windows server 2022 build history

Windows Server 2022 Build History: A Journey Through Its Evolution

windows server 2022 build history offers a fascinating glimpse into the development and refinement of one of Microsoft's most robust server operating systems. Since its initial release, Windows Server 2022 has been a cornerstone for businesses aiming to leverage enhanced security, hybrid cloud capabilities, and improved performance in their IT infrastructure. Understanding the build history not only helps IT professionals keep track of critical updates and improvements but also sheds light on how Microsoft continuously adapts to evolving technology trends and security demands.

The Foundation of Windows Server 2022

Windows Server 2022 is part of the Windows NT family and builds upon the solid groundwork laid by its predecessor, Windows Server 2019. Officially announced in March 2021 and released later that year, this version brought a renewed focus on security enhancements, hybrid capabilities with Azure, and application platform improvements. The build history of Windows Server 2022 reflects Microsoft's commitment to providing a more secure and scalable platform for enterprise environments.

Initial Release and Key Features

The initial builds of Windows Server 2022 introduced several pivotal features that set it apart. These included advanced multi-layer security protocols, such as secured-core server functionality and improved encryption standards. Additionally, the operating system integrated more deeply with Microsoft Azure, enabling hybrid cloud scenarios that allow organizations to smoothly extend their on-premises data centers to the cloud.

Some of the standout capabilities available from the first builds included:

- **Secured-core server**: Protects against firmware-level vulnerabilities by combining hardware, firmware, and driver security features.
- **TLS 1.3 support**: Improved encryption protocol for safer internet communications.
- **SMB over QUIC**: Provides secure, VPN-less access to file servers.
- **Enhanced Windows Admin Center integration**: Simplified management and monitoring for hybrid environments.

These additions made Windows Server 2022 highly appealing for businesses with stringent security requirements or those adopting cloud-first strategies.

Understanding the Build Updates and Their Impact

As with any major software release, Windows Server 2022 has seen numerous builds and cumulative updates that address bugs, patch vulnerabilities, and add incremental improvements. The build history is essential for system administrators and IT managers who need to maintain system stability while ensuring the latest security standards are met.

Major Cumulative Updates

Microsoft regularly releases cumulative updates (CUs) for Windows Server 2022, each identified by a build number that increments with every update. These updates include security patches, performance enhancements, and occasionally new features or capabilities. For example:

- **Build 20348.169 (KB5006670)**: Addressed several security vulnerabilities and improved overall system reliability.
- **Build 20348.448 (KB5012170)**: Focused on enhancing the Windows Admin Center experience and fixing specific networking issues.
- **Build 20348.572 (KB5015814)**: Brought updates to address potential exploits and improved Windows Defender capabilities.

Tracking these builds is crucial for organizations managing multiple servers to ensure every machine is up-to-date and protected against the latest threats.

Insider Previews and Early Access Builds

Before any official release or update, Microsoft offers Windows Insider Preview builds that allow developers and IT professionals to test new features and provide feedback. These builds are part of the Windows Server Insider Program, a critical component of the build history that helps shape the product's final form.

Insider builds often introduce experimental features or major changes that may not be immediately available in production releases. For instance, early previews of Windows Server 2022 included new improvements to container support, networking stack enhancements, and updated PowerShell modules. Engaging with these previews can give administrators a head start on adapting to upcoming changes.

Windows Server 2022 Build History and Security Enhancements

One of the most significant aspects of Windows Server 2022's development has been the focus on security. Each build in its history reflects Microsoft's proactive approach to combating the increasing sophistication of cyber threats.

Secured-Core Server Builds

The introduction of the secured-core server concept in Windows Server 2022 marked a milestone in server security. This initiative combines hardware root-of-trust, firmware protection, and virtualization-based security to create a hardened server environment.

Over various builds, Microsoft refined this feature to better integrate with hardware from leading manufacturers, optimize performance, and simplify deployment. The build history shows enhancements that address real-world attack vectors and help organizations comply with strict regulatory requirements.

Ongoing Security Patches

Each build update often includes crucial security patches targeting vulnerabilities discovered either internally or reported by the security community. Staying informed about these patches through the build history allows IT teams to prioritize updates and minimize exposure to threats such as ransomware, privilege escalation, or remote code execution attacks.

