

Solution Snapshot

SQL Server AWS

The Challenge

Companies continue to go through capacity and system constraints; increasing demand amplifies these challenges enterprises face.

SQL Server Overview

The mass proliferation of data means that businesses need the information to make smarter business decisions—if they can analyze that data quickly and turn those insights into action. Whether databases are small, large, or somewhere in the middle, the general purpose M6i.2xlarge and M6i.4xlarge instances enabled by 3rd Gen Intel® Xeon® processors can improve data warehousing performance over older 2nd Gen Intel® Xeon® processors.

SQL Server Use Cases

Big Data Clusters

Combine structured and unstructured data in SQL Server with the power of Apache Spark and built-in Hadoop Distributed File System (HDFS).

Data Virtualization

Query across data stored in Oracle, Teradata, multiple SQL Server versions, AWS SQL Database, AWS Synapse Analytics (formerly SQL Data Warehouse), AWS Cosmos DB, Cloudera, AWS Data Lake Storage, and HDFS without moving or replicating data.

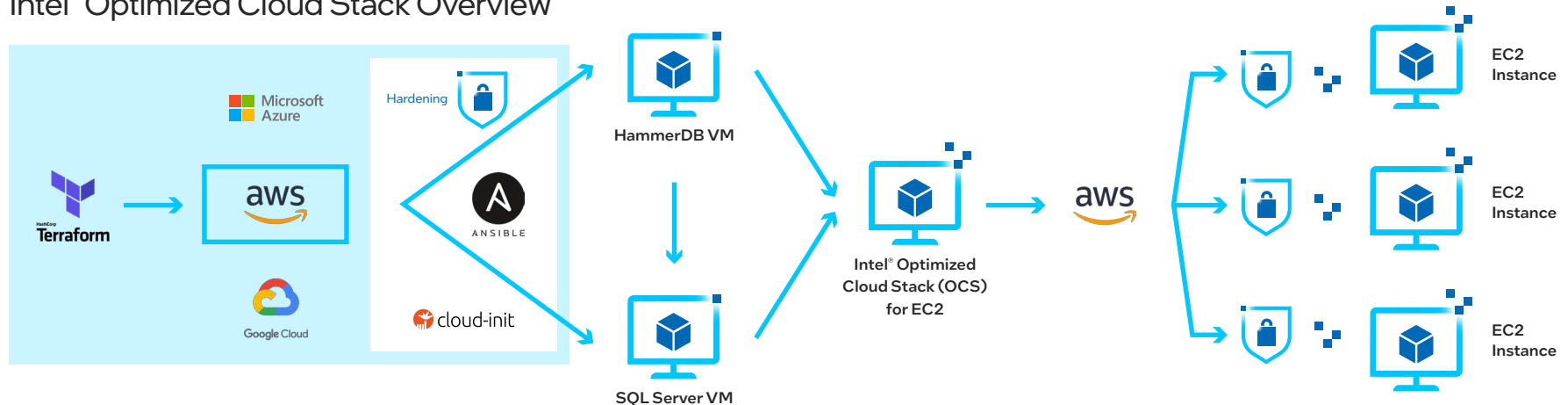
Intelligent Database

Improve query performance with no application changes using intelligent query processing.

