



# Leading Performance for Oracle Applications?

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Collaborate 2015

# First Let's Test Your IT Knowledge



1.) According to IDC in 2014, which system vendor is 2<sup>nd</sup> in x86 blades market share in worldwide and #1 here in America?

Cisco

2.) Which vendor uses over 6,000 blades to run 1000's of Oracle Databases and the 2<sup>nd</sup> largest Oracle E-Business Suite deployment?

Cisco

# First Let's Test Your IT Knowledge



3.) How many #1 Oracle-based benchmarks has Cisco UCS attained?

37 – At time of posting

4.) In January 2015 Cisco UCS posted two more Oracle performance world records, what was the ERP application?

Oracle PeopleSoft



# Cisco's Data Center Momentum

“UCS has now reached over \$3 billion revenue run rate with over 41,000 customers. More than 85% of the Fortune 500 have chosen UCS, because of the innovative architecture, with particular traction in cloud, big data and enterprise application solutions. The innovation underlying UCS, the convergence of compute network and storage is continuing to fuel our growth in the data center and differentiates Cisco.”

John Chambers

February 2015

FY15 Q2 Earnings Announcement

# Cisco UCS – A Fresh Architecture



Industry  
Standard APIs

UCS Manager



FABRIC  
INTERCONNECTS  
Cisco UCS 6296 XP

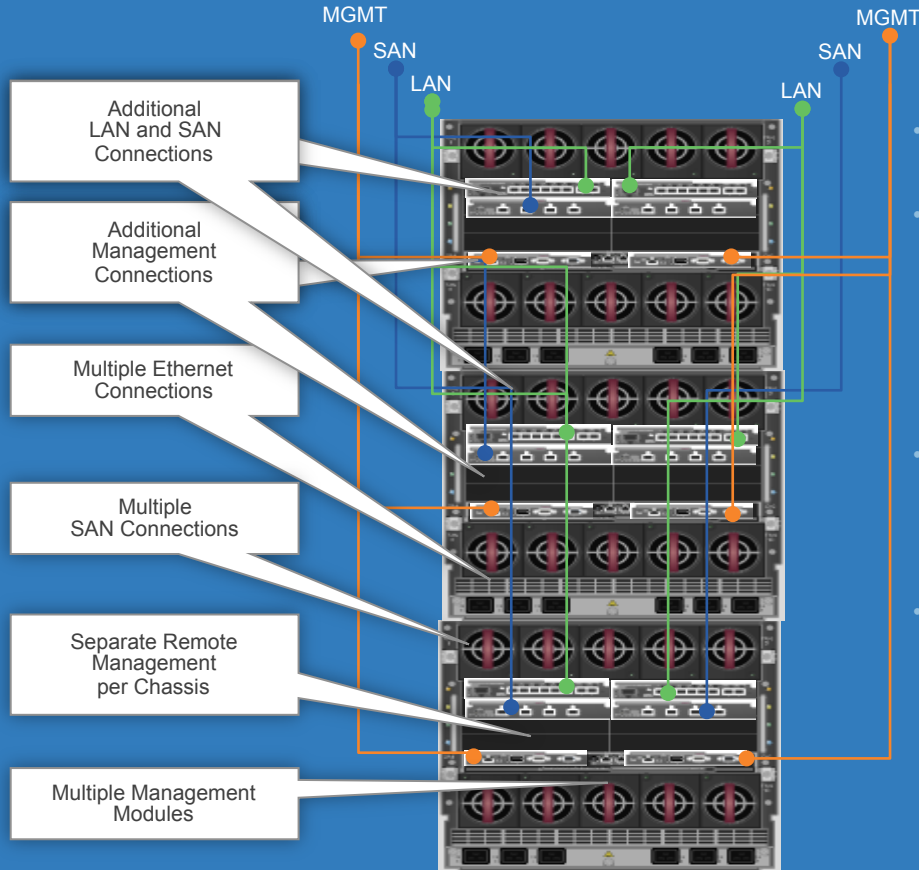
Fabric Extenders  
(I/O modules)



