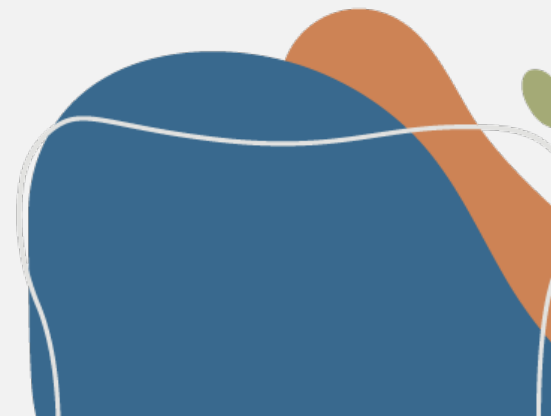




Complete online analytics
processing work faster with Google
Cloud Platform N2 standard VM
instances featuring 3rd Generation
Intel Xeon Scalable Processors





About our testing

We tested data warehouse analytical performance on three sizes of two sets of VM instances.

CSP	Google Cloud Platform
VM instances	<ul style="list-style-type: none">• N2 standard feat. 3rd Gen Intel Xeon Scalable processors (Ice Lake)• N2 standard feat. 2nd Gen Intel Xeon Scalable processors (Cascade Lake)
Database	Microsoft SQL Server 2019
