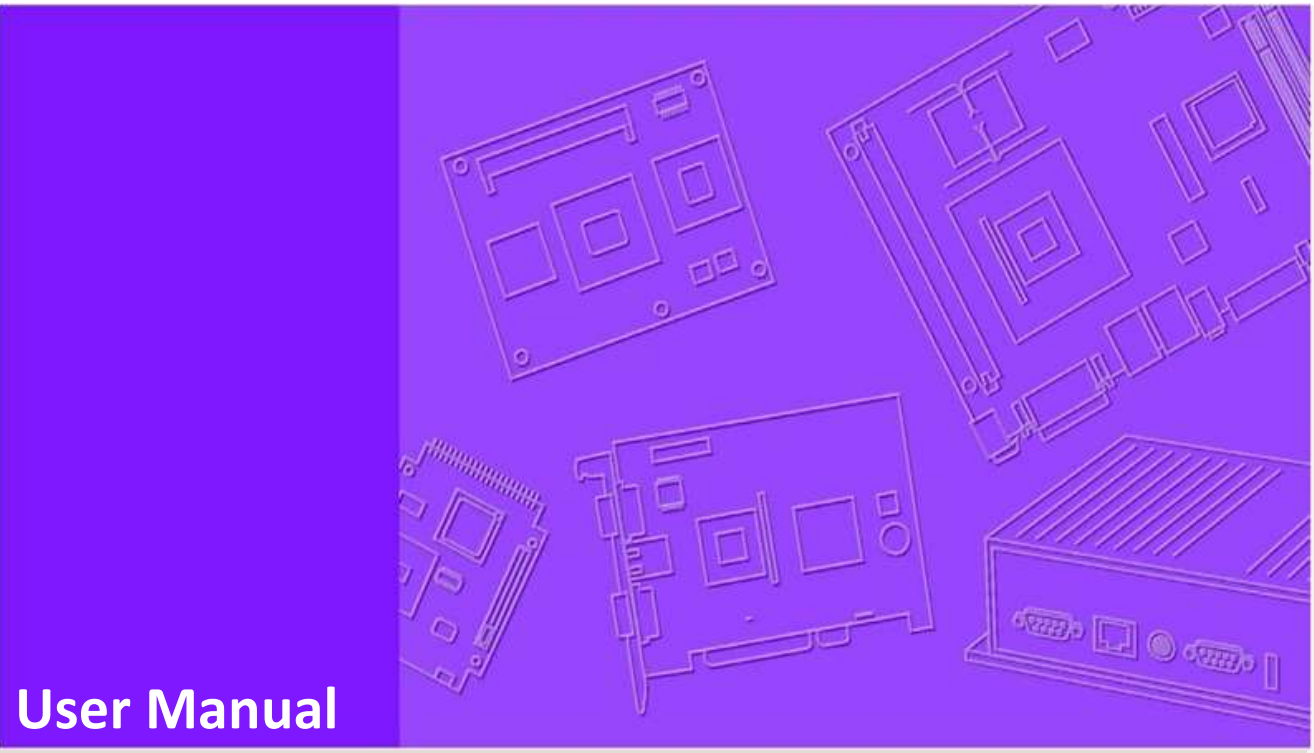

User Manual

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, 1st 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 verion 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

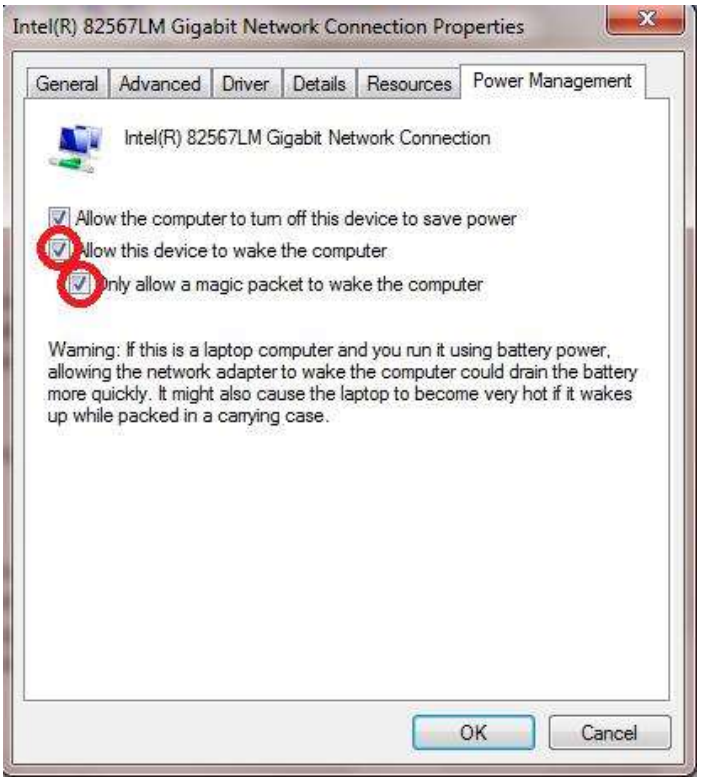
1.4. Allowed TCP ports

- 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

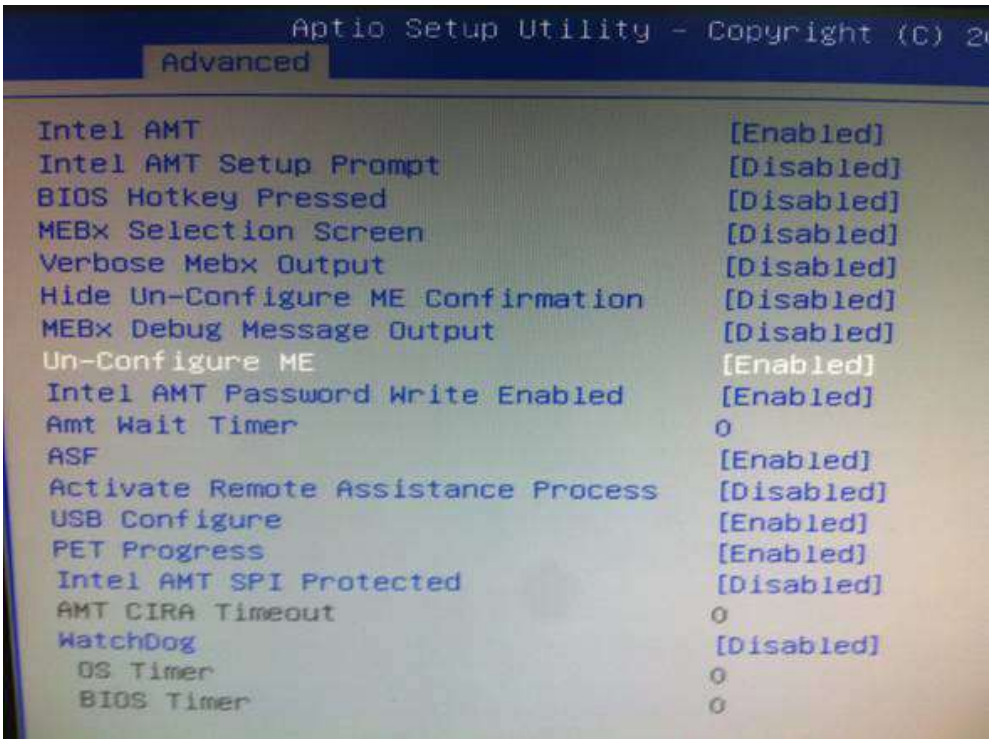
- Enable the Wake On Lan in BIOS setup menu and then enable the WOL of your NIC



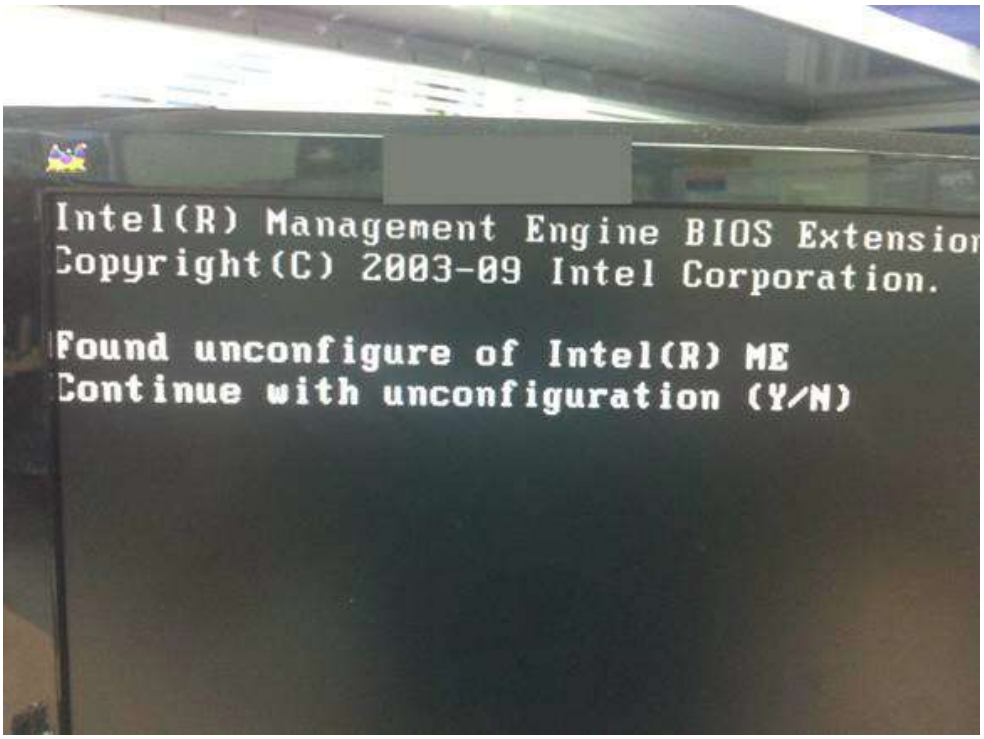
2.1.2 AMT Setting

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

- Un-configure ME changes to Enable

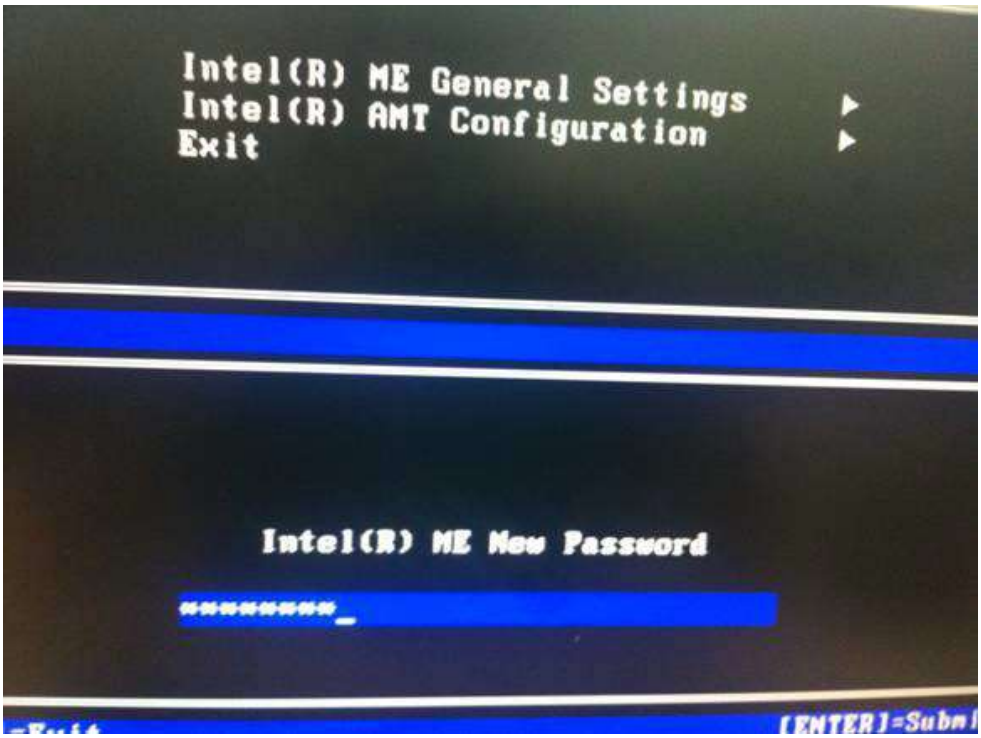

Aptio Setup Utility - Copyright (C) 2
Advanced
Intel AMT [Enabled]
Intel AMT Setup Prompt [Disabled]
BIOS Hotkey Pressed [Disabled]
MEBx Selection Screen [Disabled]
Verbose Mebx Output [Disabled]
Hide Un-Configure ME Confirmation [Disabled]
MEBx Debug Message Output [Disabled]
Un-Configure ME [Enabled]
Intel AMT Password Write Enabled [Enabled]
Amt Wait Timer 0
ASF [Enabled]
Activate Remote Assistance Process [Disabled]
USB Configure [Enabled]
PET Progress [Enabled]
Intel AMT SPI Protected [Disabled]
AMT CIRA Timeout 0
WatchDog [Disabled]
OS Timer 0
BIOS Timer 0