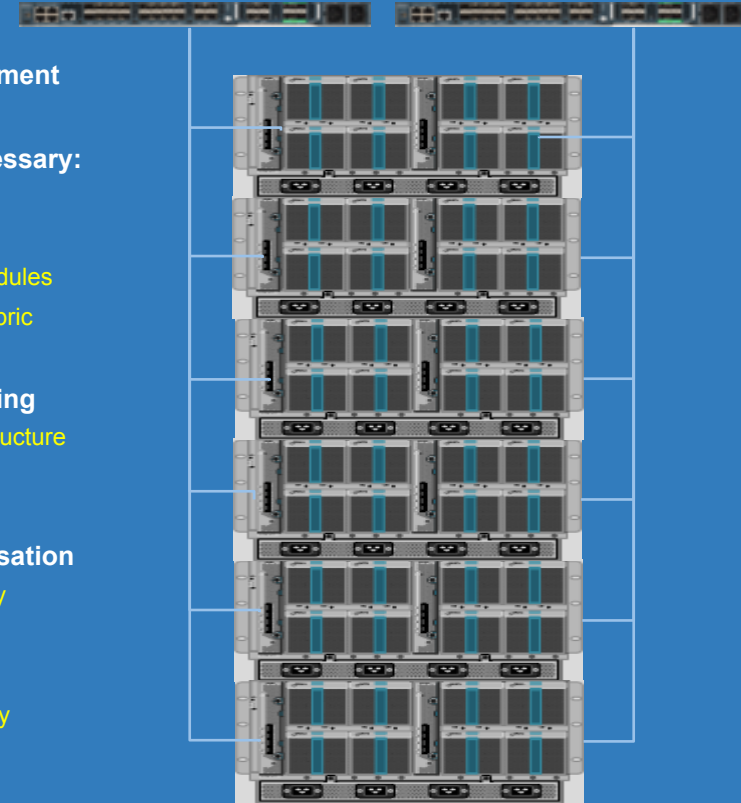
COMPUTE  
Blade Form Factor

Rack Form

# Cisco UCS = Reduced Complexity Increased Flexibility



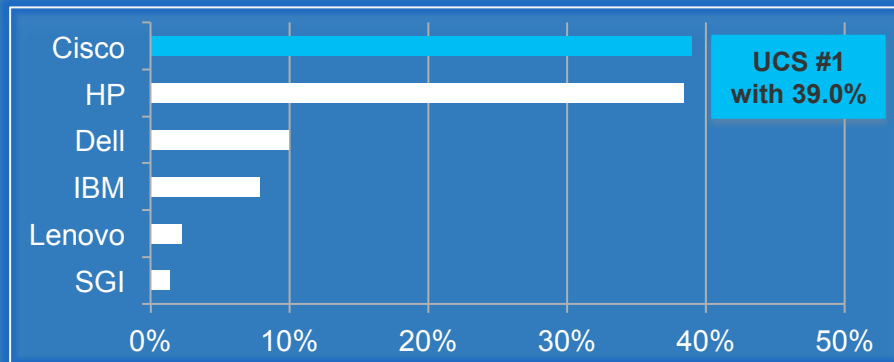
- **Embed management**
- **Remove unnecessary:**
  - Switches
  - Adapters
  - Management modules
  - 10GbE unified fabric
- **Power and cooling**
  - 1/3rd less infrastructure
  - Lower power
- **Built for virtualisation**
  - Processor density
  - VM/host ratio
  - I/O improvement
  - Extended memory



