ManageEngine) ADManager Plus

# SYSTEM REQUIREMENTS

# to install ManageEngine ADManager Plus



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Ensure that the minimum hardware and software requirements listed below are met before installing ADManager Plus.

# Hardware requirements

The following are the hardware requirements for deploying ADManager Plus.

Hardware	Minimum		Recom	mended
	Physical server	VM	Physical server	VM
RAM*	4GB	6GB	6GB	8GB
Disk Space	5GB	5GB	50GB	50GB
Processor	2.1GHz or faster	2.1GHz or faster	2.4GHz or faster	2.4GHz or faster
Number of cores*	2 Cores	4vCPUs	4 Cores	6vCPUs

Based on the operating system (client or server), the number of scheduled reports and automations running in parallel, and whether the Backup and Recovery add-on has been purchased, additional configuration might be needed.

### System requirement calculation

Hosting ADManager Plus without adequate system resources may affect its ability to perform necessary tasks. Use the calculator below to estimate the hardware requirements you'll need for ADManager Plus to perform smoothly. <u>System requirements calculator</u>

## a. RAM requirements for Active Directory activities

The following section outlines the memory and RAM requirements for Active Directory reporting and management

- Active Directory management
- Active Directory reporting

#### i. Active Directory management

Following are the memory and RAM requirements for performing Active Directory management tasks using ADManager Plus:

Number of objects created or modified per hour	RAM required (MB)	HDD required (GB)	Bandwidth (Mbps)
1,000	256	4	10
5,000	512	8	10
10,000	1,024	30	10
20,000	2,048	50	50
50,000	4,096	50	50
100,000	8,192	50	50

#### ii. Active Directory reporting

This section outlines the memory and RAM requirements for Active Directory reporting. These specifications consider all report generation activities for performing management tasks, including reports generated on demand, through the scheduler, and by automations.

Number of objects in the domain	RAM required (MB)	HDD required (GB)	Bandwidth (Mbps)
1,000	256	4	10
5,000	512	8	10
10,000	1,024	30	10
20,000	2,048	50	50
50,000	4,096	50	50
100,000	8,192	50	50

## b. RAM and disk space requirements for Backup and Recovery add-on

The table below gives disk space required for a year which is valid for both AD and Azure AD environments.

Number of objects in the domain	RAM required for the vadd-on alone (GB)	Disk space required for 1 year	Bandwidth (Mbps)
0 to 1,00,000	3	50	50
2,00,000	4	100	50
5,00,000	6	150	100
10,00,000	8	250	100

For Google Workspace, the disk space will vary based on the actual size of your total user mailboxes. Basic RAM requirement typically would be 8-16GB, along with a bandwidth of 50-100Mbps. However, considering future requirements and the backup retention period, it is recommended to allocate additional space as necessary. For instance, if the total size of the mailboxes and user drives is 1TB, ensure that there is 1TB of free disk space to store the full backup and subsequent incremental backups.

# **Software Requirements**

Following are the software requirements for deploying ADManager Plus:

### a. Supported operating systems

ADManager Plus can be installed in any one of the following versions of Microsoft Windows operating systems:

Windows 11

• Windows 10

- Windows Server 2022
- Windows Server 2008
- Windows Server 2019
- Windows Server 2016

• Windows Server 2012

- Windows Server 2012 R2
- Windows 8.1Windows 8
- Windows Server 2008 R2
  Windows 7

## b. Supported platforms

ManageEngine ADManager Plus supports the following platforms:

- Windows Server 2012 and above
- Exchange Servers 2016 and above
- LCS 2005 RTM and 2005 SP1, OCS 2007 RTM and 2007 R2 RTM, Lync Server 2010 and 2013, Skype for Business Server 2015 and above
- Google Workspace
- Microsoft 365
- NetApp Filer Data ONTAP 7.2 and above
- NetApp Cluster Data ONTAP 8.2.1 and above
- Isilon up to 9.4

#### c. Recommended browsers

ManageEngine ADManager Plus requires one of the following browsers to be installed on the system:

- Internet Explorer 10 and above
- Microsoft Edge
- Google Chrome
- Mozilla Firefox

#### Note:

- Use the latest version of the browser for better security and the best possible experience.
- The screen resolution should be 1366 x 768 pixels or higher.