- Press Yes

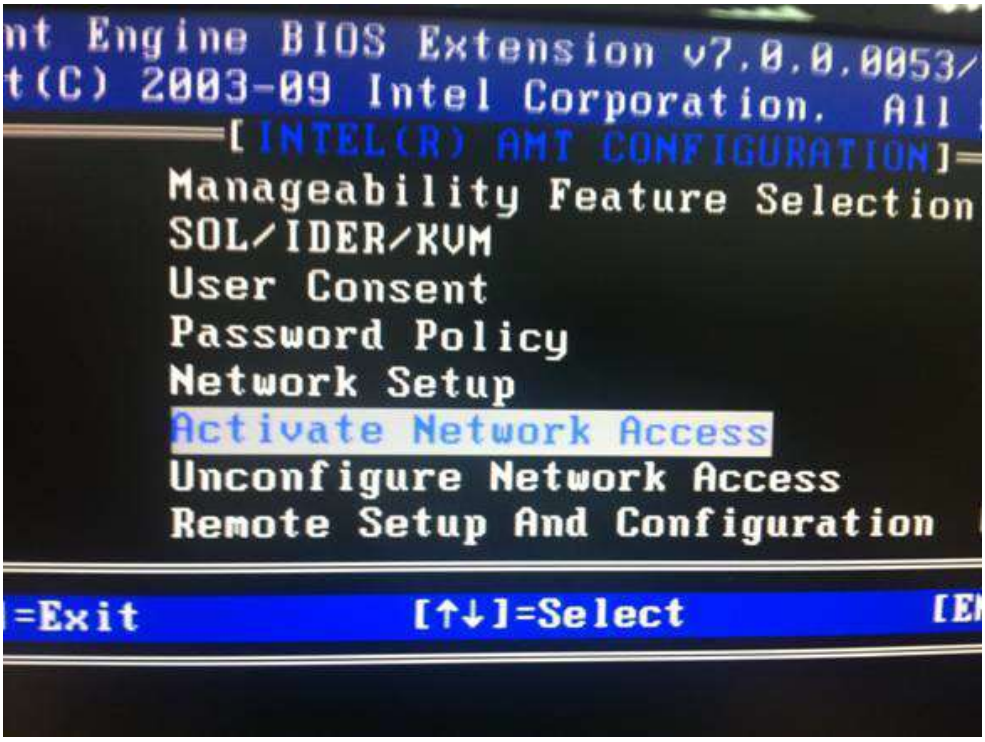

Intel(R) Management Engine BIOS Extensio
Copyright(C) 2003-09 Intel Corporation.
Found unconfigure of Intel(R) ME
Continue with unconfiguration (Y/N)

- 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

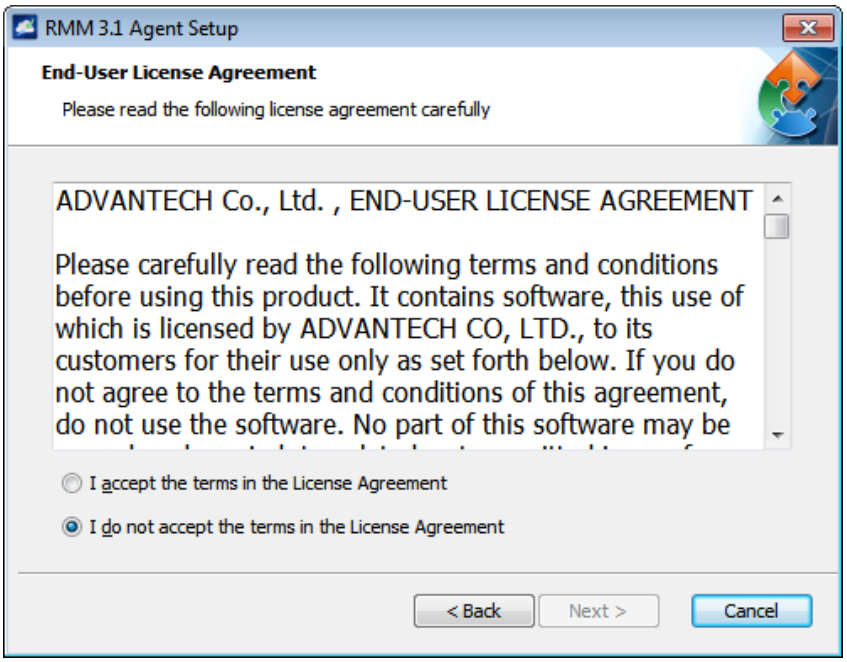
2.1.3 Installation

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

- **Start Installation**

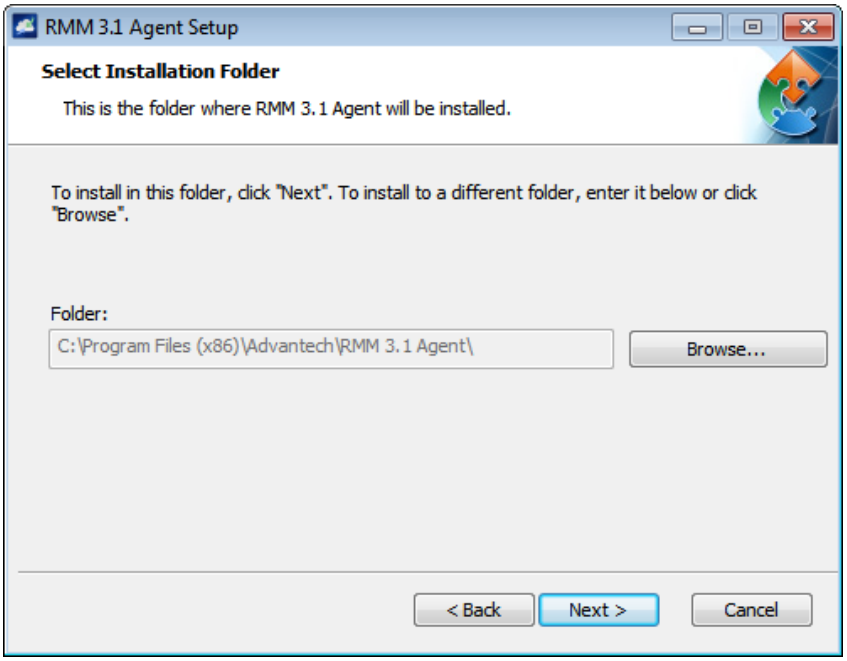
- **Check End-User License Agreement**

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

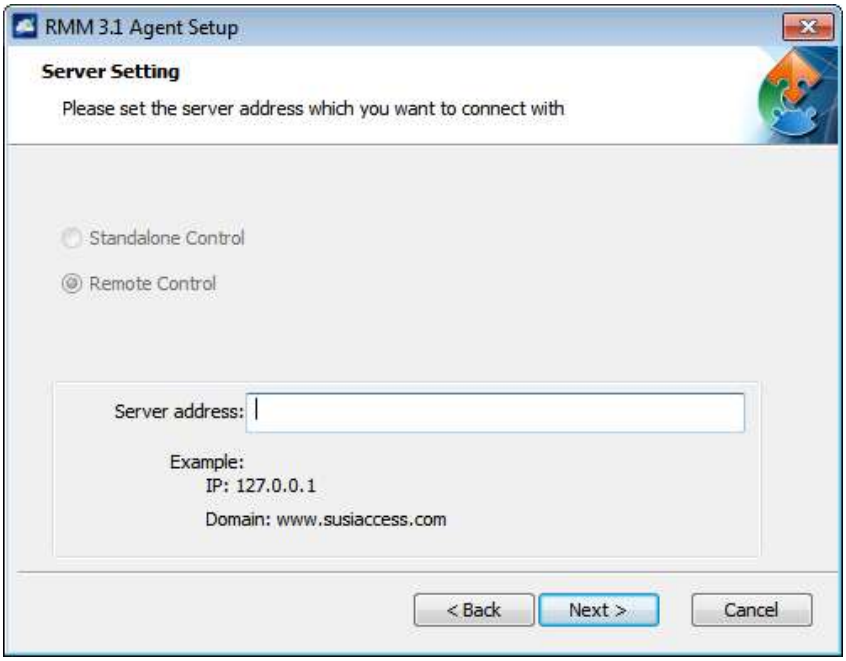


- **Select Installation Folder**

  Select the folder to be installed.

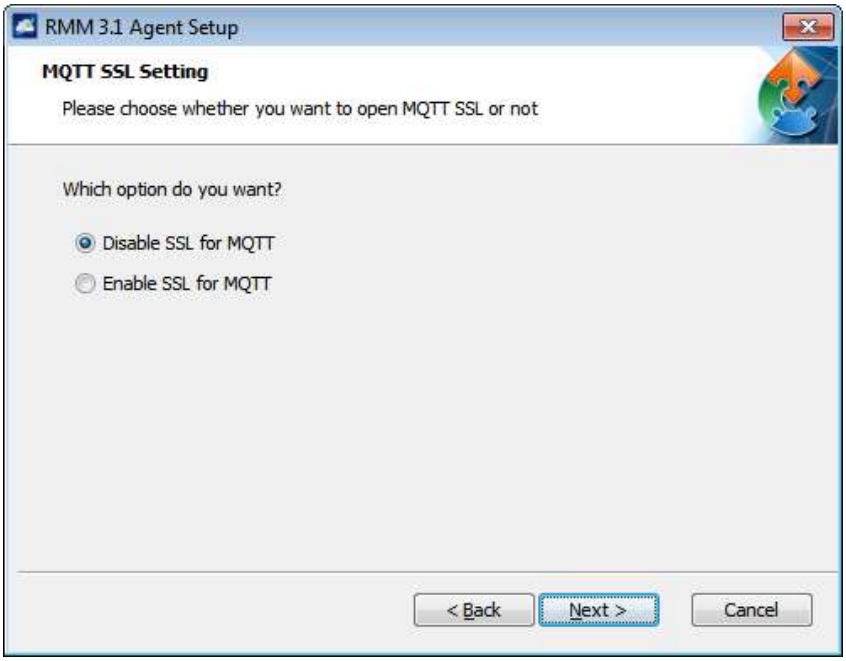


- **Server Settings - Set Remote Management Server URL/IP.**



- **MQTT SLL Settings**

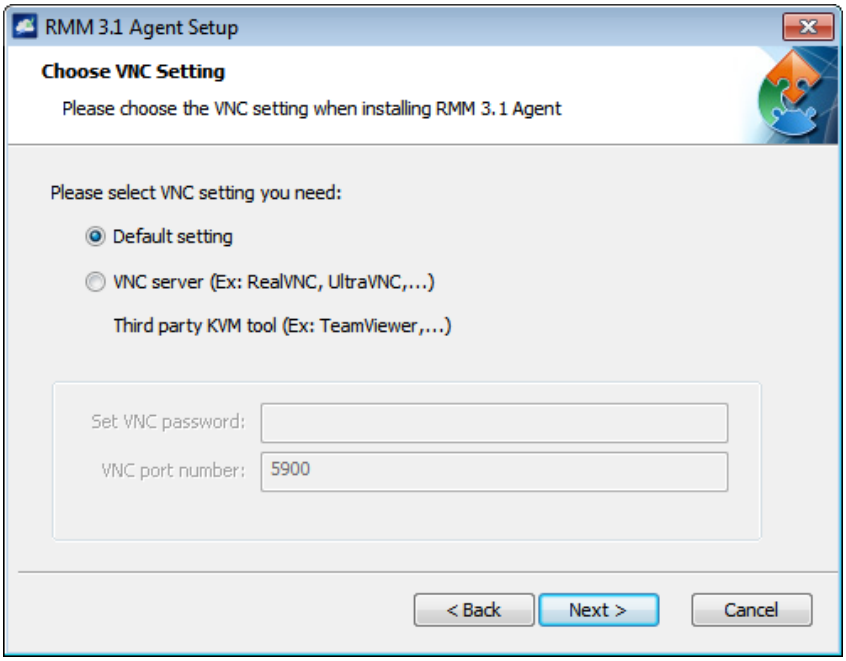
  Choose either disable or enable SSL for MQTT.



