

# Remote Server Administration Tools (RSAT) for Windows

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RSAT enables IT administrators to remotely manage roles and features in Windows Server from a computer that is running Windows 10 and Windows 7 Service Pack 1.

*Applies to:* Windows 10 - all editions, Windows 7 Service Pack 1, Windows Server 2019, Windows Server 2012 R2

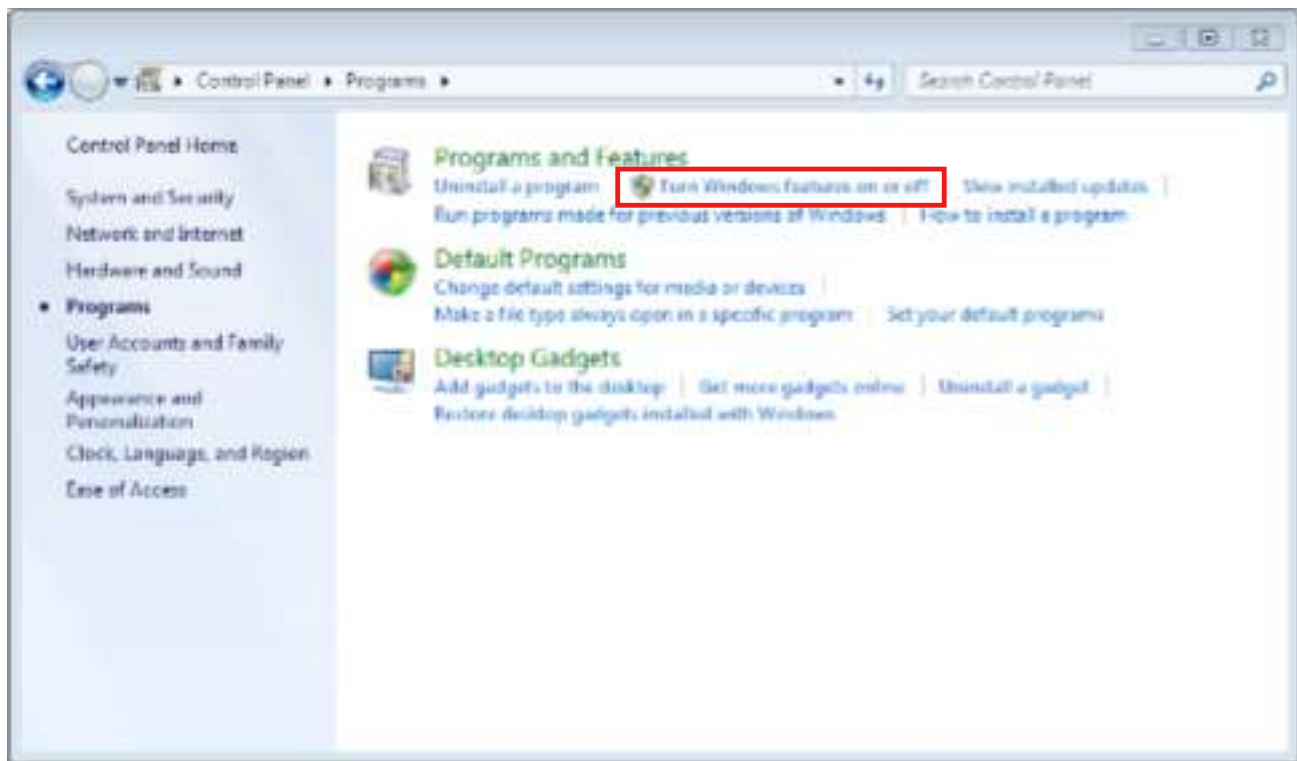
*Original KB number:* 2693643

## Introduction

You can't install RSAT on computers that are running Home or Standard editions of Windows. You can install RSAT only on Professional or Enterprise editions of the Windows client operating system. Unless the download page specifically states that RSAT applies to a beta, preview, or other prerelease version of Windows, you must be running a full (RTM) release of the Windows operating system to install and use RSAT. Some users have found ways of manually cracking or hacking the RSAT MSU to install RSAT on unsupported releases or editions of Windows. This behavior is a violation of the Windows end-user license agreement.

Installing RSAT is similar to installing Adminpak.msi in Windows 2000-based or Windows XP-based client computers. However, there's one major difference: in Windows 7, the tools aren't automatically available after you download and install RSAT. Enable the tools that you want to use by using Control Panel. To enable the tools, click **Start**, click **Control Panel**, click **Programs and Features**, and then click **Turn Windows features on or off**.

