Connected Backup

Software Version 9.0.5.1

Requirements Matrix

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Documentation updates

The title page of this document contains the following identifying information:
- Software Version number, which indicates the software version.
- Document Release Date, which changes each time the document is updated.
- Software Release Date, which indicates the release date of this version of the software.

To check for updated documentation, visit https://www.microfocus.com/documentation/connected-backup/.

Additionally, if you subscribe to the appropriate product support service, you will receive new or updated editions of documentation. Contact your Micro Focus sales representative for details.

Support

Visit the MySupport portal to access contact information and details about the products, services, and support that Micro Focus offers.

This portal also provides customer self-solve capabilities. It gives you a fast and efficient way to access interactive technical support tools needed to manage your business. As a valued support customer, you can benefit by using the MySupport portal to:

- Search for knowledge documents of interest
- Access product documentation
- View software vulnerability alerts
- Enter into discussions with other software customers
- Download software patches
- Manage software licenses, downloads, and support contracts
- Submit and track service requests
- Contact customer support
- View information about all services that Support offers

Many areas of the portal require you to sign in with a Software Passport. If you need a Passport, you can create one when prompted to sign in. To learn about the different access levels the portal uses, see the Access Levels descriptions.

Requirements matrix

This document lists hardware and software requirements for Micro Focus Connected Backup 9.0.5.1.

Data Center

This section lists the installation requirements for the Connected Backup Data Center software.

Data center hardware requirements

This section specifies the hardware requirements for the Data Center and servers.

Component	Requirements
Processor	• 64-bit environment Server class with four cores of speeds of 2.5 GHz or more (minimum)

Memory	• 64-bit environment
	
	    ○ Minimum: 8 GB, parity or ECC RAM
	
	    ○ Recommended: 16 GB or more, parity or ECC RAM

Network interface card	1 Gbps **NOTE:** For mirrored and clustered environments, use two Ethernet adapters: the first for archives and the second for replication.
Disk space for Data Center application	50 GB
Event log file size	500 MB (minimum)

Network bandwidth sizing estimates

This section specifies estimates for the amount of network bandwidth that the Data Center requires.

Network element	Network requirements
Network bandwidth between the Agent computer and each Data Center	5 megabits per second per 500 users, based on 50 MB to 60 MB of compressed data per user per day
Network bandwidth between Data Centers in a mirrored or clustered configuration	5 megabits per second per 500 users, based on 50 MB to 60 MB of compressed data per user per day

Data center software requirements

This section specifies the operating system and application requirements for Data Center applications.

Application	Requirements
Operating system	• Windows Server 2019 Standard (64-bit only) • Windows Server 2016 Standard (64-bit only) • Windows Server 2012 R2 Standard (64-bit GUI mode only) • Windows Server 2008 R2 SP1 Standard or Enterprise (64-bit only) For more information about the requirements for these operating systems, see the Microsoft Windows documentation.
SQL	• Microsoft SQL Server 2008 R2 SP3 Standard or Enterprise (64-bit only) with KB3144114 (build 6542) • Microsoft SQL Server 2012 SP4 Standard or Enterprise (64-bit only) • Microsoft SQL Server 2016 Standard or Enterprise (64-bit only) • Microsoft SQL Server 2019 Standard or Enterprise (64-bit only) **NOTE:** Only the following software combinations are supported: • Windows Server 2008 R2 and SQL Server 2008 R2 SP3 with KB3144114 (build 6542) • Windows Server 2012 R2 and SQL Server 2012 SP4 • Windows Server 2012 R2 and SQL Server 2016 • Windows Server 2016 and SQL Server 2016 • Windows Server 2016 and SQL Server 2019 • Windows Server 2019 and SQL Server 2016 SP2 • Windows Server 2019 and SQL Server 2019

Microsoft .NET Framework	• Windows Server 2019 servers
	
	  ○ Version 4.7
	
	• Windows Server 2016 servers
	
	  ○ Version 4.6.2
	
	• Windows Server 2012 R2 servers
	
	  ○ Version 4.6
	
	• Windows Server 2008 R2 servers
	
	  ○ Version 4.6

Application	Requirements
	For more information, see the Microsoft Windows documentation.
Web browser	To use Support Center, open any of the following web browsers: • Microsoft Internet Explorer 10 (32-bit) • Microsoft Internet Explorer 11 (32-bit) **NOTE:** • You can use the 64-bit version of Internet Explorer to access Support Center, but you do not have access to certain functions, such as viewing created reports and downloading Agents. • For Windows computers: To sign in to Support Center using a single sign-on account, you must turn on the Transport Layer Security (TLS) 1.2 setting in Internet Explorer. • On Windows 11 computers, to open Connected Backup Support Center and Account Management Web Services (AMWS) you need to enable the IE-mode in Microsoft Edge. For details, see To enable the IE-mode, on page 11.
SQL Server ODBC Driver	SQL Server Native Client 11.0 version 2011.110.7001.00

Data center storage requirements

This section specifies the storage requirements for the Data Center.