- **VNC Setting**

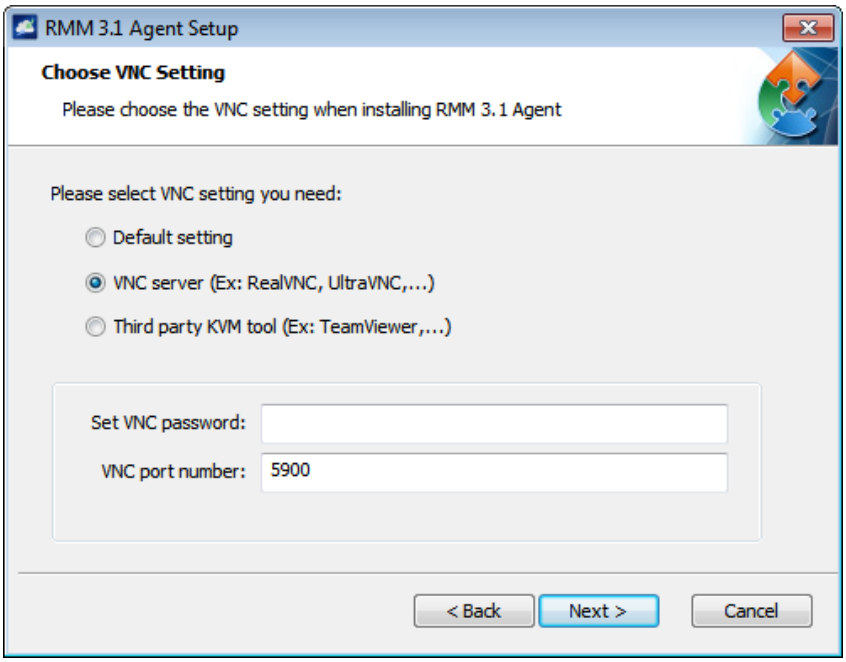
  Please select VNC setting.

A. Set as Default RMM Built-in VNC.

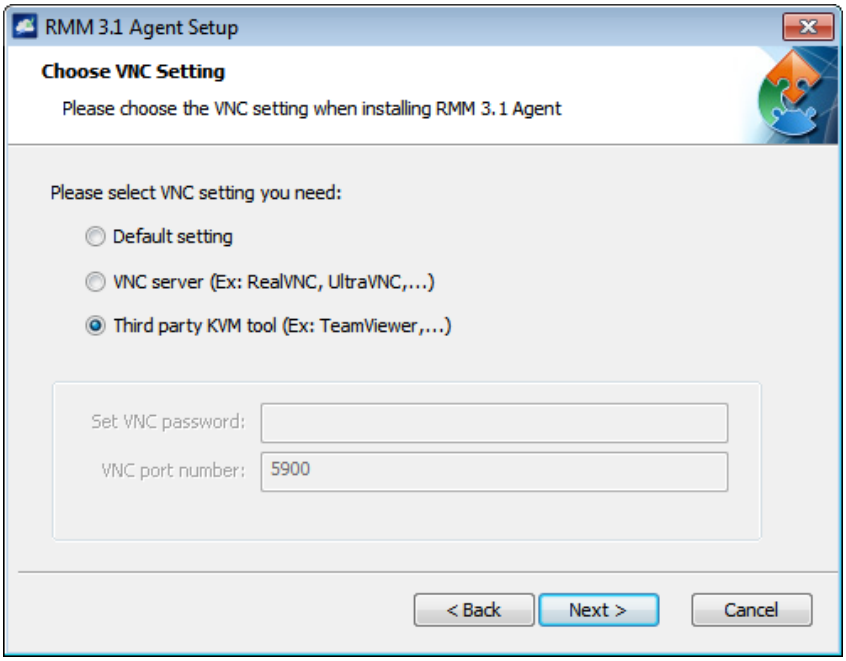


B. Use other User-defined VNC server.

Input VNC server password and port number



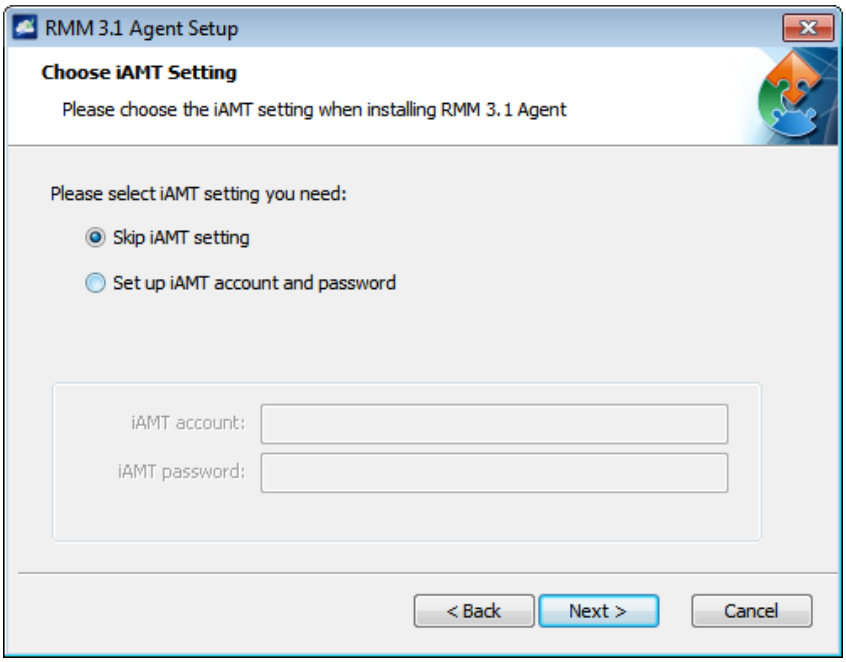
C. Disable RMM Built-in VNC and use other third party KVM tool.



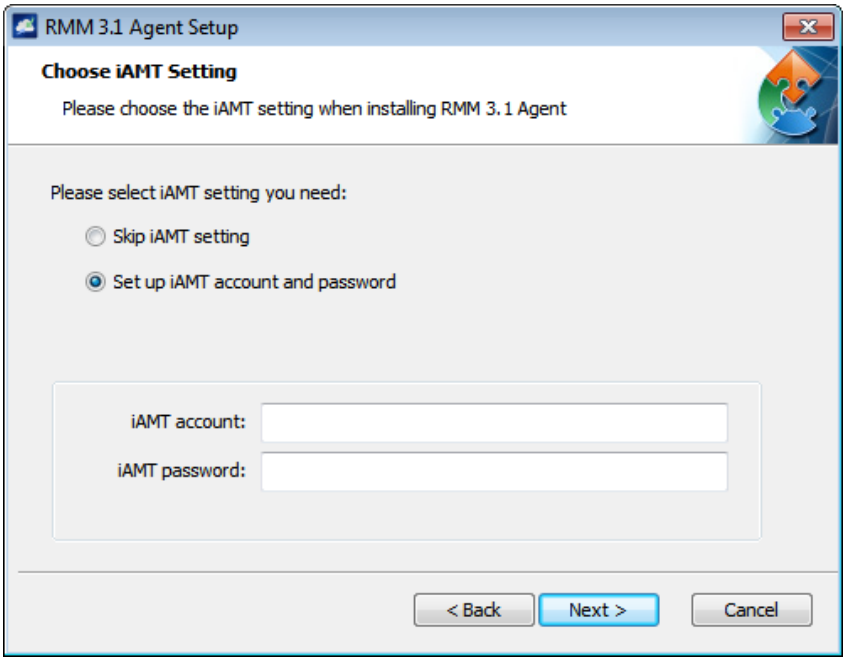
- **iAMT Settings**

  Please choose the iAMT..

