

# Firmware Updater Connection Troubleshooting

## Summary

This Technical Note describes how to proceed when the firmware updater fails to connect even though the correct IP address for the instrument has been provided.

## Related Technical Notes and References

TN2500 Wyatt Instrument Firmware Update Guide

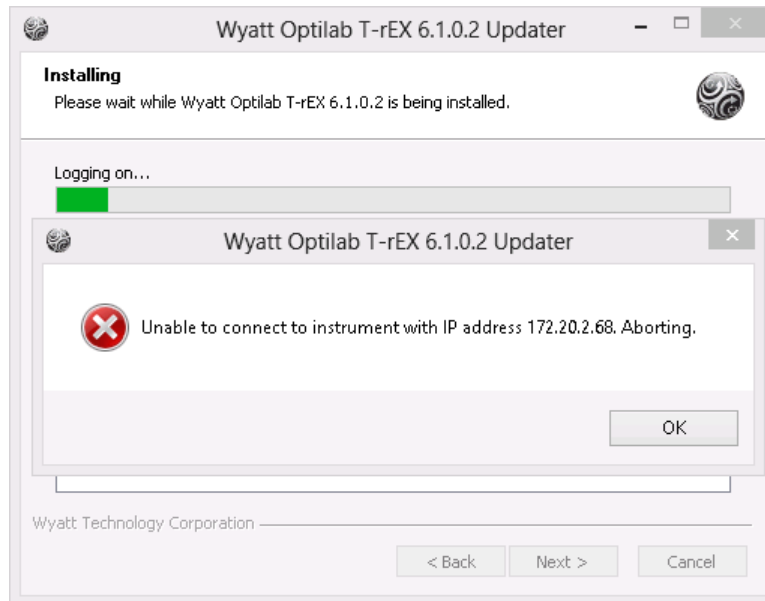
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## Problem Overview

The firmware updater may fail to connect to the specified instrument even though the user has provided the correct IP address for the instrument. The user may see an error message similar to the screenshot below, which reports that it is “Unable to connect to instrument with IP address X.X.X.X. Aborting.”



This error is likely to occur on Windows 7 and Windows 8 computers with specific network security configurations when the instrument's local time is incorrect.