# X86 Server Blade Market Share CY 2014



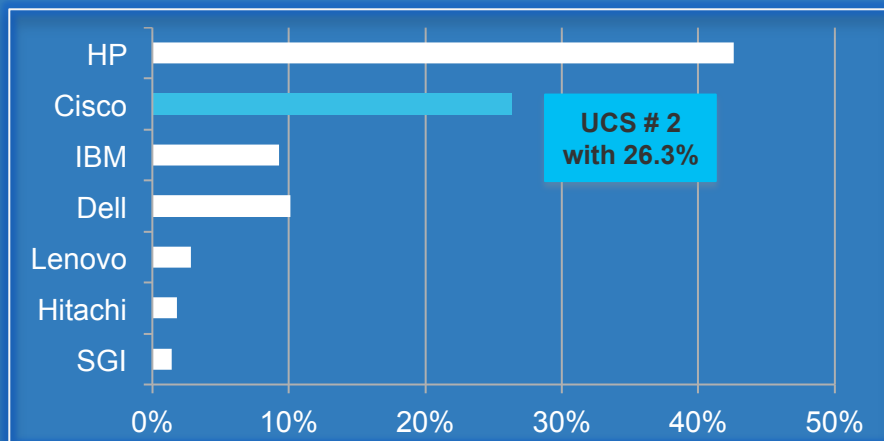
US



#1 in US for 2014 (39.0%), growing 28% YoY (IDC)

#2 Worldwide for 2014 (26.3%)  
growing 29% YoY (IDC)