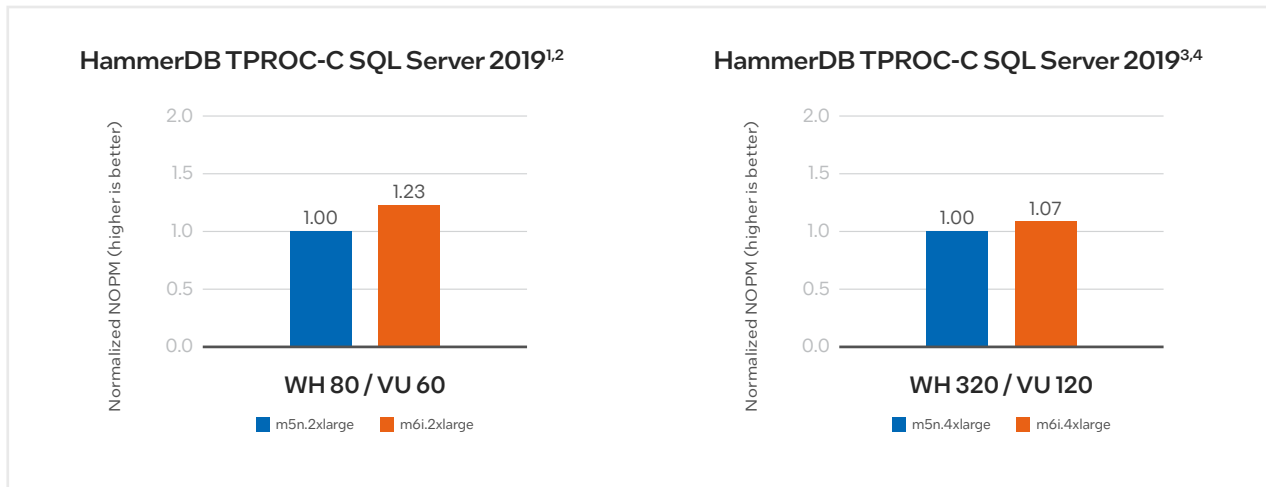
Accelerated Database Recovery

Enable fast and consistent database recovery, no matter how many transactions you're processing or their sizes.

Intel® Optimized Cloud Stack Overview



Proof Points



Amazon EC2 M6i instances are powered by 3rd Gen Intel® Xeon® Scalable processors and deliver up to 15% better price-performance compared to M5 instances.^{1,2,3,4}

M6i instances feature a 4:1 ratio of memory to vCPU, just like M5 instances, and support up to 128 vCPUs per instance, which is 33% more than M5 instances.^{1,2,3,4}

High-performance block storage (Amazon EBS) that attach volumes to SQL Server instances.

Why Intel for SQL Server

Fast Operations

SQL Server on AWS provides near real-time insights across the application development cycle and allows you to add new use cases quickly by deploying data warehousing solutions in minutes. Harness more data with less hassle by using 3rd Gen Intel® Xeon® Scalable processors for SQL Server deployments.

Infrastructure Footprint

Shrink your infrastructure footprint and lower your cost with Intel® architecture on AWS cloud with Intel® scalable processors.

Flexible Storage Options

Leverage Intel® technology to run SQL Server on your infrastructure platform of choice, on-premises, hybrid, or AWS Cloud.

Turnkey Solution

Intel® Optimized Cloud Stack uses ready-to-use AWS EC2 instance images to save workload runtime and cloud costs, helping end customers reduce customization complexity and accelerate time to deployment.

Want More Information?

Contact your Microsoft or Intel account executive to learn how we can help modernize your security platform.

1. Tested by Intel as of 05/04/2022, Single m6i.2xlarge instance with 8vCPU, Intel® Xeon® Platinum 8375C processor, total memory = 32 GB, OS image = Windows_Server-2019-English-Full-SQL_2019_Enterprise-2022.03.09, kernel = Version 1809 (OS Build 17763.1757), WL specific details = HammerDB 4.2, Microsoft SQL Server 2019 (RTM-CU15) (KB5008996) - 15.0.4198.2 (X64), storage = Amazon AWS EBS GP3 disks.

2. Tested by Intel as of 28/03/2022, Single m5n.2xlarge instance with 8vCPU, Intel® Xeon® Platinum 8259CL processor, total memory = 32 GB, OS image = Windows_Server-2019-English-Full-SQL_2019_Enterprise-2022.03.09, kernel = Version 1809 (OS Build 17763.1757), WL specific details = HammerDB 4.2, Microsoft SQL Server 2019 (RTM-CU15) (KB5008996) - 15.0.4198.2 (X64), storage = Amazon AWS EBS GP3 disks.

3. Tested by Intel as of 05/04/2022, Single m6i.4xlarge instance with 16vCPU, Intel® Xeon® Platinum 8375C processor, total memory = 64 GB, OS image = Windows_Server-2019-English-Full-SQL_2019_Enterprise-2022.03.09, kernel = Version 1809 (OS Build 17763.1757), WL specific details = HammerDB 4.2, Microsoft SQL Server 2019 (RTM-CU15) (KB5008996) - 15.0.4198.2 (X64), storage = Amazon AWS EBS GP3 disks.

4. Tested by Intel as of 28/03/2022, Single m5n.4xlarge instance with 16vCPU, Intel® Xeon® Platinum 8259CL processor, total memory = 64 GB, OS image = Windows_Server-2019-English-Full-SQL_2019_Enterprise-2022.03.09, kernel = Version 1809 (OS Build 17763.1757), WL specific details = HammerDB 4.2, Microsoft SQL Server 2019 (RTM-CU15) (KB5008996) - 15.0.4198.2 (X64), storage = Amazon AWS EBS GP3 disks.

Performance varies by use, configuration, and other factors. Learn more at www.Intel.com/PerformanceIndex

Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. See backup for configuration details. No product or component can be absolutely secure.

Your costs and results may vary.

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