Hybrid Cloud and Azure Integration in the Build Evolution

Windows Server 2022's build history also highlights Microsoft's vision for hybrid cloud computing. Integrating on-premises servers with Azure services is a central theme that continues to evolve through various builds and updates.

Azure Arc and Improved Hybrid Capabilities

One of the most notable advancements is the enhanced support for Azure Arc, which allows organizations to manage Windows Server instances across on-premises, multi-cloud, and edge environments using a single control plane.

Builds have progressively improved Azure Arc's compatibility and features, enabling better compliance monitoring, policy enforcement, and seamless provisioning of cloud resources. For enterprises adopting hybrid architectures, these build improvements offer significant operational benefits.

Windows Admin Center Enhancements

Windows Admin Center acts as a crucial bridge between traditional server management and cloud integration. Throughout the Windows Server 2022 build timeline, Microsoft has continuously updated this tool to support new features, such as improved Kubernetes cluster management, better VM lifecycle controls, and streamlined Azure connectivity.

Administrators following the build history can take advantage of these incremental updates to enhance their management workflows without disrupting existing systems.

Performance Optimizations and Application Platform Updates

While security and hybrid cloud features dominate much of Windows Server 2022's build history, Microsoft has also focused on refining performance and developer-centric capabilities.

Container Improvements

Containers have become a cornerstone of modern application deployment, and Windows Server 2022 builds reflect ongoing enhancements in this area. Updates have included better compatibility with Kubernetes, reduced image sizes, and improved networking for container workloads.

These optimizations help organizations deploy scalable, efficient applications with greater reliability on Windows Server platforms.

Networking Stack and Storage Enhancements

Various builds have brought improvements to networking protocols and storage management, aiming to reduce latency, increase throughput, and simplify configuration. Features like SMB compression and improved DNS security have been refined across updates, providing measurable benefits in real-world deployments.

Keeping Up With Windows Server 2022 Builds

For IT professionals and system administrators, understanding the windows server 2022 build history is essential for effective server management. Here are some tips to stay current:

- Regularly check Microsoft's official Windows Server release health status and update catalogs.
- Subscribe to the Windows Insider Program to test upcoming builds and prepare for changes.
- Use tools like Windows Admin Center for streamlined update management across multiple servers.
- Monitor security bulletins and patch Tuesday releases for critical fixes tied to specific builds.

By staying informed about the build history and updates, organizations can ensure their Windows Server 2022 environments remain secure, efficient, and aligned with the latest technological advancements.

Exploring the windows server 2022 build history not only helps maintain a robust IT infrastructure but also reveals the dynamic nature of Microsoft's approach to server operating systems. From enhanced security to hybrid cloud integration and performance tuning, each build milestone reflects a step toward meeting the complex demands of modern enterprise computing.

Frequently Asked Questions

What is Windows Server 2022 build history?

Windows Server 2022 build history refers to the chronological record of updates, patches, and feature improvements released for Windows Server 2022 since its initial launch.

Where can I find the latest build updates for Windows Server 2022?

The latest build updates for Windows Server 2022 can be found on the official Microsoft Windows Server update history webpage or through the Windows Update service within the server operating system.

How often does Microsoft release new builds or updates for Windows Server 2022?

Microsoft typically releases new builds or cumulative updates for Windows Server 2022 on a monthly basis, usually on Patch Tuesday, which is the second Tuesday of each month.

What types of improvements are included in Windows Server 2022 build updates?

Windows Server 2022 build updates often include security patches, bug fixes, performance enhancements, and occasionally new features or improvements to existing functionalities.

Can I view the detailed changelog of each Windows Server 2022 build?

Yes, Microsoft provides detailed changelogs for each Windows Server 2022 build update on their official documentation and support pages, outlining the fixes and improvements included.

Additional Resources

Windows Server 2022 Build History: An In-Depth Analysis of Its Evolution and Features

windows server 2022 build history traces the development journey of Microsoft's latest iteration in its long-standing server operating system lineage. As a crucial component in enterprise IT infrastructure, Windows Server 2022 represents a confluence of enhanced security, hybrid cloud capabilities, and improved performance. Understanding the build history offers valuable insights into the progression of features, stability improvements, and the strategic direction Microsoft has taken to cater to modern workloads.

