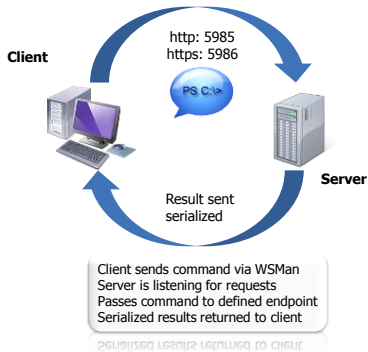


How It Works



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Session Configurations

PowerShell 3 has several default session configurations

- Get-PSSessionConfiguration

Default sessions can be modified

- Set-PSSessionConfiguration

Session configurations can be disabled and enabled

New session configurations can be defined (outside the scope of this class)

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WSMan Security

Default authentication is Kerberos

- Mutual authentication

Other options available:

- Basic
- Digest
- Certificate
- CredSSP
- Negotiate

Traffic encrypted by default

- Can be encrypted again and secured by SSL

Requires administrator access by default

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Enabling and Configuring

Enable and Configure Remoting

- Must run elevated
- Run once per machine

Enable-PSRemoting cmdlet

- Runs Set-WSManQuickConfig
- Configures WinRM to AutoStart
- Configures firewall settings
- Registers session configurations and listeners

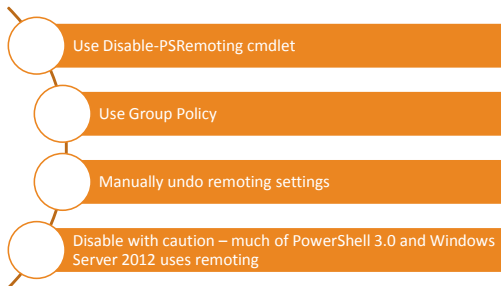
Use Group Policy

Remoting turned **off** by default in 2.0

Remoting turned **on** by default in Windows Server 2012 and Windows 8

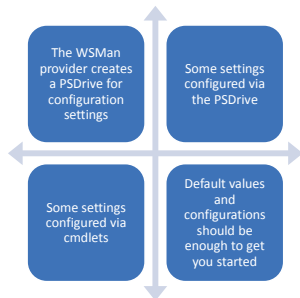
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Disabling Remoting



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The WSMAN Provider



PS C:\> help wsman

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Trusted Hosts

For non-domain machines you can specify who you trust

- Configure via WSMAN PSDrive
- Configure via Group Policy
- DO NOT SET TO *

Configured on the client side

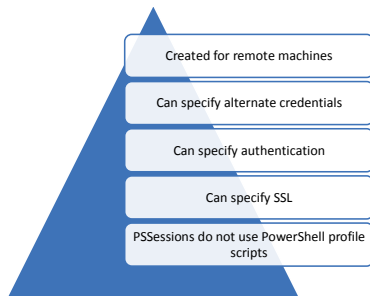
Using SSL still the better option

```
PS C:\> set-item WSMAN:\localhost\Client\TrustedHosts *.globomantics.local
```

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Enabling and Configuring PowerShell Remoting

PSSessions



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PSSessions

Enter-PSSession

- Use interactively in the console or PowerShell ISE
- Like SSH
- Use Exit-PSSession to quit

New-PSSession

- Create persistent PSSessions to one or more remote computers
- Can be used interactively
- Can be used to run remote commands

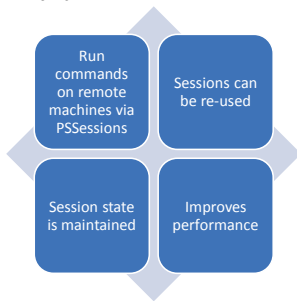
Sessions close when PowerShell ends

- Or use Remove-PSSession

Sessions can also be disconnected and reconnected (beyond the scope of this course)

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Invoke-Command



```
PS C:\> invoke-command -scriptblock {dir c:\}  
-Session $mysessions
```

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Using PSSessions

Advanced Remoting Topics

Implicit Remoting

Disconnected Sessions

Constrained or Delegated endpoints

PowerShell Workflow

Watch for future TrainSignal courses or webinars

PowerShell in Depth: An Administrator's Guide by
Don Jones, Richard Siddaway & Jeffery Hicks

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Lab

1. If you have not already done so, enable PowerShell remoting.
2. Enter an interactive remote session with another computer, or use your computername. Run some commands.
3. Create a persistent PSSession for a remote computer, or use your computername. Enter the session and run some commands.
4. Remove all your PSSessions.

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