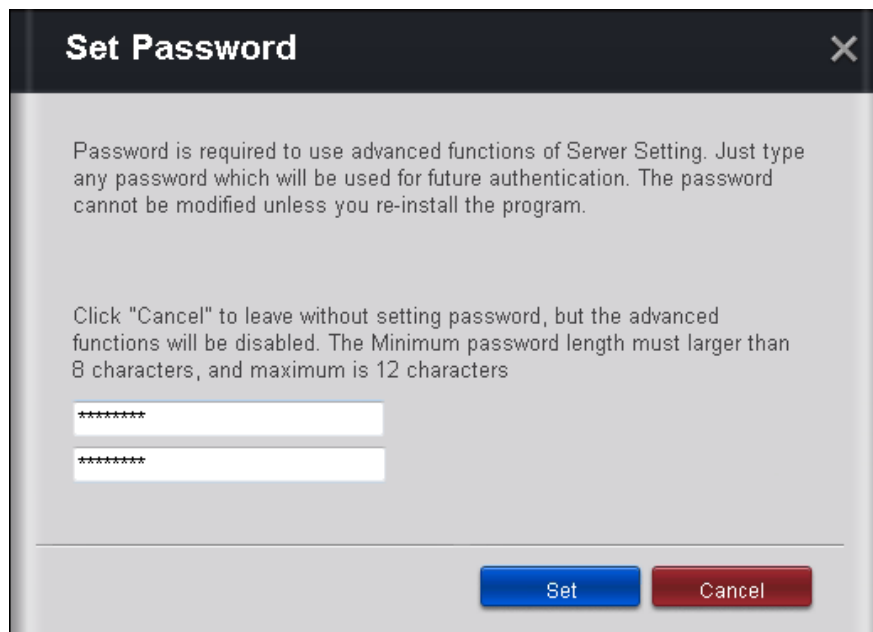
To use WISE-PaaS/RMM, users must install the WISE-Agent software on the monitored device. After installing the agent software, users can launch WISE-Agent program from the desktop shortcut.



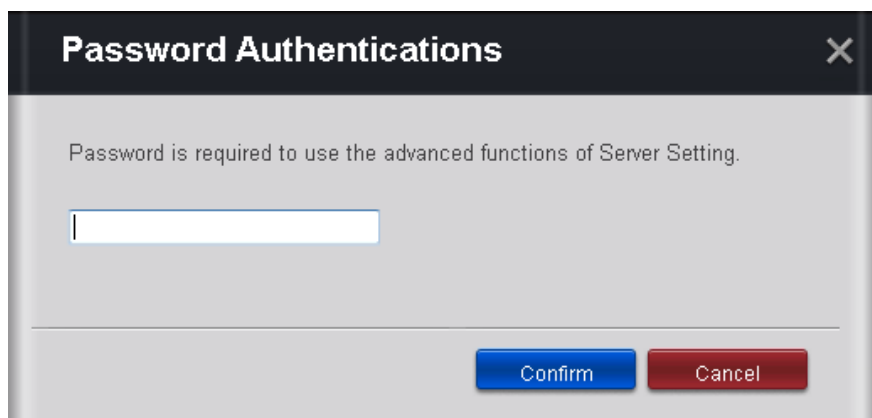
3.2. Connect to Server

Double-click the WISE-Agent shortcut under desktop to call WISE-Agent standalone.

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

A screenshot of a 'Set Password' dialog box. The dialog has a dark gray title bar with the text 'Set Password' and a close button (X). The main area is light gray and contains the following text: 'Password is required to use advanced functions of Server Setting. Just type any password which will be used for future authentication. The password cannot be modified unless you re-install the program.' Below this, it says: 'Click "Cancel" to leave without setting password, but the advanced functions will be disabled. The Minimum password length must larger than 8 characters, and maximum is 12 characters'. There are two text input fields, each preceded by a series of asterisks (*****). At the bottom right, there are two buttons: a blue 'Set' button and a red 'Cancel' button.

