

ProLiant upgrade ROI Example

The example below shows upgrading 34 DL380 G4's or older with a 24 Core DL385 G7 with 82 GB of memory and 4.8TB of onboard storage. Savings come from power and hardware maintenance reduction. Additional savings from datacenter footprint reduction are also shown. The \$17,000 hardware costs are paid for in 5 months

HP ProLiant ROI Estimator

Version 4.2 - Long Version

Select and edit all blue input fields

Current ProLiant Platform - Select one	DL380 G4 (2x3.8GHz Xeon (Single-Core))
Current Platform Load (%) - Select Nearest 10%	30%
Target ProLiant Server Platform - Select one	DL385 G7 (2x6174 Opteron, 2.2GHz)
Target Platform Load (%) - Select Nearest 10%	60%
Select Local Currency	USD America (United States of America), Dollars
Energy Cost/kWhr (in selected currency)	0.10
PUE (Cooling Multiplier)	2.0
Annual Maintenance per Current Server	800
Annual Maintenance per Target ProLiant	0
Cost for New Target ProLiant (Configured) ^{2,3,4,5}	17,000
CAPEX Capacity Cost/kW (Capital Sunk Cost)	12,500
Units of Carbon / kWhr (multiplier)	1.3600

Lookup data (measured performance & power)

Current Platform Performance @ Load	15223 ops
Current Platform Watts @ Load (W)	255 Watts
Target Platform Performance @ Load	516195 ops
Target Platform Watts @ Load (W)	267 Watts

Estimated Consolidation Ratio (N:1) ^{1,2,3,4,5}	34
Watts (W) Reduced through consolidation ^{1,2,3,4,5}	8,403 Watts
Annual kWhrs Eliminated (for each target server)	147,221 kWhrs
Estimated Annual Power & Cooling Savings	14,722
Estimated Annual Maintenance Savings	27,200
Total Annual OPEX Savings (Power & Licenses)	41,922
Estimated Breakeven in Months (OPEX Only)	5 Months
CAPEX Capacity Reclaimed (for each target server)	105,038
Annual Carbon Reduction for each target ProLiant	200,220 units CO2

Resulting savings at the data center level

Total # of Current Platforms in the Data Center	34
Total # of Target ProLiant Servers ^{2,3,4,5}	1
Grand Total Annual Power and Cooling Savings	14,722
Grand Total Annual License Fee Savings	27,200
Grand Total Annual OPEX Savings	41,922
Grand Total Value of Reclaimed CAPEX Capacity	105,038
Grand Total Annual Carbon Eliminated	200,220 units CO2