Advantech AE Technical Share Document

| Date	2018/07/23	SR#	1-3508328831
Category	□FAQ ■SOP	Related OS	N/A
Abstract	How to setup Windows OS as SNTP server of WISE-4000 series?		
Keyword	WISE, SNTP, private network, Windows.		
Related Product	WISE-4010LAN, WISE-4050LAN, WISE-4060LAN, WISE-4012, WISE-4012E, WISE-4050, WISE-4051, WISE-4060, WISE-4220-S231		

■ **Problem Description:**

If WISE is not going to use public Network, is it possible to use Windows as SNTP server?

This document is showing how to set up Windows as SNTP server of WISE module.

■ **Brief Solution - Step by Step:**

Step 1. Time server setting
▪ Run Windows command.
▪ "regedit"
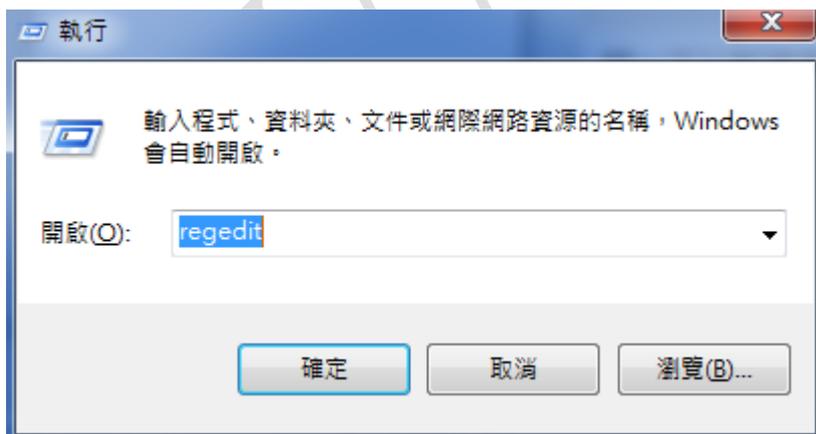
Step 2. To use local CMOS time clock

- Locate registry entry:
- HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\W32Time\Config\Announce Flags
- Change the value from 10 to 5
- (it means to use local CMOS time clock, KB314054)
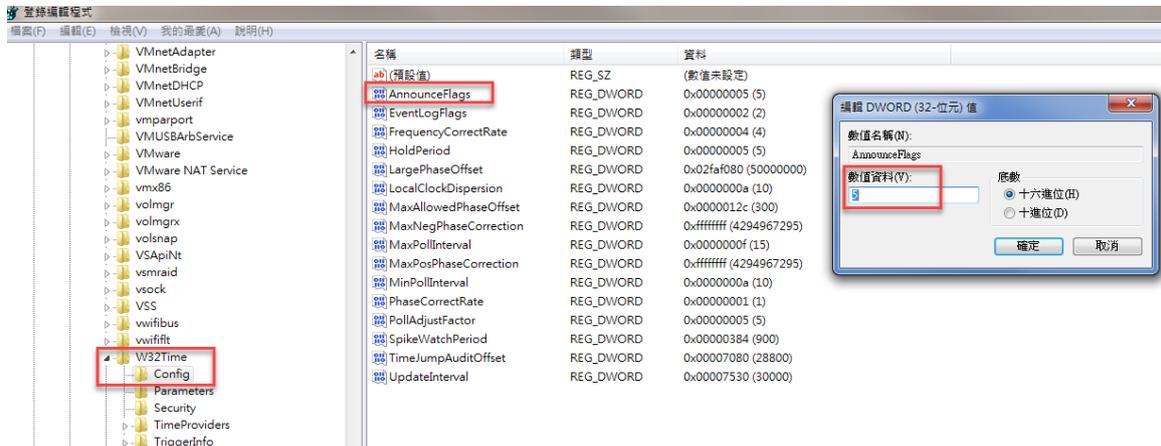
Checking NTP client setup is correct "w32tm /query /source"
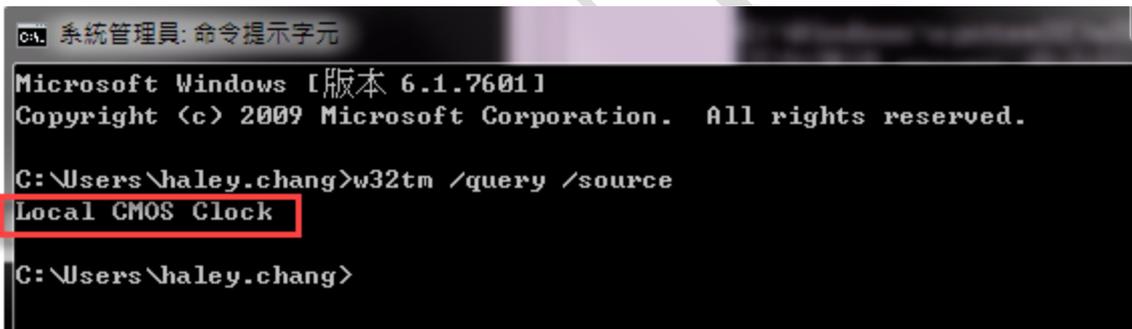