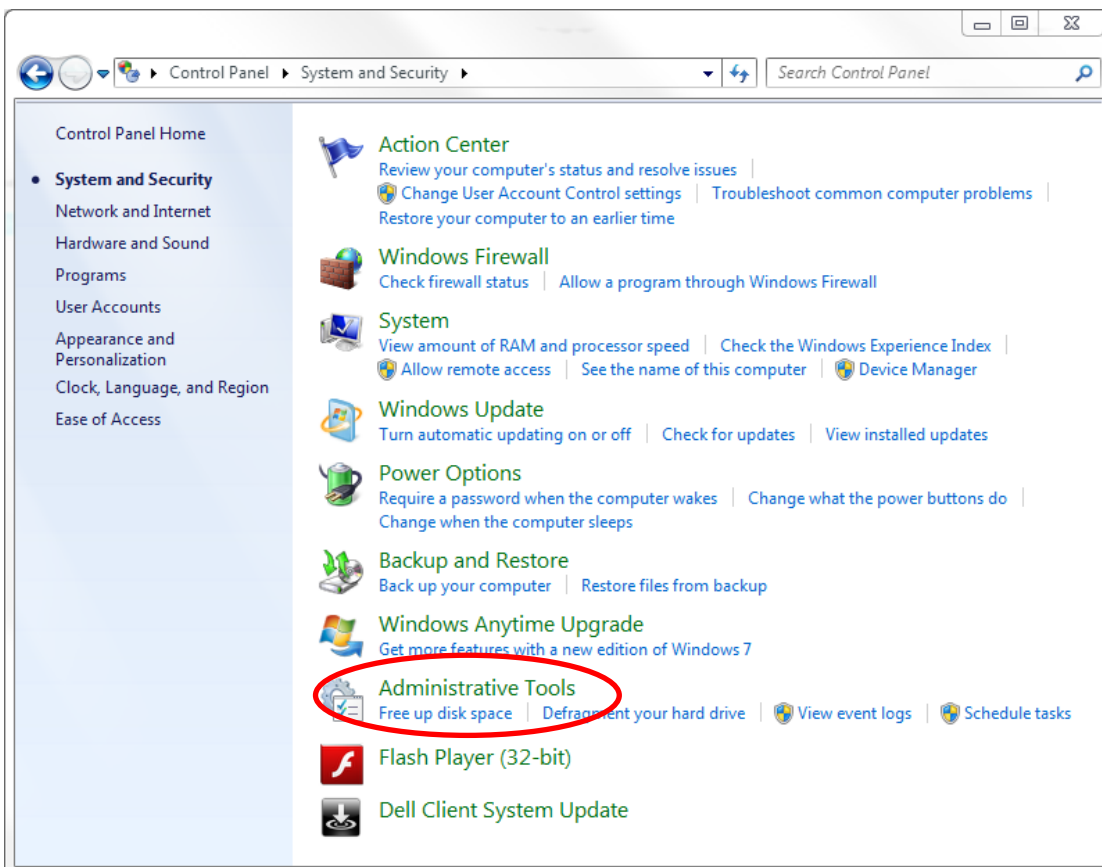
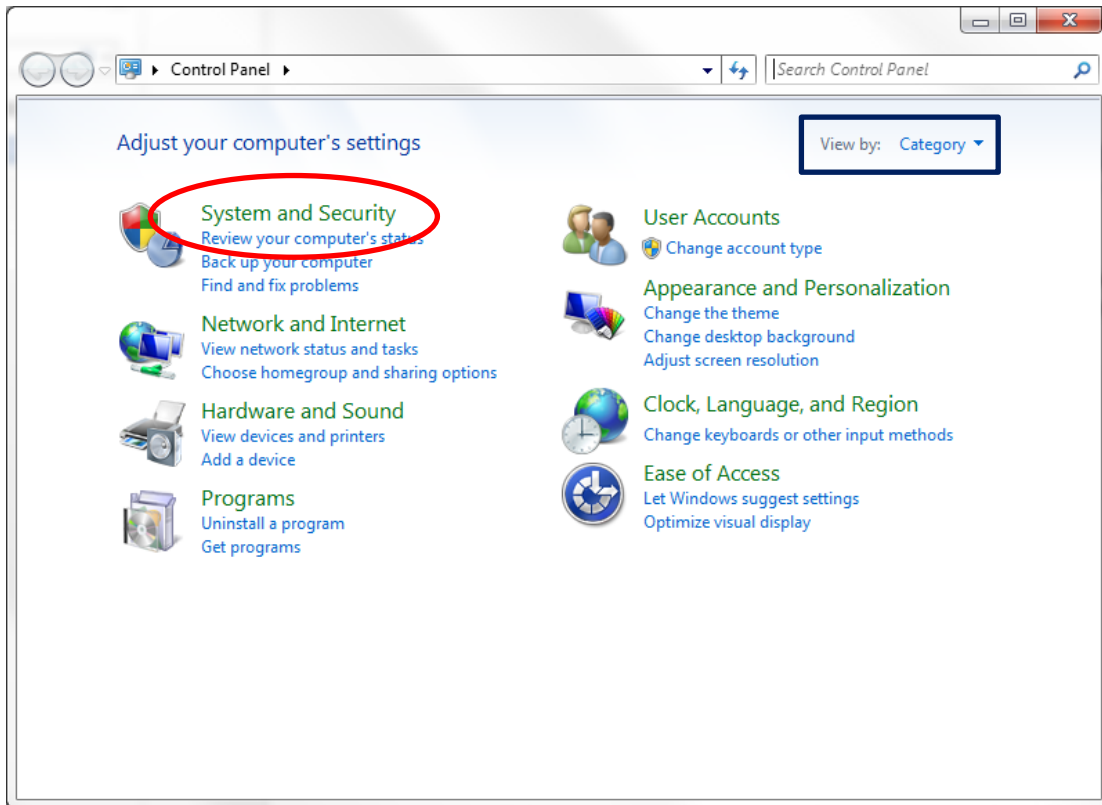
## Resolutions

