



Demo Consolidation

Server Performance and Simulation Report

Prepared for: Interact

Version 2 • Generated 6 August 2026

Interact DC

<https://interactdc.com>

Host-to-Host Analysis

Spec	Servers	Current Util.	New Util.	Max Perf. Change
Dell PowerEdge R7725 – AMD Epyc 9965 – 1024GB RAM	100	25.0% (assumed)	22.3%	+12.0%
HPE ProLiant DL380 Gen12 – Intel Xeon 6990E+ – 1024GB RAM	150	25.0% (assumed)	24.5%	+1.9%
HPE ProLiant DL380 Gen11 – Intel Xeon Gold 6544Y – 768GB RAM	400	25.0% (assumed)	26.5%	-5.5%

Target Comparisons

Dell PowerEdge R7725 (AMD Epyc 9965) — Qty: 100

Dell PowerEdge R7725 – AMD Epyc 9965 – 1024GB RAM

72%

ENERGY REDUCTION

72%

CARBON REDUCTION

86%

SERVER CONSOLIDATION

Increase 61.0%

CORE COUNT – CURRENT VS NEW

Decrease 67.9%

TOTAL MEMORY – CURRENT VS NEW

C → A+

ESTATE ENERGY GRADING

Physical Server Consolidation

716

Current

100

New

86%

% Physical Server Consolidation

Core Count – Current vs New

23852

Current

38400

New

Increase 61.0%

% Core Change

Total Memory – Current vs New

319426 GB

Current

102400 GB

New

Decrease 67.9%

% Memory Change

Energy Efficiency Ratings

C

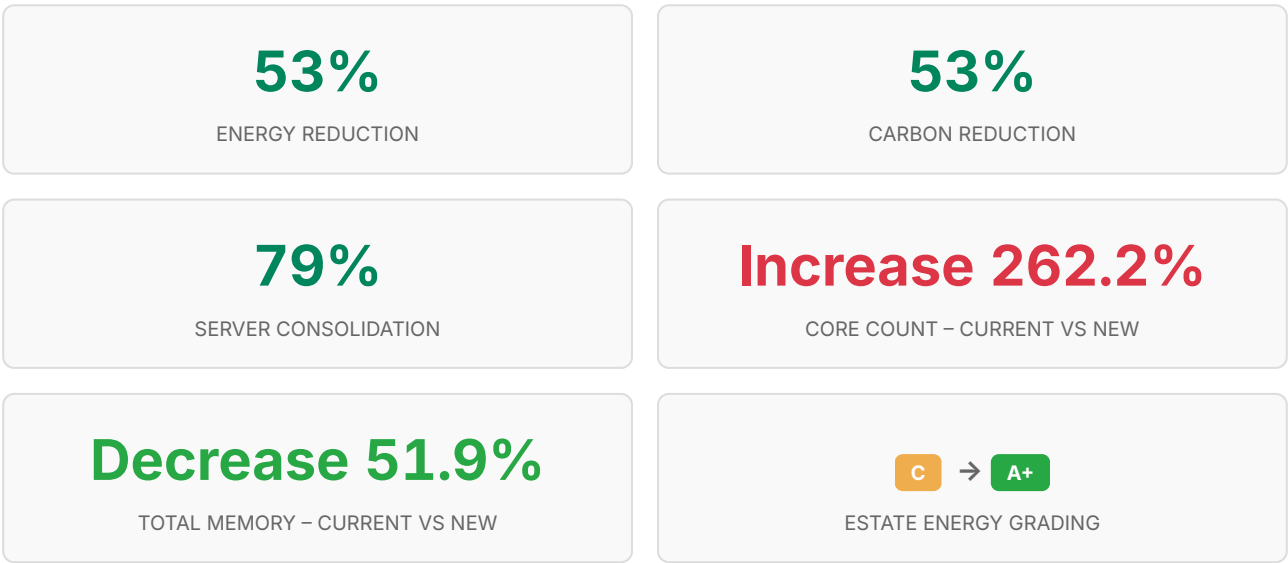
Source Average Rating

A+

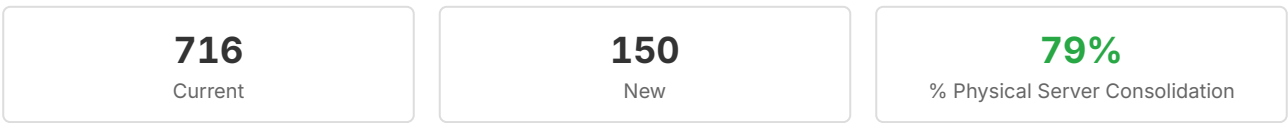
Target Rating

HPE ProLiant DL380 Gen12 (Intel Xeon 6990E+) — Qty: 150

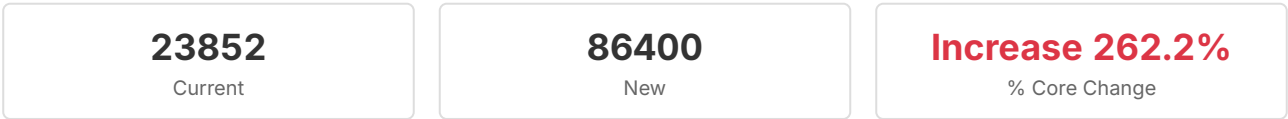
HPE ProLiant DL380 Gen12 – Intel Xeon 6990E+ – 1024GB RAM



