

## 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.**

| 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-to- Cloud 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](mailto: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 Advanced Threat Protection (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 Let's talk, contact us at [info@bsquare.com](mailto:info@bsquare.com)