Workload	TPROC-H workload from HammerDB benchmark suite: <ul style="list-style-type: none">• Online analytics processing (OLAP)• Measures time required to analyze streams of database queries• One stream = 22 serialized database queries
Sizes	<ul style="list-style-type: none">• 8 vCPUs with 32 GB memory• 16 vCPUs with 64 GB memory• 64 vCPUs with 256 GB memory

About PT

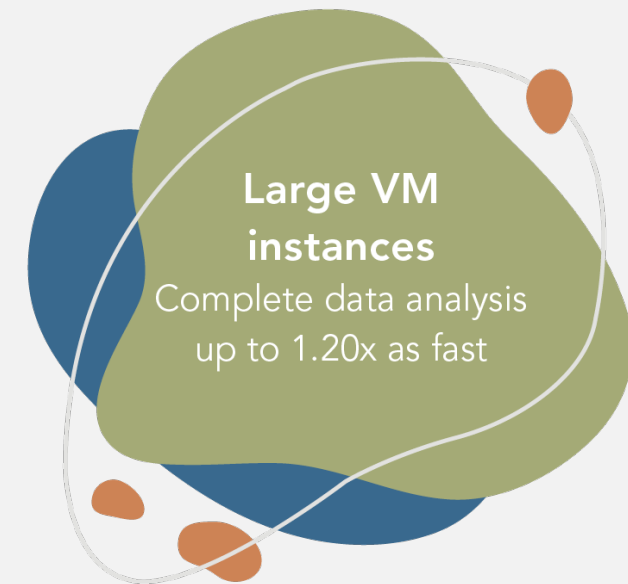
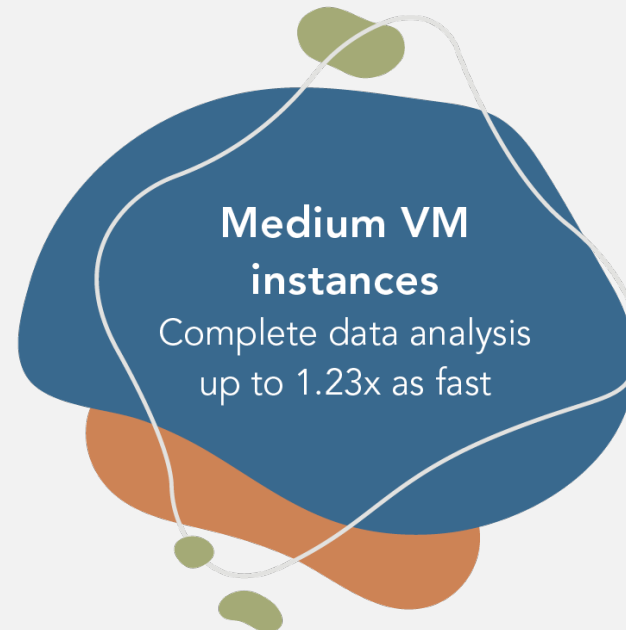
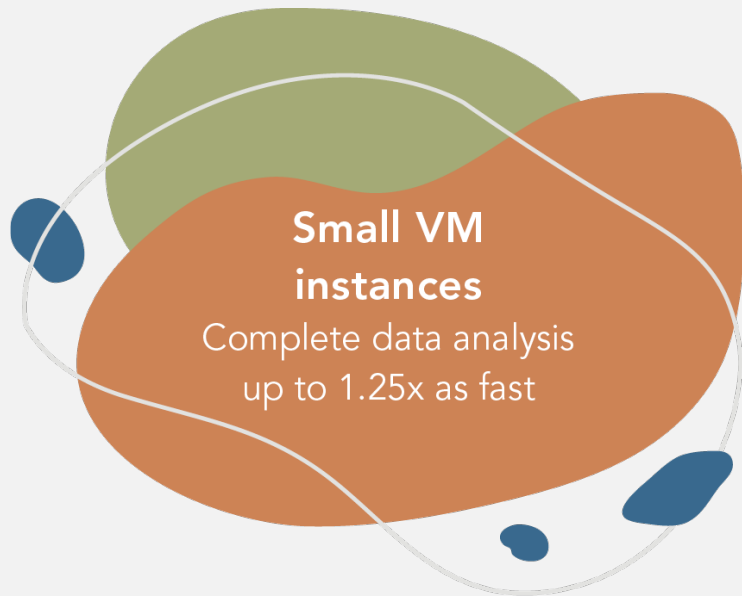
Principled Technologies, Inc. (PT) is the leading provider of third-party competitive marketing services for technology.