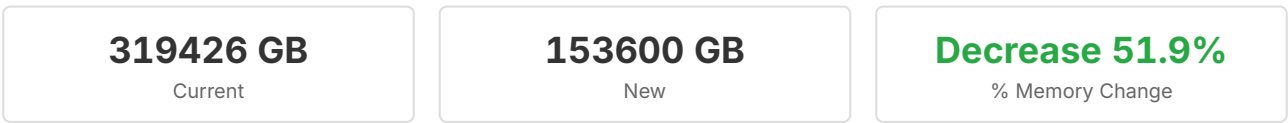
Physical Server Consolidation



Core Count – Current vs New



Total Memory – Current vs New



Energy Efficiency Ratings



HPE ProLiant DL380 Gen11 (Intel Xeon Gold 6544Y) — Qty: 400

HPE ProLiant DL380 Gen11 – Intel Xeon Gold 6544Y – 768GB RAM

11%

ENERGY REDUCTION

11%

CARBON REDUCTION

44%

SERVER CONSOLIDATION

Decrease 46.3%

CORE COUNT – CURRENT VS NEW

Decrease 3.8%

TOTAL MEMORY – CURRENT VS NEW

C → A

ESTATE ENERGY GRADING

Physical Server Consolidation

716

Current

400

New

44%

% Physical Server Consolidation

Core Count – Current vs New

23852

Current

12800

New

Decrease 46.3%

% Core Change

Total Memory – Current vs New

319426 GB

Current

307200 GB

New

Decrease 3.8%

% Memory Change

Energy Efficiency Ratings

C

Source Average Rating

A

Target Rating

Source Analysis

Total servers: **716** • Total cores: **23,852** • Total memory: **319,426 GB**

Vendor	Model	CPU	Qty	Grade	Cores/Server	Memory (GB)
HPE	Synergy 480 Gen11	Intel Xeon Gold 6548N	24	A+	64	1,024
HPE	Synergy 480 gen10 plus	Intel Xeon Platinum 8362	14	A+	64	1,024
HPE	ProLiant DL380 Gen10	Intel Xeon Platinum 8280	4	A+	56	768
HPE	ProLiant DL385 Gen11	AMD Epyc 9654	3	A+	192	1,536
HPE	Synergy 480 Gen10	Intel Xeon Platinum 8268	80	A	48	1,154
HPE	Synergy 480 Gen10	Intel Xeon Platinum 8268	46	A	48	768
HPE	Synergy 480 Gen10	Intel Xeon Platinum 8268	7	A	48	512
HPE	Synergy 480 Gen10	Intel Xeon Gold 6248R	7	A	48	768
Dell	PowerEdge R840	Intel Xeon Platinum 8280	3	A	112	3,073
DELL	PowerEdge R640	Intel Xeon Gold 6230	110	B	40	383
HPE	ProLiant BL460c Gen10	Intel Xeon Gold 6248	55	B	40	512
HPE	ProLiant DL360 Gen10	Intel Xeon Platinum 8168	28	B	48	512
HPE	ProLiant DL380 Gen10	Intel Xeon Gold 6226R	8	B	32	191
DELL	PowerEdge R640	Intel Xeon Platinum 8268	5	B	48	640
DELL	PowerEdge R640	Intel Xeon Gold 6248R	3	B	48	768
DELL	PowerEdge R630	Intel Xeon Processor E5 - 2660 v4	32	C	28	128
DELL	PowerEdge R730	Intel Xeon Processor E5 - 2697A v4	8	C	32	512
DELL	PowerEdge R730	Intel Xeon Processor E5 - 2680 v3	4	C	24	64
DELL	PowerEdge R730	Intel Xeon Processor E5 - 2640 V4	4	C	10	32

Vendor	Model	CPU	Qty	Grade	Cores/Server	Memory (GB)
HPE	ProLiant DL380 Gen9	Intel Xeon Processor E5 - 2650 v4	90	D	24	256