### Method 1

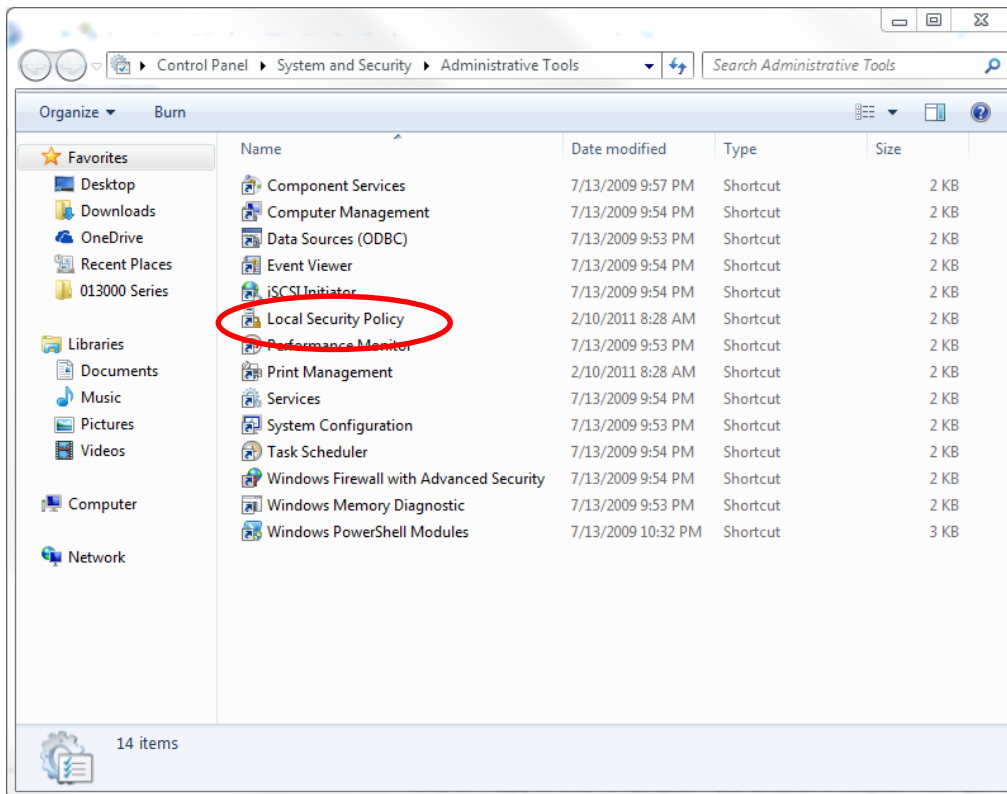
The user can modify their computer's **Windows Security Policy**. This procedure may require administrator privileges.

On the computer that is connected to the instrument:

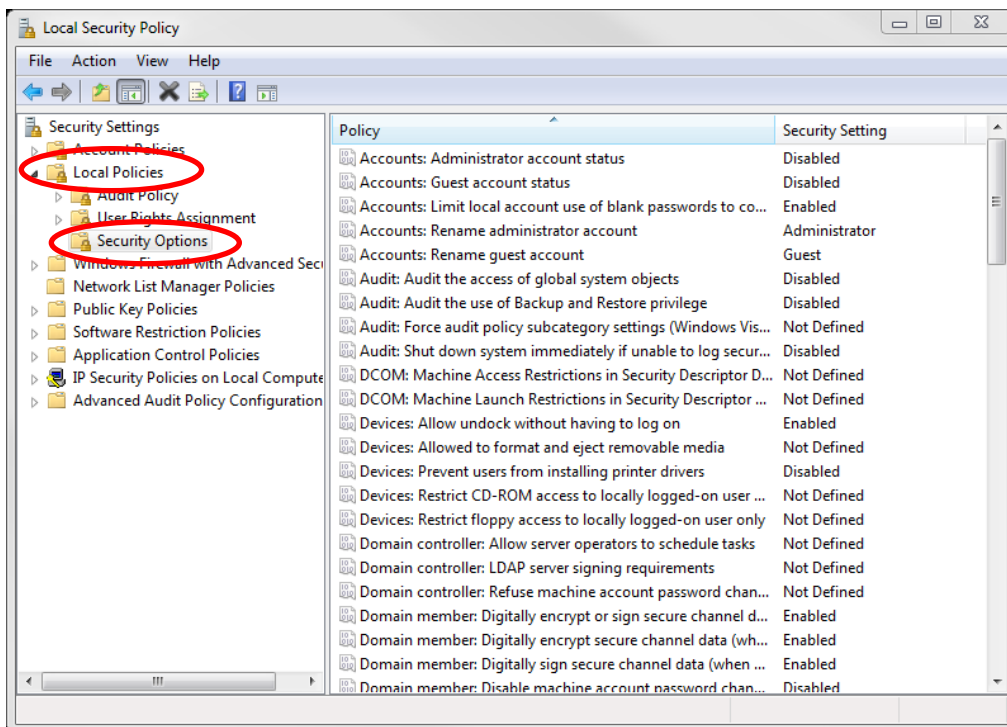
1. Open the **Start** menu, then select **Control Panel**.
2. Please note that this control panel is in **Category** view. Select **System and Security**, then select **Administrative Tools**. (If your control panel is in list view, you can immediately select **Administrative Tools**.)



