Microsoft

SQL Server 2014
Mission Critical Performance

With groundbreaking In-Memory technology built-in, SQL Server 2014 provides mission critical performance for the most demanding database applications.

In-Memory Built-In
Up to 30x performance gains

In-memory **across all workloads** in a single platform

- No need to re-write the entire app
- Select highly utilized tables to be in-memory
- Optimize in-memory to fit existing hardware
- Natively compile stored procedures

OLTP   DW   BI

" With In-Memory OLTP and HDInsight, we have the best technology on which to base the current and future design of our architecture. "
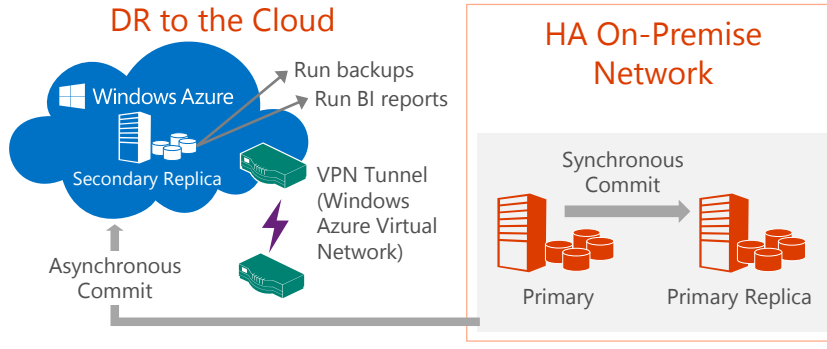
– Guido Van de Velde
Ferranti

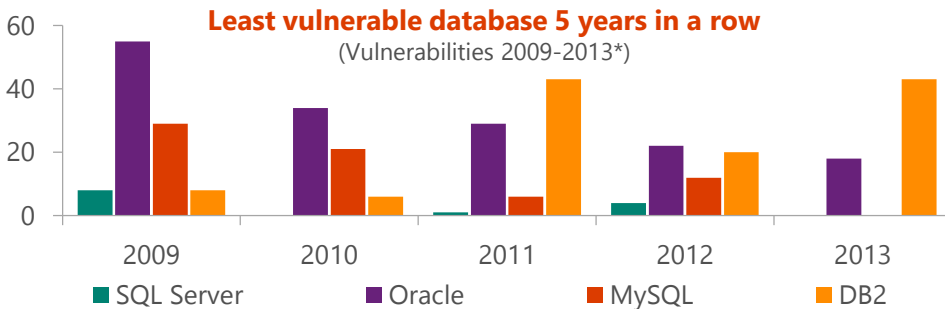## High Availability
The 9's you need

- Multi-DB failover, manual or automatic
- Up to 8 secondary replicas and a new Replica Wizard
- Offload reads and backups to readable secondaries
- Synchronous replication for zero transaction loss

High Availability & Disaster Recovery with AlwaysOn

DR to the Cloud

HA On-Premise Network

Windows Azure

Run backups
Run BI reports

Secondary Replica

VPN Tunnel (Windows Azure Virtual Network)

Asynchronous Commit

Synchronous Commit

Primary   Primary Replica

Enhanced Security & Scalability
Least vulnerable 5 years in a row

Least vulnerable database 5 years in a row
(Vulnerabilities 2009-2013*)

	2009	2010	2011	2012	2013
SQL Server					
Oracle					
MySQL					
DB2					

■ SQL Server   ■ Oracle   ■ MySQL   ■ DB2

Mission Critical Scale with Windows Server 2012

COMPUTE

Physical compute up to 640 logical processors
Virtual compute 64 vCPUs/VM & 1TB memory/VM

NETWORKING

Access scalable networking with NIC teaming by pooling network cards

STORAGE

Ensure hot data hits premium storage for faster performance

Mission Critical Support
Highest-level coverage

- Solution validation
- Architectural reviews
- On-site engineering
- Fastest response times available from Microsoft

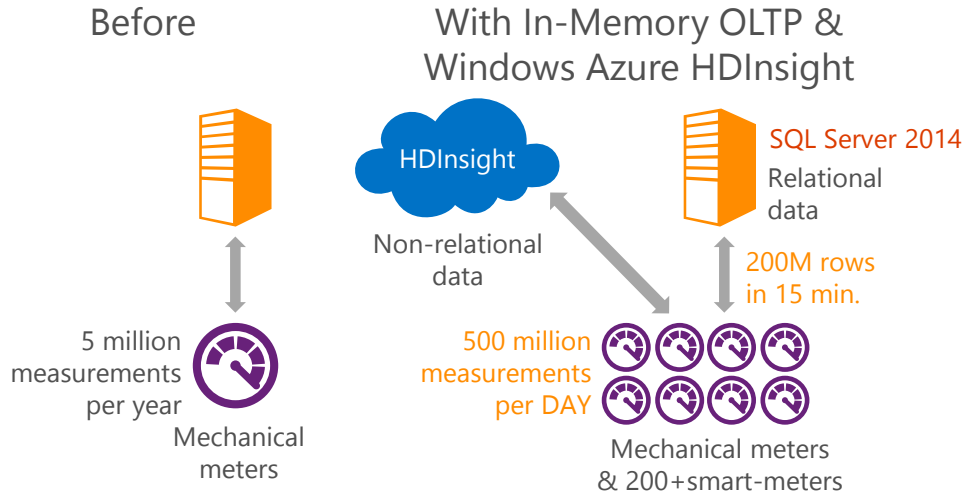Ecosystem of
70,000+
SQL Server Partners

More than 900 businesses migrated workloads from Oracle to SQL Server since 2012

*National Institute of Standards and Technology Comprehensive Vulnerability Database 4/17/2013