DELL	PowerEdge R640	Intel Xeon Bronze 3204	22	E	12	32
DELL	PowerEdge R620	Intel Xeon Processor E5 - 2667	57	F	12	16
DELL	PowerEdge R320	Intel Xeon Processor E5 - 2403	42	F	4	32
IBM	System X3650 M2	Intel Xeon Processor E5520	30	F	8	4
IBM	System X3550 M3	Intel Xeon Processor E5607	18	F	4	12
HPE	ProLiant DL380p Gen8	Intel Xeon Processor E5 - 2609 v2	7	F	4	8
DELL	PowerEdge R620	Intel Xeon Processor E5 - 2690	4	F	16	64
HPE	ProLiant DL380p Gen8	Intel Xeon Processor E5 - 2640	1	F	12	125

Methodology

Energy Efficiency Measurement

Server energy efficiency is provided using **ITEEsv** (IT Equipment Energy Efficiency for Servers) as per ISO/IEC 30134-4

Efficiency Grades

Servers are graded on a scale from **A+** (most efficient) to **F** (least efficient) based on their normalised ITEEsv score. Grades factor in CPU architecture generation and performance, core count, memory configuration, and measured benchmark performance.

Consolidation Analysis

Server reduction percentages are calculated using Interact DC's machine-learning model, which analyses workload characteristics, CPU and memory performance ratios, and efficiency metrics to determine optimal consolidation ratios for each target configuration.

Assumptions

- Unless provided per host, server utilisation rates are applied uniformly across the source estate
- Consolidation will be sized based on maintaining current assumed, or provided, utilisation
- A server utilisation rate of 25% (assumed platform default) was applied to this report

About Interact DC

Interact DC provides data centre intelligence tools that help organisations understand, optimise, and future-proof their IT infrastructure. Our platform combines hardware benchmarking data with machine-learning models to deliver actionable insights on energy efficiency, sustainability, and cost optimisation.

This report is generated based on analysis of provided server specifications. Actual energy consumption may vary based on workload, environment, and alterations to configuration. All estimates use Interact DC's machine-learning model.

Report generated on 6 August 2026 10:48 • Simulation: Demo Consolidation • Version 2 • ID: 76691626-9cf6-48e7-8588-97b926eccc7b