Worldwide



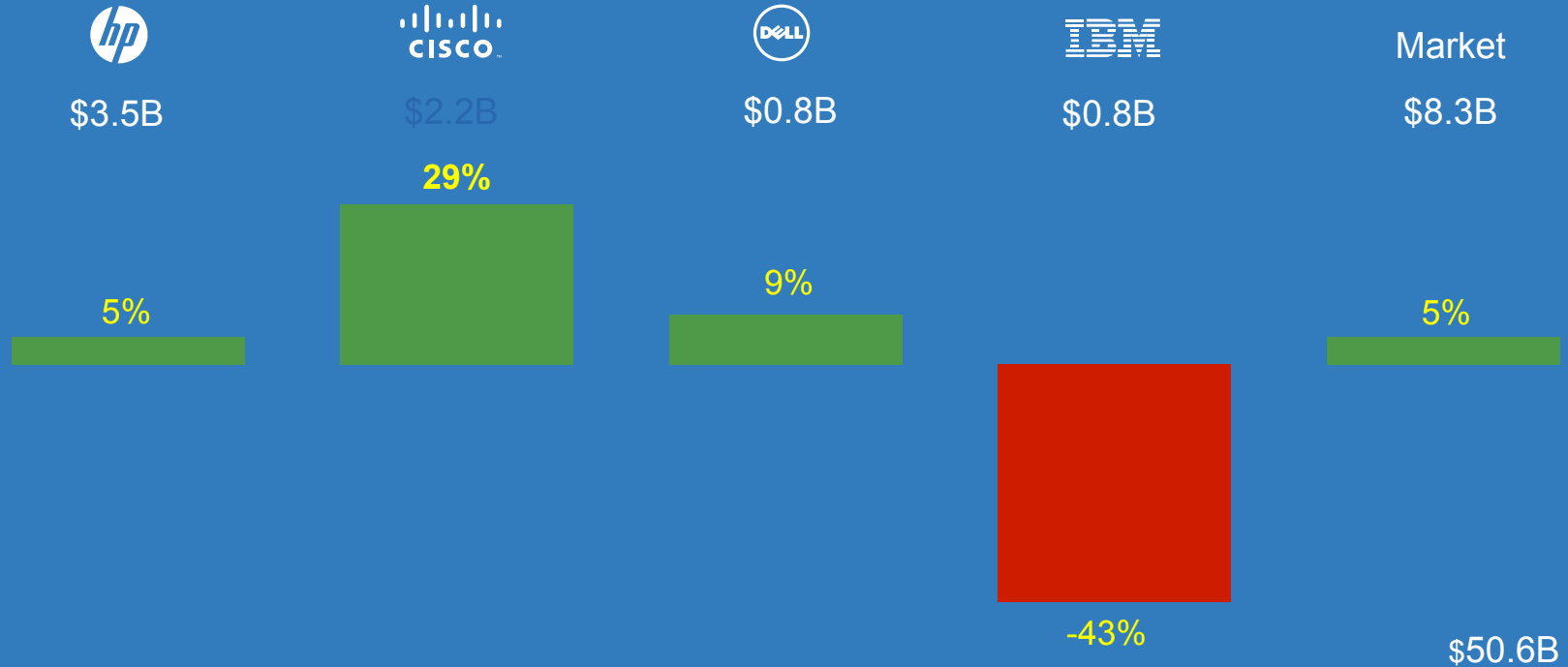
UCS momentum

41,000+ Unique Customers

19,500+ Repeat Customers

1,000's running Oracle Solutions!

# Cisco UCS Leading X86 Blade Server Growth (Y/Y)



Source: IDC Worldwide Quarterly Server Tracker, 2014 Q4, March 2015, Vendor Revenue Share for top vendors. Y/Y growth based on cumulative 4 quarters revenue (Q1CY14 – Q4CY14).





RosettaStone



WestconGroup



slumberland  
FURNITURE



PHARMAVITE



hannover *life re*

UCS Oracle  
Customers



# Cisco UCS Performance: 100 Records for All Workloads

## World-Record Performance



The balance of processor, memory, and I/O  
makes Cisco UCS the clear performance leader!

23

CPU

17

Virtualization  
/Cloud

7

Database

19

Enterprise  
Application

16

Enterprise  
Middleware

18

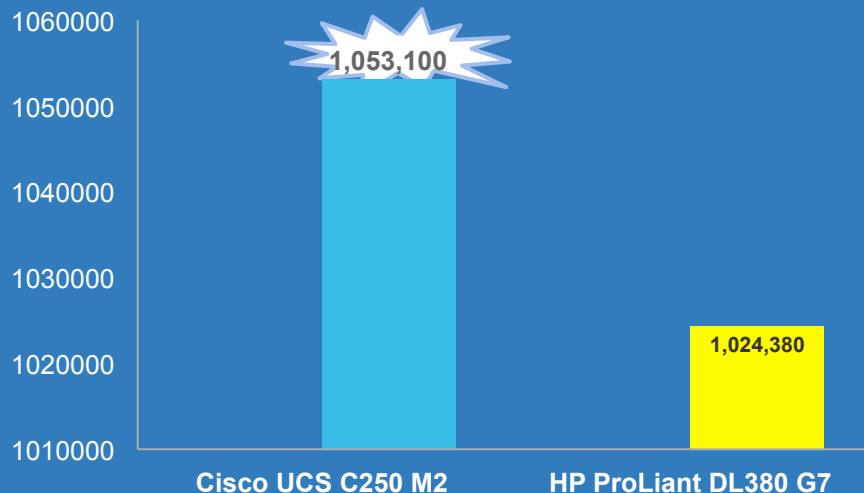
HPC

Cisco UCS Benchmarks that held world record performance records as of date of publication For details, please see source document "Cisco Unified Computing System and Intel Xeon Processors: 100 World-Record Performance Results" at [http://www.cisco.com/c/dam/en/us/products/collateral/servers-unified-computing/le\\_32801\\_pb\\_ucs\\_worldrecords.pdf](http://www.cisco.com/c/dam/en/us/products/collateral/servers-unified-computing/le_32801_pb_ucs_worldrecords.pdf)

# Cisco-Oracle Post Leading TPC-C Result

First non-Sun TPC Result Since Acquisition of Sun by Oracle

Oracle Database 11g R2. Oracle Linux with Unbreakable Enterprise Kernel Release 2



Results for Two-Socket  
Intel Xeon Processor-Powered Servers.