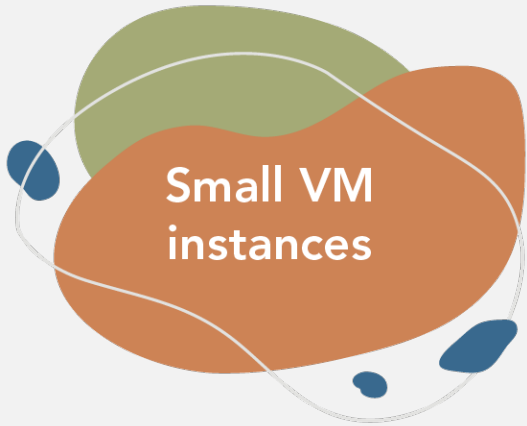
Our hands-on testing mirrors the way real users work with your product and delivers proof points you and they can count on, while our award-winning competitive marketing contextualizes those claims.

Learn more at www.principledtechnologies.com.

Key claims

VM instances with 3rd Gen Intel Xeon Scalable CPUs **consistently completed the workload faster** than those with 2nd Gen Intel Xeon Scalable processors.

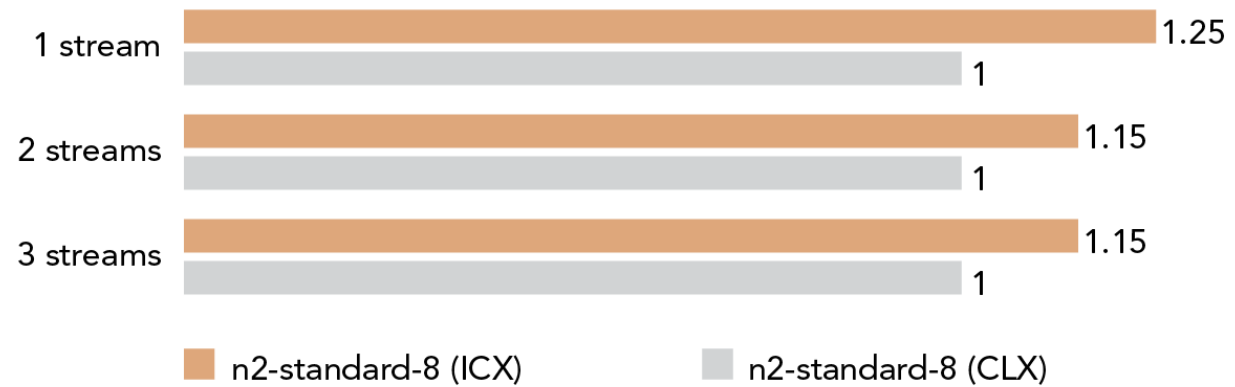




Detailed test results

Small VM instance comparison: speed of completion

OLAP workload on Microsoft SQL Server 2019 | Higher is better | Normalized results



Benefits

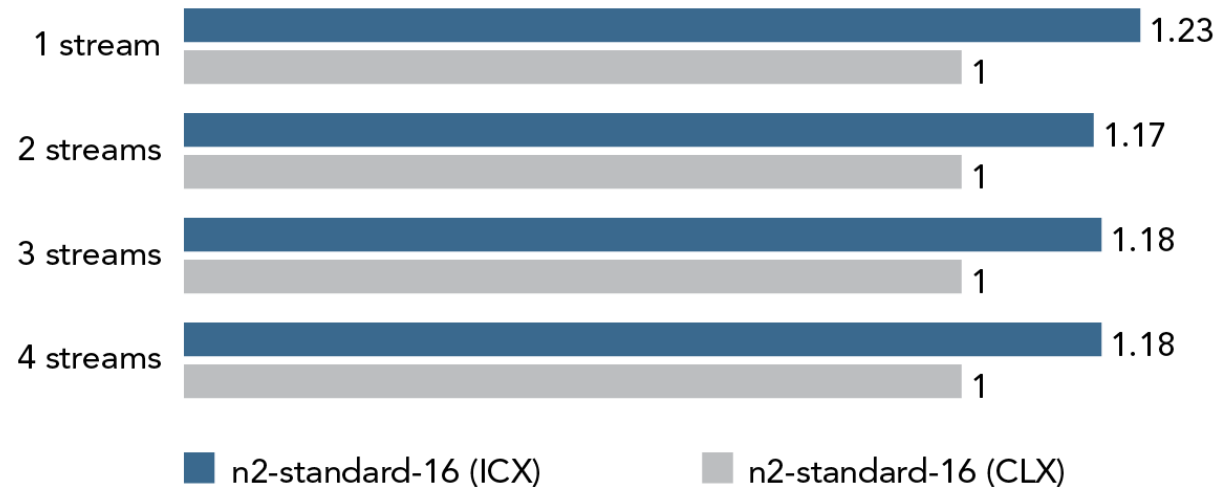
- Do more analysis work in the same time window
- Use fewer VM instances for the same work
- Speed the time to insights
- Quicken pace of innovation
- Give decision-makers key info sooner



Detailed test results

Medium VM instance comparison: speed of completion

OLAP workload on Microsoft SQL Server 2019 | Higher is better | Normalized results