A. Skip iAMT setting

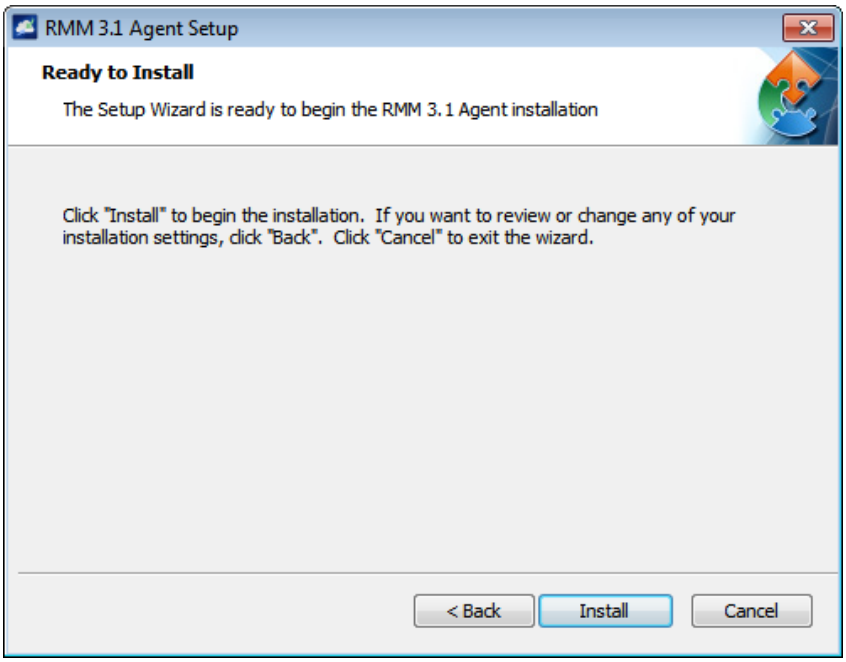


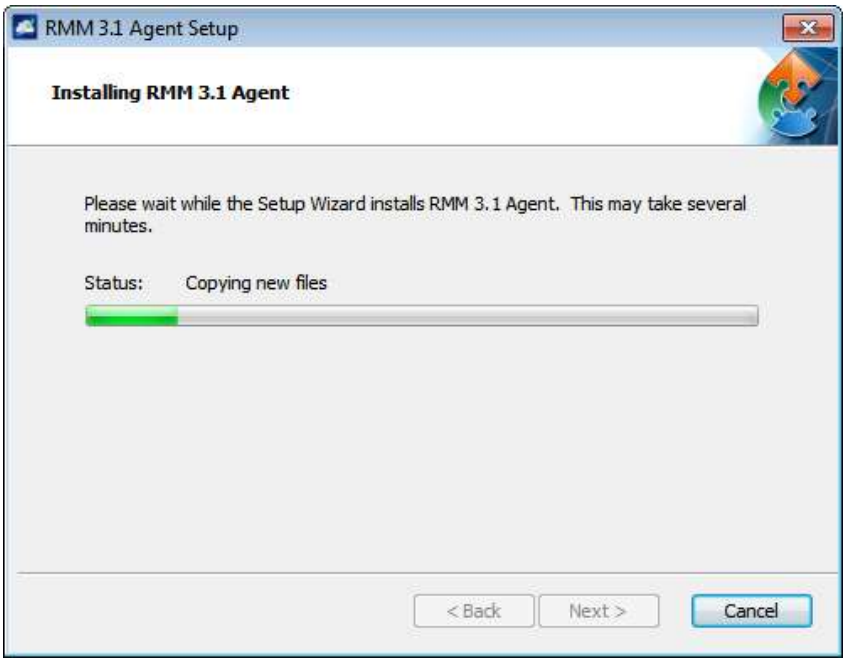
B. Set up iAMT



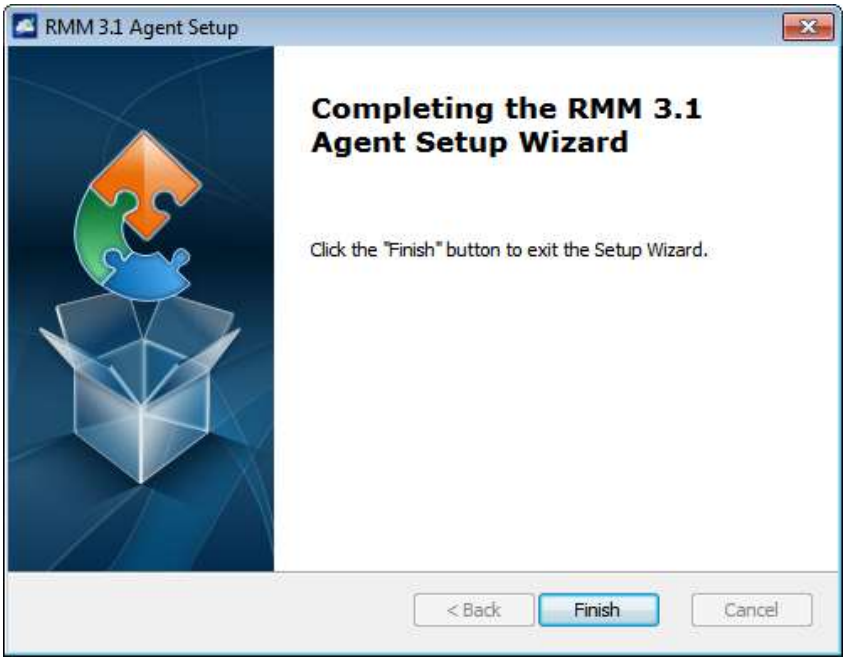
- **Start Installing.**

  Click the “Install” button to begin the installation.





- **Installation Completed.**
  Click the “Finish” button to exit the Setup Wizard.



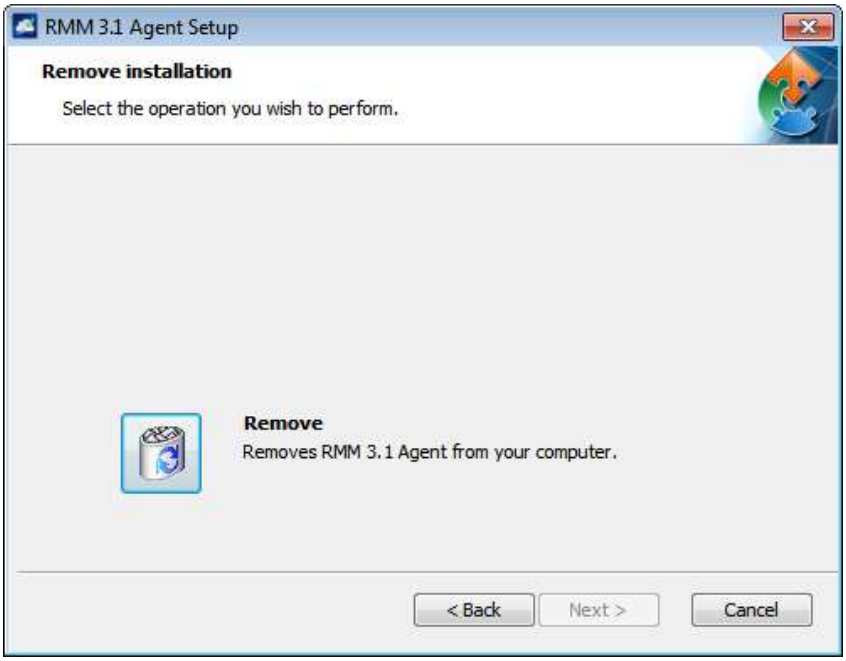
2.1.4 Uninstallation

- **Start to uninstall "WISE-Agent"**

  Double click "**WISE-Agent Setup.exe**" to uninstall the WISE-Agent program.

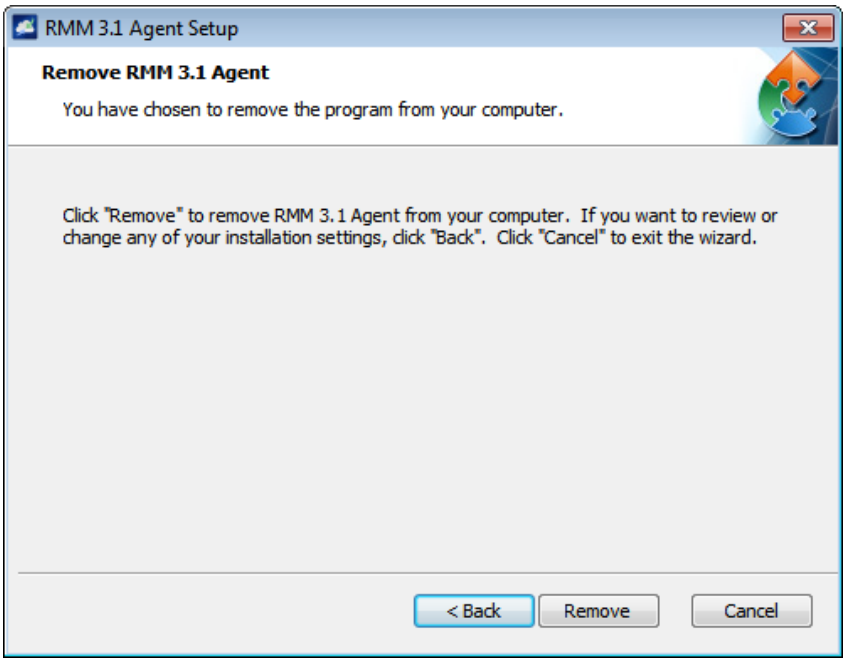
- **Remove installation**

  Click the "Remove" icon to start uninstallation.



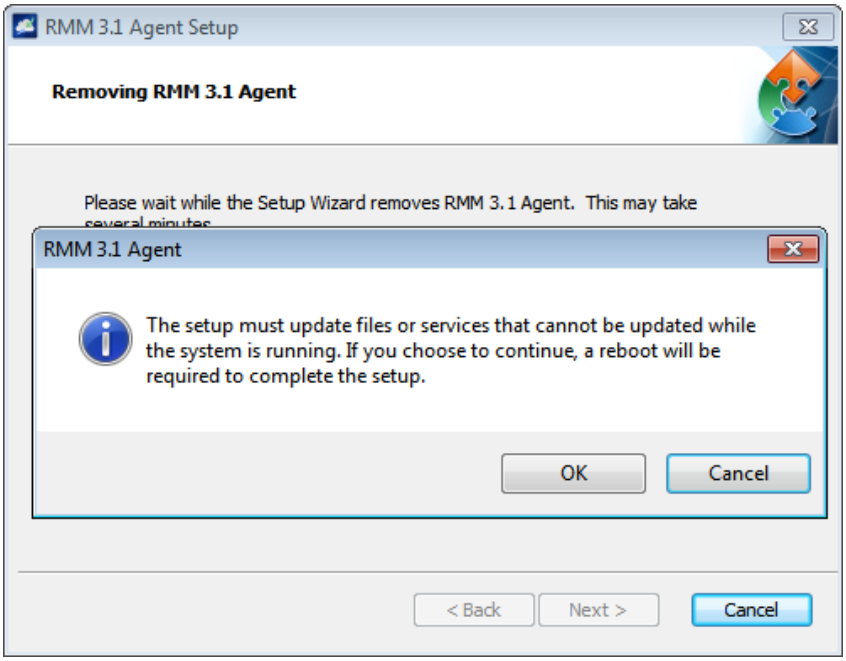
- **Confirm the uninstallation for WISE-Agent**

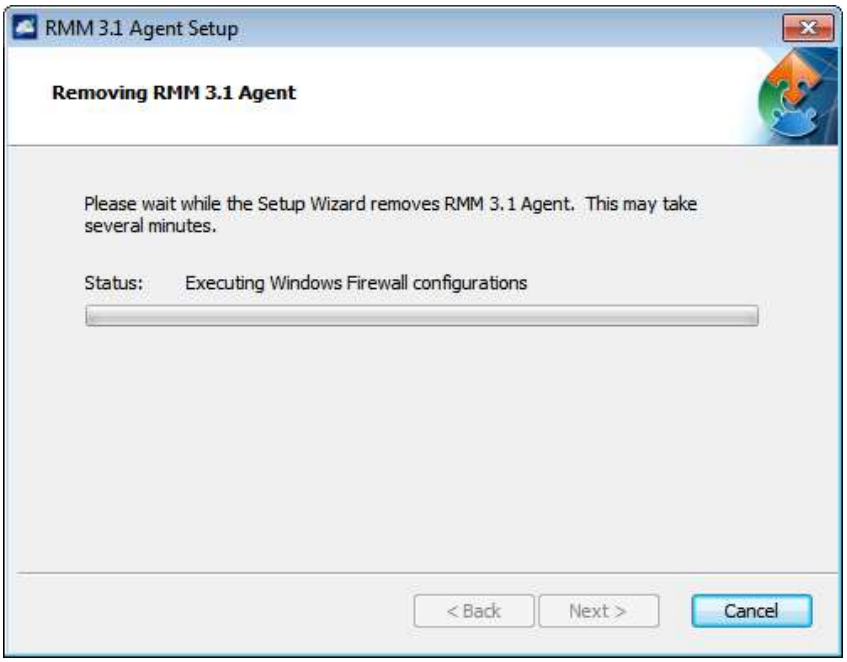
  Click the “Remove” button to remove WISE-Agent from your computer.



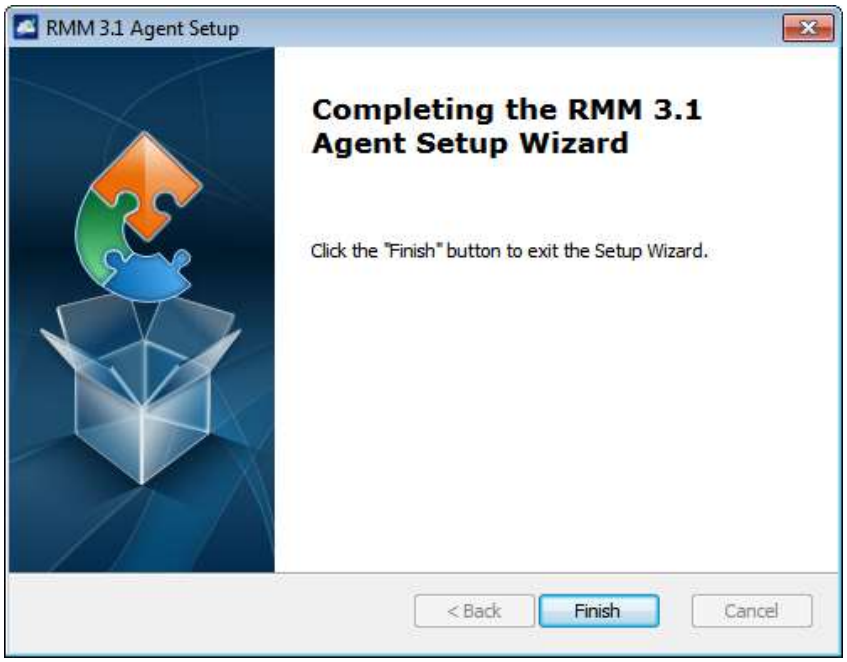
- **Confirm that running services will being stopped and removed.**

  Click “OK” to continue the uninstallation process.





