

Network and Credentials

Autodesk Inventory Tool uses Microsoft Windows Management Instrumentation (WMI) to connect to and inventory networked computers. WMI by default uses TCP ports **135** (RPC) and **445** (WMI/SMB) in addition to dynamically assigned ports, typically in the range of **1024** to **1034**. A user account that has enough permission to query WMI on the target machine should be used. This can be a Domain Administrator account or a user account with specifically assigned permissions.

 If using **Windows Defender Firewall with Advanced Security** in your environment, the **Predefined Inbound Rules** to allow are the following:

- File and Printer Sharing
- Windows Management Instrumentation (WMI)

More information for enabling these via Group Policy can be found here:

<https://docs.microsoft.com/en-us/windows/security/threat-protection/windows-firewall/enable-predefined-inbound-rules>

AIT can discover devices through Active Directory, and for this, it uses LDAP to communicate with an Active Directory Domain Controller, which typically uses TCP port **389** (LDAP) but can also use TCP ports **636** (LDAP SSL), **3268** (LDAP GC), **3269** (LDAP GC SSL). A user account with Domain User rights is required to query Active Directory.

AIT can also discover devices via an IP range scan which can be performed by providing start and end IP addresses or by providing a CIDR network address. AIT will attempt to ICMP ping each IP address, and if there is a response, the IP address will be included in the inventory scan. If your environment is not configured to allow ICMP echo requests, it will need to be configured before using this method. More information for enabling ICMP options via Group Policy can be found here: <https://docs.microsoft.com/en-us/windows/security/threat-protection/windows-firewall/create-an-inbound-icmp-rule>