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



Password Authentications [X]

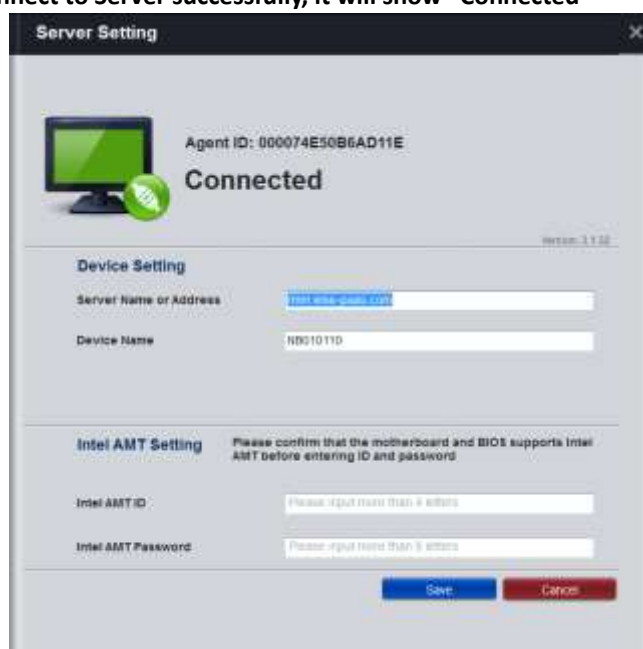
Password is required to use the advanced functions of Server Setting.

Confirm Cancel

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.

- If Agent connect to Server successfully, it will show “Connected”



Server Setting [X]

Agent ID: 000074E50B6AD11E

Connected

Version: 3.1.1.0

Device Setting

Server Name or Address:

Device Name:

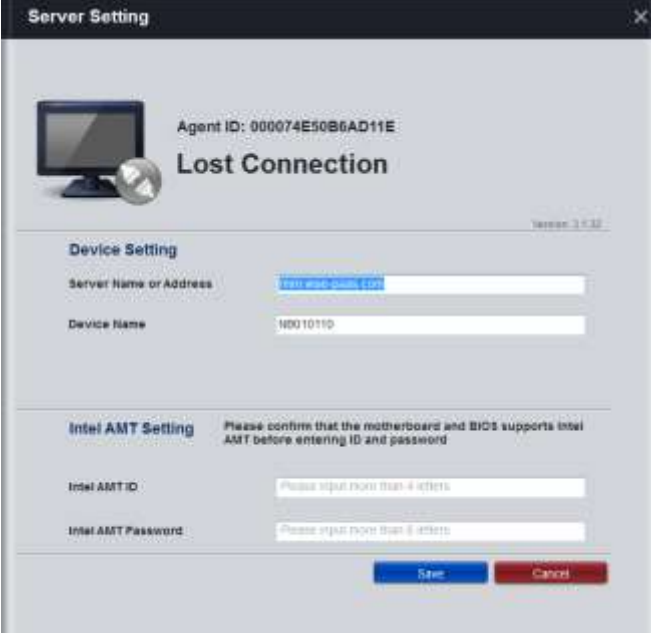
Intel AMT Setting Please confirm that the motherboard and BIOS supports Intel AMT before entering ID and password

Intel AMT ID:

Intel AMT Password:

Save Cancel

- If Agent can't connect to Server, it will show "Disconnected"



The screenshot shows a 'Server Setting' window with a dark header bar containing the title and a close button. Below the header, there is a section with a computer icon and a CD icon, followed by the text 'Agent ID: 000074E50B6AD11E' and a large 'Lost Connection' message. A small 'Version: 3.0.32' label is visible on the right. The window is divided into two main sections: 'Device Setting' and 'Intel AMT Setting'. The 'Device Setting' section contains two input fields: 'Server Name or Address' with the value 'test.wed-qamr.com' and 'Device Name' with the value 'WD010110'. The 'Intel AMT Setting' section has a note: 'Please confirm that the motherboard and BIOS supports Intel AMT before entering ID and password'. It contains two input fields: 'Intel AMT ID' and 'Intel AMT Password', both with placeholder text 'Please input more than 4 letters'. At the bottom right, there are two buttons: 'Save' (blue) and 'Cancel' (red).

