

Migration von Fileservern, Remote Desktop Services und weiteren Diensten nach Windows Server 2022



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Themen heute

Migration von Fileservern, Remote Desktop Services und weiteren Diensten nach Windows Server 2022

In diesem Webcast erklärt der Microsoft Most Valuable Professional Manfred Helber worauf bei der Migration von Fileservern, Remote Desktop Services und SQL Server zu achten ist. Auch in diesem Webcast gibt es viele hilfreiche Tipps aus der Praxis.

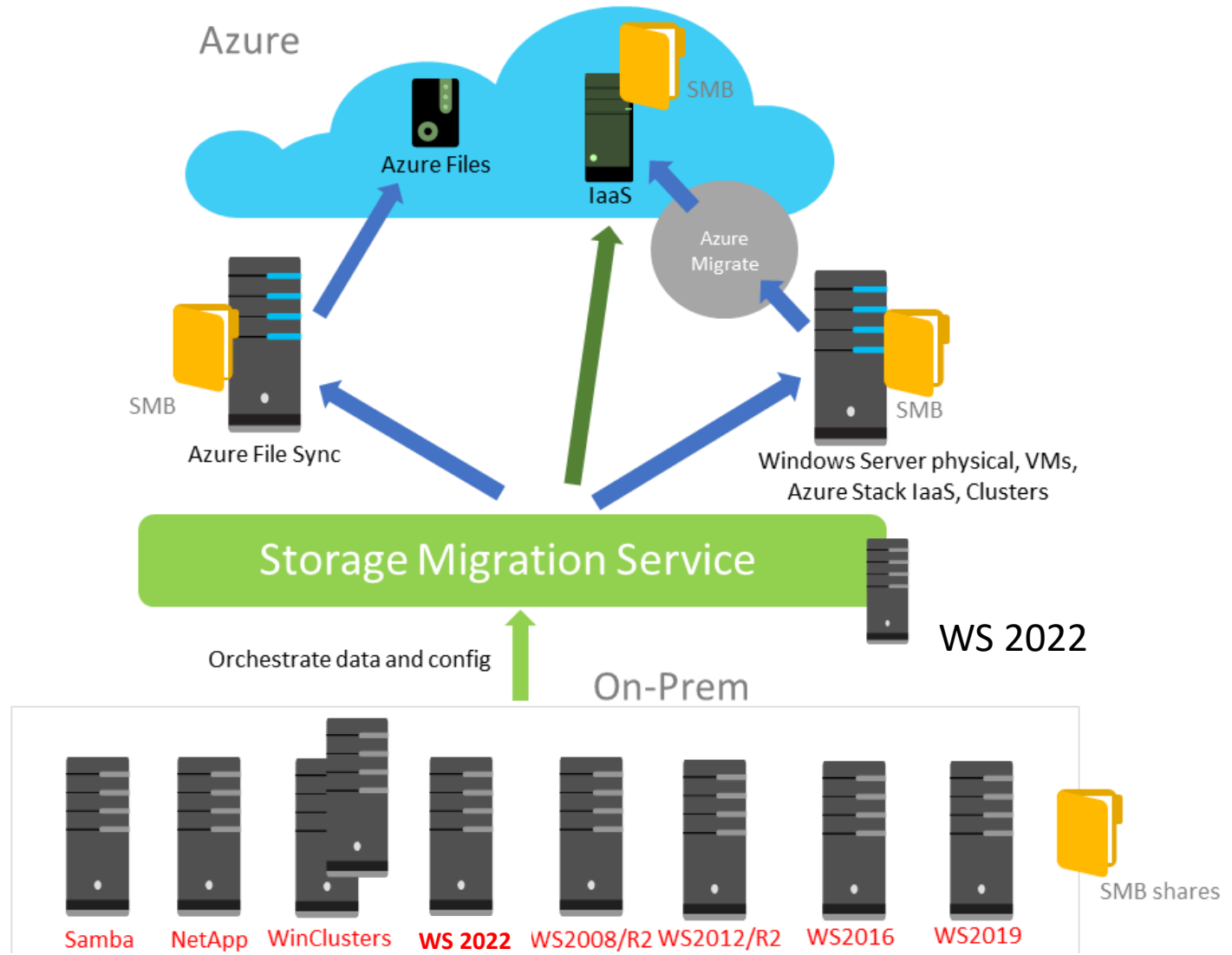
Inhalte:

- Migration von Fileservern mit den Storage Migration Services
- Migration von Remote Desktop Services
- Migration von älteren Windows Server System mit SQL Server

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Migration von Fileservern mit den Storage Migration Services

Storage Migration Service



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Storage Migration Service

Requirements for source servers

The source server must run one of the following operating systems:

- Windows Server, Semi-Annual Channel
- Windows Server 2022
- Windows Server 2019
- Windows Server 2016
- Windows Server 2012 / 2012 R2
- Windows Server 2008 / 2008 R2
- Windows Server 2003 / 2003 R2
- Windows Small Business Server 2003 R2
- Windows Small Business Server 2008
- Windows Small Business Server 2011
- Windows Server 2012 / 2012 R2 / 2016 / 2019 Essentials
- Windows Storage Server 2008 / 2008 R2 / 2012 / 2012 R2 / 2016

Note: Windows Small Business Server and Windows Server Essentials are domain controllers. Storage Migration Service can't yet cut over from domain controllers, but can inventory and transfer files from them.

Storage Migration Service

You can migrate the following additional source types if the orchestrator is running Windows Server 2019 with *KB5001384* installed:

- Failover clusters running Windows Server 2019, Windows Server 2016, Windows Server 2012 R2, Windows Server 2012, or Windows Server 2008 R2 (Windows Server 2008 R2 only supports inventory and transfer, not cutover)
- Linux servers that use Samba. We've tested the following:
 - CentOS 7
 - Debian GNU/Linux 8
 - RedHat Enterprise Linux 7.6
 - SUSE Linux Enterprise Server (SLES) 11 SP4
 - Ubuntu 16.04 LTS and 12.04.5 LTS
 - Samba 4.8, 4.7, 4.3, 4.2, and 3.6
- NetApp FAS arrays hosting NetApp CIFS server, running NetApp ONTAP 9.

Storage Migration Service

Requirements for destination servers

The destination server must run one of the following operating systems:

- Windows Server, Semi-Annual Channel
- Windows Server 2022
- Windows Server 2019
- Windows Server 2016
- Windows Server 2012 R2
- The destination servers can be standalone servers or part of a Windows failover cluster. They cannot run Azure Stack HCI or use a non-Microsoft clustering add-on.

💡 Tip

Destination servers running Windows Server 2019 or Windows Server, Semi-Annual Channel or later have double the transfer performance of earlier versions of Windows Server. This performance boost is due to the inclusion of a built-in Storage Migration Service proxy service.

Storage Migration Service

To use Storage Migration Service, you need the following:

- A **source server** or **failover cluster** to migrate files and data from
- A **destination server** running Windows Server 2019 (clustered or standalone) to migrate to. Windows Server 2016 and Windows Server 2012 R2 work as well but are around 50% slower
- An **orchestrator server** running Windows Server 2019 to manage the migration
If you're migrating only a few servers and one of the servers is running Windows Server 2019, you can use that as the orchestrator. If you're migrating more servers, we recommend using a separate orchestrator server.
- A **PC or server running the latest Windows Admin Center** to run the Storage Migration Service user interface, along with the latest Storage Migration Service tool (extension) available from the feed. The Windows Admin Center must be at least version 2103.

