Christopher Hart - IT Adventures

Documenting my discoveries in the IT world

Blog   About

Windows 10 OpenSSH Equivalent of "ssh-copy-id"

Written on May 24, 2020

At the moment, Windows 10's implementation of the OpenSSH client does not have the `ssh-copy-id` command available. However, a PowerShell one-line command can mimic the `ssh-copy-id` command and allow you to copy an SSH public key generated by the ssh-keygen command to a remote Linux device for passwordless login.

Generate an SSH Key

Note: If you have already generated an SSH keypair that you would like to use, skip this section and proceed to the Copy SSH Key to Remote Linux Device section.

First, open a new PowerShell window (*not* a Command Prompt window!) and generate a new SSH keypair with the `ssh-keygen` command. By default, the public and private keys will be placed in the `%USERPROFILE%/.ssh/` directory. The public key file we are interested in is named `id_rsa.pub`.

```
PS C:\Users\Christopher> ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (C:\Users\Christopher/.ssh/i
Created directory 'C:\Users\Christopher/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in C:\Users\Christopher/.ssh/
Your public key has been saved in C:\Users\Christopher/.ssh/id_r
```

```
The key fingerprint is:
SHA256:/mjkrJOQbRzCAwlSPYVBNcuxntm/Ms5/MMC15dCRrMc christopher@C
The key's randomart image is:
+---[RSA 2048]----+
|oo.+o==    o.o   |
|. o +. =  o =    |
|   o .+. . B     |
|    +..+o o E    |
|     *+.S. .     |
|    o +...o      |
|     o =. .o     |
|      o.*o ..    |
|      .=+++.     |
+----[SHA256]-----+
PS C:\Users\Christopher>
```

Copy SSH Key to Remote Linux Device

Next, we use the below PowerShell one-line command to copy the contents of the
id_rsa.pub public key to a remote Linux device. Replace the {IP-ADDRESS-OR-
FQDN} with the IP address or FQDN (Fully Qualified Domain Name) of the remote Linux
device you would like to copy the public key to.

```
type $env:USERPROFILE\.ssh\id_rsa.pub | ssh {IP-ADDRESS-OR-FQDN}
```

An example of this command is shown below. In this example, I am copying the
contents of the id_rsa.pub public key to a remote Linux device at IP address
192.168.30.31.

```
PS C:\Users\Christopher> type $env:USERPROFILE\.ssh\id_rsa.pub |
The authenticity of host '192.168.30.31 (192.168.30.31)' can't b
ECDSA key fingerprint is SHA256:mTD0/WNCVZ/p/PFSkNDmLJtzIGb5eD7q
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '192.168.30.31' (ECDSA) to the list o
christopher@192.168.30.31's password:
```

```
PS C:\Users\Christopher>
```

Test Passwordless SSH Connectivity to Remote Linux Device

Finally, verify that you can SSH to the remote Linux device with the `ssh` command. An example to a remote Linux device at IP address 192.168.30.31 is shown below. Note how a password did not need to be entered in order for us to establish SSH connectivity to the remote Linux device.

```
PS C:\Users\Christopher> ssh 192.168.30.31
Last login: Sat May 23 12:44:51 2020 from 192.168.10.139
[christopher@linux ~]$ who
christopher pts/0        2020-05-24 19:35 (192.168.10.113)
```

References

The instructions for this blog post were heavily inspired by Scott Hanselman's blog post on the subject.