Server Setting

Agent ID: 000074E50B6AD11E

Lost Connection

Version: 3.0.32

Device Setting

Server Name or Address: test.wed-qamr.com

Device Name: WD010110

Intel AMT Setting

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

Intel AMT ID: Please input more than 4 letters

Intel AMT Password: Please input more than 4 letters

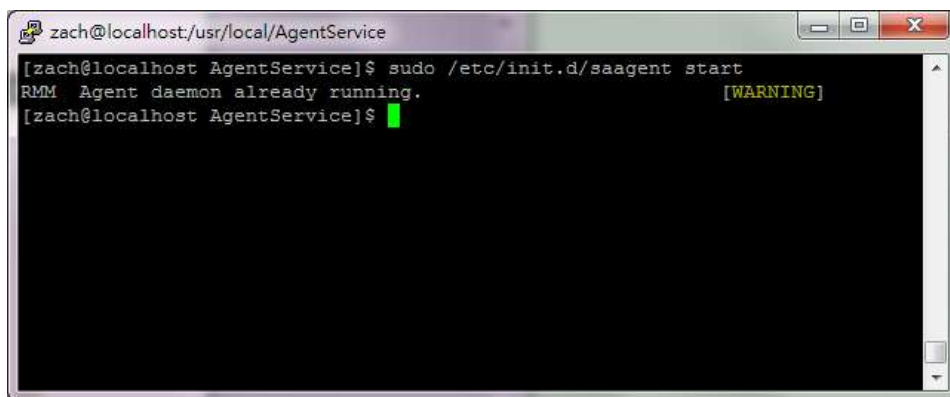
Save Cancel

4. Linux WISE-Agent Configuration

4.1 CentOS

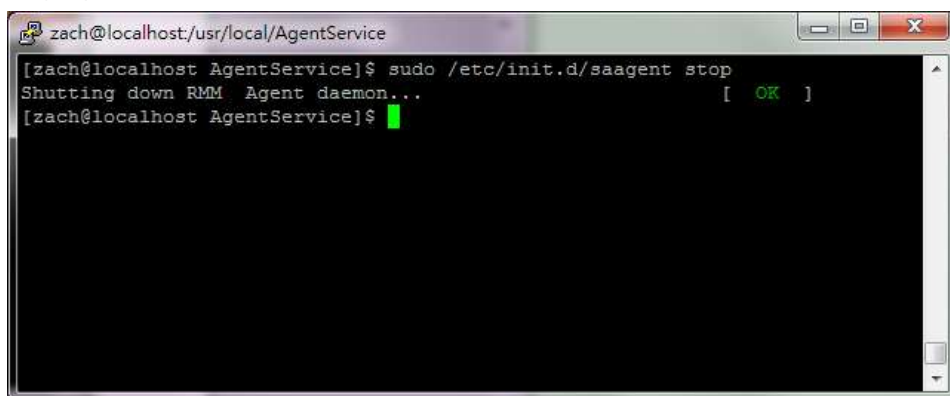
4.1.1 WISE-Agent Service Control

- Start Agent Service



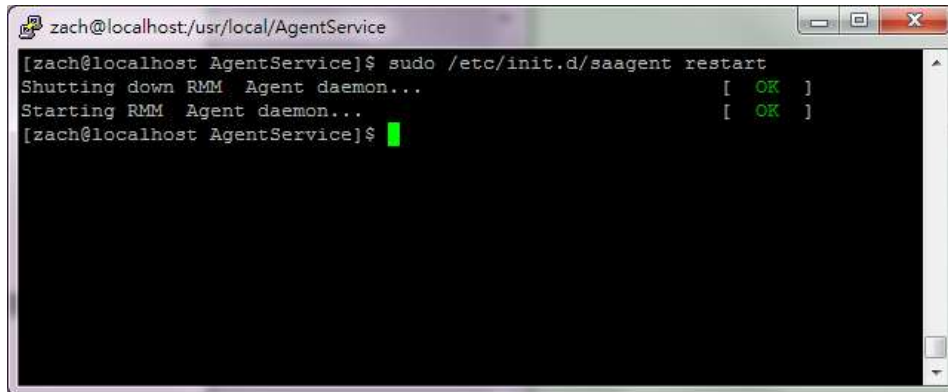
```
zach@localhost:/usr/local/AgentService
[zach@localhost AgentService]$ sudo /etc/init.d/saagent start
RMM Agent daemon already running. [WARNING]
[zach@localhost AgentService]$
```