Windows Server 2022: The Context of Its Release

Windows Server 2022 arrived as the successor to Windows Server 2019, continuing the tradition of delivering robust, enterprise-grade solutions for data centers, cloud integration, and hybrid environments. Officially announced in early 2021 and generally available by August 2021, the server OS was developed with a strong emphasis on security enhancements and seamless integration with Azure cloud services. The build history of Windows Server 2022 reflects Microsoft's response to evolving cybersecurity threats and the growing demand for hybrid cloud infrastructures.

Early Development and Insider Builds

Prior to its official release, Windows Server 2022 underwent multiple preview and insider builds as part of Microsoft's Windows Insider Program. These builds were instrumental in gathering feedback from IT professionals and developers, enabling Microsoft to fine-tune the operating system. Notable early builds included:

- **Build 20348**: One of the first leaked or preview builds that showcased Windows Server 2022's core foundations, focusing on stability and legacy compatibility.
- **Build 20349**: Introduced enhancements in storage and networking, including SMB improvements and support for encrypted DNS (DNS over HTTPS).
- **Build 20350**: Brought security-centric features such as secured-core server capabilities, which leveraged hardware root-of-trust to fortify the OS against firmware-level attacks.

These insider builds established the groundwork for the final release, allowing Microsoft to iterate on feedback related to performance bottlenecks, feature usability, and integration with existing Windows Server ecosystems.

Key Milestones in Windows Server 2022 Build History

The build history of Windows Server 2022 reflects several pivotal milestones, each contributing to the refinement of the OS. Microsoft's cumulative update strategy and feature packs introduced incremental improvements after the initial launch.

General Availability (Build 20348.169)

The RTM (Release to Manufacturing) build, identified as 20348.169, marked the official launch of Windows Server 2022 in August 2021. This build was characterized by:

- **Secured-core server capabilities:** Enhancing hardware-backed security to protect against advanced threats.
- Azure Arc integration: Enabling hybrid management for on-premises and cloud resources.
- Improved container platform: Support for smaller container images and enhanced Kubernetes compatibility.

At this stage, Microsoft prioritized compatibility and performance, ensuring that enterprises could deploy Windows Server 2022 with minimal disruptions and maximum benefit.

Cumulative Updates and Feature Enhancements

Following the GA release, Microsoft issued multiple cumulative updates aimed at fixing bugs, improving security, and enhancing features. These updates are crucial in the build history as they reflect Microsoft's commitment to product lifecycle support.

- **KB5005039 (October 2021)**: Addressed critical security vulnerabilities and improved SMB performance.
- **KB5010342 (January 2022)**: Introduced enhancements to Windows Admin Center compatibility and fixed issues with DNS over HTTPS.
- **KB5014699** (July 2022): Brought improvements to Hyper-V performance and resolved several stability issues impacting remote desktop connections.

These incremental updates showcase how Microsoft balances feature rollouts with operational stability, a key consideration for server environments.

Windows Server 2022 LTSC vs. Semi-Annual Channel Builds

Microsoft offers two servicing channels for Windows Server: Long-Term Servicing Channel (LTSC) and Semi-Annual Channel (SAC). The build history of Windows Server 2022 includes both, catering to different organizational needs.

- LTSC Builds: Designed for stability and long-term support (10 years), LTSC builds of Windows Server 2022 are suitable for traditional server roles requiring minimal feature changes.
- **Semi-Annual Channel Builds:** Focus on rapid feature delivery, targeted at cloud-native and containerized workloads. These builds are updated twice a year but have a shorter support lifecycle.

The differentiation in build history between these channels highlights Microsoft's adaptive strategy to serve both conservative IT environments and agile, cloud-centric operations.

Comparative Analysis: Windows Server 2022 Builds vs. Previous Versions

Examining the build history of Windows Server 2022 in relation to its predecessors, especially Windows Server 2019, reveals several evolutionary trends.

Security Improvements

Windows Server 2022 builds introduced advanced security features such as secured-core server and hardware root-of-trust, which were not present in earlier builds of Windows Server 2019. This marks a significant shift toward proactive security in build development, addressing vulnerabilities that have become more prevalent since the last major release.