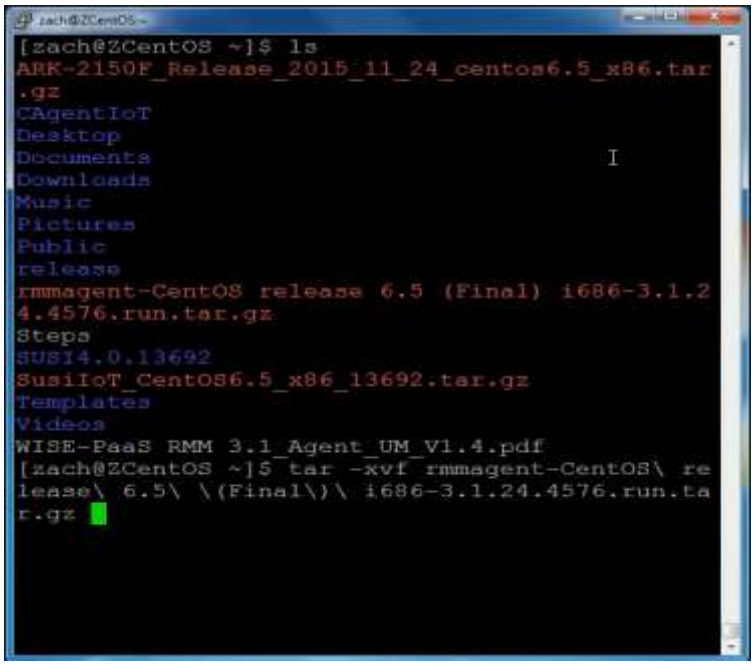
- **Uninstallation completed.**
  Click the “Finish” button to exit the Setup Wizard.



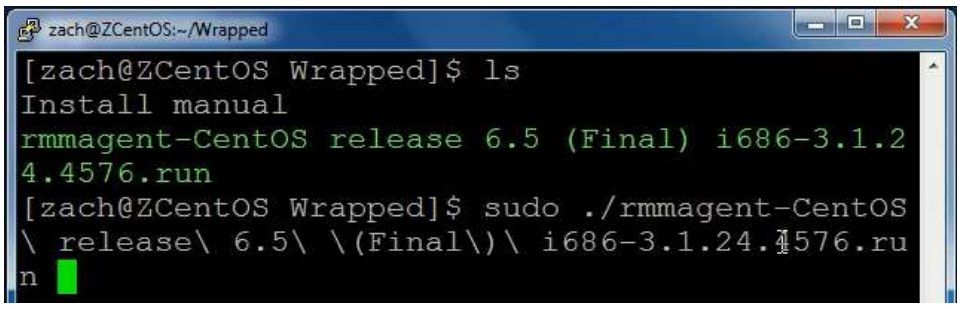
2.2. Linux WISE-Agent Installation - CentOS

2.2.1 Installation

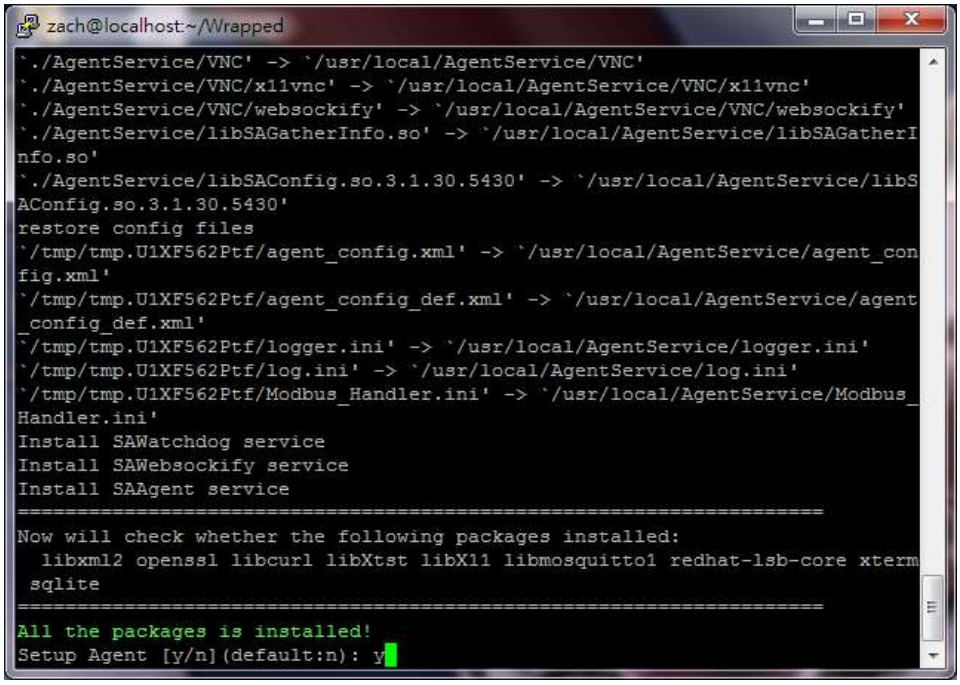
- **Untar the WISE-Agent installer to “Wrapped” folder**



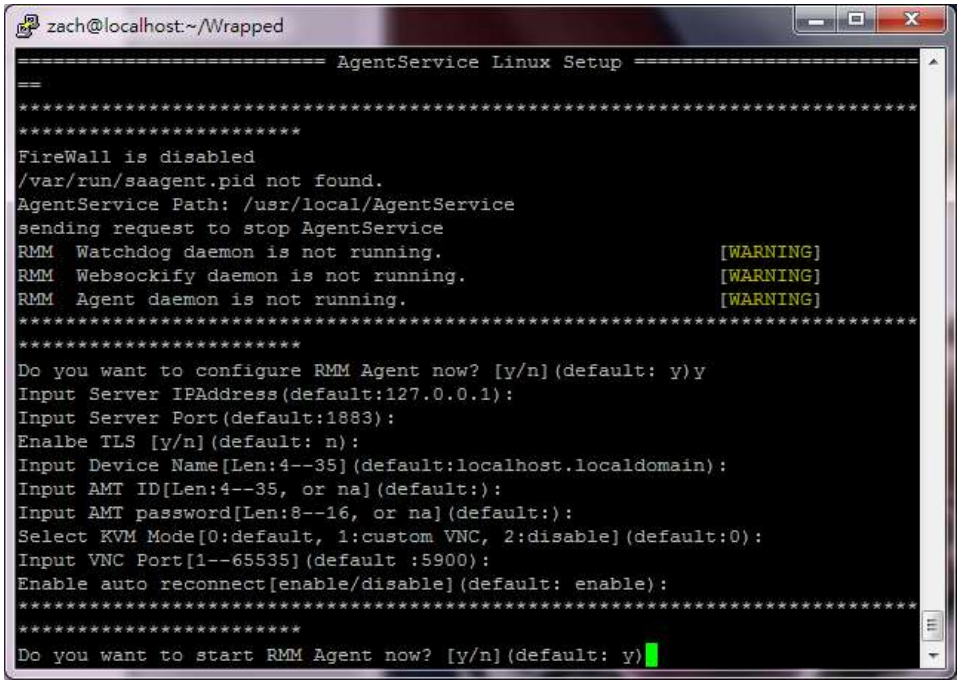
- **Change directory to “Wrapped” folder and execute the installer with superuser permissions**



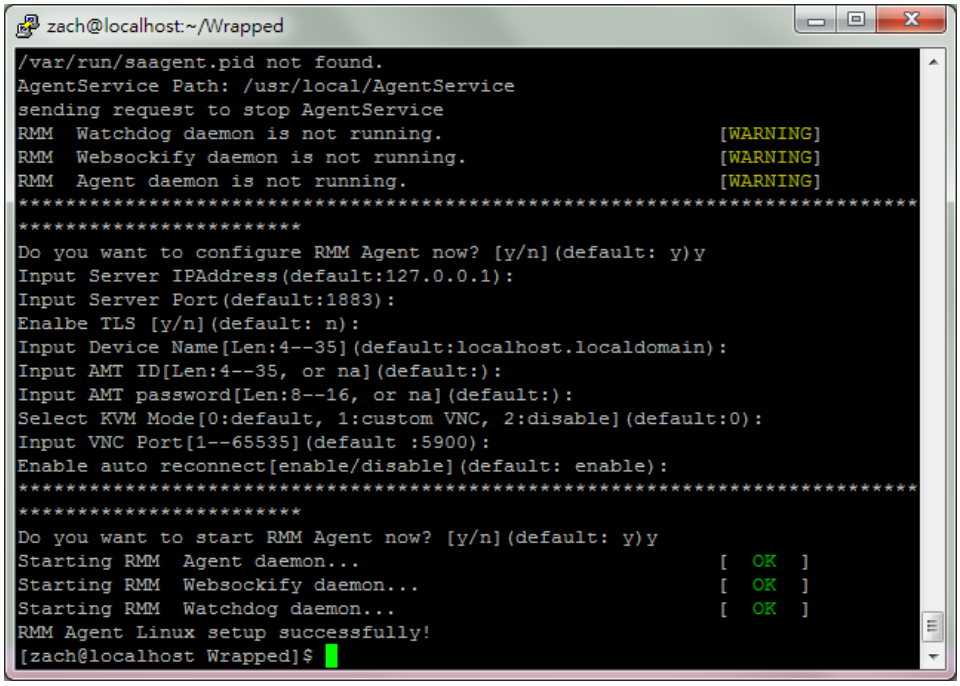
- **Enter the setup mode by clicking y**



