NAME
    Get-PSSession

SYNOPSIS
    Gets the Windows PowerShell sessions on local and remote computers.

SYNTAX
    Get-PSSession [-ConnectionUri] <Uri[]> [-AllowRedirection] [-Authentication
    {Default | Basic | Negotiate | NegotiateWithImplicitCredential | Credssp |
    Digest | Kerberos}] [-CertificateThumbprint <String>] [-ConfigurationName
    <String>] [-Credential <PSCredential>] -InstanceId <Guid[]> [-SessionOption
    <PSSessionOption>] [-State {All | Opened | Disconnected | Closed | Broken}]
    [-ThrottleLimit <Int32>] [<CommonParameters>]

    Get-PSSession [-ConnectionUri] <Uri[]> [-AllowRedirection] [-Authentication
    {Default | Basic | Negotiate | NegotiateWithImplicitCredential | Credssp |
    Digest | Kerberos}] [-CertificateThumbprint <String>] [-ConfigurationName
    <String>] [-Credential <PSCredential>] [-Name <String[]>] [-SessionOption
    <PSSessionOption>] [-State {All | Opened | Disconnected | Closed | Broken}]
    [-ThrottleLimit <Int32>] [<CommonParameters>]

    Get-PSSession [-ComputerName] <String[]> [-ApplicationName <String>]
    [-Authentication {Default | Basic | Negotiate |
    NegotiateWithImplicitCredential | Credssp | Digest | Kerberos}]
    [-CertificateThumbprint <String>] [-ConfigurationName <String>] [-Credential
    <PSCredential>] [-Name <String[]>] [-Port <Int32>] [-SessionOption
    <PSSessionOption>] [-State {All | Opened | Disconnected | Closed | Broken}]
    [-ThrottleLimit <Int32>] [-UseSSL] [<CommonParameters>]

    Get-PSSession [-ComputerName] <String[]> [-ApplicationName <String>]
    [-Authentication {Default | Basic | Negotiate |
    NegotiateWithImplicitCredential | Credssp | Digest | Kerberos}]
    [-CertificateThumbprint <String>] [-ConfigurationName <String>] [-Credential
    <PSCredential>] -InstanceId <Guid[]> [-Port <Int32>] [-SessionOption
    <PSSessionOption>] [-State {All | Opened | Disconnected | Closed | Broken}]
    [-ThrottleLimit <Int32>] [-UseSSL] [<CommonParameters>]

    Get-PSSession [-ConfigurationName <String>] -InstanceId <Guid[]> [-State {All
    | Opened | Disconnected | Closed | Broken}] -VMId <Guid[]> [<CommonParameters>]

    Get-PSSession [-ConfigurationName <String>] -ContainerId <String[]> [-Name
    <String[]>] [-State {All | Opened | Disconnected | Closed | Broken}]
    [<CommonParameters>]

    Get-PSSession [-ConfigurationName <String>] -ContainerId <String[]>
    -InstanceId <Guid[]> [-State {All | Opened | Disconnected | Closed | Broken}]
    [<CommonParameters>]

    Get-PSSession [-ConfigurationName <String>] [-Name <String[]>] [-State {All |
    Opened | Disconnected | Closed | Broken}] -VMId <Guid[]> [<CommonParameters>]

    Get-PSSession [-ConfigurationName <String>] [-Name <String[]>] [-State {All |
    Opened | Disconnected | Closed | Broken}] -VMName <String[]>
    [<CommonParameters>]

    Get-PSSession [-ConfigurationName <String>] -InstanceId <Guid[]> [-State {All
    | Opened | Disconnected | Closed | Broken}] -VMName <String[]>
    [<CommonParameters>]

    Get-PSSession [-Id] <Int32[]> [<CommonParameters>]

    Get-PSSession [-InstanceId <Guid[]>] [<CommonParameters>]

    Get-PSSession [-Name <String[]>] [<CommonParameters>]

DESCRIPTION
    The Get-PSSession cmdlet gets the user-managed Windows PowerShell sessions (
    PSSessions) on local and remote computers.