Hybrid Cloud Integration

Unlike previous builds, Windows Server 2022 has tightly integrated Azure Arc and other hybrid cloud services from early builds. This integration facilitates seamless management of both onpremises and cloud-based resources, reflecting Microsoft's vision of a hybrid future.

Container and Kubernetes Support

Builds of Windows Server 2022 have enhanced the container ecosystem with smaller image sizes and better Kubernetes support, responding to the increasing adoption of containerization in enterprise environments. This contrasts with earlier builds where container support was more experimental and less optimized.

Impact and Relevance of Windows Server 2022 Build History

The thorough documentation and availability of Windows Server 2022 builds have enabled IT professionals and organizations to plan migrations and upgrades strategically. The incremental build releases helped mitigate risks commonly associated with server OS upgrades by allowing pre-release testing and phased adoption.

Furthermore, the build history encapsulates Microsoft's strategic focus areas: security, hybrid cloud, and containerization. By analyzing these builds, enterprises can anticipate future directions and prepare their infrastructure accordingly.

In addition, the availability of detailed build notes and cumulative updates ensures transparency and aids system administrators in troubleshooting and optimizing deployment scenarios.

Windows Server 2022's build history underscores the evolving nature of server operating systems amid rapid technological shifts. As businesses increasingly rely on hybrid and cloud environments, the continuous refinement evident in these builds will likely shape the next generation of enterprise IT infrastructure.

Windows Server 2022 Build History

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techniques – all while reinforcing core infrastructure skills like Active Directory, DNS, DHCP, and Group Policy. What you will learn Build a Windows Server from the ground up and implement your own PKI Manage your servers with Server Manager, PowerShell, and Windows Admin Center Secure your network and data with modern technologies in Windows Server 2022 Understand containers and where Nano Server fits into the equation Discover new ways to integrate your datacenter with Microsoft Azure Virtualize your datacenter with Hyper-V Round out your understanding of Active Directory, DNS, DHCP, and Group Policy Deploy Remote Desktop Services in your environment Who this book is for Anyone interested in Windows Server administration will benefit from this book. If you are proficient in Microsoft infrastructure technologies and have worked with prior versions of Windows Server, then there are some focused topics on the aspects that are brand new and only available in Server 2022. On the other hand, if you are currently in a desktop support role looking to advance, or fresh into the IT workforce, care was taken in the pages of this book to ensure that you will receive a rounded understanding of Windows Server core capabilities that translate into any environment

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windows server 2022 build history: Windows Server 2022 Administration Fundamentals Bekim Dauti, 2022-09-16 Deploy, set up, and deliver network services with Windows Server 2022, along with exploring Microsoft's role-based certifications Key Features Get started with server installation, performance monitoring, and server maintenance Develop the skills necessary to

manage an enterprise environment Implement networking and security best practices in your Windows Server environment Book DescriptionThis third edition gets you up and running with Windows Server 2022, Microsoft's new server operating system, as part of the Windows NT family of operating systems, developed concurrently with Windows 10, version 21H2. The book begins by introducing computer networking and Windows Server concepts, gradually moving towards Windows Server 2022. With the help of step-by-step instructions and easy-to-understand graphics, you'll become well versed with the roles, features, and functionalities of Windows Server 2022. Topics such as the installation process, upgrades, post-installation tasks, and initial server configuration are covered in detail. As you make progress, you'll explore roles, features, and role services such as Active Directory, DNS, Hyper-V, remote access, storage, and printers, among others. The book then takes you through maintenance and troubleshooting tasks to guide you in efficiently managing Windows Server 2022. Finally, by working with numerous questions in each chapter and detailed answers at the end, you can test your understanding of the concepts covered. By the end of this Windows Server book, you'll be equipped with the knowledge needed to update, maintain, and troubleshoot servers to ensure business continuity by relying on best practices and using step-by-step graphic-driven examples. What you will learn Grasp the fundamentals of Windows Server 2022 Understand how to deploy Windows Server 2022 Discover Windows Server post-installation tasks Add roles to your Windows Server environment Apply Windows Server 2022 GPOs to your network Delve into virtualization and Hyper-V concepts Tune, maintain, update, and troubleshoot Windows Server 2022 Get familiar with Microsoft's role-based certifications Who this book is for If you are an IT professional who wants to deploy and configure Windows Server 2022, then this book is for you. You can also use this book to learn about Microsoft's role-based certifications if you're planning to enroll in a course. No prior experience with Windows Server operating systems or familiarity with networking concepts is required.