- 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**



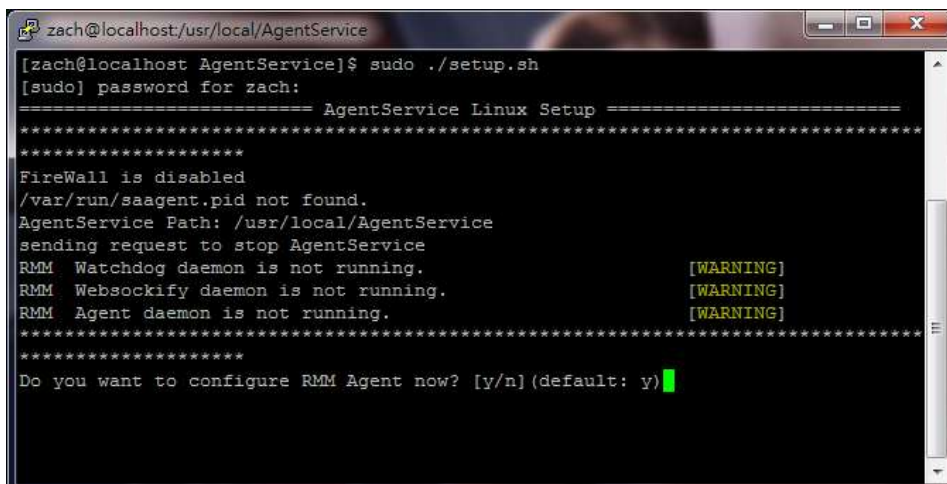
```

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]$

```

4.1.2 Setup WISE-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)

```

4.1.3 Check WISE-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]$

```

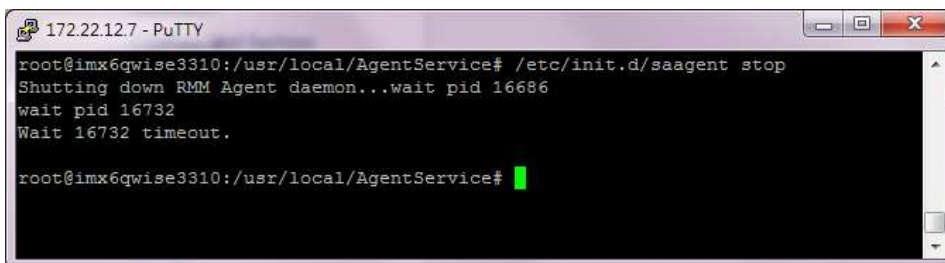

4.2 RISC_Yocto

- **WISE-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



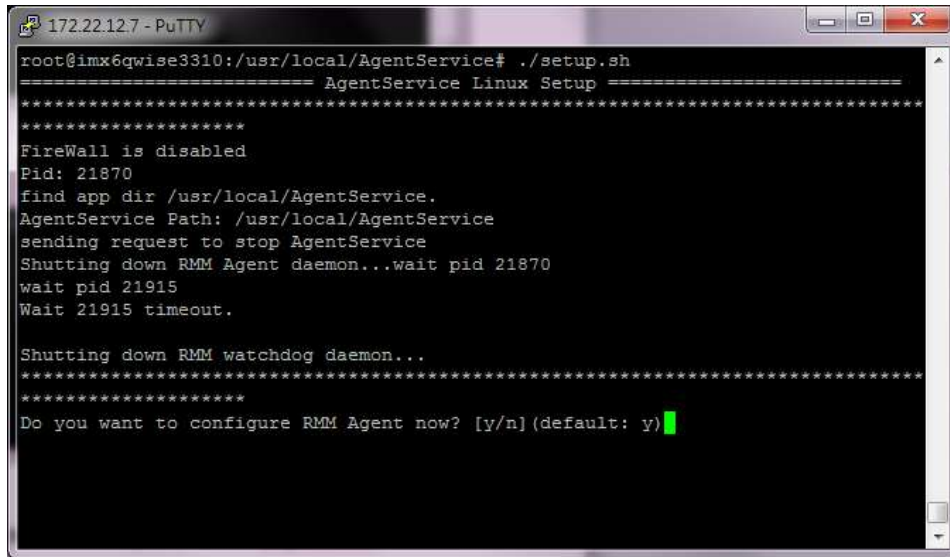
```
172.22.12.7 - PuTTY
root@imx6qwise3310:/usr/local/AgentService# /etc/init.d/saagent stop
Shutting down RMM Agent daemon...wait pid 16686
wait pid 16732
Wait 16732 timeout.
root@imx6qwise3310:/usr/local/AgentService#
```