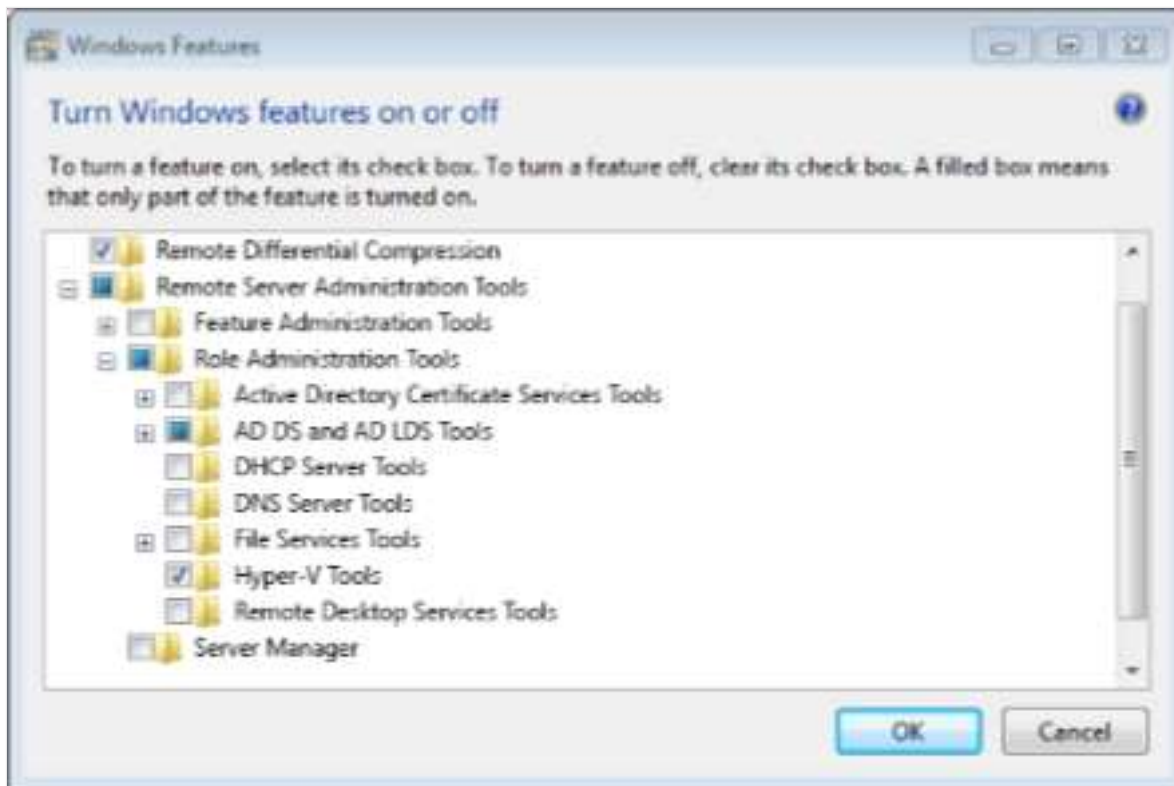
In the RSAT releases for Windows 10, tools are again all enabled by default. You can open **Turn Windows features on or off** to disable tools that you don't want to use for Windows 7.