windows server 2022 build history: Mastering Windows Server 2025 Jordan Krause, 2025-10-13 Build the skills needed to modernize your IT infrastructure using Windows Server 2025, with hands-on configuration, enterprise-grade security, virtualization, and cloud integration Key Features Configure, manage, secure, and troubleshoot Windows Server environments from the ground up Understand and take control of key components including AD, DNS, DHCP, GPO, and PKI Apply knowledge in real-world labs and walkthroughs that bring each server role to life Purchase of the print or Kindle book includes a free PDF eBook Book DescriptionWritten by a 10-time Microsoft MVP with 25 years of IT and technical coaching experience, this practical guide offers real-world expertise in Windows Server management. From building and connecting servers to securing them, and even intentionally breaking them to learn, you'll find comprehensive, experience-based coverage that takes you deep into professional administration. Fully updated for the 2025 release, this edition prepares you to manage any Windows Server environment, whether deploying the latest version or maintaining Server 2012 in a modern infrastructure. You'll work with PowerShell, Server Manager, Windows Admin Center, RSAT, and Azure Arc to achieve centralized and efficient administration. While the focus is on Windows Server 2025 LTSC with Desktop Experience, the book also explores Server Core, containerization, and the evolving role of Nano Server. Along the way, you'll gain hands-on experience with core services, including Active Directory, DNS, DHCP, and Group Policy, and explore advanced topics such as certificate services and PKI, Hyper-V virtualization, Remote Desktop Services, failover clustering, DFS, and Intune integration. By the end of this book, you'll have the skills to manage and modernize complex server infrastructures with confidence. What you will learn Create an entire lab of new servers and configure multiple roles Manage servers using Server Manager, PowerShell, and Windows Admin Center Close knowledge gaps in core infrastructure technologies such as Active Directory, DNS, DHCP, and Group Policy Virtualize your datacenter with Hyper-V Create redundancy through Failover Clustering services Deploy Remote Desktop Services Design and implement Distributed File System with Replication (DFSR) and Storage Replica Don the DevOps cap as you explore containers and Nano Server Who this book is for This book is for IT professionals who want to step into a full systems administrator role or modernize

their server management skills. Whether you're managing legacy Windows Server deployments or preparing for 2025 migrations, you'll find practical, hands-on content tailored for sysadmins, IT operations teams, and infrastructure engineers. Newcomers to Windows Server will build the foundation they need, while experienced admins will discover what's new and what's next in Server 2025.

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windows server 2022 build history: Microsoft SQL Server Text Book Manish Soni, 2024-11-13 This book is designed to be your comprehensive companion in your journey to becoming proficient in Microsoft SQL Server Text Book. Whether you are a beginner taking your first steps into the world of SQL databases or an experienced database professional seeking to deepen your knowledge, this book has something to offer you. In today's data-driven world, the importance of managing data efficiently cannot be overstated. Microsoft SQL Server, a robust and versatile database management system, is at the heart of countless applications, powering businesses, industries, and organizations of all sizes. With its rich feature set, scalability, and integration capabilities, SQL Server has become an indispensable tool for database professionals, developers, and administrators. In Mastering Microsoft SQL, we have carefully curated a wealth of knowledge, practical insights, and hands-on examples to guide you through the complexities of SQL Server. From understanding the fundamentals of SQL to mastering advanced database administration techniques, this book is structured to help you build a strong foundation and progress to expert-level skills.