    Starting in Windows PowerShell 3.0, sessions are stored on the computers at
    the remote end of each connection. You can use the ComputerName or
    ConnectionUri parameters of Get-PSSession to get the sessions that connect to
    the local computer or remote computers, even if they were not created in the
    current session.

Without parameters, Get-PSSession gets all sessions that were created in the current session.

Use the filtering parameters, including Name , ID , InstanceID , State , ApplicationName , and ConfigurationName to select from among the sessions that Get-PSSession returns.

Use the remaining parameters to configure the temporary connection in which the Get-PSSession command runs when you use the ComputerName or ConnectionUri parameters.

NOTE: In Windows PowerShell 2.0, without parameters, Get-PSSession gets all sessions that were created in the current session. The ComputerName parameter gets sessions that were created in the current session and connect to the specified computer.

For more information about Windows PowerShell sessions, see about_PSSessions (http://go.microsoft.com/fwlink/?LinkID=135181).

PARAMETERS

-AllowRedirection [<SwitchParameter>]

Indicates that this cmdlet allows redirection of this connection to an alternate Uniform Resource Identifier (URI). By default, Windows PowerShell does not redirect connections.

This parameter configures the temporary connection that is created to run a Get-PSSession command with the ConnectionUri parameter.

This parameter was introduced in Windows PowerShell 3.0.

Required?	false
Position?	named
Default value	False
Accept pipeline input?	False
Accept wildcard characters?	false

-ApplicationName <String>

Specifies the name of an application. This cmdlet connects only to sessions that use the specified application.

Enter the application name segment of the connection URI. For example, in the following connection URI, the application name is WSMan: `http://localhost:5985/WSMAN`. The application name of a session is stored in the Runspace.ConnectionInfo.AppName property of the session.

The value of this parameter is used to select and filter sessions. It does not change the application that the session uses.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

-Authentication <AuthenticationMechanism>

Specifies the mechanism that is used to authenticate credentials for the session in which the Get-PSSession command runs.

This parameter configures the temporary connection that is created to run a Get-PSSession command with the ComputerName or ConnectionUri parameter.

The acceptable values for this parameter are:

- Default

- Basic

- Credssp

- Digest

- Kerberos

- Negotiate

- NegotiateWithImplicitCredential.

The default value is Default.

For information about the values of this parameter, see the description of the AuthenticationMechanism Enumerationhttp://go.microsoft.com/fwlink/?LinkID=144382 (http://go.microsoft.com/fwlink/?LinkID=144382) in the Microsoft Developer Network (MSDN) library.

CAUTION: Credential Security Support Provider (CredSSP) authentication, in which the user's credentials are passed to a remote computer to be authenticated, is designed for commands that require authentication on more than one resource, such as accessing a remote network share. This mechanism increases the security risk of the remote operation. If the remote computer is compromised, the credentials that are passed to it can be used to control the network session.
This parameter was introduced in Windows PowerShell 3.0.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	False
Accept wildcard characters?	false

-CertificateThumbprint <String>
Specifies the digital public key certificate (X509) of a user account that has permission to create the session in which the Get-PSSession command runs. Enter the certificate thumbprint of the certificate.

This parameter configures the temporary connection that is created to run a Get-PSSession command with the ComputerName or ConnectionUri parameter.

Certificates are used in client certificate-based authentication. They can be mapped only to local user accounts; they do not work with domain accounts.

To get a certificate thumbprint, use a Get-Item or Get-ChildItem command in the Windows PowerShell Cert: drive.

This parameter was introduced in Windows PowerShell 3.0.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	False
Accept wildcard characters?	false

-ComputerName <String[]>
Specifies an array of names of computers. Gets the sessions that connect to the specified computers. Wildcard characters are not permitted. There is no default value.

Beginning in Windows PowerShell 3.0, PSSession objects are stored on the computers at the remote end of each connection. To get the sessions on the specified computers, Windows PowerShell creates a temporary connection to each computer and runs a Get-PSSession command.