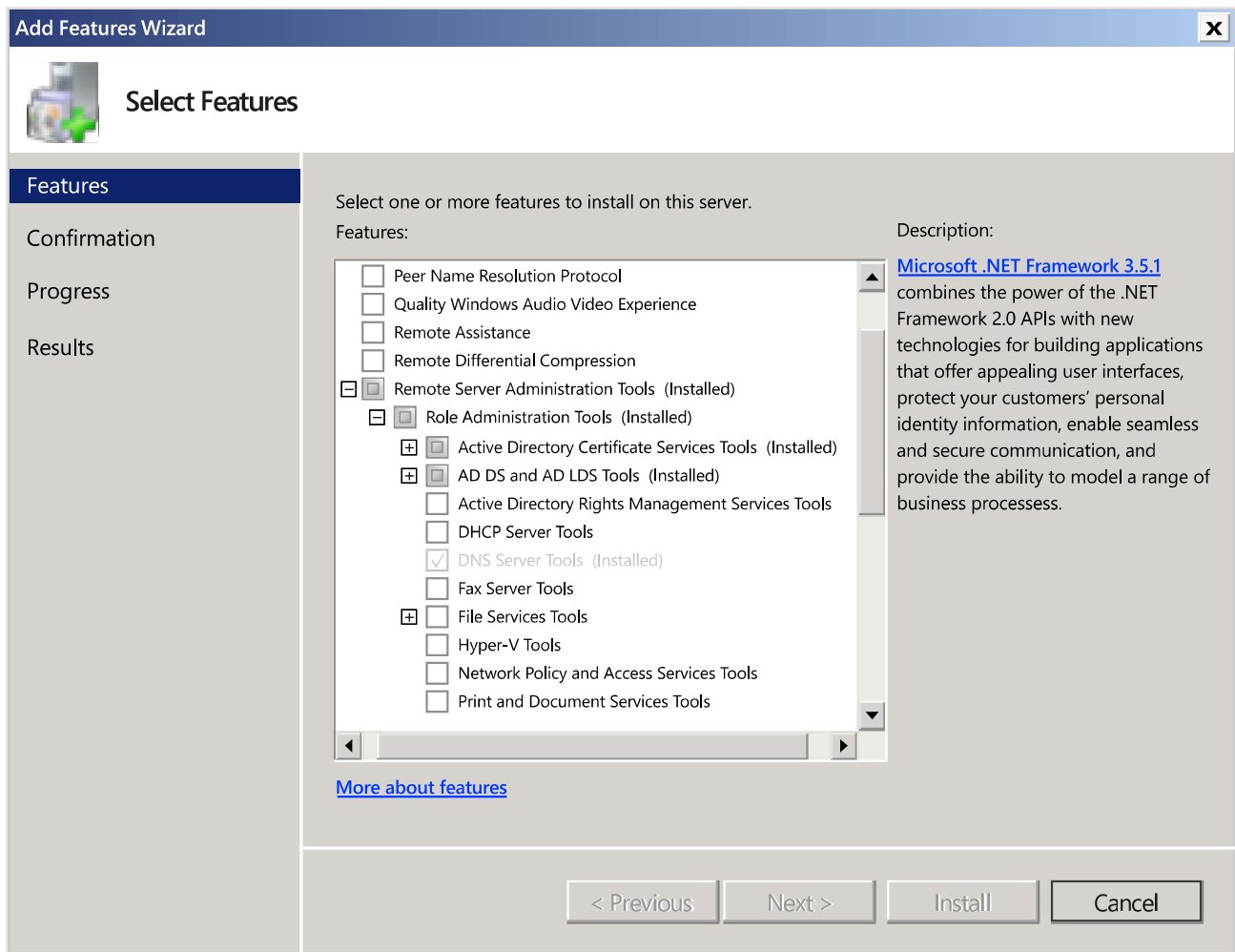
For RSAT in Windows 7, you must enable the tools for the roles and features that you want to manage after you run the downloaded installation package.

#### ! Note

You can't do the following changes for RSAT in Windows 8 or later versions.



If you have to install management tools in Windows Server 2012 R2 for specific roles or features that are running on remote servers, you don't have to install additional software. Start the Add Roles and Features Wizard in Windows Server 2012 R2 and later versions. Then, on the **Select Features** page, expand **Remote Server Administration Tools**, and then select the tools that you want to install. Complete the wizard to install your management tools.



## Download locations for RSAT

- [Remote Server Administration Tools for Windows 10](#)

## RSAT for Windows 10 platform and tools support matrix

[Expand table](#)

Remote Server Administration Tools Technology	Description	Manages technology in Windows Server 2012 R2	Manages technology in Windows Server 2016 Technical Preview and Windows Server 2012 R2
Active Directory Certificate Services (AD CS) tools	AD CS tools include the Certification Authority, Certificate Templates, Enterprise PKI, and Online Responder Management snap-ins.	√	√
Active Directory Domain Services (AD DS) tools and Active Directory Lightweight Directory Services (AD LDS) tools	<p>AD DS and AD LDS tools include the following tools:</p> <ul style="list-style-type: none"> <li>- Active Directory Administrative Center</li> <li>- Active Directory Domains and Trusts</li> <li>- Active Directory Sites and Services</li> <li>- Active Directory Users and Computers</li> <li>- ADSI Edit</li> <li>- Active Directory module for Windows PowerShell</li> <li>- Tools such as               <ul style="list-style-type: none"> <li>• DCPromo.exe</li> <li>• LDP.exe</li> <li>• NetDom.exe</li> <li>• NTDSUtil.exe</li> <li>• RepAdmin.exe</li> <li>• DCDiag.exe</li> <li>• DSACLs.exe</li> <li>• DSAdd.exe</li> <li>• DSDBUtil.exe</li> <li>• DSMgmt.exe</li> <li>• DSMod.exe</li> <li>• DSMove.exe</li> <li>• DSQuery.exe</li> <li>• DSRm.exe</li> <li>• GPFixup.exe</li> </ul> </li> </ul>		√

