

All things WSMAN

<https://campus.barracuda.com/doc/98217337/>

Why WSMAN

Barracuda RMM Onsite Managers query WMI over the WS-Management Protocol. If the WS-Management protocol is not available on a device, Barracuda RMM Onsite Manager queries WMI over DCOM.

In order to use WS-Man, Windows Management Framework (WinRM 2.0) or greater must be installed. Below is a brief list of what frameworks are supported on their respective operating systems. Some of the following Operating Systems do not ship with the required Windows Management Framework and thus must have it installed separately.

When only WinRM 2.0 is available, we employ a hybrid DCOM + WSMAN solution. DCOM is used to get WMI metadata, and WSMAN is used to query the rest of the information

Operating systems supporting WinRM 2.0 with Windows Management Framework 2.0

- Windows Server 2008 with Service Pack 1 with KB968930
- Windows Server 2008 with Service Pack 2 with KB968930
- Windows Server 2003 with Service Pack 2 with KB968930
- Windows Vista with Service Pack 2 with KB968930
- Windows Vista with Service Pack 1 with KB968930
- Windows XP with Service Pack 3 with KB968930

Operating systems supporting WinRM 3.0 with Windows Management Framework 3.0

- Windows 7 SP1 with KB2506143
- Windows Server 2008 SP2 with KB2506143 (This update requires KB968930 before it can be installed)
- Windows Server 2008 R2 SP1 with KB2506146

Operating systems supporting WinRM 3.0 with Windows Management Framework

4.0 or later

- Windows 7 SP1 with KB2819745
- Windows Server 2008 R2 SP1 with KB2819745
- Windows Server 2012 with KB2799888
- Windows Server 2012 R2
- Windows 8.1
- Windows 10
- Windows Server 2016
- Windows Server 2019

Installing the Windows Management Framework through automation

The Install Microsoft Windows Management Framework script is available from the Update Center and can be deployed via Automated Tasks to install and configure the Windows Management Framework on supported devices.

- If the Windows Management Framework is updated, the system is rebooted and the task runs again after the next startup to complete the installation.

Simplified Deployment

The site prep tool installs and configures the latest available Windows Management Framework on the target device if it is not installed, or the installed version is not supported.

If the framework is installed, a reboot is not forced and the framework cannot be configured until the system is rebooted.

Operating systems, such as Windows 7, that ship with 2.0 do not have the 3.0 framework installed by simplified deployment.

If a supported version of the Windows Management Framework is already installed, the site prep tool only configures the device.

See [What is Simplified Deployment?](#)

Windows Prep Utility

The Windows Prep Utility can be run on both Workgroup and Domain systems. It will configure any supported Windows Management Framework versions installed on the device.

Manually Configuring the Windows Management Framework

- See [How to manually configure the Windows Management Framework](#).

Group Policy

The domain configuration guide includes policy settings for enabling WSMAN. See the latest version of the Domain Configuration Guide in the latest version of the [Barracuda RMM documentation](#).

Testing WSMAN outside of Barracuda RMM

You can test WSMAN functionality against a target device from Onsite Manager using the following command in the **Command Prompt**.

- `winrm e wmicimv2/* -dialect:wql -filter:"SELECT * FROM Win32_OperatingSystem" -remote:"192.168.1.100" -auth:negotiate -u:"MYDOMAIN\MWService"`

Alternatively, you can use the following PowerShell command to verify that WSMAN is enabled on the target device, and this will also provide the Stack version. This does not query WMI so it is not as comprehensive.

- `Test-WSMan -ComputerName 192.168.1.100`

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