Type the NetBIOS name, an IP address, or a fully-qualified domain name of one or more computers. To specify the local computer, type the computer name, localhost, or a dot (.).

Note: This parameter gets sessions only from computers that run Windows PowerShell 3.0 or later versions of Windows PowerShell. Earlier versions do not store sessions.

Required?	true
Position?	0
Default value	None
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

-ConfigurationName <String>
Specifies the name of a configuration. This cmdlet gets only to sessions that use the specified session configuration.

Enter a configuration name or the fully qualified resource URI for a session configuration. If you specify only the configuration name, the following schema URI is prepended: http://schemas.microsoft.com/powershell. The configuration name of a session is stored in the ConfigurationName property of the session.

The value of this parameter is used to select and filter sessions. It does not change the session configuration that the session uses.

For more information about session configurations, see about_Session_Configurations.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

-ConnectionUri <Uri[]>

Specifies a URI that defines the connection endpoint for the temporary session in which the Get-PSSession command runs. The URI must be fully qualified.

This parameter configures the temporary connection that is created to run a Get-PSSession command with the ConnectionUri parameter.

The format of this string is:

<Transport>://<ComputerName>:<Port>/<ApplicationName>

The default value is: http://localhost:5985/WSMAN.

If you do not specify a ConnectionUri , you can use the UseSSL , ComputerName , Port , and ApplicationName parameters to specify the ConnectionURI values. Valid values for the Transport segment of the URI are HTTP and HTTPS. If you specify a connection URI with a Transport segment, but do not specify a port, the session is created with standards ports: 80 for HTTP and 443 for HTTPS. To use the default ports for Windows PowerShell remoting, specify port 5985 for HTTP or 5986 for HTTPS.

If the destination computer redirects the connection to a different URI, Windows PowerShell prevents the redirection unless you use the AllowRedirection parameter in the command.

This parameter was introduced in Windows PowerShell 3.0.

This parameter gets sessions only from computers that run Windows PowerShell 3.0 or later versions of Windows PowerShell. Earlier versions do not store sessions.

Required?	true
Position?	0
Default value	None
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

-ContainerId <String[]>

Specifies an array of IDs of containers. This cmdlet starts an interactive session with each of the specified containers. To see the containers that are available to you, use the Get-Container cmdlet.

Required?	true
Position?	named
Default value	None
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

-Credential <PSCredential>

Specifies a user credential. This cmdlet runs the command with the permissions of the specified user. Specify a user account that has permission to connect to the remote computer and run a Get-PSSession command. The default is the current user. Type a user name, such as `User01`, `Domain01\User01`, or `User@Domain.com`, or enter a PSCredential object, such as one returned by the Get-Credential cmdlet. When you type a user name, this cmdlet prompts you for a password.

This parameter configures to the temporary connection that is created to run a Get-PSSession command with the ComputerName or ConnectionUri parameter.

This parameter was introduced in Windows PowerShell 3.0.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	False
Accept wildcard characters?	false

-Id <Int32[]>

Specifies an array of session IDs. This cmdlet gets only the sessions with the specified IDs. Type one or more IDs, separated by commas, or use the range operator (..) to specify a range of IDs. You cannot use the ID parameter together with the ComputerName parameter.

An ID is an integer that uniquely identifies the user-managed sessions in the current session. It is easier to remember and type than the InstanceId , but it is unique only within the current session. The ID of a session is stored in the ID property of the session.

Required?	true
Position?	0
Default value	None
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

-InstanceId <Guid[]>

Specifies an array of instance IDs of sessions. This cmdlet gets only the sessions with the specified instance IDs.

The instance ID is a GUID that uniquely identifies a session on a local or remote computer. The InstanceID is unique, even when you have multiple sessions running in Windows PowerShell.

The instance ID of a session is stored in the InstanceID property of the session.

Required?	true
Position?	named
Default value	None
Accept pipeline input?	False
Accept wildcard characters?	false

-Name <String[]>

Specifies an array of session names. This cmdlet gets only the sessions that have the specified friendly names. Wildcard characters are permitted.