Remote Server Administration Tools Technology	Description	Manages technology in Windows Server 2012 R2	Manages technology in Windows Server 2016 Technical Preview and Windows Server 2012 R2
	<ul style="list-style-type: none"> <li>• KSetup.exe</li> <li>• NITest.exe</li> <li>• NSLookup.exe</li> <li>• W32tm.exe</li> </ul>		
Best Practices Analyzer	Best Practices Analyzer cmdlets for Windows PowerShell	√	√
BitLocker Drive Encryption Administration Utilities	Manage-bde , Windows PowerShell cmdlets for BitLocker, BitLocker Recovery Password Viewer for Active Directory	√	√
DHCP Server tools	DHCP Server tools include the DHCP Management Console, the DHCP Server cmdlet module for Windows PowerShell, and the <b>Netsh</b> command-line tool.	√	√
DirectAccess, Routing, and Remote Access	<ul style="list-style-type: none"> <li>- Routing and Remote Access management console</li> <li>- Connection Manager Administration Kit console</li> <li>- Remote Access provider for Windows PowerShell</li> <li>- Web Application Proxy</li> </ul>	√	√
DNS Server tools	DNS Server tools include the DNS Manager snap-in, the DNS module for Windows PowerShell, and the <b>Dnscmd.exe</b> command-line tool.	√	√

Remote Server Administration Tools Technology	Description	Manages technology in Windows Server 2012 R2	Manages technology in Windows Server 2016 Technical Preview and Windows Server 2012 R2
<b>Failover Clustering tools</b>	Failover Clustering tools include Failover Cluster Manager, Failover Clusters (Windows PowerShell cmdlets), MSCluster.exe, Cluster-Aware Updating management console, Cluster-Aware Updating cmdlets for Windows PowerShell	√	√  GUI tools support Windows Server 2016 Technical Preview and Windows Server 2012 R2. Only PowerShell tools work in Windows Server 2012.
<b>File Services tools</b>	<p>File Services tools include the following tools:</p> <ul style="list-style-type: none"> <li>- Share and Storage Management tools</li> <li>- Distributed File System tools <ul style="list-style-type: none"> <li>• The DFS Management snap-in</li> <li>• The Dfsradmin.exe, Dfsrdiag.exe, Dfscmd.exe, Dfsdiag.exe, and Dfsutil.exe command-line tools</li> <li>• PowerShell modules for DFSN and DFSR</li> </ul> </li> <li>- File Server Resource Manager tools <ul style="list-style-type: none"> <li>• The File Server Resource Manager snap-in</li> </ul> </li> </ul>	√	√  The Share and Storage Management snap-in is deprecated after the release of Windows Server 2016. Storage Replica is new in Windows Server 2016 Technical Preview, and won't work in Windows Server 2012 R2.

Remote Server Administration Tools Technology	Description	Manages technology in Windows Server 2012 R2	Manages technology in Windows Server 2016 Technical Preview and Windows Server 2012 R2
	<ul style="list-style-type: none"> <li>• The Dirquota.exe, Filescrn.exe, and Storrep.exe command-line tools.</li> </ul> <p>- Services for NFS Administration tools</p> <p>- iSCSI management cmdlets for Windows PowerShell</p> <p>- Work Folders Management tools</p>		
Group Policy Management tools	Group Policy Management tools include Group Policy Management Console, Group Policy Management Editor, and Group Policy Starter GPO Editor.	√	√  Group Policy has some new features in Windows Server 2016 Technical Preview that aren't available on older operating systems.
Hyper-V tools	Hyper-V tools include the Hyper-V Manager snap-in and the Virtual Machine Connection remote access tool.	Hyper-V tools aren't part of Remote Server Administration Tools for Windows 10. These tools are available as part of Windows 10. You don't have to install RSAT to use the tools. The Hyper-V Manager console for Windows Server 2016 Technical Preview doesn't support managing Hyper-V	Hyper-V in Windows 10 can manage Hyper-V in Windows Server 2012 R2.