- **Complete the configuration step by step**

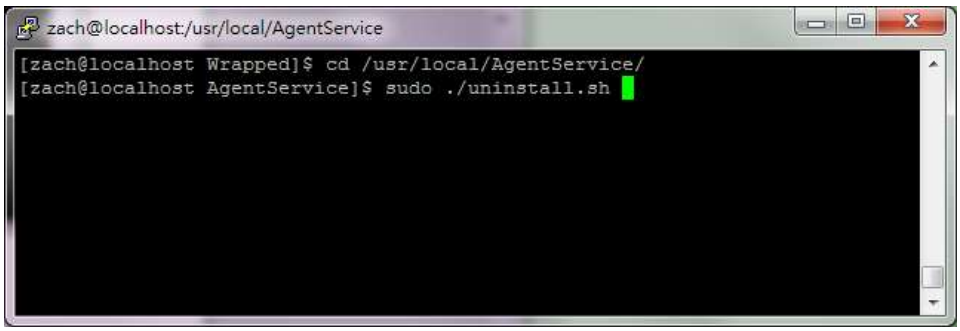


- **Install Completed**

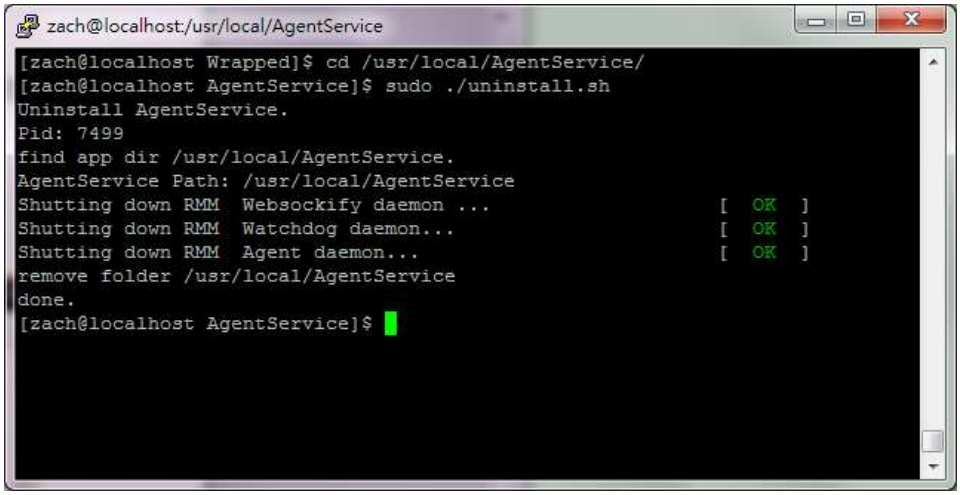


2.2.2 Uninstallation

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



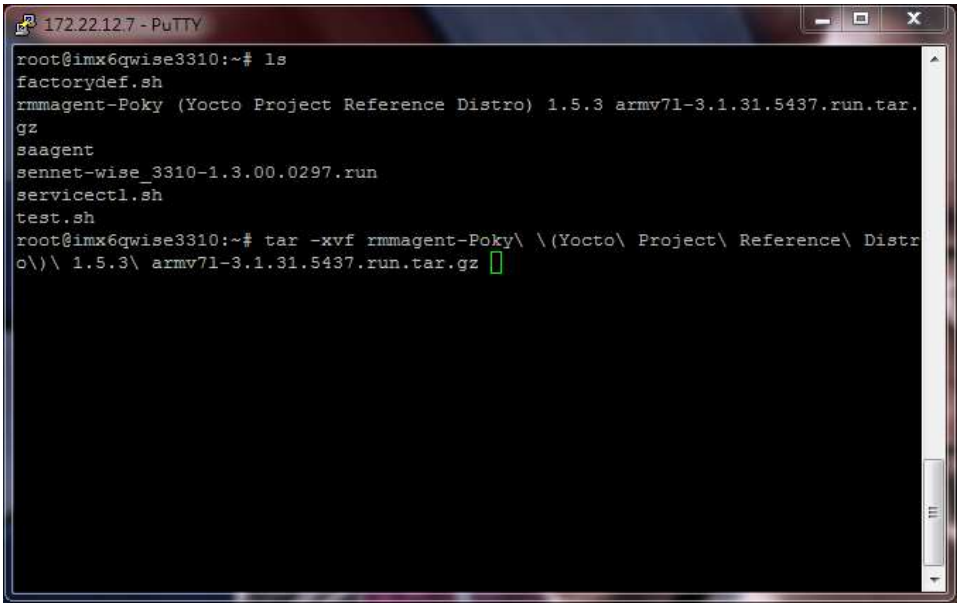
- **Uninstall Completed**



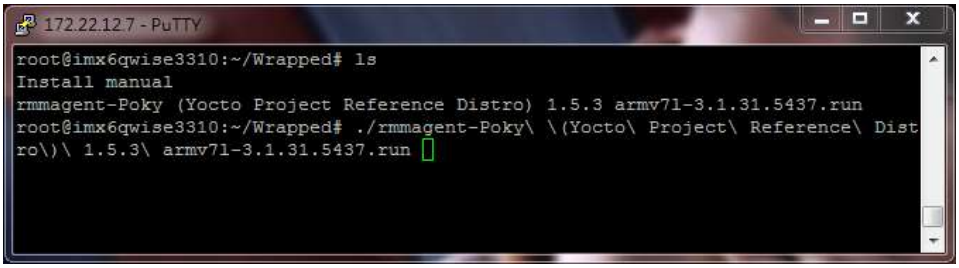
2.3. Linux WISE-Agent Installation – RISC_Yocto

2.3.1 Installation

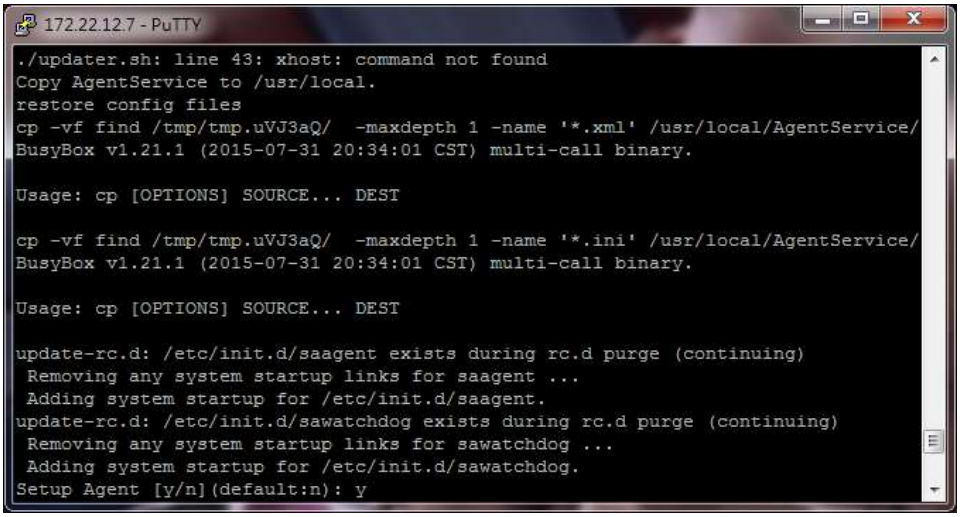
- **Untar the WISE-Agent installer to "Wrapped" folder**



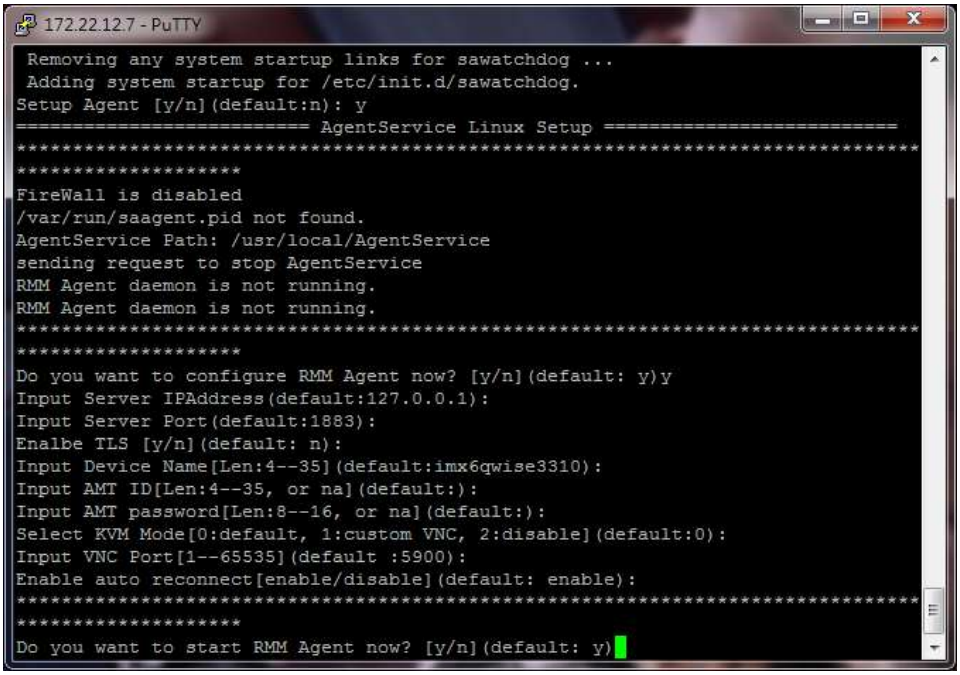
- **Change directory to "Wrapped" folder and execute the installer with superuser permissions**



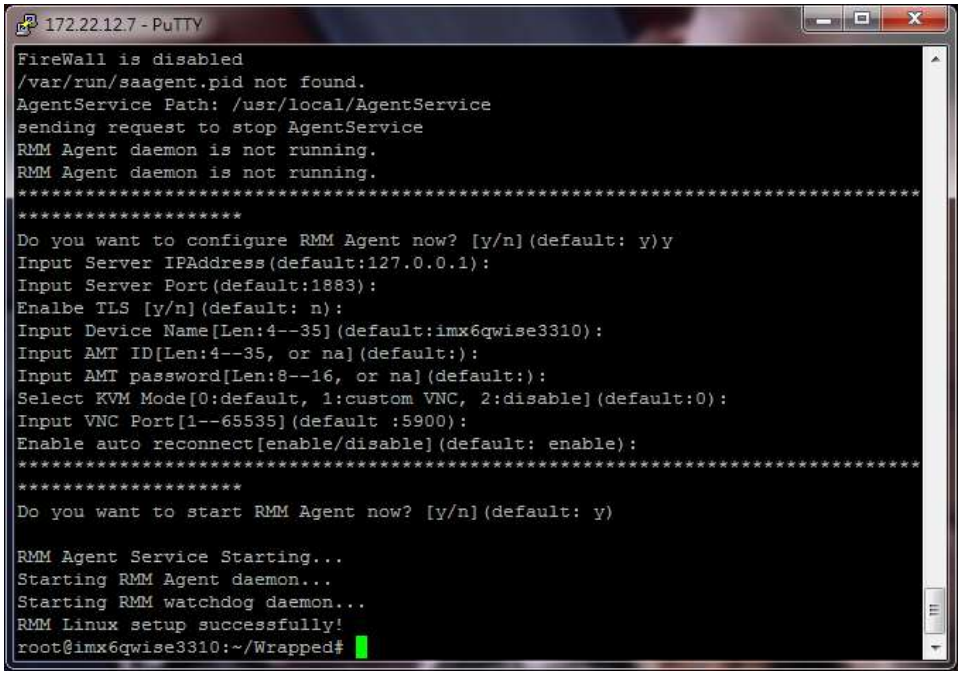
- **Enter the setup mode by clicking y**



- **Complete the configuration step by step**

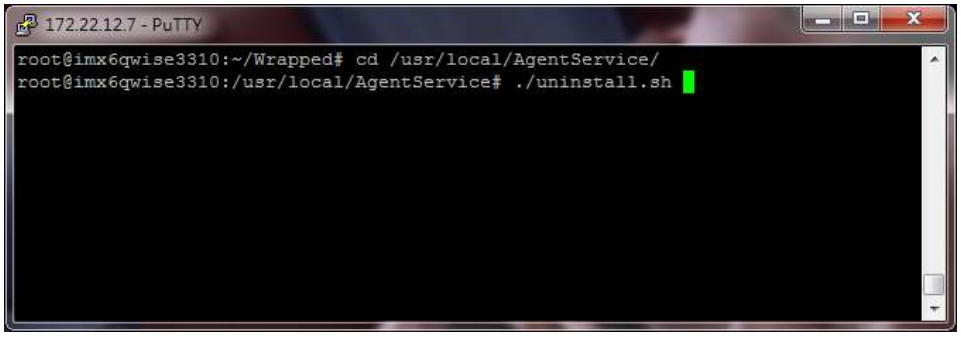


- **Install Completed**

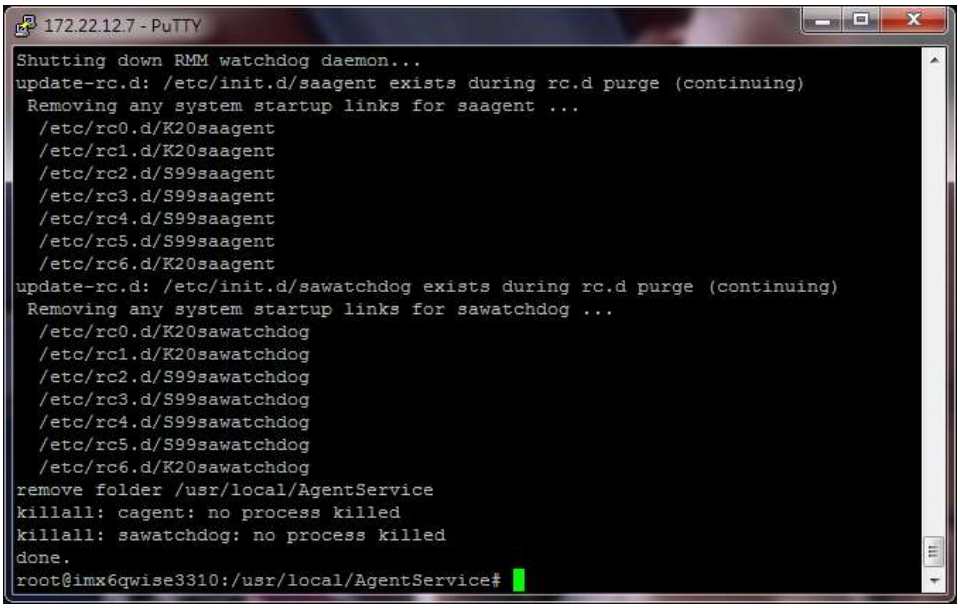


2.3.2 Uninstallation

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



- **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

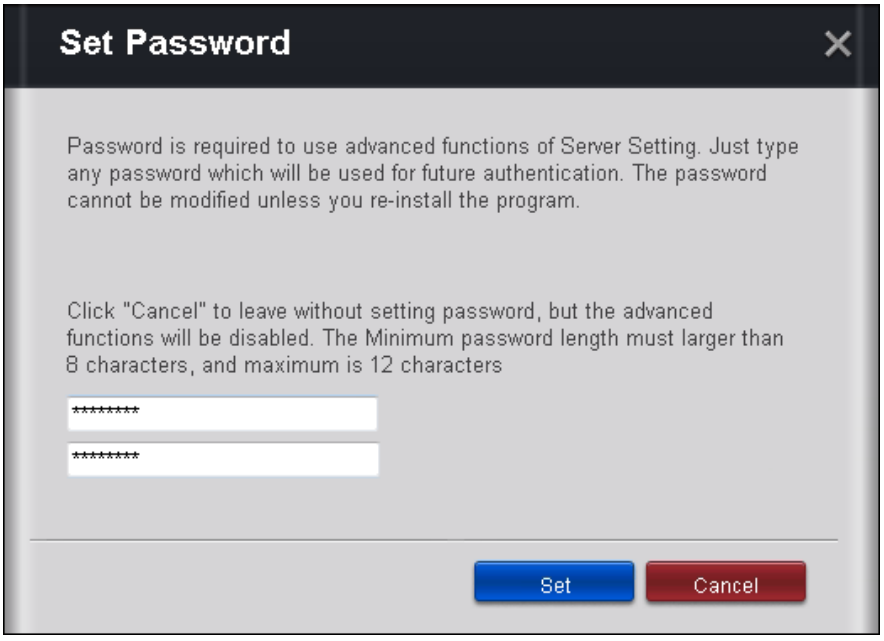
3.1. WISE-Agent Console

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.