- 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#
```

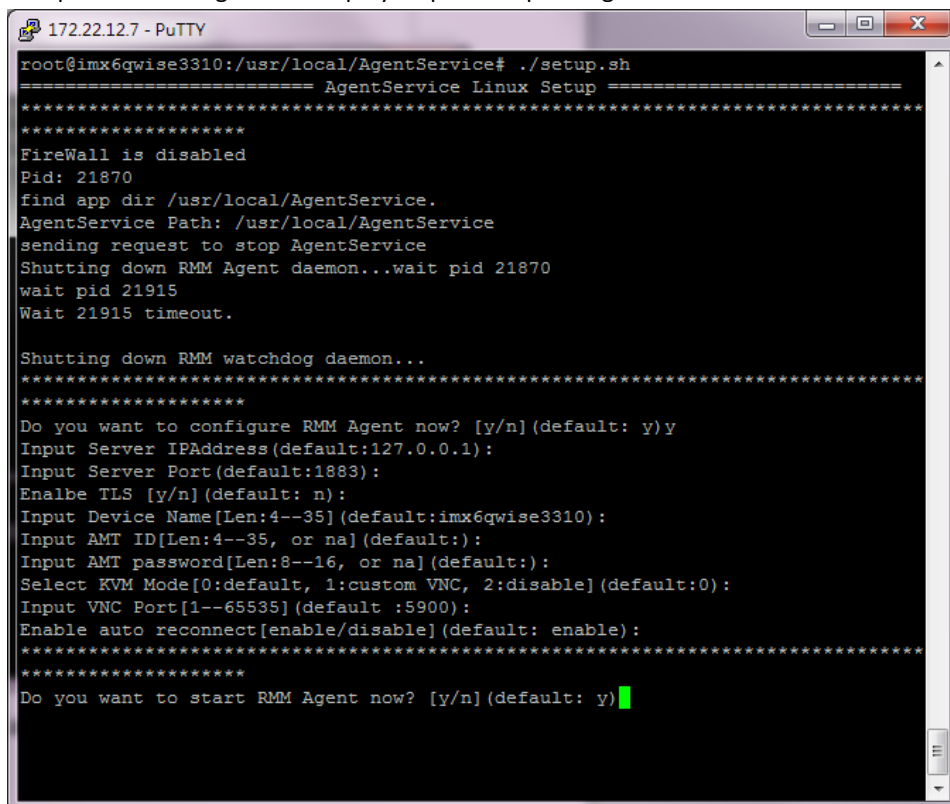
- **Setup WISE- Agent**
- Change directory to '/usr/local/AgentService' and execute 'setup.sh' with superuser permissions.



```
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)
```

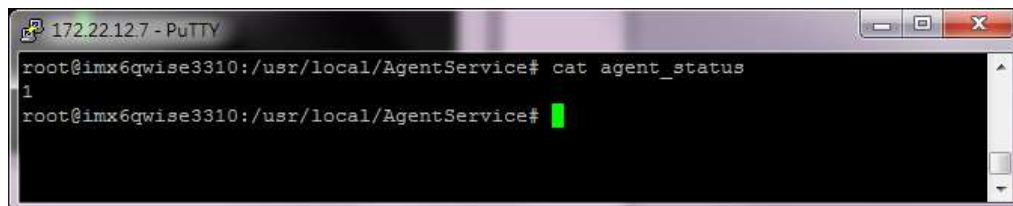
- Complete the configuration step by step to setup the agent.