Remote Server Administration Tools Technology	Description	Manages technology in Windows Server 2012 R2	Manages technology in Windows Server 2016 Technical Preview and Windows Server 2012 R2
		servers running Server 2008 or Server 2008 R2.	
IP Address Management (IPAM) Management tools	IP Address Management client console	√  IPAM tools in Remote Server Administration Tools for Windows 10 can't be used to manage IPAM running in Windows Server 2012 R2.	√  IPAM tools in Remote Server Administration Tools for Windows 10 can't be used to manage IPAM running in Windows Server 2012 R2.
Network Adapter Teaming, or NIC Teaming	NIC Teaming management console	√	√
Network Controller	Network Controller PowerShell module	Not available	√
Network Load Balancing tools	Network Load Balancing tools include the Network Load Balancing Manager, Network Load Balancing Windows PowerShell cmdlets, and the <b>NLB.exe</b> and <b>WLBS.exe</b> command-line tools.	√	√
Remote Desktop Services tools	Remote Desktop Services tools include: - Remote Desktop snap-ins - RD Gateway Manager - <code>tsgateway.msc</code> - RD Licensing Manager - <code>licmgr.exe</code> - RD Licensing Diagnoser - <code>lsdiag.msc</code>	√	√

Remote Server Administration Tools Technology	Description	Manages technology in Windows Server 2012 R2	Manages technology in Windows Server 2016 Technical Preview and Windows Server 2012 R2
	Use Server Manager to administer all other RDS role services except RD Gateway and RD Licensing.		
Server for NIS tools	Server for NIS tools include an extension to the Active Directory Users and Computers snap-in, and the <b>Ypclear.exe</b> command-line tool	These tools aren't available in RSAT for Windows 10 and later releases.	
Server Manager	<p>Server Manager includes the Server Manager console.</p> <p>Remote management with Server Manager is available in Windows Server 2016 Technical Preview, Windows Server 2012 R2, and Windows Server 2012.</p>	√	√
Simple Mail Transfer Protocol (SMTP) Server tools	SMTP Server tools include the SMTP snap-in.	These tools aren't available in RSAT for Windows 8 and later releases.	
Storage Explorer tools	Storage Explorer tools include the Storage Explorer snap-in.	These tools aren't available in RSAT for Windows 8 and later releases.	
Storage Manager for Storage Area Network (SAN) tools	Storage Manager for SAN tools include the Storage Manager for SAN snap-in and the	These tools aren't available in RSAT for Windows 8 and later releases.	

Remote Server Administration Tools Technology	Description	Manages technology in Windows Server 2012 R2	Manages technology in Windows Server 2016 Technical Preview and Windows Server 2012 R2
	Provisionstorage.exe command-line tool.		
Volume Activation	Manage Volume Activation, vmw.exe	√	√
Windows System Resource Manager tools	Windows System Resource Manager tools include the Windows System Resource Manager snap-in and the <b>Wsrmc.exe</b> command-line tool.	√  WSRM has been deprecated in Windows Server 2012 R2. Tools for managing WSRM aren't available in RSAT for Windows 8.1 and later releases of RSAT.	
Windows Server Update Services tools	Windows Server Update Services tools include the Windows Server Update Services snap-in, WSUS.msc, and PowerShell cmdlets.	√	√

## RSAT for Windows 10, version 1809 or later versions

### ⓘ Note

You can't use the Turn Windows features on and off dialog from the Control Panel

Installing the RSAT Tools for Windows 10 version 1809 and later version is slightly different from earlier versions. RSAT is now part of the Operating System and can be installed via **Optional Features**.

To enable the tools, click **Start**, click **Settings**, click **Apps**, and then click **Optional features**, after that click on the panel **Add a feature** and enter Remote in the search bar.

## References

- [Deploy Remote Server Administration Tools](#)
  - [Remotely managing your Server Core using RSAT](#)
  - [Screencast: How to Install and Enable Microsoft RSAT \(Remote Server Administration Tools\) for Windows Vista](#)
  - [Using MMC Snap-ins and RSAT](#)
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