The friendly name of a session is stored in the Name property of the session.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

-Port <Int32>

Specifies the specified network port that is used for the temporary connection in which the Get-PSSession command runs. To connect to a remote computer, the remote computer must be listening on the port that the connection uses. The default ports are 5985, which is the WinRM port for HTTP, and 5986, which is the WinRM port for HTTPS.

Before using an alternate port, you must configure the WinRM listener on the remote computer to listen at that port. To configure the listener, type the following two commands at the Windows PowerShell prompt:

`Remove-Item -Path WSMan:\Localhost\listener\listener* -Recurse`

`New-Item -Path WSMan:\Localhost\listener -Transport http -Address * -Port <port-number>`

This parameter configures to the temporary connection that is created to run a Get-PSSession command with the ComputerName or ConnectionUri

parameter.

Do not use the Port parameter unless you must. The Port set in the command applies to all computers or sessions on which the command runs. An alternate port setting might prevent the command from running on all computers.

This parameter was introduced in Windows PowerShell 3.0.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	False
Accept wildcard characters?	false

-SessionOption <PSSessionOption>
Specifies advanced options for the session. Enter a SessionOption object, such as one that you create by using the New-PSSessionOption cmdlet, or a hash table in which the keys are session option names and the values are session option values.

The default values for the options are determined by the value of the $PSSessionOption preference variable, if it is set. Otherwise, the default values are established by options set in the session configuration.

The session option values take precedence over default values for sessions set in the $PSSessionOption preference variable and in the session configuration. However, they do not take precedence over maximum values, quotas or limits set in the session configuration.

For a description of the session options, including the default values, see New-PSSessionOption. For information about the $PSSessionOption preference variable, see about_Preference_Variables (http://go.microsoft.com/fwlink/?LinkID=113248) in the Microsoft TechNet library. For more information about session configurations, see about_Session_Configurations (http://go.microsoft.com/fwlink/?LinkID=145152).

Required?	false
Position?	named
Default value	None
Accept pipeline input?	False
Accept wildcard characters?	false

-State <SessionFilterState>
Specifies a session state. This cmdlet gets only sessions in the specified state. The acceptable values for this parameter are: All, Opened, Disconnected, Closed, and Broken. The default value is All.

The session state value is relative to the current sessions. Sessions that were not created in the current sessions and are not connected to the current session have a state of Disconnected even when they are connected to a different session.

The state of a session is stored in the State property of the session.

This parameter was introduced in Windows PowerShell 3.0.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	False
Accept wildcard characters?	false

-ThrottleLimit <Int32>
Specifies the maximum number of concurrent connections that can be established to run the Get-PSSession command. If you omit this parameter or enter a value of 0 (zero), the default value, 32, is used. The throttle limit applies only to the current command, not to the session or to the computer.