```
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):
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)
```

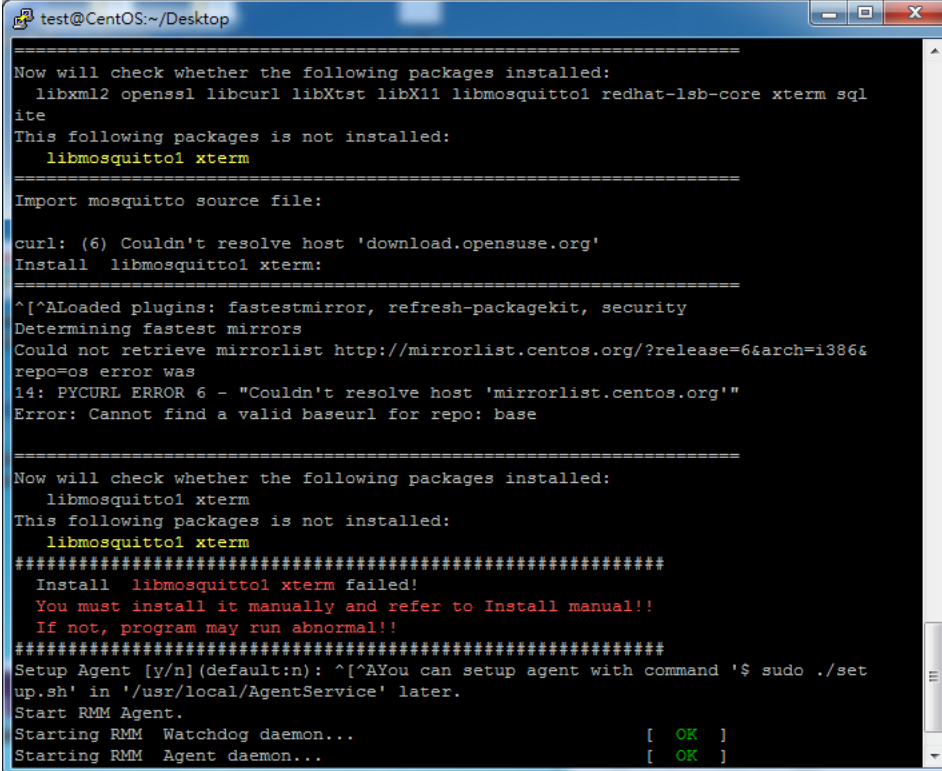
- **Check WISE-Agent Connection Status**
- Change directory to '/usr/local/AgentService' and use 'cat' command to check 'agent_status' file. If return 0 means the agent cannot connect to server, return 1 means the agent connected to server.



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

5. FAQ

Question1. How to fix the loss of dependent libraries while installing WISE-Agent?



```
test@CentOS:~/Desktop
=====
Now will check whether the following packages installed:
  libxml2 openssl libcurl libXtst libX11 libmosquitto1 redhat-lsb-core xterm sq
ite
This following packages is not installed:
  libmosquitto1 xterm
=====
Import mosquitto source file:
curl: (6) Couldn't resolve host 'download.opensuse.org'
Install  libmosquitto1 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:
  libmosquitto1 xterm
This following packages is not installed:
  libmosquitto1 xterm
#####
Install  libmosquitto1 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 ]
```

Answer:

Users 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

註解 [W1]: TBC

NOTICE:

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

'rmmagent-platform_name-version.run'.

註解 [W2]: TBC

And run './pre-install_chk.sh -devel' is install the depend packages for WISE-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 sqlite
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    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                               1.3.7 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]$
```

6. Support

Please contact us if there are questions or visit the following websites for more details.

WISE-PaaS/RMM	http://www.advantech.com/wise-paas/rmm
IoT Developer Form	http://iotforum.advantech.com/
Technical Support	http://support.advantech.com/support/new_default.aspx
Advantech	http://www.advantech.com/