Step 3. Enable NTP server

- Locate registry entry:
- HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\W32Time\TimeProviders\NtpServer
- Enabled = 1.
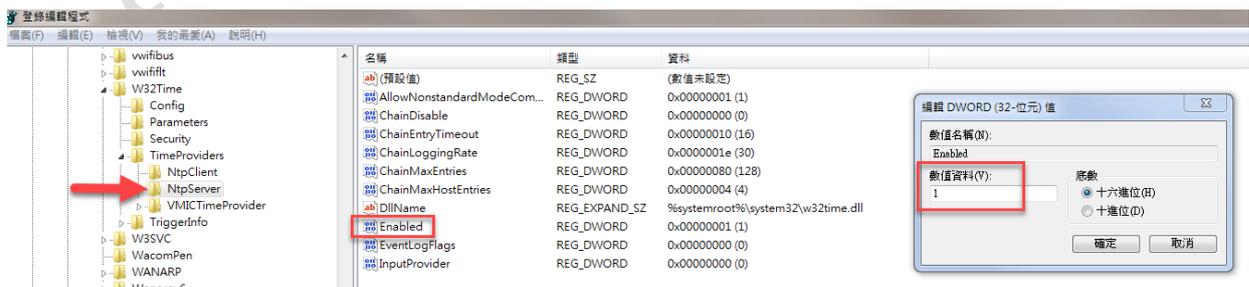
Step 4. Run the Windows Time service

- Run Windows command as administrator.
- "net stop w32time"
- "net start w32time"
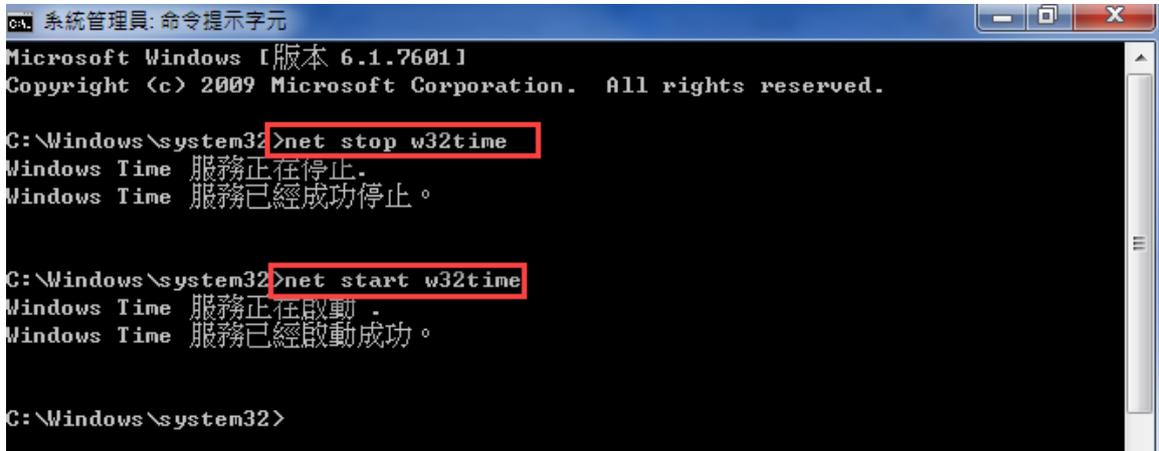
```
系統管理員: 命令提示字元

Microsoft Windows [版本 6.1.7601]
Copyright (c) 2009 Microsoft Corporation.  All rights reserved.

C:\Windows\system32>net stop w32time
Windows Time 服務正在停止.
Windows Time 服務已經成功停止。

C:\Windows\system32>net start w32time
Windows Time 服務正在啟動 .
Windows Time 服務已經啟動成功。

C:\Windows\system32>
```

