Kiosk Mode For Instruments Using Windows Platform

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Why is kiosk necessary

How to implement

Limitations



WHY KIOSK

- These instruments are just like a Windows desktop PC
 - They have all the security vulnerabilities of a desktop
 - Need to prevent unauthorized use
- Instrument may be used in a remote, unattended location for data acquisition
 - No keyboard or mouse
 - Must be running when accelerator is in operation
- Still want to have local use
 - Access to controls and display for system commissioning or diagnostics
- Want to be able to reboot the instrument remotely
 - Use remote AC reset to restore operation
 - No user interaction needed

IMPLEMENTATION

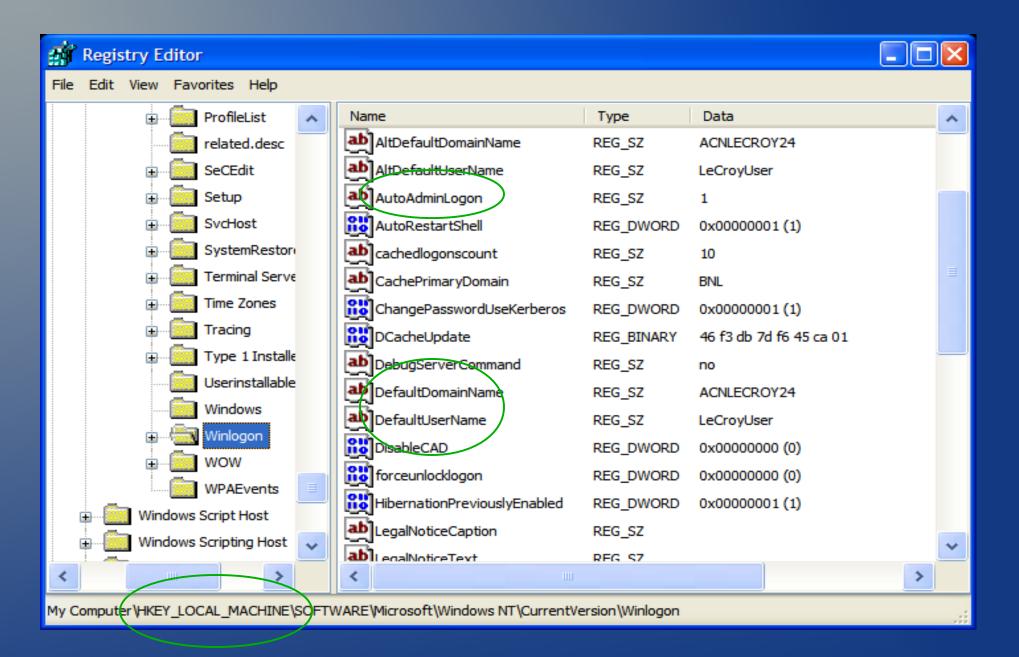
How to allow local use of the instrument and provide cyber security.

- 1) Auto log-on
- 2) Run the instrument application at start up
- 3) No access to task manager

To automatically log on this account, instead of being prompted for credentials, follow these steps.

- 1. Locate the registry key

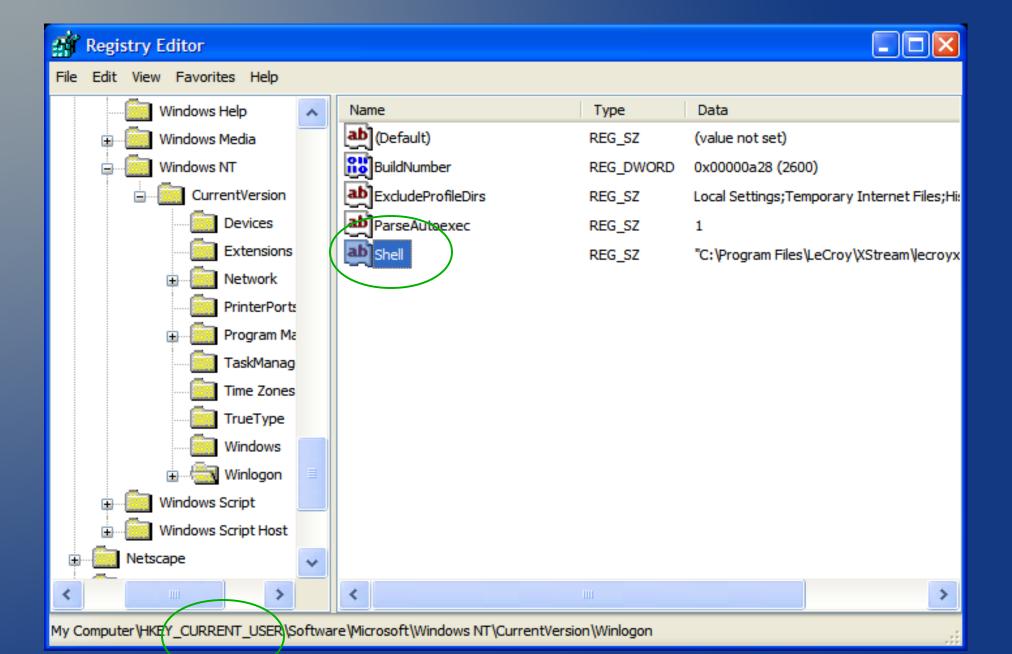
 | Locate the registry key
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 | NT\CurrentVersion\Winlogon.
- 2. In the right pane open the string value "AutoAdminLogon". If it doesn't exist create it.
- 3. Change the value of "AutoAdminLogon" from "0" to "1".
- 4. In the same pane, add another string value called "DefaultUserName".
- Change the value for "DefaultUserName" to the name of the account you created for limited access.
- 6. Add another string value called "DefaultPassword".
- 7. Change the value for "DefaultPassword" to the password you created for the limited account. If no password was set you can leave this blank.
- 8. Close the registry editor.



