

Module 7

PowerShell Remoting

Activating and Using
Configuring Connections
Constraints Endpoints
Using SSL
Remoting in Workgroups

Page • 1



1

Enabling/Disabling PSRemoting

How to enable and disable PSRemoting

- **Enabling PSRemoting**
 - WinRM quick configuration
 - Setting permissions for all endpoints
- **Test PSRemoting**
 - enter a remote session
- **Disabling PSRemoting**
 - WinRM still runs
 - permissions are restored (group Network set All Operations to deny)

```
Enable-PSRemoting  
Enable-PSRemoting -Confirm:$False
```

```
Enter-PSSession -Computername Localhost
```

```
Disable-PSRemoting  
Disable-PSRemoting -Confirm:$False
```

Page • 2



2

Using PSRemoting



How to execute cmdlets and scripts remotely.

- **Parameter 'Computer' of cmdlet**

- does not work always
- Hint: DCOM instead of WinRM

- **Invoke-Command**

- -Computersname or -Session
- -ScriptBlock
- -FilePath
- -AsJob

- **Enter-PSSession**

- -Computersname or -Session
- -Credential

Page • 3



3

Using session



How to use sessions in PSRemoting.

"A session is an environment in which
Windows PowerShell runs."
(get-help about_modules)

- **Create a session**

```
$Session = New-PSSession -Computersname Srv3
```

- **Use a session**

```
Invoke-Command -Session $Session -ScriptBlock { ... }
```

- **Disconnect a session**

- and reconnect

```
Disconnect-PSSession -Session $Session  
Get-PSSession -Computersname Srv2  
Reconnect-PSSession -Session $Session
```

- **End a session?**

```
Remove-PSSession -Session $Session
```

Page • 4

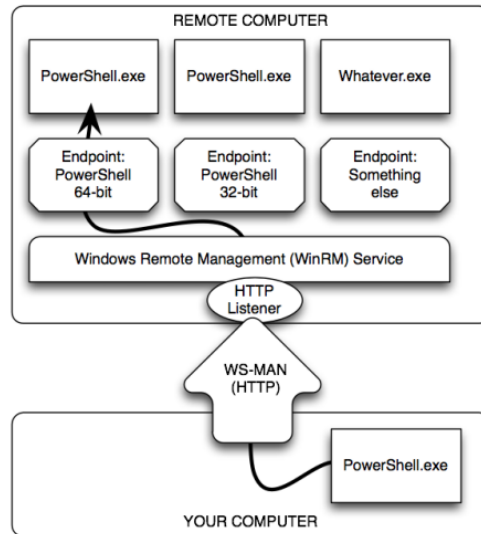


4

Architecture of PSRemoting



How PSRemoting is working



Source: <https://www.penflip.com/powershellorg/secrets-of-powershell-remoting/blob/master/remoting-basics.txt>

Page • 5



5



Do You Have Any Questions?

Page • 10



10