Infra Blog

By Rob Heygele

Backup ASA config with PowerShell

11/04/2016 LEAVE A COMMENT (HTTPS://HEGGEL4.WORDPRESS.COM/2016/04/11/BACKUP-ASA-CONFIG-WITH-POWERSHELL/#RESPOND)

During my years in the networking business one of my frustrations is that it is very hard to backup the configuration of an A
There are some commercial products like Solarwinds that can accomplish this goal, but it costs money. An open source alter
like Rancid is also available but is pretty hard to configure.
Determined to find a solution I started searching the internet and came across some PowerShell scripts. I'm not a PowerShel
specialist, but I do know how to put together the separate scripts. So to be clear, I did not invent the scipts I just put them tog

So let's take a look at the script:

Read-Host "Enter Password" -AsSecureString | ConvertFrom-SecureString | Out-File c:\<map>\cred01.txt
–I don't want to sent the password of the ASA user plain over the network. So with the above line I make sure the password
encrypted. It is possible to convert the password back to plain text, but then you'll need access to the server. So it is not rocks
save, but safer then sending the password in plain text over the internet. If you make sure that the useraccount only has mini
rights on the ASA, there is minimal change of getting unwanted guests on your ASA. The line converts the plain password t
encrypted password and writes it to a .txt file.

$ASApw = Get-Content "c:\<map>\cred01.txt" | ConvertTo-SecureString #-AsPlainText #-Force
$BSTR = [System.Runtime.InteropServices.Marshal]::SecureStringToBSTR($ASApw)
$ASApw = [System.Runtime.InteropServices.Marshal]::PtrToStringAuto($BSTR)
–The above three lines are needed to convert the encrypted password from the credentials file. This is needed because the AS
unable to read an encrypted password.

$ASAIP = "<ip address>"
$ASAUser = "<username>"
$ASAEnablepw = $ASApw

```
#Modifies the ASA firewall
#Starts by writing a "commands" file#
echo en >>unicode.txt
echo $ASAEnablepw >>unicode.txt
echo "conf t" >>unicode.txt
echo "no pager" >>unicode.txt
echo "show run" >>unicode.txt
echo "pager 24" >>unicode.txt
echo "copy running-config startup-config" >>unicode.txt
echo "running-config" >>unicode.txt
echo exit >>unicode.txt
echo exit >>unicode.txt
```

```
#Converts the file to ASCII format (separate file)#
$lines = gc "unicode.txt"
$lines | out-file -encoding Ascii -filepath commands.txt
```
–The above lines writes the actual ASA commands to the commands.txt file.

#Using the command file and plink.exe connects and runs the commands#
c:/Windows/System32/plink.exe -ssh -l $ASAUser -pw $ASApw $ASAIP -m commands.txt > "c:\<map>\ASA.txt"
–To make things work you need to download the Plink tool. It is the command line version of Putty. It can be downloaded fc
put the tool in de c:\windows\system32 folder, but you can place it everywhere you want. This line writes the configuration
ASA to an .txt file.

#removes the files it created earlier#
del unicode.txt
del commands.txt

As you can see it's actually a pretty easy script an above all it's free.
To make a daily backup, create a task through "Task scheduler".

FILED UNDER CISCO, CONFIGURATION, MONITORING, SECURITY