**Winbox Helper App**

**for**

**Intermapper Remote Access Client**

(“This utility” or “the program” within the readme will refer to the actual desktop application, i.e. WinboxHelper.exe, so as not to be confused with the “Winbox” helper app created within the Intermapper Remote Access client which resides on the Intermapper server.)

**General Use**

1. The purpose of this utility is specifically to open a network device in a Winbox session. Originally this was designed to only work with Intermapper Remote Access Client, however, it has been adapted to work via webpage as well by custom protocol.
2. Before the utility can be used in Intermapper Remote Access Client, the ‘Helpers.xml’ must be imported to add the WinboxHelper app to your list of helper apps. Aside from the WinboxHelper app, this XML document contains only the default helper apps. That being said, if you already have one or more custom helper apps you may or may not need to do some manual work with the import. My assumption is that if you already have custom helper apps you are adequately equipped to handle this specific case.
3. Once the installer has been run successfully and the helper apps imported, you can run the app by right clicking on the device being monitored and choosing ‘Winbox’ from the list of helper apps. This will open up a command prompt window in which you will need to type in your master password for your KeePass password database. This utility will then search your KeePass database for a matching entry based on that device’s IP address and launch a Winbox session with the IP address, username and password respectively.

**Note: It is advisable to change the ACL’s on the WinboxHelper folder so that only your user has access. This will at least minimize the risk of unauthorized access.**

**Web Use**

1. Once this utility has been installed you will alternatively be able to launch a Winbox session via hypertext reference using custom protocol. You can view the registry structure of the current implementation by opening up your registry and drilling down to HKCR\WinboxHelper and all of its subkeys. This is agnostic to the way the rest of the program works so if you would like to rename things or tweak things a little bit feel free. The only requirement for this utility to work is the passing of the IP address.
2. If you do continue to use the provided protocol, you must edit your hypertext reference links to your devices by using the form <a href="winboxhelper:127.0.0.1"></a>, where 127.0.0.1 is replaced with the IP of the device you would like to open a Winbox session to. In our scenario, we simply have two links: one to the web interface of the device, and one to open a Winbox session.

**Functional Structure**

* The installer will extract the required files to C:\Winboxhelper and enter the appropriate registry keys. If you wish to move the location of this folder, you may do so as long as you update the Winbox helper app within Intermapper Remote Access Client to reflect the new location.
* The registry keys entered are:
  + HKCR\WinboxHelper and all of its subkeys. This is for launching a Winbox session from the web only and has nothing to do with the original intended functionality of the system. You can safely delete these keys if you do not intend to use WinboxHelper from the web.
  + HKCU\Software\WinboxHelper
    - This contains the paths to your KeePass database and Winbox that you selected during the installation process. This is required for the program to function properly, regardless of your use case. You would need to rewrite the code for WinboxHelper in order to change this. Also, if the incorrect KeePass database was entered during installation, you should only need to edit the registry key to reflect the correct database location.
* The Winbox helper app within Intermapper Remote Access Client calls upon WinboxHelper.exe, passing it the IP address of the selected device.
* WinboxHelper.exe is coded in C#. It is a windows console application that accepts one parameter: the IP address of the device to be accessed.
* Once launched, this utility will take the user input of the master password of the KeePass database selected during installation. This utility then searches your KeePass database for an entry that matches the IP address provided and retrieves the username and password for that device. After retrieving said information this utility will open a Winbox session, passing it the parameters required to login.
* Using this utility from the web only differs in the source from which the IP address is received. All other functionality is identical.

If you have any further questions or would like to have the source code for the program and Inno installer you can email me at [asdfjklsomething@gmail.com](mailto:asdfjklsomething@gmail.com).

Subnote: We noticed some DPI issues when launching things from our web page. Passing the ‘Disable display scaling on high DPI settings’ option to Winbox.exe did not resolve the issue. In the end we added the following registry key:

Reg path: HKCU\Software\Microsoft\Windows NT\CurrentVersion\AppCompatFlags\Layers

Key Type: String

Key Name: The path to Winbox.exe, e.g. C:\Program Files (x86)\Winbox\winbox.exe

Key Data: WINXPSP3

This will run Winbox in windows xp sp3 compatibility mode. If you do not experience DPI issues it is not recommended to pass this flag. We are still working to track down the source of this problem, but given that this is a fairly specific case it’s not something we feel inhibits the normal use of this utility.