Set	Storage type

Archives	Any of the following storage methods:
	 • Direct Attached Storage
	    ○ AT Attachment (ATA)
	    ○ Serial ATA (SATA)
	    ○ eSATA
	    ○ SCSI-1
	    ○ SAS
	    ○ Fibre Channel
	 • NAS
	 • SAN
	
	 NOTE:
	 • We recommend the use of RAID, if available.

Set	Storage type
	• Connected Backup version 9.0.5.1 supports using mount point as an archive volume.
Databases	Any of the following storage methods: • Direct Attached Storage • SAN **NOTE:** We recommend the use of RAID, if available. The recommended RAID level is RAID 1 + 0. We do not recommend the use of RAID 5 due to deficient performance.

Data center storage sizing estimates

Each Data Center environment has different requirements and different hardware for data protection. To obtain a storage sizing estimate based on your needs and your server environment, contact your Sales Representative.

Web Servers

This section identifies the installation requirements for Connected Backup Web Services applications that you install on Web Servers.

Web server hardware requirements

This section specifies the hardware requirements for Web Servers.

> **NOTE:**
> Web Services applications have the following deployment requirements:
>
> • Account Management Website (AMWS)
>
>   ○ In a standalone environment, AMWS can reside on its own server or the Data Center server.
>
>   ○ In a mirrored or clustered environment, AMWS cannot reside on the Data Center server. It can reside on the same server as Support Center
>
> • Support Center
>
>   ○ In a standalone environment, Support Center can reside on its own server or the Data Center server.
>
>   ○ In a mirrored environment, Support Center should not reside on the Data Center server. It can reside on the same server as AMWS.
>
>   ○ In a clustered environment, Support Center must not reside on the Data Center server. It can reside on the same server as AMWS.

> - Management API and Data Transfer API must reside either on their own servers or on the same server. They cannot reside on the Data Center server or any other server that hosts Connected Backup components.

Component	Requirements
Processor	Server class with dual 2 GHz processors or a single 3 GHz dual-core processor (minimum)
Memory	4 GB, parity or ECC RAM (recommended)
Network interface card	1 Gbps
Disk space	500 MB (minimum) for the event log plus additional space on servers where the following components reside: - AMWS server: 50 GB - Support Center server: 10 GB - Management API: 150 GB - Data Transfer API: 150 GB (recommended) Each retrieval requires temporary space that is equal to twice the estimated retrieval size. The recommended amount of disk space is 150 GB, which supports file retrievals up to 75 GB. The software requires this space on the drive where you install the Data Transfer API.

Web server software requirements

This section specifies the software requirements for Web servers.

Application	Requirements
Operating system	- Windows Server 2019 Standard (64-bit only) - Windows Server 2016 Standard (64-bit only) - Windows Server 2012 R2 Standard or Enterprise (64-bit only) - Windows Server 2008 R2 SP1 Standard or Enterprise (64-bit only) - Windows Web Server 2008 R2 SP1 (64-bit only) For more information about the requirements for these operating systems, see the Windows documentation.
Microsoft Distributed Transaction	Included with the Windows operating system. For more information, see the Microsoft Windows documentation.

Application	Requirements
Coordinator Service	
Microsoft .NET Framework	- Windows Server 2019 - Version 4.7 - Windows Server 2016 - Version 4.6 - Windows Server 2012 - Version 4.6 - Windows Server 2008 R2 - Version 4.6 (Data Transfer API) - Version 4.6 (Management API, Support Center) For more information, see the Microsoft Windows documentation.
ASP.NET	- Windows Server 2019 - ASP.NET 4.7 - Windows Server 2016 - ASP.NET 4.6 - Windows Server 2012 - ASP.NET 4.6 - Windows Server 2008 R2 - ASP.NET 4.6 For more information about these components, see the Microsoft Windows documentation.
Internet Information Server (IIS)	- Version 7.0, or later, with IIS 6 Compatibility Mode enabled (AMWS, Support Center, and Data Transfer API) - Version 7.0, or later (Management API) - SSL encryption protocol - Versions earlier than 8.6.2, use SSL 2.0 - Versions 8.6.2 and later, use TLS 1.0. Disable SSL 2.0 and SSL 3.0. - Version 8.9 and later, use TLS 1.0, TLS 1.1, and TLS 1.2. You can optionally disable TLS 1.0, but you must upgrade your Agents to version 8.8.7 and later. **NOTE:** Ensure that, in a system on which you have installed the AMWS or

Application	Requirements
	Support Center, disable any weak and vulnerable cipher having a block size of 64-bits, such as Triple DES. Also disable all RC4 ciphers such as TLS_RSA_WITH_RC4_128_SHA and TLS_RSA_WITH_RC4_128_MD5 and other ciphers such as TLS_RSA_WITH_AES_256_CBC_SHA (0x35), TLS_RSA_WITH_AES_128_CBC_SHA (0x2f), TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA (0xc014), and TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA (0xc013).
Microsoft Visual C++	Both of the following for the Management API only • 2010 Redistributable Package (x64) • 2010 Redistributable Package (x86) For more information, see the Microsoft Download Center.
SQL Server ODBC Driver	SQL Server Native Client 11.0 version 2011.110.7001.00

Data Center and Web Server Virtualization

This section lists the virtualization specifications for the Data Center and Web Servers:

- All Connected Backup servers may run as virtual machines.

