

Advantech AE Technical Share Document

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Category	■FAQ □ SOP	Related OS	N/A
Abstract	How to setup time zone and real time clock on WISE-6610		
Keyword	WISE-6610, NTP, time zone		
Related Product	WISE-6610 Series		

■ **Description**

This document introduces how to set up time zone and real time clock on WISE-6610.

■ **Brief Solution**

A user has to set up the current time zone and real time clock because of there is a timestamp item on received frame of LoRaWAN Gateway user module.

Here is the procedure to introduce how to configure the two items on WISE-6610.

Server Admin

- Infrastructure >
- Devices >
 - Profiles
 - Commissioned
 - Activated (Nodes)
 - Ignored
- Backends >

Received Frames

Received	Application	DevAddr	MAC	U/L RSSI	U/L SNR	FCnt	Confirm	Port	Data
2021-04-13 12:45:38	WISE6610_Handler	FF4C916F	74FE48FFFE4FBB1A	-53	9.5	1	✓	1	810
2021-04-13 12:45:34	WISE6610_Handler	FF4C916F	74FE48FFFE4FBB1A	-52	7.2	1	✓	1	810

Figure 1. Received Frames page of network server.

Step 1. Log in WISE-6610's WebGUI then go to "Configuration > Services > NTP" for changing time zone or synchronizing clock with NTP server.

WISE-6610-N100-A

Status	NTP Configuration
<ul style="list-style-type: none"> General Network DHCP IPsec DynDNS System Log 	<input type="checkbox"/> Enable local NTP service
	<input type="checkbox"/> Synchronize clock with NTP server Primary NTP Server <input type="text"/> Secondary NTP Server <input type="text"/>
	Timezone GMT <input type="text"/> Daylight Saving Time no <input type="text"/>
	<input type="button" value="Apply"/>

Enable local NTP service: acts as a NTP server for other devices in the local network.

Synchronize clock with NTP server: select an external NTP server and synchronize clock when reboot or each 8 hours.

Timezone: select current region's time zone.

Daylight Saving Time: activates/deactivates the DST shift.

Note: If user fill in primary NTP server and secondary NTP server, system will try to request real time clock from primary NTP server and wait for 30 seconds for response. After 30 seconds, system will try to connect to secondary server if primary one has no response.

Step 2. Go to “Administration > Set Real Time Clock” to modify date and time.

WISE-6610-N100-A

Status		Set Real Time Clock	
General	Date	<input type="text" value="2021 - 03 - 31"/>	
Network	Time	<input type="text" value="02 : 45 : 10"/>	
DHCP	NTP Server Address <input type="text"/>		
IPsec	<input type="button" value="Apply"/>		
DynDNS			
System Log			
Configuration			
LAN			
VRRP			
PPPoE			
Backup Routes			
Static Routes			
Firewall			
NAT			
OpenVPN			
IPsec			
GRE			
L2TP			
PPTP			
Services			
Expansion Port			
Scripts			
Automatic Update			
Customization			
User Modules			
Administration			
Users			
Change Profile			
Change Password			
Set Real Time Clock			
System Configuration			

NTP server address: synchronize NTP sever once.

Step 3. After setup, user can log in LoRaWAN Gateway Settings and check the UTC time is correct or not.

Navigation		LoRaWAN Gateway Settings				
Router LoRaWAN Radio <ul style="list-style-type: none"> • Packet Forward • LoRaWAN Status Network Server MQTT Storage Application Server Licenses Return to Router		Basic Status Data Record Time : 2021-04-21T17:01:47Z Total Up Stream : 76754 Bytes CRC OK packet : 863 CRC Bad packet : 505 NO CRC packet : 0				
		Channel Status				
Channel	Radio Index	Enabled	Frequency(Hz)	Received(Bytes)		
0	0	Enabled	923200000	3255		
1	0	Enabled	923400000	14716		
2	1	Enabled	922200000	6448		
3	1	Enabled	922400000	12827		
4	0	Enabled	922600000	7035		
5	0	Enabled	922800000	11891		
6	0	Enabled	923000000	9581		
7	1	Enabled	922000000	11001		
STD	1	Enabled	922100000	0		
FSK	1	Enabled	921800000	0		
		Uplink Frame				
UTC Time	Type	Devaddr/EUI Freq	DR	RSSI Fcnt	Data	
2021-04-21T09:00:53.752060Z	Confirmed Data Up	FF556E5E 922.40MHz	SF7BW125 -75	263	gF5uVf+ABwEB5m8ItmnnInmSrOutEJ9ZxdZe18bCTR3ITq4zWymJKQR3cOn2Be8dVZc	
2021-04-21T09:00:56.523939Z	Confirmed Data Up	05E8BEEC 923.20MHz	SF7BW125 -53	29627	gOy+6AXAu3MBNCCJRHMIToYy7Jlr6wCNzvL/h3DsaSr59mmFIBUPz4rw+G0zTSt19faF	
2021-04-21T09:01:01.036761Z	Confirmed Data Up	05E8BEEC 922.20MHz	SF7BW125 -63	29627	gOy+6AXAu3MBNCCJRHMIToYy7Jlr6wCNzvL/h3DsaSr59mmFIBUPz4rw+G0zTSt19faF	
2021-04-21T09:01:06.364531Z	Confirmed Data Up	05E8BEEC 922.00MHz	SF7BW125 -64	29628	gOy+6AXAvHMBByGHwNmTaClicksZQD0qb7XbiATwu2sAc7GYEoxo8mHfjnVUWRuUcb+	

On Network Server page, system will get UTC time and user's laptop time zone to display GMT time as timestamp.

Received Frames

Received	Application	DevAddr	MAC	U/L RSSI	U/L SNR	FCnt	Confirm	Port	Data
2021-04-21 17:03:13	WISE6610_Handler	FF556E5E	74FE48FFFE46C9A9	-69	9.2	270	✓	1	810E3950070600003F6800005423E207C
2021-04-21 17:02:53	WISE6610_Handler	FF556E5E	74FE48FFFE46C9A9	-56	7.2	269	✓	1	810D3950070600003F6800005423E207C
2021-04-21 17:02:34	WISE6610_Handler	FF556E5E	74FE48FFFE46C9A9	-57	10.2	268	✓	1	810C3950070600003F6800005423E207C