"This record benchmark shows that Oracle Database 11g Standard Edition One provides customers with exceptional price/performance,"

Juan Loaiza,  
SVP Systems Technology  
Oracle.

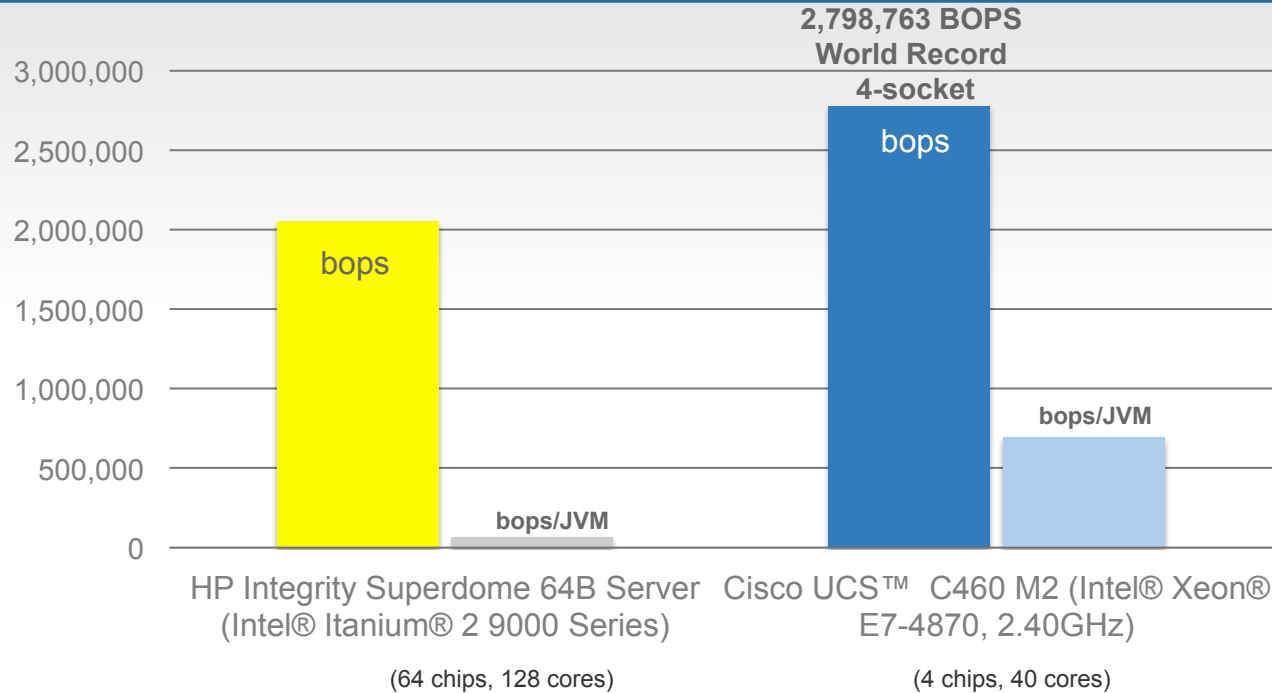
11% Lower Cost

Server	Processors (Cores/Threads)	Performance	Price/Performance Ratio	Availability Date
Cisco® UCS C250 M2	2 Intel Xeon X5690 3.46 GHz (12 cores, 24 threads in total)	1,053,100 tpmC	\$0.58 USD per tpmC	December 7, 2011
HP ProLiant DL380 G7	2 Intel Xeon X5690 3.46 GHz (12 cores, 12 threads in total)	1,024,380 tpmC	\$0.65 USD per tpmC	June 20, 2011

The performance results described in this document are derived from detailed benchmark results available as of December 14, 2011, at <http://www.tpc.org/tpcc/default.asp>.