## d. Supported databases

The following databases are supported by ADManager Plus:

- PostgreSQL (the default database bundled with the product)
- MS SQL

# **Port requirements**

## a. Server ports

Port Number	Protocol	Purpose
8080/8443	HTTP/HTTPS	Necessary to connect to the Tomcat web server
33306	ТСР	To connect to the product database
9280	нттр	To connect to the Elasticsearch database
9380	ТСР	Used for communications between nodes in a cluster

# b. System ports

Allow outbound connections to ports on the source server (the ADManager Plus server) and inbound connections to ports on the target servers (i.e. domain controllers).

Port Number	Protocol	Source	Destination	Port Type	Service	Purpose
389/636	TCP and UDP	ADManager Plus server	Domain controllers	Static	LDAP	To connect to Active Directory
135	ТСР	ADManager Plus server	Domain controllers	Static	RPC	For data exchange
445	TCP and UDP	ADManager Plus server	Domain controllers	Static	SMB	To get access to shared file systems
88	ТСР	ADManager Plus server	Domain controllers	Static	Kerberos	For authentication when accessing a domain resource
139	ТСР	ADManager Plus server	Domain controllers	Static	NetBIOS session	Required for communicating within the network
3268/3269	ТСР	ADManager Plus server	Domain controllers	Static	Global Catalog	Necessary for performing search operations in the Global Catalog
25	SMTP	ADManager Plus server	SMTP server	Static	SMTP	To send emails
80	нттр	ADManager Plus server	Domain controllers	Static	Exchange	For connecting to Exchange servers

80, 443	HTTP/HTTPS	Microsoft 365 or Google Workspace servers	SMTP server	Static	Microsoft 365 and Google Workspace	Required for communicating with Microsoft 365 and Google Workspace platforms
49152-65535	ТСР	ADManager Plus server	RPC randomly allocated high TCP ports	Dynamic	RPC	Used to establish data exchange

# c. Port requirements for Backup and Recovery add-on

The Backup and Recovery add-on requires a few ports to be enabled based on your Azure environment.

#### Azure Worldwide

Ports	Modules	Endpoints
8080 for HTTP	Azure AD Endpoint	https://login.microsoftonline.com/ <tenantname> /oauth2/v2.0/token</tenantname>
and 80443 for	8GB minimum	https://graph.windows.net/
HTTPS	One-third of the actual size*	https://graph.microsoft.com

## **Azure China**

Ports	Modules	Endpoints
8080 for HTTP and	Azure AD Endpoint	https://login.chinacloudapi.cn/ <tenantname>/oauth2/v2.0/token</tenantname>
80443 for	Azure Graph Endpoint	https://graph.chinacloudapi.cn/
HTTPS	Microsoft Graph Endpoint	https://microsoftgraph.chinacloudapi.cn

#### **Azure Germany**

Ports	Modules	Endpoints
8080 for	Azure AD Endpoint	https://login.microsoftonline.de/ <tenantname>/oauth2/v2.0/token</tenantname>
	Azure Graph Endpoint	https://graph.cloudapi.de/
HTTPS	Microsoft Graph Endpoint	https://graph.microsoft.de/

#### Azure for the United States Government

Ports	Modules	Endpoints
8080 for HTTP and	Azure AD Endpoint	https://login-us.microsoftonline.com/ <tenantname>/oauth2/v2.0/token</tenantname>
80443 for	Azure Graph Endpoint	https://graph.windows.net/
HTTPS	Microsoft Graph Endpoint	https://graph.microsoft.com

#### Azure for the US Department of Defense

Ports	Modules	Endpoints
8080 for HTTP and 80443 for HTTPS	Azure AD Endpoint	https://login-us.microsoftonline.com/ <tenantname>/oauth2/v2.0/token</tenantname>
	Azure Graph Endpoint	https://graph.windows.net/
	Microsoft Graph Endpoint	https://graph.microsoft.com

#### **Our Products**

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# **About ADManager Plus**

ADManager Plus is an identity governance and administration (IGA) solution that simplifies identity management, ensures security, and improves compliance. With ADManager Plus, manage the user life cycle from provisioning to deprovisioning, run access certification campaigns, orchestrate identity management across enterprise applications, and protect data on your enterprise platforms with regular backups. Use over 200 reports to gain valuable insights into identities and their access rights. Improve the efficiency of your IGA operations with workflows, automations, and role-based access control policies. ADManager Plus' Android and iOS applications help with on-the-go AD and Azure AD management.

For more information about ADManager Plus, visit manageengine.com/products/ad-manager/.

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