This parameter was introduced in Windows PowerShell 3.0.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	False

```
        Accept wildcard characters?  false

    -UseSSL [<SwitchParameter>]
        Indicates that this cmdlet uses the Secure Sockets Layer (SSL) protocol to
        establish the connection in which the Get-PSSession command runs. By
        default, SSL is not used. If you use this parameter, but SSL is not
        available on the port used for the command, the command fails.

        This parameter configures the temporary connection that is created to run
        a Get-PSSession command with the ComputerName parameter.

        This parameter was introduced in Windows PowerShell 3.0.

        Required?                    false
        Position?                    named
        Default value                False
        Accept pipeline input?       False
        Accept wildcard characters?  false

    -VMId <Guid[]>
        Specifies an array of ID of virtual machines. This cmdlet starts an
        interactive session with each of the specified virtual machines. To see
        the virtual machines that are available to you, use the following command:

        `Get-VM | Select-Object -Property Name, ID`

        Required?                    true
        Position?                    named
        Default value                None
        Accept pipeline input?       True (ByPropertyName)
        Accept wildcard characters?  false

    -VMName <String[]>
        Specifies an array of names of virtual machines. This cmdlet starts an
        interactive session with each of the specified virtual machines. To see
        the virtual machines that are available to you, use the Get-VM cmdlet.

        Required?                    true
        Position?                    named
        Default value                None
        Accept pipeline input?       True (ByPropertyName)
        Accept wildcard characters?  false

    <CommonParameters>
        This cmdlet supports the common parameters: Verbose, Debug,
        ErrorAction, ErrorVariable, WarningAction, WarningVariable,
        OutBuffer, PipelineVariable, and OutVariable. For more information, see
        about_CommonParameters (https:/go.microsoft.com/fwlink/?LinkID=113216).

INPUTS
    None
        You cannot pipe input to this cmdlet.


OUTPUTS
    System.Management.Automation.Runspaces.PSSession



NOTES


        This cmdlet gets user-managed sessions PSSession objects" such as those
        that are created by using the New-PSSession, Enter-PSSession *, and
        Invoke-Command cmdlets. It does not get the system-managed session that is
        created when you start Windows PowerShell. Starting in Windows PowerShell
        3.0, PSSession * objects are stored on the computer that is at the
        server-side or receiving end of a connection. To get the sessions that are
        stored on the local computer or a remote computer, Windows PowerShell
        establishes a temporary session to the specified computer and runs query
        commands in the session. To get sessions that connect to a remote
        computer, use the ComputerName or ConnectionUri parameters to specify the
        remote computer. To filter the sessions that Get-PSSession gets, use the
        Name , ID , InstanceID , and State parameters. Use the remaining
        parameters to configure the temporary session that Get-PSSession * uses.
        When you use the ComputerName or ConnectionUri parameters, Get-PSSession *
        gets only sessions from computers running Windows PowerShell 3.0 and later
```

versions of Windows PowerShell. The value of the State property of a PSSession is relative to the current session. Therefore, a value of Disconnected means that the PSSession is not connected to the current session. However, it does not mean that the PSSession is disconnected from all sessions. It might be connected to a different session. To determine whether you can connect or reconnect to the PSSession from the current session, use the Availability * property.

An Availability value of None indicates that you can connect to the session. A value of Busy indicates that you cannot connect to the PSSession because it is connected to another session.

For more information about the values of the State property of sessions, see RunspaceState Enumerationhttp://msdn.microsoft.com/en-us/library/windows/desktop/system.management.automation.runspaces.runspacestate(v=VS.85).aspx (http://msdn.microsoft.com/en-us/library/windows/desktop/system.management.automation.runspaces.runspacestate(v=VS.85).aspx) in the MSDN library.

For more information about the values of the Availability property of sessions, see RunspaceAvailability Enumerationhttp://msdn.microsoft.com/en-us/library/windows/desktop/system.management.automation.runspaces.runspaceavailability(v=vs.85).aspx (http://msdn.microsoft.com/en-us/library/windows/desktop/system.management.automation.runspaces.runspaceavailability(v=vs.85).aspx).

Example 1: Get sessions created in the current session

```
PS C:\>Get-PSSession
```

This command gets all of the PSSessions that were created in the current session. It does not get PSSessions that were created in other sessions or on other computers, even if they connect to this computer.

Example 2: Get sessions connected to the local computer

```
PS C:\>Get-PSSession -ComputerName "localhost"
```

This command gets the PSSessions that are connected to the local computer. To indicate the local computer, type the computer name, localhost, or a dot (.)

The command returns all of the sessions on the local computer, even if they were created in different sessions or on different computers.

Example 3: Get sessions connected to a computer

```
PS C:\>Get-PSSession -ComputerName "Server02"
 Id Name            ComputerName    State         ConfigurationName
Availability
 -- ----            ------------    -----         -----------------
------------
  2 Session3        Server02       Disconnected  ITTasks
Busy
  1 ScheduledJobs   Server02       Opened        Microsoft.PowerShell
Available
  3 Test            Server02       Disconnected  Microsoft.PowerShell
Busy
```

This command gets the PSSessions that are connected to the Server02 computer.

The command returns all of the sessions on Server02, even if they were created in different sessions or on different computers.

