



What's new in SQL Server IoT 2019

SQL Server IoT 2019 offers numerous enhancements to security, performance, and availability for your IoT workloads. Because SQL Server IoT 2019 is the binary equivalent of SQL Server 2019, you get the same database for mission-critical data analytics offering industry-leading performance, availability, and security¹. Microsoft offers two SQL Server IoT editions – Standard and Enterprise.

SQL Server 2019 new features		Standard	Enterprise
Compute and storage	Maximum number of cores	24	OS Max
	Maximum memory utilized per instance	128 GB	OS Max
	Maximum size	524 PB	524 PB
Intelligence over all your data	Data virtualization using PolyBase (including additional data sources like Oracle, Teradata, MongoDB, and other SQL Server databases)	×	×
Choice of language and platform	Compatibility certification	×	×
	UTF-8 support	×	×
	Support for SQL Server Java extension	×	×
Industry-leading performance and availability	Intelligent QP features: Scalar UDF inlining, table variable deferred compilation, approximate count distinct, and automatic tuning	×	×
	Intelligent QP features: row mode memory grant feedback and batch mode for row store		×
	Automatic read-write connection re-routing		×
	In-Memory Database: Hybrid Buffer Pool	×	×
	In-Memory Database: memory-optimized tempdb		×
	In-Memory OLTP and Column Store	×	×
In-Memory Database: Persistent Memory support	×	×	
Secure and reliable	Always Encrypted with secure enclaves	×	×
	Transparent database encryption	×	×
	Data classification and auditing	×	×
	Vulnerability assessment	×	×
Quick business insights	Lightweight Query Profiling	×	×
	SQL Server Analysis Services Direct Query	×	×

Choosing the right SKU:

Use **Standard** for:

Full featured database for mid-tiered applications on servers not exceeding 24 cores.

Use **Enterprise** for:

Intelligent applications requiring mission critical in-memory performance, security, and high availability.

¹Various TPC performance measurements as of 9/23/19: <http://www.tpc.org/4081>; <http://www.tpc.org/3331>; <http://www.tpc.org/3336>; <http://www.tpc.org/3337> Most secure over past 9 years: National Institute of Standards and Technology Comprehensive Vulnerability Database