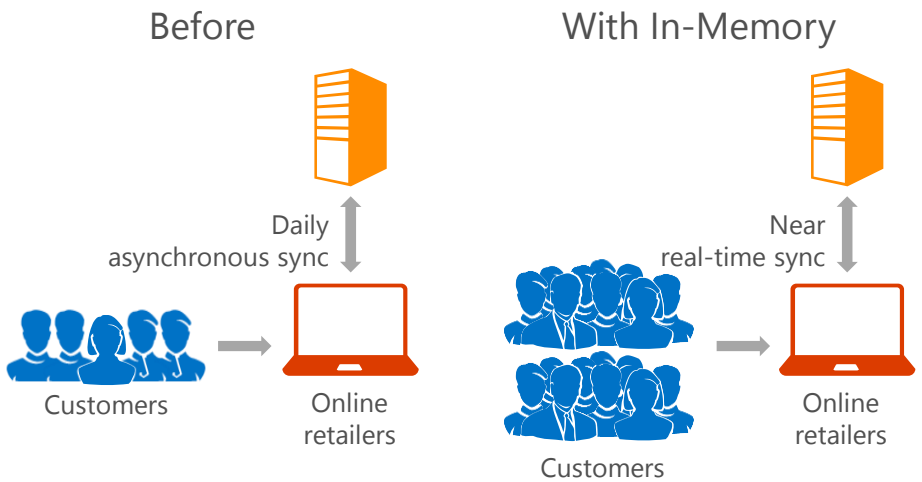# Real World Mission Critical Performance with SQL Server 2014

Hybrid Utility Solution Manages Data Explosion

- ✓ Increased database write speed 100%
- ✓ Enhanced customer service through "smart" appliances and optimized rates

FERRANTI computer systems

Before

5 million measurements per year

Mechanical meters

With In-Memory OLTP & Windows Azure HDInsight

HDInsight

Non-relational data

SQL Server 2014 Relational data

200M rows in 15 min.

500 million measurements per DAY

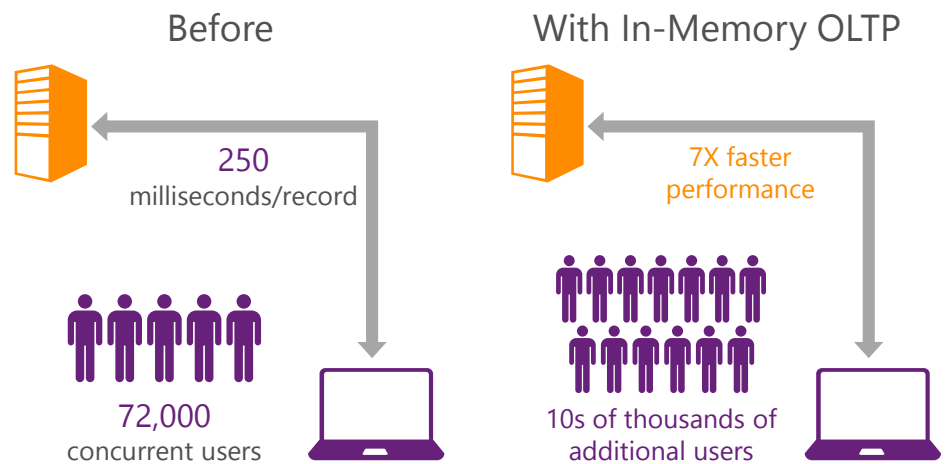Mechanical meters & 200+smart-meters

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Edgenet gets 7x faster performance

- ✓ Increased sales with greater throughput and improved customer satisfaction
- ✓ 7x faster performance enables near real time inventory updates

edgenet

Before

Daily asynchronous sync

Customers

Online retailers

With In-Memory

Near real-time sync

Customers

Online retailers

7X Faster Solution Can Save Lives, Scale Globally

- ✓ 7x faster performance enables near real time access to medical records, to help save lives
- ✓ Increased scalability can handle thousands of additional users

tpp

Before

250 milliseconds/record

72,000 concurrent users

With In-Memory OLTP

7X faster performance

10s of thousands of additional users

> "Using SQL Server 2014, we can now comfortably say we can scale our system when we expand to new international markets...we've proven that we can scale, and we'll be able to handle many more users."

– Phil Grayson, Technical Operations Lead, TPP