These steps will force the specified program to be run instead of the normal windows shell.

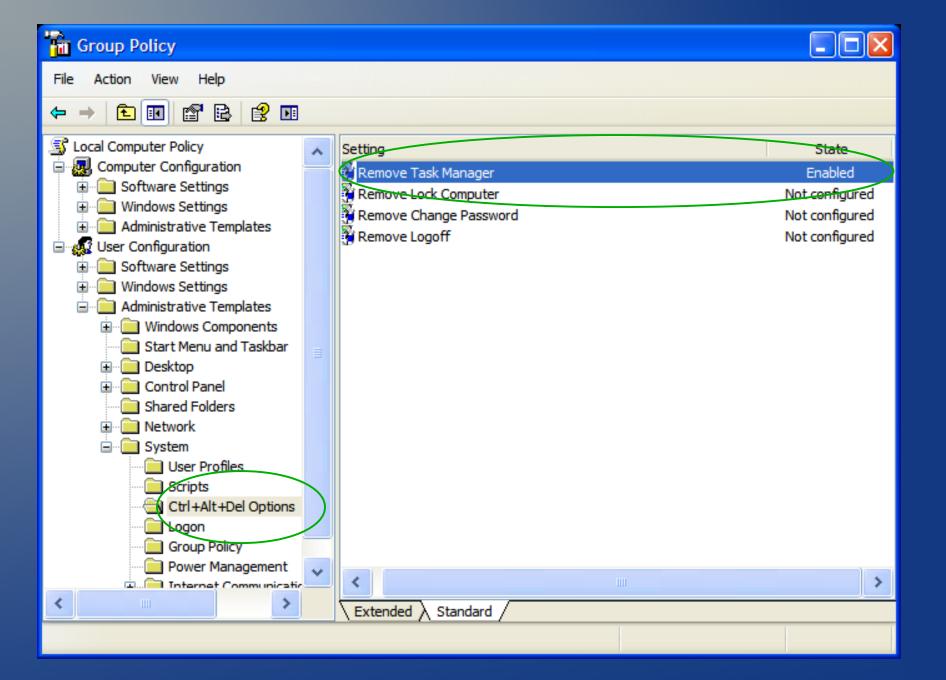
- 1. From an account with administrative rights, create a new account and give it administrative rights as well.
- 2. Log off and onto the new account you just created. (This account must have admin rights)
- 3. Open the registry editor by clicking Start Run and typing "regedit" in the space.
- 4. Locate the registry key

 HKEY_CURRENT_USER\Software\Microsoft\
 Windows NT\CurrentVersion\Winlogon.
- 5. In the right pane create a new string value and name it "Shell".
- 6. Change the value for the newly created string to the application executable you wish to solely run on this account including the path.
- 7. Close the registry editor.



These last steps will disable the task manager so that no additional programs can be run or closed.

- 1. Click Start Run and type "gpedit.msc" in the space.
- 2. In the left pane expand the key called "User Configuration".
- 3. Under "User Configuration" expand "Administrative Templates".
- 4. Under "Administrative Templates" expand "System".
- 5. Under "System" open the folder called "Ctrl+Alt+Del Options".
- 6. Double click "Remove Task Manager" and change the setting from "Not Configured" to "Enabled".
- 7. Close the policy editor.



Limitations

The running application may provide access to the internet or the task bar.

After a "Remote Desktop" session it is necessary to log-on or reboot the device.

"Trials, Tribulations, and Pitfalls Using Commercial Instruments for Data Acquisition"