The output shows that two of the sessions have a Disconnected state and a Busy availability. They were created in different sessions and are currently in use. The ScheduledJobs session, which is Opened and Available, was created in the current session.

Example 4: Save results of this command

```
PS C:\>New-PSSession -ComputerName Server01, Server02, Server03
PS C:\>$s1, $s2, $s3 = Get-PSSession
```

This example shows how to save the results of a Get-PSSession command in multiple variables.

The first command uses the New-PSSession cmdlet to create PSSessions on three remote computers.

The second command uses a Get-PSSession cmdlet to get the three PSSessions . It then saves each of the PSSessions in a separate variable.

When Windows PowerShell assigns an array of objects to an array of variables, it assigns the first object to the first variable, the second object to the second variable, and so on. If there are more objects than variables, it assigns all remaining objects to the last variable in the array. If there are more variables than objects, the extra variables are not used.

Example 5: Delete a session by using an instance ID

```
PS C:\>Get-PSSession | Format-Table -Property ComputerName, InstanceID
PS C:\>$s = Get-PSSession -InstanceID a786be29-a6bb-40da-80fb-782c67f7db0f
PS C:\>Remove-PSSession -Session $s
```

This example shows how to get a PSSession by using its instance ID, and then to delete the PSSession .

The first command gets all of the PSSessions that were created in the current session. It sends the PSSessions to the Format-Table cmdlet, which displays the ComputerName and InstanceID properties of each PSSession .

The second command uses the Get-PSSession cmdlet to get a particular PSSession and to save it in the $s variable. The command uses the InstanceID parameter to identify the PSSession .

The third command uses the Remove-PSSession cmdlet to delete the PSSession in the $s variable.

Example 6: Get a session that has a particular name

The first command gets sessions on the Server02 and Server12 remote computers that have names that begin with BackupJob and use the ITTasks session configuration.The command uses the *Name* parameter to specify the name pattern and the *ConfigurationName* parameter to specify the session configuration. The value of the *SessionOption* parameter is a hash table that sets the value of the *OperationTimeout* to 240000 milliseconds (4 minutes). This setting gives the command more time to complete.The *ConfigurationName* and *SessionOption* parameters are used to configure the temporary sessions in which the **Get-PSSession** cmdlet runs on each computer.The output shows that the command returns the BackupJob04 session. The session is disconnected and the *Availability* is None, which indicates that it is not in use.

```
PS C:\>Get-PSSession -ComputerName Server02, Server12 -Name BackupJob*
-ConfigurationName ITTasks -SessionOption @{OperationTimeout=240000}
 Id Name            ComputerName    State         ConfigurationName
Availability
 -- ----            ------------    -----         -----------------
------------
  3 BackupJob04     Server02        Disconnected        ITTasks
  None
```

The second command uses the **Get-PSSession** cmdlet to get to the BackupJob04 session and the Connect-PSSession cmdlet to connect to the session. The command saves the session in the $s variable.

```
PS C:\>$s = Get-PSSession -ComputerName Server02 -Name BackupJob04
-ConfigurationName ITTasks | Connect-PSSession
```

The third command gets the session in the $s variable. The output shows that the **Connect-PSSession** command was successful. The session is in the **Opened** state and is available for use.

```
PS C:\>$s
Id Name            ComputerName    State         ConfigurationName
Availability
-- ----            ------------    -----         -----------------
------------
 5 BackupJob04     Server02        Opened        ITTasks
Available
```

The commands in this example find a session that has a particular name format and uses a particular session configuration and then connect to the session. You can use a command like this one to find a session in which a colleague started a task and connect to finish the task.

Example 7: Get a session by using its ID

```
PS C:\>Get-PSSession -Id 2
```

This command gets the PSSession with ID 2. Because the value of the ID property is unique only in the current session, the Id parameter is valid only for local commands.

RELATED LINKS

Online Version: http://go.microsoft.com/fwlink/?LinkId=821488
Connect-PSSession
Disconnect-PSSession
Receive-PSSession
Enter-PSSession
Exit-PSSession
Invoke-Command
New-PSSession
Remove-PSSession