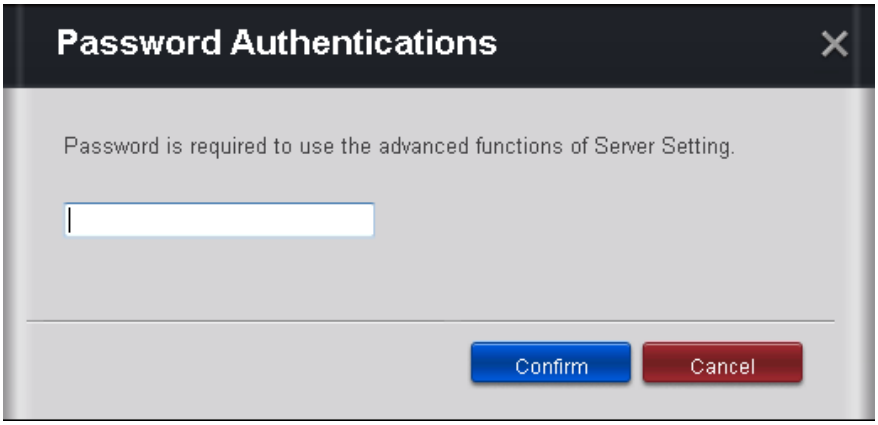
3.2. Connect to Server

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.



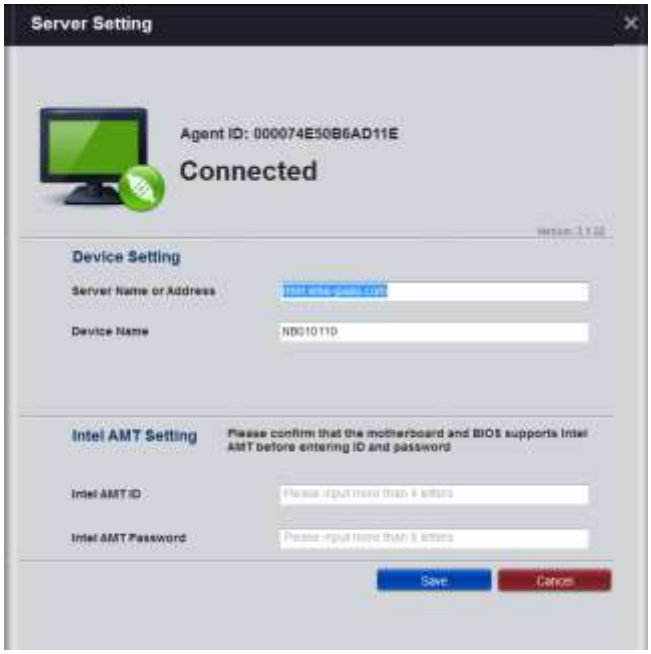
After the password setup, user needs to enter the password to lunch the Server Setting dialog.



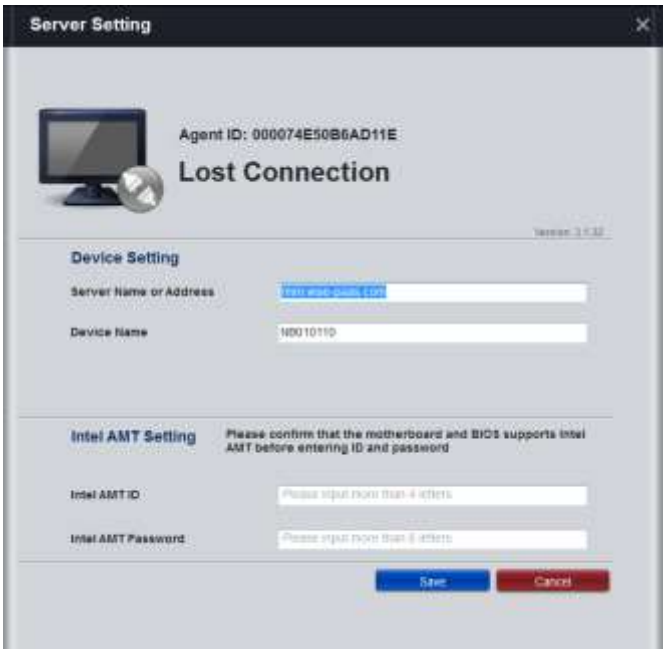
In the following window, enter the server IP address or server name and the device name, and then click “Save & Connect” button to establish the connection to server. If the device’s motherboard supports Intel AMT, users can also enter AMT’s account ID and password here, then after connecting to the 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.

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



- **If Agent can’t connect to Server, it will show “Disconnected”**

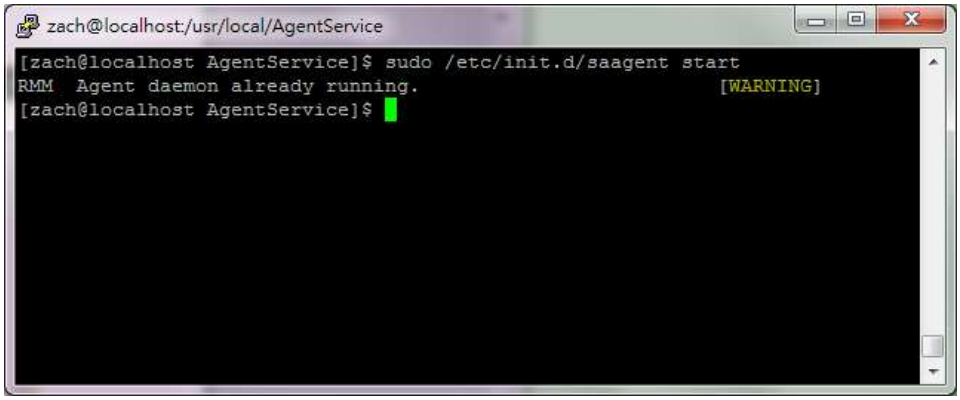


4. Linux WISE-Agent Configuration

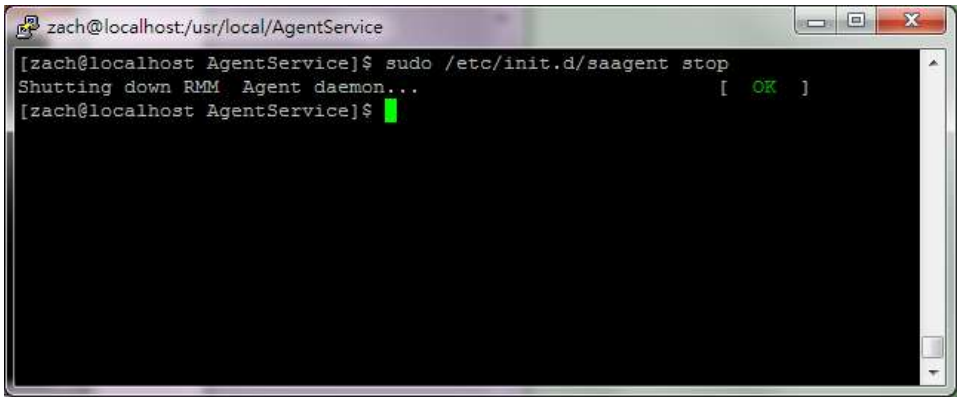
4.1 CentOS

4.1.1 WISE-Agent Service Control

- **Start Agent Service**



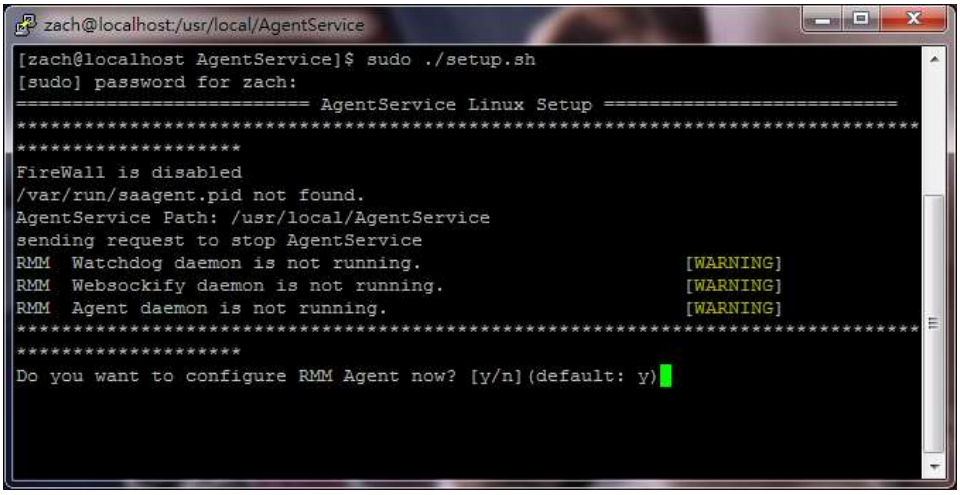
- **Stop Agent Service**



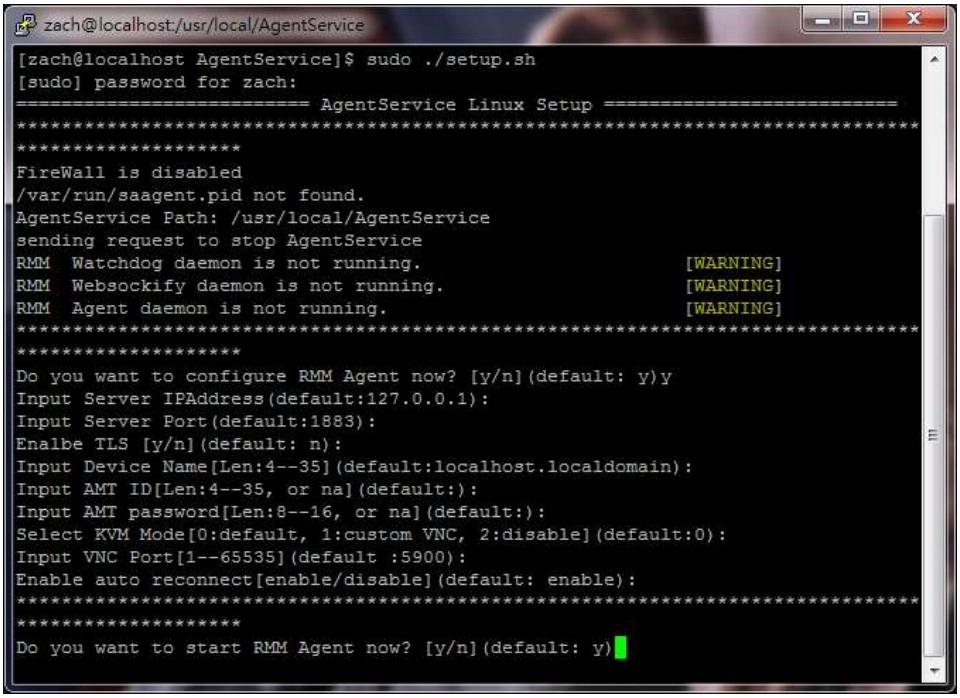
- **Restart Agent Service**

4.1.2 Setup WISE-Agent

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



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



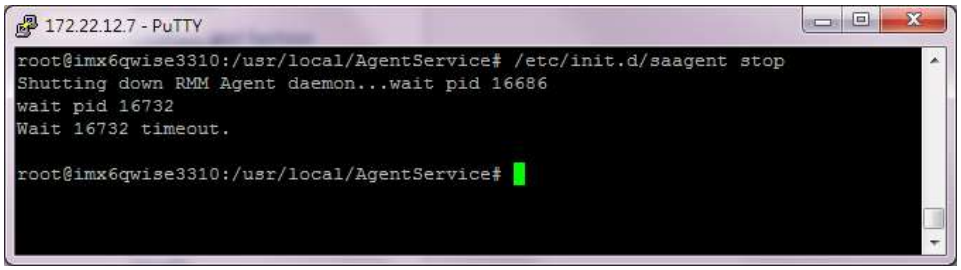
4.1.3 Check WISE-Agent Connection Status

