# Windows Server 2016



### Bring cloud speed to your datacenter

The biggest challenge for IT today isn't cost, it's speed. The move to the cloud-first world is about getting ahead of the competition. New applications and new features for applications drive business value and that application-centric mindset means that you need to think differently about your datacenter. We know that you are under pressure to deliver on the need for agility while maintaining security, resilience, and performance.

With the 2016 wave of hybrid datacenter solutions, Microsoft is bringing cloud-inspired technologies to the traditional datacenter. New and enhanced features can help you make the most of your existing resources while delivering innovation to your customers. From the software-defined datacenter to the application platform, Windows Server 2016 offers new investments in cloud technology that can benefit your datacenter today.

# Meet IT challenges with a software-defined approach

The term "software-defined" is everywhere, and there's a reason for that. Companies want to reduce costs and increase flexibility, which is part of what makes the software-defined approach valuable. But if you want to move faster, the first and foundational step is creating an infrastructure layer that mirrors what is done in public clouds.

Windows Server 2016 brings you new advanced features to further extend software-defined datacenter capabilities. Advances in storage, networking, and compute are all fully integrated into the platform to give you the foundation you need to meet business requirements.

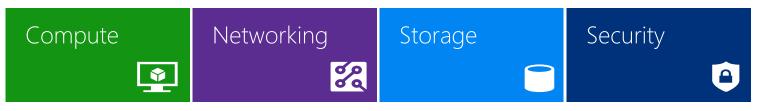
### Key benefits

- Simplify upgrades and increase resilience with enterprise-grade virtualization
- Get more flexibility with advanced cloud-born features for software-defined networking
- Reduce costs and improve performance with cloud-inspired storage
- Expand security options with a "zero-trust" approach
- Make innovation easier with modern app plat capabilities

### Drive rapid innovation with a modern application platform

Rapid development and deployment, with the flexibility to use in-cloud or on-premises resources, is the new standard for applications. Windows Server 2016 brings you new features for making modern applications your new standard. Windows Server Containers and Hyper-V Containers give you tools for rapid iteration and lighter weight DevOps. You'll also find a new deployment option, Nano Server, that dramatically reduces the footprint for both applications and the operating system itself. With lower servicing requirements and improved security, Nano Server forms the foundation of a modern application platform. Windows Server 2016 gives you a true write once, deploy anywhere model offering maximum application flexibility.

# Software-defined Datacenter



#### **Resilient compute**

Windows Server 2016 will enable simplified virtualization upgrades, new installment options, and increased resilience, helping you ensure the stability of the infrastructure without limiting agility. Significant enhancements to Hyper-V include advances in failover clustering, designed to increase resilience to transient failures in storage or networking. Rolling upgrades for Hyper-V and scale-out file server clusters allow for faster adoption of new operating systems.

#### **Reduced-cost storage**

New storage offerings in Windows Server 2016 include expanded capabilities in software-defined storage with an emphasis on resilience, reduced cost, and increased control. Storage Spaces Direct allows you to use standard servers with local storage to build highly available and scalable software-defined storage. Windows Server 2016 will also include Storage QoS and Storage Replica, giving you synchronous storage replication for affordable business continuity and disaster recovery strategies.

#### **Simplified networking**

Software-defined networking is a critical part of the infrastructure innovation coming in Windows Server 2016. Key elements of the new networking stack are a scalable network controller for programming policies, a new load balancer for high availability and performance and enhanced gateways for hybrid connectivity, Windows Server 2016 brings the core set of networking capabilities and SDN architecture directly from Azure to your datacenter.

#### **Extended security**

Windows Server 2016 helps guard against today's threats with a "zero-trust" approach to security that is rooted in the hardware. Shielded virtual machines, which enable isolation between the underlying host and virtual machines, help protect resources in shared environments. The new Windows Server role, the Host Guardian Service, helps identify trusted hosts. In addition, Just in Time administration and Just Enough Administration enable you to set limits on administrator access.

## Modern Application Platform

#### Containers

Windows Server Containers bring the agility and density of containers to the Windows ecosystem, enabling rapid application development. Windows Server Containers offer a lightweight development option for maximum flexibility. To meet the needs of customers who want the ease of Windows Server Containers with a higher level of isolation, Hyper-V Containers offer an additional deployment option.

#### **Nano Server**

A new headless deployment option for Windows Server, Nano Server offers a dramatically reduced footprint. Ideal for modern apps, Nano Server has lower servicing requirements and increased security.