Storage Migration Service

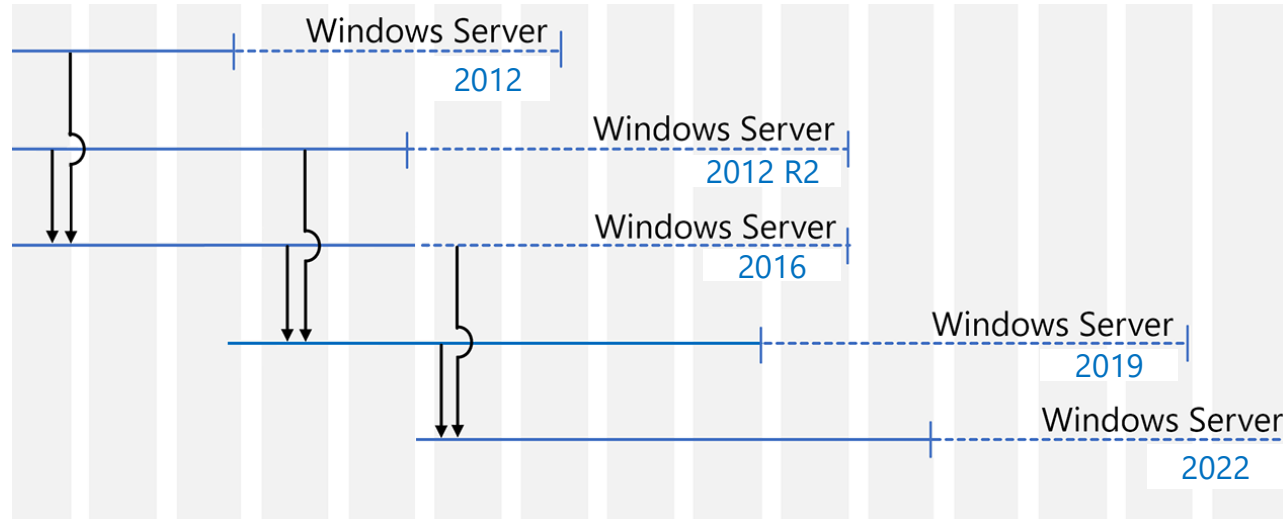
- The orchestrator computer must have the File and Printer Sharing (SMB-In) firewall rule enabled *inbound*.
- The source and destination computers must have the following firewall rules enabled *inbound* (though you might already have them enabled):
 - File and Printer Sharing (SMB-In)
 - Netlogon Service (NP-In)
 - Windows Management Instrumentation (DCOM-In)
 - Windows Management Instrumentation (WMI-In)

Migration von Fileservern über ein In-Place Upgrade!?

Windows Server In-Place Upgrade

Upgrade from / to	Windows Server 2008 R2	Windows Server 2012	Windows Server 2012 R2	Windows Server 2016	Windows Server 2019	Windows Server 2022
Windows Server 2008	Yes	Yes	-	-	-	-
Windows Server 2008 R2	-	Yes	Yes	-	-	-
Windows Server 2012	-	-	Yes	Yes	-	-
Windows Server 2012 R2	-	-	-	Yes	Yes	-
Windows Server 2016	-	-	-	-	Yes	Yes
Windows Server 2019	-	-	-	-	-	Yes

Windows Server In-Place Upgrade



Migration von Remote Desktop Services

Best Practices

- Use Windows Server 2022 for your Remote Desktop infrastructure (the Web Access, Gateway, Connection Broker, and license server). Windows Server 2022 is backward-compatible with these components, which means a Windows Server 2019 or Windows Server 2016 RD Session Host can connect to a 2022 RD Connection Broker, but not the other way around.
- For RD Session Hosts - all Session Hosts in a collection need to be at the same level, but you can have multiple collections. You can have a collection with Windows Server 2019 Session Hosts and one with Windows Server 2022 Session Hosts.
- If you upgrade your RD Session Host to Windows Server 2022, also upgrade the license server. Remember that a 2019 license server can process CALs from all previous versions of Windows Server, down to Windows Server 2008.
- Follow the upgrade order recommended in Upgrading your Remote Desktop Services environment.
- If you are creating a highly available environment, all of your Connection Brokers need to be at the same OS level.

<https://learn.microsoft.com/en-us/windows-server/remote/remote-desktop-services/rds-supported-config>

RD Connection Brokers

3+ Connection Brokers in HA	RDSH or RDVH 2022	RDSH or RDVH 2019	RDSH or RDVH 2016	RDSH or RDVH 2012 R2
Windows Server 2022 Connection Broker	Supported	Supported	Supported	Supported
Windows Server 2019 Connection Broker	N/A	Supported	Supported	Supported
Windows Server 2016 Connection Broker	N/A	N/A	Supported	Supported
Windows Server 2012 R2 Connection Broker	N/A	N/A	N/A	Not Supported

<https://learn.microsoft.com/en-us/windows-server/remote/remote-desktop-services/rds-supported-config>

Remote Desktop Services

The following table shows which RDS CAL and RD Session Host versions are compatible with each other.

	RDS 2008 R2 and earlier CAL	RDS 2012 CAL	RDS 2016 CAL	RDS 2019 CAL	RDS 2022 CAL
2008, 2008 R2 session host	Yes	Yes	Yes	Yes	Yes
2012 session host	No	Yes	Yes	Yes	Yes
2012 R2 session host	No	Yes	Yes	Yes	Yes
2016 session host	No	No	Yes	Yes	Yes
2019 session host	No	No	No	Yes	Yes
2022 session host	No	No	No	No	Yes

<https://docs.microsoft.com/en-us/windows-server/remote/remote-desktop-services/rds-client-access-license>

Remote Desktop Services

The following table shows which RDS CAL and license server versions are compatible with each other.