- **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.**

4.2 RISC_Yocto

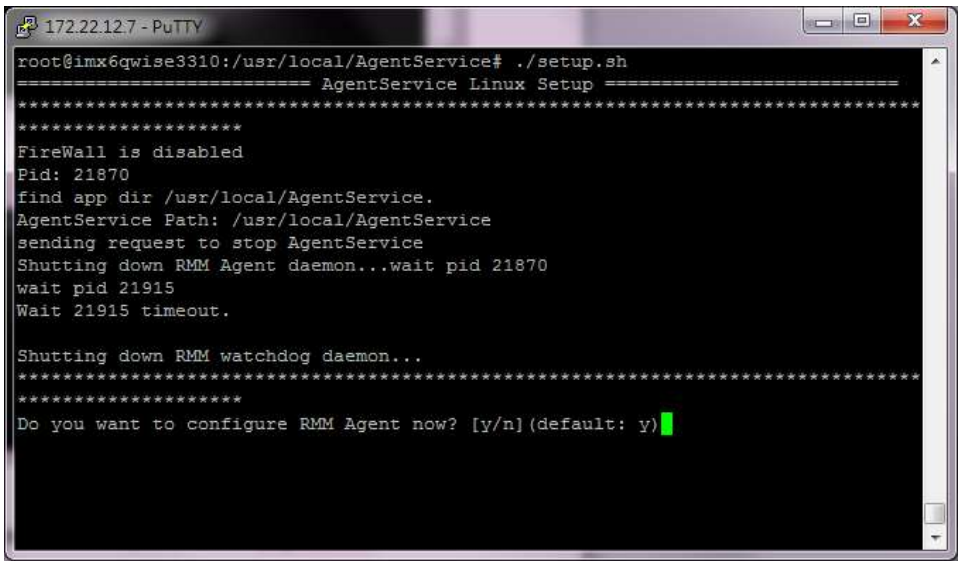
- **WISE-Agent Service Control**
- Start Agent Service

- Stop Agent Service

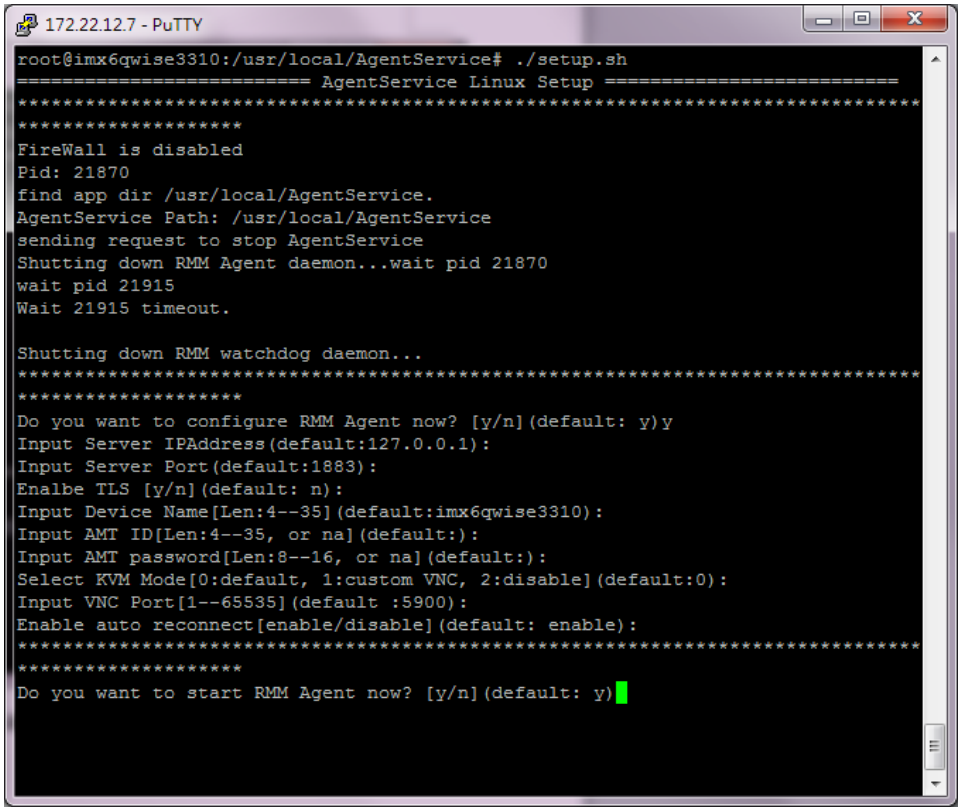


- Restart Agent Service

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



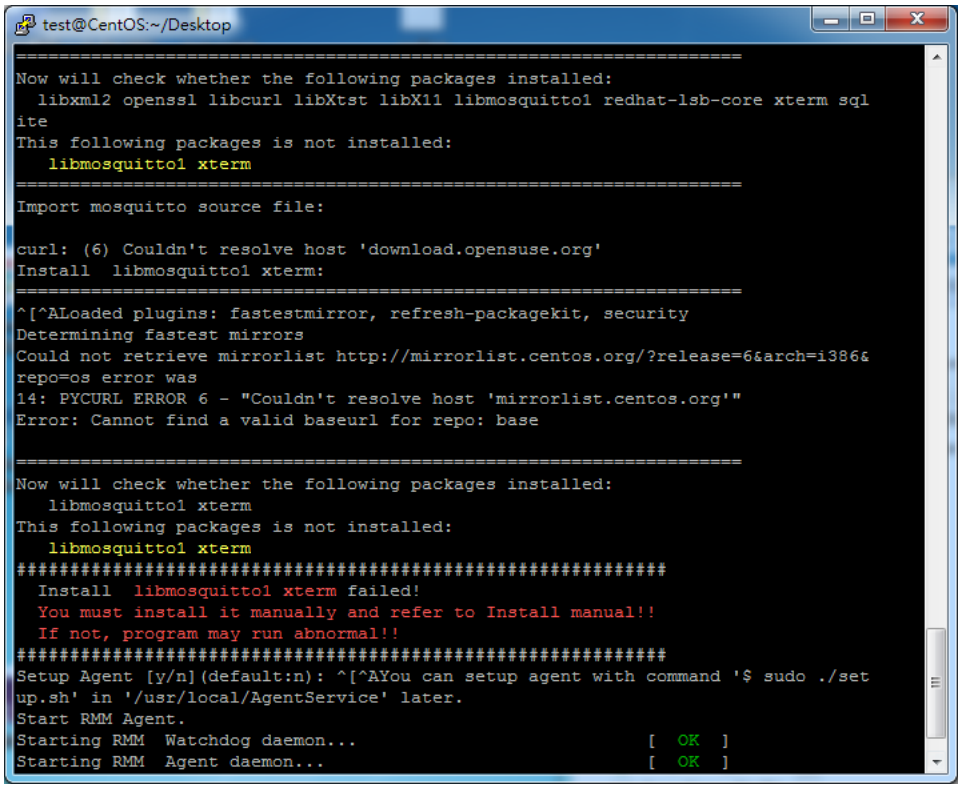
- Complete the configuration step by step to setup the agent.



- **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.

5. FAQ

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



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

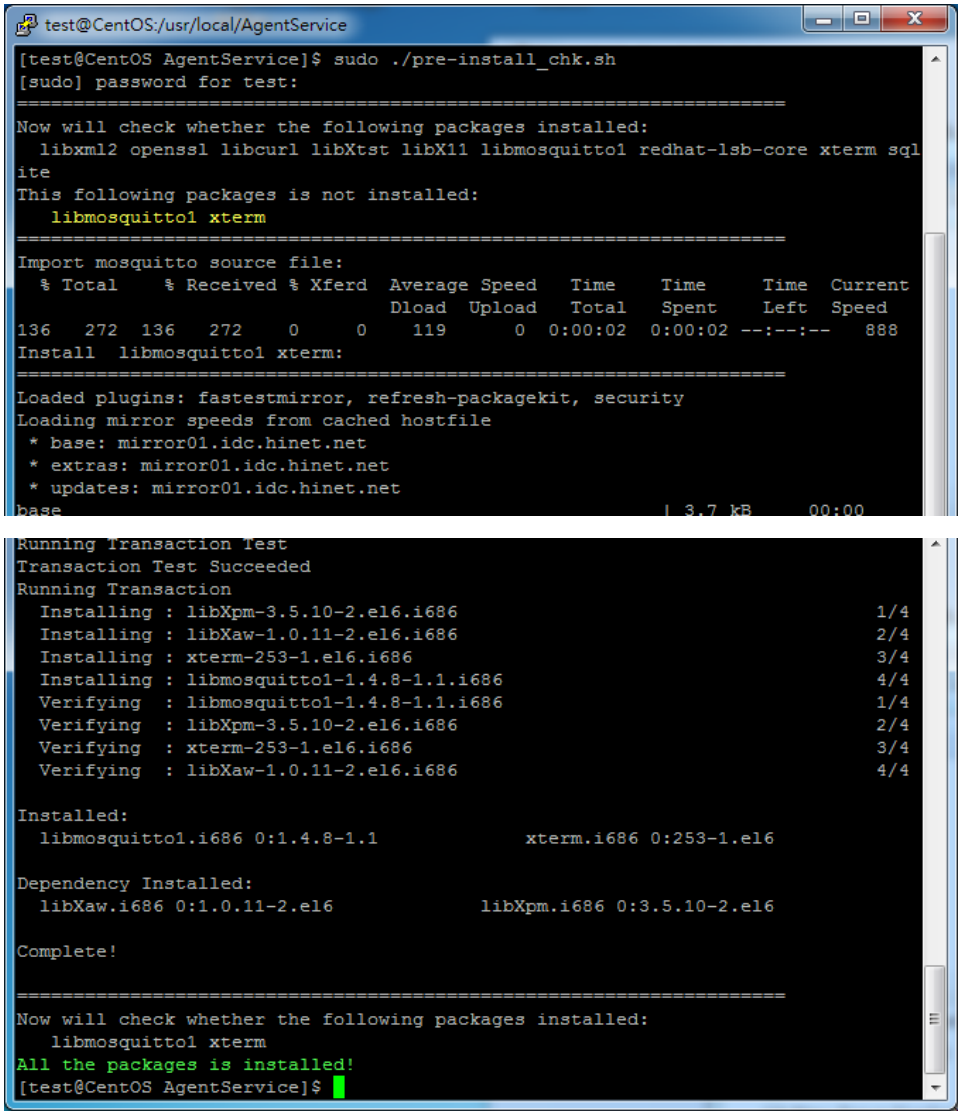
註解 [W1]: TBC

NOTICE:

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

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

註解 [W2]: TBC


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]$

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/