Benefits

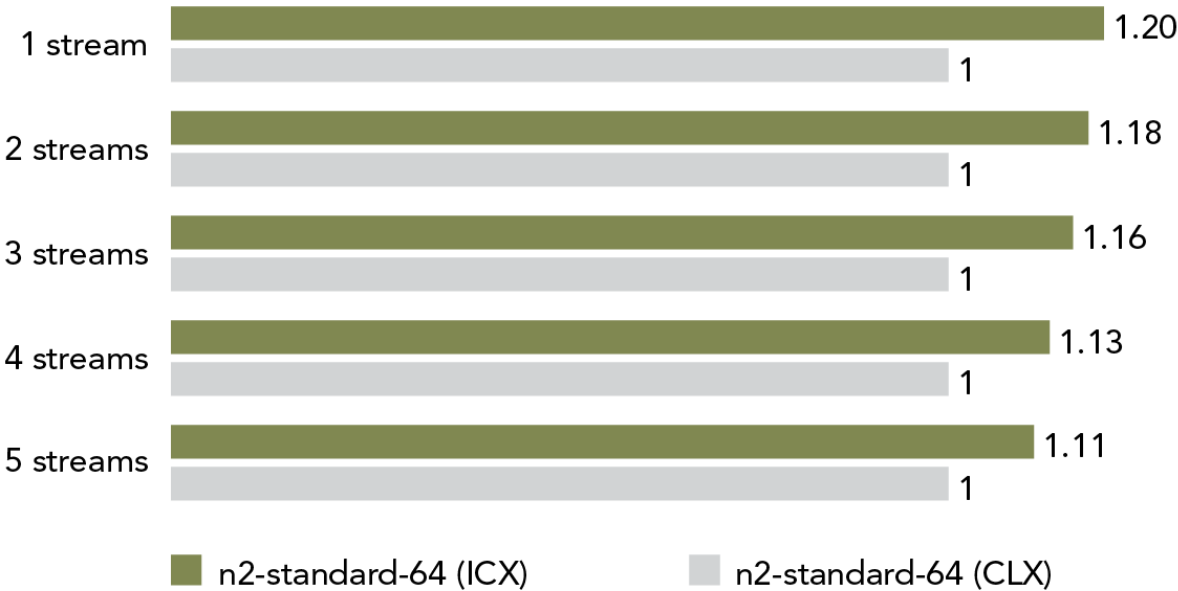
- Do more analysis work in the same time window
- Use fewer VM instances for the same work
- Speed the time to insights
- Quicken pace of innovation
- Give decision-makers key info sooner



Detailed test results

Large VM instance comparison: speed of completion

OLAP workload on Microsoft SQL Server 2019 | Higher is better | Normalized results



Benefits

- Do more analysis work in the same time window
- Use fewer VM instances for the same work
- Speed the time to insights
- Quicken pace of innovation
- Give decision-makers key info sooner

A Principled Technologies report: Hands-on testing, Real-world results.



Complete online analytics processing work faster with Google Cloud Platform N2 standard VM instances featuring 3rd Generation Intel Xeon Scalable Processors

Compared to N2 standard instances with 2nd Generation Intel Xeon Scalable processors

These days, many sound business decisions rely on a conversation between powerful analytics systems and executives who consider the data those systems report. While we can't help your staff with their deliberations, we can point the way to a cloud solution capable of speeding up data analysis so key decision-makers can gain insights sooner.

At Principled Technologies, we assessed the data warehouse analytical performance of two sets of Google Cloud Platform VM instances running Microsoft SQL Server 2019 databases: N2 standard VM instances featuring 3rd Generation Intel Xeon Scalable processors and N2 standard VM instances featuring 2nd Generation Intel Xeon Scalable processors. In our tests, the VM instances with 3rd Gen Intel Xeon Scalable processors completed the workload faster than the VM instances with 2nd Gen Intel Xeon Scalable processors (up to 1.25 times as fast when processing a single data stream).

This speed could enable your business to process more analytics work in the same analysis window you currently use, or to speed the time to insights.

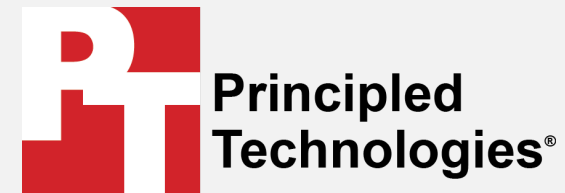
Small VM instances
Complete data analysis up to 1.25x as fast

Medium VM instances
Complete data analysis up to 1.23x as fast

Large VM instances
Complete data analysis up to 1.20x as fast

Complete online analytics processing work faster with Google Cloud Platform N2 standard VM instances featuring 3rd Generation Intel Xeon Scalable Processors

January 2022



Read the report at <https://facts.pt/5qbfLud>