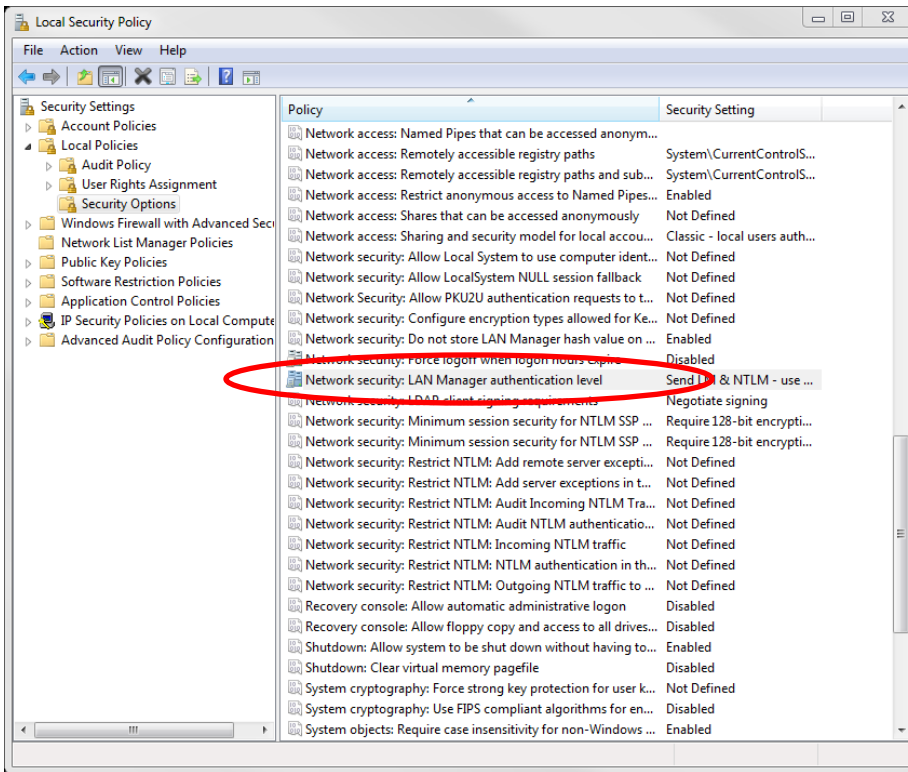
3. Double click on "Local Security Policy"



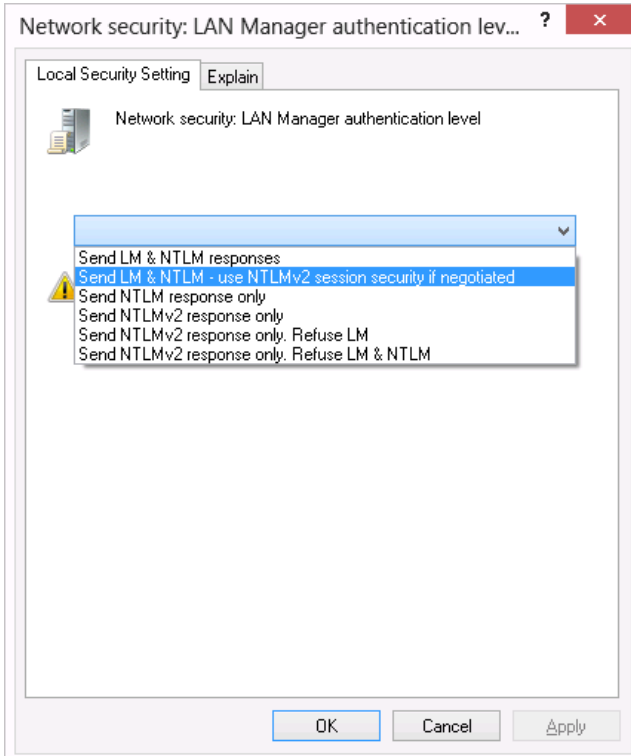
4. Under Security Setting, expand Local Policies and select Security Options.