Step 5. Run the NTP server

- Checking on NTP server
- use command "w32tm /query /configuration"   to view if not show "NtpClient <Local>"
- Checking on NTP client
- use command "w32tm /resync" and "w32tm /query /source" to show if successful

```
C:\Windows\system32>w32tm /query /source
HQDC3.ADVANTECH.CORP

C:\Windows\system32>w32tm /resync
正在傳送 resync 命令給本機電腦
命令已經成功完成。

C:\Windows\system32>w32tm /query /source
HQDC3.ADVANTECH.CORP
```

Step 6. Setup SNTP function on WISE

- Primary SNTP server: the IP of the NTP server, which is the Windows NTP server setup in step 1-5.
- SNTP time polling interval (sec.): counted from the time WISE plugged line power.
  - The moment when WISE is connected with a line power, it will adjust the timing with NTP server. Second adjust timing depends on the polling interval.
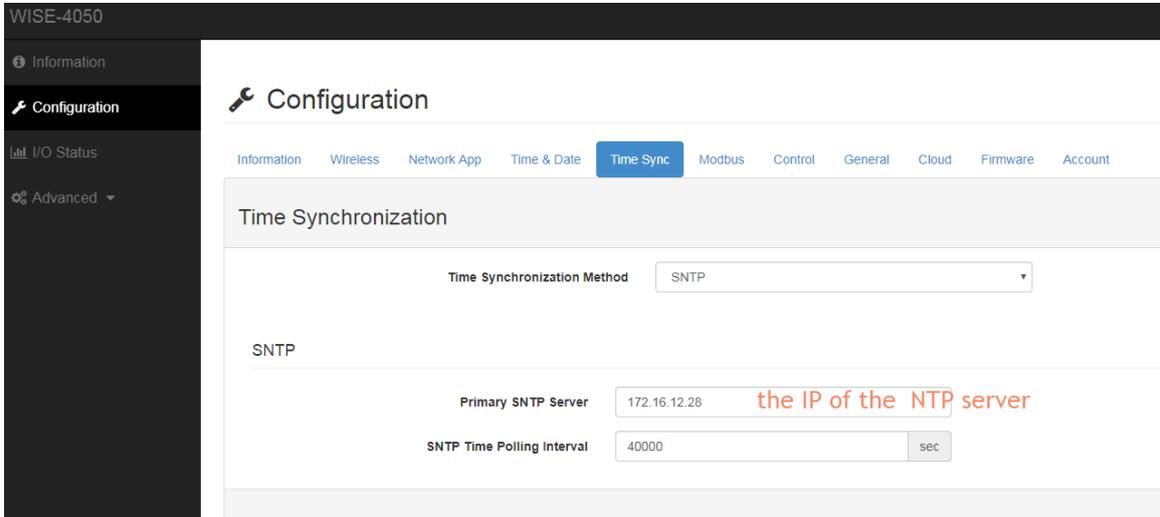
Result
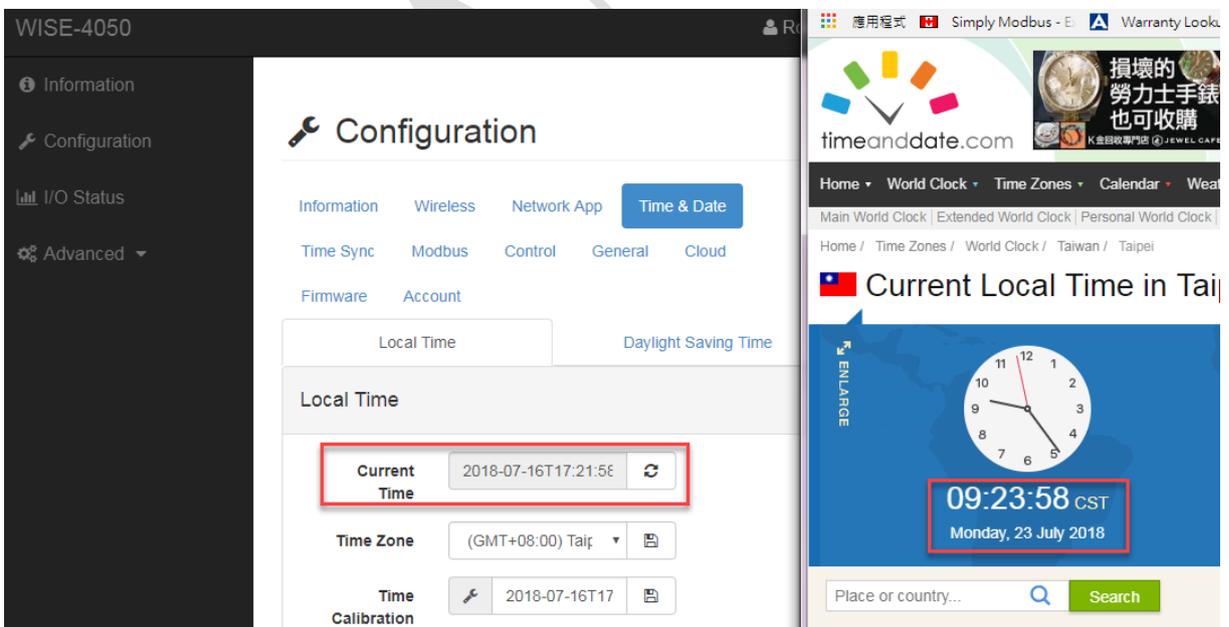
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WISE-4050