# Cisco UCS Displays Excellent – SPECjbb2005

## Multi-tier Java Server Performance C460 M2



SPECjbb2005 results posted <http://www.spec.org/jbb2005/results/jbb2005.html>

# The Best Oracle Performance 37 World Records & Proof Points

3

Database

14

E-Business  
Suite

4

PeopleSoft

3

JD Edwards

1

Siebel

12

Middleware

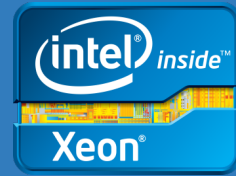
# Oracle E-Business Suite Standard Benchmark Audit and Publication



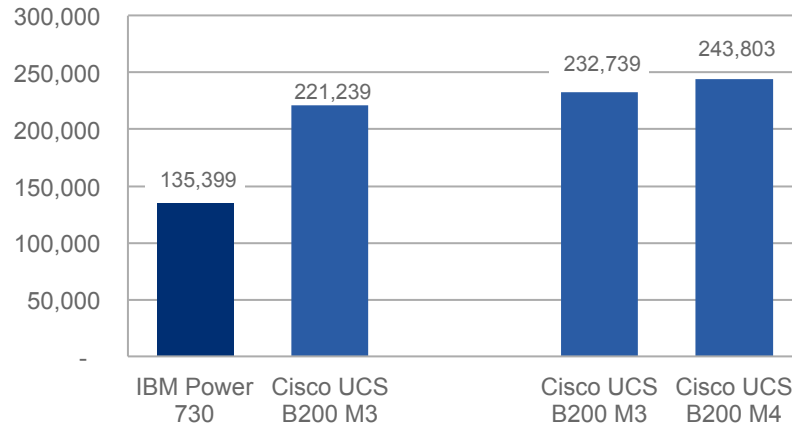
- Final results are approved by Oracle
- Certified by independent auditor (InfoSizing) before publication.
- Published results and detailed benchmark reports are publicly accessible on the Oracle web site.
- All tuning is documented and reproducible.
- Vendors can run three versions of the kit:
  - Payroll Batch – Simulates paying employees
  - Order-to-Cash – Simulates processing of orders at a factory
  - On-line – Combines an OLTP run exercising each E-Business Suite module, then massive update at night

# Oracle E-Business Suite Standard Benchmark

## A History of Cisco UCS Leadership



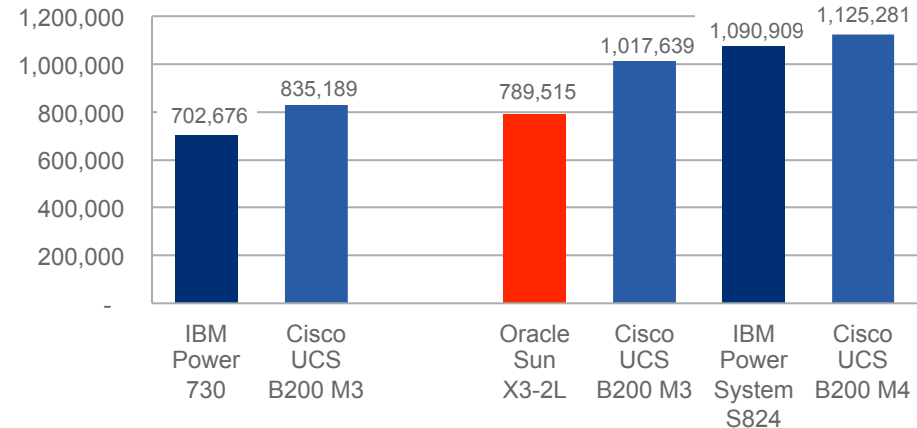
**Order to Cash Batch Benchmark**  
Order Lines per Hour



• Oracle E-Business Suite  
12.1.2

• Oracle E-Business Suite  
12.1.3

**Payroll Batch Benchmark**  
Employees Paid per Hour



• Oracle E-Business Suite  
12.1.2

• Oracle E-Business Suite  
12.1.3

# Oracle PeopleSoft HRMS 9.1 FP2 Self-Service (OLTP)

Posted January 2015 Extra-Large Data Model B460 M4 Based

New  
Jan 15

The online (OLTP) transactions simulated HTML page clicks that guide the user through a particular scenario such as promoting an employee. The kit requires one to process several sets of 14 different transactions:

- Update Home Address
- Update Home Phone
- View Benefits Summary
- Benefits Change Life
- View Paycheck
- Update Direct Deposit Info
- Employee Adds Profile
- View Employee Info
- Initiate Termination
- Initiate Promotion
- Initiate Employee Salary Change
- Add Employee
- Hire Employee
- Add a Position

20,000 Users

Ave. Response  
0.35 sec  
Ave. Save  
0.17 sec

Cisco UCS 5108 Chassis



EMC VNX 5500

Data Storage

75 Drives (536 GB)  
39 TB Raw Storage  
~ 9.4TB used



UCS B200 M3

Web Server

(4) 2.7 GHz 12-core E7-2697 V2  
256 GB memory (45 GB used)

Oracle Linux 5.8



(2) UCS B200 M3  
Application Servers

(4) 2.7 GHz 12-core E7-2697 V2  
256 GB memory (224 GB used)

Oracle Linux 5.8



UCS B460 M4

Database Server

(4) 2.8 GHz 15-core E7-4890 V2  
1 TB memory (370 GB used)

Oracle Linux 6.3

12,000 Users	Oracle T4-4	Cisco B460 M4	Cisco Improvement
Sec. Response	0.77	0.294	62%
Sec. Save	0.51	0.139	72%

20,000 Users	Oracle M6-32	Cisco B460 M4	Cisco Improvement
Sec. Response	0.764	0.35	55%
Sec. Save	0.32	0.17	47%

<http://www.oracle.com/us/solutions/benchmark/apps-benchmark/peoplesoft-167486.html>



# Oracle PeopleSoft HRMS 9.1 FP2 Self-Service & Payroll Batch

Posted January 2015 Extra-Large Data Model B460 M4 Based

New  
Jan 15

This benchmark measured five Payroll application business process runtimes for one database representing an extra-large organization. Five different sets of transactions are compiled:

- Paysheet Creation
- Payroll Calculation,
- Payroll Confirmation,
- Print Advice Forms,
- Creating a Direct Deposit

1,368,055  
Payments in  
22 minutes!

500,480  
Employees

B460 M4 result beat previous top results on  
64 streams of data by Oracle:

Oracle M6-32 by	7.8%
Oracle T4-4 by	34.3%

Then a massive single update to the Oracle database occurs (at night for a real customer ☺).

Cisco UCS 5108 Chassis



\*Based upon 64 streams of data



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1 TB memory (370 GB used)

Oracle Linux 6.3

<http://www.oracle.com/us/solutions/benchmark/apps-benchmark/peoplesoft-167486.html>

# Benchmarks Are Cool, But Keep in Prospective

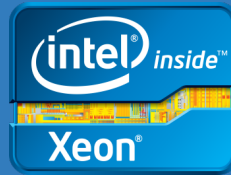


- Benchmarks are like miles per gallon measure of fuel economy (Each individual drives differently 😊)
- The workload tested is not YOURS
- Benchmark engineers strive for top performance and configurations are unique
- Best measure is to test with you own data (Proof of Concept)

The balance of processor, memory, and I/O makes Cisco UCS the clear performance leader!



# Next Steps?



Take 5 minutes to tell us  
what you think

You get to rate the  
speaker - ME



Please visit the  
**Ask The Experts**  
area and the  
EXCITING  
**KAON** unit!

Request a more detailed  
architecture or sizing  
discussion today at:

[oraclewithcisco@cisco.com](mailto:oraclewithcisco@cisco.com)



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email: [oraclewithcisco@cisco.com](mailto:oraclewithcisco@cisco.com)



*TOMORROW starts here.*