- Most modern virtual machine implementations support Connected Backup servers. For any limitations that may prevent Connected Backup from functioning correctly, consult your VM software provider.

- The dedicated resources, such as CPU, memory, bandwidth, and storage must meet the minimum requirements. Also, they must be dedicated to exclusive use for Connected Backup and not pooled with other virtual machines (although a VM host could include other virtual machines).

- It is suggested that all VM instances of Connected Backup meet the recommended rather than the minimum resource requirements.

- Virtualization of client machines is not supported for Connected Backup Agents due to known issues in the virtual machines.

SSO Service Provider Requirements

This section identifies the configuration requirements for Connected Backup to utilize a Single Sign-On Service Provider such as Ping Federate. This enables the Data Center to have Single Sign-On (SSO) communities and technician IDs.

Ping federate software requirements

This section specifies the software requirements for Connected Backup to use Ping Federate as its SSO service provider.

Application	Requirements
Operating system	For more information about the requirements for these operating systems, see the Ping Federate service provider installation documentation.
Ping Federate	Version 6.11 or later For more information about the requirements for Ping Federate, see the Ping Federate service provider installation documentation.

Agents

This section lists the installation requirements for the Connected Backup Agent software.

> **NOTE:** If you use Single Sign-On (SSO) enabled communities, the agent version must be 8.6.3 or higher. No 7.x or older 8.x agents will be available in these communities.

Mac Agents

The following table lists the requirements for Mac Agents.

Component	Requirements
Operating system	• macOS 10.14 (Mojave) • macOS 10.15 (Catalina) • macOS 11 (Big Sur) • macOS 12 (Monterey)
Memory (RAM)	2 GB (minimum)
Processor	Intel Apple M1 (macOS 12 only)
Web browser	To access the Account Management Website, use any of the following Web browsers: • Apple Safari 14 or later • Mozilla Firefox 16 or later
Disk space	1 GB (depending on the size of the data backed up)

> **NOTE:** While running Connected Backup Mac Agent 8.10.2 (or later), either backups complete with errors or fails, after you upgrade to Mojave 10.14.1, see *Troubleshooting* section in *Connected Backup Administering Mac Agents* document for details to fix the issue.

PC Agents

The following table lists the requirements for PC Agents.

Component	Requirements
Operating system	- Windows 7 (32-bit or 64-bit) - Windows 8 (32-bit or 64-bit) - Windows 8.1 Update 1 (32-bit or 64-bit) - Windows 10 (32-bit or 64-bit) - Windows 10 Fall Creators version 1709 - Windows 10, version 1903 - Windows 10, version 1909 - Windows 10, version 2004 - Windows 10, version 20H2 - Windows 10, version 21H1 - Windows 10, version 21H2 - Windows 11, version 21H2 **NOTE:** Microsoft Edge is the default browser for Windows 11. To open Connected Backup Support Center and Account Management Web Services (AMWS), enable the IE-mode in Microsoft Edge. **To enable the IE-mode** 1. Click the **Settings and More** (ellipsis) on the top-right corner of the Microsoft Edge browser. 2. Navigate to **Settings > Default browser > Internet Explorer compatibility** section. 3. Select **Allow** from the drop-down for **Allow sites to be reloaded in Internet Explorer mode** option.
Memory (RAM)	2 GB (minimum) **NOTE:** Microsoft's recommendations supersede the recommendation listed here.

Component	Requirements
Processor	For more information, see the Microsoft Windows documentation
Web browser	To access the Account Management Website, use any of the following Web browsers: • Microsoft Internet Explorer 9, or later • Mozilla Firefox 32.02, or later • Chrome 37, or later **NOTE:** To support single sign-on accounts in the Agent and AMWS, you must turn on the Transport Layer Security (TLS) 1.2 setting if Internet Explorer is your default browser or you use it to access AMWS.
Microsoft .NET Framework	Version 4.6—Full edition only; the Client Profile edition is not sufficient The Agent requires.NET only to display the user interface. The Agent service can back up files without .NET installed. **NOTE:** If not installed on the PC, for interactive installations, the Agent installer prompts whether to automatically install .NET (Full edition). For silent installations, the first time the user starts the Agent, the Agent prompts whether to automatically install .NET (Full edition).
Disk space	1 GB (which depends on the size of the data backed up) plus the following amount of space: • For open file handling that uses the Microsoft Volume Shadow Copy service (VSS), a minimum of 10% of the total storage space must be free on a backed-up NTFS volume. • If you use Connected Email Optimizer, disk space in the amount of 1.5 times the size of all PST and NSF files that you plan to back up must be free.

Agent sizing requirements

- The maximum size of an Email Optimizer file that a PC agent can back up is 50 GB, and for an individual file, the PC or Mac Agent can back up to 20 GB.

- The maximum number of files that a PC Agent can scan is 12 million.