

Bsquare Server Data Sheet

How to Compare:

Windows Server IoT vs. Windows Server 2019

Windows Server IoT 2019 provides the same powerful features as Windows Server 2019, including the development and management tools that you've come to expect—as well as ten years of OS support and updates. The key differences come down to usage and licensing.

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Usage and Licensing	Windows Server IoT 2019	Windows Server 2019
Usage	Dedicated, fixed-purpose appliances	General purpose
Licensing	OEM channel with dedicated use licensing terms	Multiple channels including volume licensing, retail, and OEM
SKUs	Standard, datacenter, essentials, Telecom, and storage (Standard/Workgroup)	Standard, datacenter & essentials
CAL Requirements	CAL-less program available	Normal Windows Server CAL requirements

Windows Server IoT 2019 Powers Edge-toCloud Solutions

Designed for heavy-duty edge computing, Windows Server IoT 2019 is ideal for solutions that enable you to run data processing, machine learning, and analytics workloads on fixed-purpose intelligent devices.

With Windows Server IoT 2019, you can build and secure server-class, fixed-purpose devices with powerful compute capabilities that enable high-capacity storage and seamless scalability between the cloud and edge, delivering enterprise manageability to your IoT solution.

Windows Server IoT 2019 Offers Fixed-Purpose Licensing Terms

Windows Server IoT 2019 licensing accommodates scenarios that are unique to IoT deployments. In addition to Standard, Datacenter and Essentials SKUs, Windows Server IoT 2019 provides for Telecom and Storage Standard & Workgroup use cases.

Windows Server IoT 2019 also offers specific allowances and restrictions in the license agreement. This means that if you are connecting multiple devices, it's the more cost-effective way to go. Windows Server IoT 2019 also offers a CAL-less program, supporting the use of embedded servers in IoT. This option enables you to connect an unlimited number of users or devices to your server cost effectively.

Let's Talk

Don't have all the answers? No problem. We can answer your licensing questions and help you craft a fixed-purpose IoT strategy tailor-made for your business. Contact us at info@bsquare.com

Windows Server IoT 2019: The Foundation for Your Intelligent Edge

Designed for demanding edge workloads, Windows Server IoT 2019 is the ideal solution for fixed-purpose devices, offering features and capabilities to accelerate and secure your IoT solution.

Unique Hybrid Capabilities

Storage Migration Service
Synchronizing file servers to Azure

System Insights
Azure network adaptor

VM protection

Unprecedented Hyper-Converged Infrastructure

Unified Management
Storage spaces
Enhanced Storage Spaces Direct
Mirror-accelerated parity
Nested mirror-accelerated parity
*Storage class memory
USB thumb drive (as cluster witness)
Storage Replica
Storage Quality of Service (QoS)
Data deduplication
Deduplication for ReFS
Virtual machine storage resiliency
Software load balancer (SLB)
Virtual network peering

Cluster OS rolling upgrade
Mixed OS mode cluster
Site-aware failover clusters
Persistent memory
Linux and Free BSD workloads
Hot add and remove for disk, memory, and network
Network controller
Virtual networking
Cloud Witness
Storage health monitoring
Cluster-wide monitoring
Cluster sets
SDN with IPv4/IPv6

Distributed firewall and micro-segmentation
Hybrid SDN gateways
Improved SDN gateway
Converged RDMA
Precision Time Protocol (PTP)
Leap second
HTTP/2
Latency Optimized Background Transport - LEDBAT
IP Address management (IPAM) and DNS
MultiPoint services role
High-availability RDS connection broker

Enhanced Security Capabilities

*Enhanced Windows Defender ATP
Shielded VMs for Windows
Shielded VMs for Linux
HSG offline mode for shielded VMs
VM Connect for shielded VMs
Cluster hardening

SDN encrypted subnet
Cluster hardening
SDN encrypted subnet
Just-enough administration
Just-in-time administration
*Credential guard

Control flow guard
Remote credential guard
Device guard (code integrity)
Dynamic access control
AppLocker
*BitLocker

Faster Innovation for Applications

*Linux containers
*Windows Server containers
*Server Core base container image
*Nano Server base container image
Server Core features on demand
*Kubernetes platform support

Group Managed Service Accounts (gMSA)
*Windows Subsystem for Linux (WSL)
Hyper-V isolation
Azure Service Fabric for Windows Server

PowerShell 5.1
PowerShell Desired State Configuration (DSC)
Visual Studio Code
.NET Core

* Innovations for IoT scenarios

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