	RDS 2008 R2 and earlier CAL	RDS 2012 CAL	RDS 2016 CAL	RDS 2019 CAL	RDS 2022 CAL
2008, 2008 R2 license server	Yes	No	No	No	No
2012 license server	Yes	Yes	No	No	No
2012 R2 license server	Yes	Yes	No	No	No
2016 license server	Yes	Yes	Yes	No	No
2019 license server	Yes	Yes	Yes	Yes	No
2022 license server	Yes	Yes	Yes	Yes	Yes

<https://docs.microsoft.com/en-us/windows-server/remote/remote-desktop-services/rds-client-access-license>

Office und Windows Server – Lifecycle-Kompatibilität

Seit Februar 2023

	Microsoft 365 Apps No end date	Office LTSC EOS Oct 2026	Office 2019 EOS Oct 2025	Office 2016 EOS Oct 2025	Office 2013 EOS April 2023
Windows 11 In support ¹	No end date ¹	Oct 2026	Oct 2025	Oct 2025 ²	n/a
Windows 10 Semi-annual channel EOS Oct 2025	Oct 2025	Oct 2025	Oct 2025	Oct 2025	Apr 2023
Windows 8.1 EOS Jan 2023	Jan 2023	n/a	n/a	Jan 2023	Jan 2023
Windows 7 (with or without ESU) EOS Jan 2020; Security updates thru Jan 2023 with ESU	Jan 2020 ³	n/a	n/a	Jan 2020 ⁴	Jan 2020 ⁴
Windows Server 2022 EOS Oct 2031	Oct 2026	Oct 2026	Oct 2025	n/a	n/a
Windows Server 2019 EOS Jan 2029	Oct 2025	Oct 2026	Oct 2025	n/a	n/a
Windows Server 2016 EOS Jan 2027	Oct 2025	n/a	n/a	Oct 2025	Apr 2023
Windows Server 2012 / 2012 R2 EOS Oct 2023	Jan 2020	n/a	n/a	Oct 2023	Apr 2023
Windows 10 LTSC 2021 EOS Jan 2027	n/a	Oct 2026	Oct 2025	n/a	n/a
Windows 10 LTSC 2019 EOS Jan 2029	n/a	Oct 2026	Oct 2025	n/a	n/a
Windows 10 LTSB 2016 EOS Oct 2026	Jan 2020	n/a	n/a	Oct 2025	Apr 2023
Windows 10 LTSB 2015 EOS Oct 2025	Jan 2020	n/a	n/a	Oct 2025	Apr 2023

Migration von älteren Windows Server System mit SQL Server

Migration von älteren Windows Server System mit SQL Server

Windows Version/SQL Version	SQL Server 2022	SQL Server 2019	SQL Server 2017	SQL Server 2016	SQL Server 2014	SQL Server 2012	SQL Server 2008 R2	SQL Server 2008
Windows Server 2022	Yes (RTM)	Yes (RTM)	Yes (RTM)	Not supported	Not supported	Not supported	Not supported	Not supported
Windows 11	Yes (RTM)	Yes (RTM)	Yes (RTM)	Not supported	Not supported	Not supported	Not supported	Not supported
Windows 10	Yes (RTM)	Yes (RTM)	Yes (RTM)	Yes (SP2)	Yes (SP3)	Yes (SP4)	Not supported	Not supported
Windows Server 2019	Yes (RTM)	Yes (RTM)	Yes (RTM)	Yes (SP2)	Yes (SP3)	Yes (SP4)	Not supported	Not supported
Windows Server 2016	Yes (RTM)	Yes (RTM)	Yes (RTM)	Yes (SP2)	Yes (SP3)	Yes (SP4)	Not supported	Not supported
Windows 8.1	No	No	Yes (RTM)	Yes (SP2)	Yes (SP3)	Yes (SP4)	Yes (SP3)	Yes (SP4)
Windows Server 2012 R2	No	No	Yes (RTM)	Yes (SP2)	Yes (SP3)	Yes (SP4)	Yes (SP3)	Yes (SP4)
Windows 8	No	No	Yes (RTM)	Yes (SP2)	Yes (SP3)	Yes (SP4)	Yes (SP3)	Yes (SP4)
Windows Server 2012	No	No	Yes (RTM)	Yes (SP2)	Yes (SP3)	Yes (SP4)	Yes (SP3)	Yes (SP4)

Vielen Dank!



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