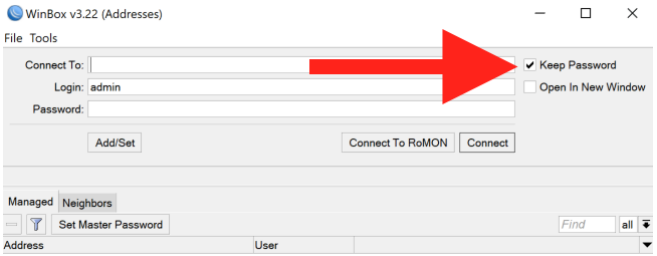
MikroTik WinBox Cleartext Password Storage

Low

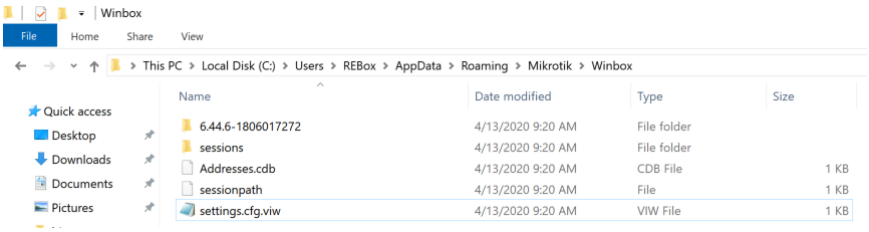
← View More Research Advisories

Synopsis

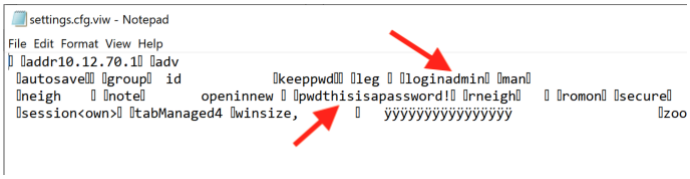
MikroTik's WinBox stores the user's cleartext password in a configuration file when the *Keep Password* option is selected. *Keep Password* is enabled by default.



Specifically, the password is stored in a file called *settings.cfg.viw* in Winbox's *AppData/Roaming* directory. The full path is *C:\Users**USERNAME**\AppData\Roaming\Mikrotik\Winbox\settings.cfg.viw*



The username and password can be found appended to the keywords *login* and *pwd* respectively.



An attacker that gains access to this file can use it to pivot to the router.

Solution

This issue affects all known versions of WinBox. However, to mitigate this issue, MikroTik suggests using WinBox's "Set Master Password" functionality.

Additional References

https://cwe.mitre.org/data/definitions/260.html
https://wiki.mikrotik.com/wiki/Manual:Winbox

Disclosure Timeline

01/16/2020 - Tenable discloses to MikroTik. 90 days is April 15, 2020.
01/17/2020 - MikroTik indicates that the plaintext password issue isn't an issue because users can encrypt the password through an additional mechanism.
01/17/2020 - Tenable reiterates that they believe plaintext password storage is an issue.
01/18/2020 - MikroTik states "By default, no credentials are being stored in settings.cfg..." MikroTik commits to adding additional info messages.
01/20/2020 - Tenable disagrees. By default Keep Password is set which causes the password to be saved. Tenable agrees additional information to the users would be good.
01/27/2020 - MikroTik replies with, "thank you for the suggestions."

Risk Information

CVE ID: CVE-2020-5721

CVSSv2 Vector: AV:L/AC:L/Au:N/C:P/I:N/A:N
Additional Keywords : CWE-260
Affected Products: WinBox 3.22 and below
Risk Factor: Low

Advisory Timeline

April 15, 2020 - Initial Release