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network and system administrators looking for an actionable guide to on-premises, hybrid, and cloud Windows Server 2022 environments.

windows server 2022 build history: C# 10 and .NET 6 - Modern Cross-Platform **Development** Mark J. Price, 2021-11-09 Publisher's Note: Microsoft will stop supporting .NET 6 from November 2024. The newer 8th edition of the book is available that covers .NET 8 (end-of-life November 2026) with C# 12 and EF Core 8. Purchase of the print or Kindle book includes a free PDF eBook Key Features Explore the newest additions to C# 10, the .NET 6 class library, and Entity Framework Core 6 Create professional websites and services with ASP.NET Core 6 and Blazor Build cross-platform apps for Windows, macOS, Linux, iOS, and Android Book DescriptionExtensively revised to accommodate all the latest features that come with C# 10 and .NET 6, this latest edition of our comprehensive guide will get you coding in C# with confidence. You'll learn object-oriented programming, writing, testing, and debugging functions, implementing interfaces, and inheriting classes. The book covers the .NET APIs for performing tasks like managing and querying data, monitoring and improving performance, and working with the filesystem, async streams, and serialization. You'll build and deploy cross-platform apps, such as websites and services using ASP.NET Core. Instead of distracting you with unnecessary application code, the first twelve chapters will teach you about C# language constructs and many of the .NET libraries through simple console applications. In later chapters, having mastered the basics, you'll then build practical applications and services using ASP.NET Core, the Model-View-Controller (MVC) pattern, and Blazor. What you will learn Build rich web experiences using Blazor, Razor Pages, the Model-View-Controller (MVC) pattern, and other features of ASP.NET Core Build your own types with object-oriented programming Write, test, and debug functions Query and manipulate data using LINQ Integrate and update databases in your apps using Entity Framework Core, Microsoft SQL Server, and SQLite Build and consume powerful services using the latest technologies, including gRPC and GraphQL Build cross-platform apps using XAML Who this book is forDesigned for both beginners and C# and .NET programmers who have worked with C# in the past and want to catch up with the changes made in the past few years, this book doesn't need you to have any C# or .NET experience. However, you should have a general understanding of programming before you jump in.

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2022 in Changsha, China. EIMSS 2022 is to bring together innovative academics and industrial experts in the field of Education, Information Management and Service Science to a common forum. The primary goal of the conference is to promote research and developmental activities in Education, Information Management and Service Science and another goal is to promote scientific information interchange between researchers, developers, engineers, students, and practitioners working all around the world. The conference will be held every year to make it an ideal platform for people to share views and experiences in Education, Information Management and Service Science and related areas.

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Work with the Razor Editor and troubleshoot problems with visualizations.

Build, test, and debug.NET, C#, and C++ applications. ● Enhance coding skills to create effective web, mobile, and Azure solutions. ● Get Visual Studio 2022 rolling on Linux and macOS systems. ● Create and use custom IDE extensions. The book exemplifies topics such as extending Visual Studio with your customizations to make it function as you desire effectively. The book will help you learn everything you need to know about.NET 6, diagnosing and debugging programs, and utilizing all the collaborative tools in Visual Studio 2022. This book will teach you how to use the brand new AI IntelliCode and implement .NET MAUI and C++ 20 features. WHO THIS BOOK IS FOR This is the book for you, developers, and programmers who wish to master Visual Studio and produce

high-quality code in any deployment setting and for any application. You only need to be familiar with.NET and C#. Nothing else is required. TABLE OF CONTENTS Section - I: Getting to Know the Visual Studio 2022 IDE 1. Getting Started with Visual Studio 2022 2. Having a Look at .NET 6 3. Language and Coding Changes in C# 4. Digging into the Visual Studio 2022 IDE Section - II: Using The Tools in Visual Studio 2022 5. AI IntelliCode 6. Built-in Coding Experience Tools 7. Diagnostics and Debugging Tools Section - III: Advanced Tools 8. Web Tools and Extensions 9. Mobile Tools 10. Azure Tools Section - IV: Advanced Topics 11. C++ 20 Appendix 'A'

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Robert Panther, 2023-07-18 Alles, was ein gutes Lehrbuch bieten sollte: Klar definierte Lernziele, gute Beispiele und viele praktische Übungsaufgaben Aktualisierte Neuauflage der bewährten Einführung in die Datenbankentwicklung Basiert auf der kostenlos erhältlichen Version SQL Server 2022 Express Jetzt komplett überarbeitet und an alle Neuerungen der SQL-Server-Version von 2022 angepasst SQL Server 2022 und die kostenlose Version SQL Server 2022 Express sind ideal, um in

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