- **ℹ Information**
- **🔧 Configuration**
- **📊 I/O Status**
- **⚙ Advanced ▾**

🔧 Configuration

Information | Wireless | Network App | Time & Date | **Time Sync** | Modbus | Control | General | Cloud | Firmware | Account

Time Synchronization

Time Synchronization Method   SNTP ▾

SNTP

Primary SNTP Server   172.16.12.28   the IP of the NTP server

SNTP Time Polling Interval   40000   sec

Click on SUBMIT

⬇
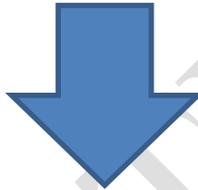
Please wait for module restart

⚙

Page will be redirected after 9 seconds...
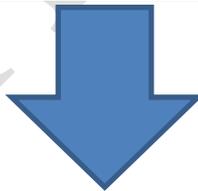
⬇

WISE-4050   👤 Root ▾

- **ℹ Information**
- **🔧 Configuration**
- **📊 I/O Status**
- **⚙ Advanced ▾**

🔧 Configuration

Information | Wireless | Network App | **Time & Date** | Time Sync

Modbus | Control | General | Cloud | Firmware | Account

Local Time | Daylight Saving Time

Local Time

Current Time   2018-07-23T09:39:10+I   ⟳

Time Zone   (GMT+08:00) Taipei ▾   💾

Time Calibration   🔧   Click Me...   💾

Simply Modbus - E... | Warranty L...

...ate.com

...Clock ▾ | Time Zones ▾ | Calendar ▾ | W

| Extended World Clock | Personal World Clo

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09:39:11 CST
Monday, 23 July 2018