5. Scroll through the list in the right-hand pane and double click on Network security: LAN Manager authentication level as shown below.



- Click on the drop down menu and select **Send LM & NTLM – use NTLMv2 session security if negotiated**.



- Press "OK".
- Restart the firmware update procedure.

## Method 2

The second method to establish connection between the firmware updater and the instruments is to correct the instrument date and time so that it is in sync with their workstation. To change the date and time on the instrument's front LCD screen follow these steps:

1. Navigate to the **System** tab. Note: The screenshots below are for a HELEOS II. The System tab will look slightly different on other instruments, but the necessary functions will be available for all instruments.
2. Tab down to the **Set Time** button, then hit enter.

The screenshot shows the 'System' tab of the HELEOS II instrument interface. At the top, there are navigation tabs: Main, Batch, QELS, Alarm, System (selected), and Comm. The main display area shows temperature settings: Flow Cell Temperature: 25.00°C (Set to 25.00 °C, Sync checked) and Heated Line Temperature: disconnected (Set to 25.00 °C). Below this are sections for Recycle (Start in minutes, RECYCLE button, Cancel button) and COMET (Start in minutes, OFF indicator, Run for minutes, Cancel button). The Analog Output section includes Analog Out 1, LS Detector 11 [V], and voltage settings (+/- 10.00 V, +/- -10.00 V). Other settings include Laser Power (70.0%), Time Interval (1.00 s), Language (English), Serial Number (893-H2HC), and Firmware Version (2.4.3.2). At the bottom, there are buttons for Zero Dark Offsets, Restart ISI, Load Factory Default, and Restart Instrument. The 'Set Time' button is circled in red, and the current time is displayed as 3:57:34 PM.

3. Press **DEL** on the keypad to the right of the LCD screen on your instrument – this will replace the **Set Time** button with a date field. You can switch between the month, day, and year fields with the right and left arrow keys. You can change the value of each field with the up and down arrow keys.

The screenshot shows the 'System' tab of the HELEOS II instrument interface, similar to the previous one. The 'Set Time' button has been replaced by a date field showing '5/2015', which is circled in red. The time field next to it shows '4:01:25 PM'. All other settings and buttons remain the same as in the previous screenshot.

1. Press **TAB** on the keypad to modify the time. You switch between the hour, minute, and second fields with the right and left arrow keys. You can change the values with the up and down arrow keys.

The screenshot displays the HELEOS II control interface. At the top, there are tabs for 'Main', 'Batch', 'QELS', 'Alarm', 'System', and 'Comm'. The 'System' tab is selected. The interface shows various parameters and controls:

- Flow Cell Temperature: 25.00°C (Set to 25.00 °C)
- Heated Line Temperature: disconnected (Set to 25.00 °C)
- Recycle: Start in [ ] minutes (RECYCLE button)
- COMET: Start in [ ] minutes (OFF button)
- Analog Output: Analog Out 1, LS Detector 11 [V], +/- 10.00 V, +/- -10.00 V
- Laser Power (%): 70.0
- Time Interval (s): 1.00
- Serial Number: 893-H2HC
- Firmware Version: 2.4.3.2
- Language: English
- Buttons: Zero Dark Offsets, Restart ISI, Load Factory Default, Restart Instrument
- Time: 3/ 5/2015, 4:01:25 PM (circled in red)

2. Once the date and time are both correct, hit ENTER on the keypad to save the changes.
3. Restart the firmware update procedure.

## Contact Information

Please contact us at [support@wyatt.com](mailto:support@wyatt.com) (in North America) or contact your local distributor listed at [www.wyatt.com/Distributors](http://www.wyatt.com/Distributors) if you have any questions about either method or if you like to obtain any further assistance.

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