

Continuously analyze
and optimize your
Adaptive Infrastructure

HP Insight Dynamics - VSE

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Manager, Virtualization, HP Insight
Software

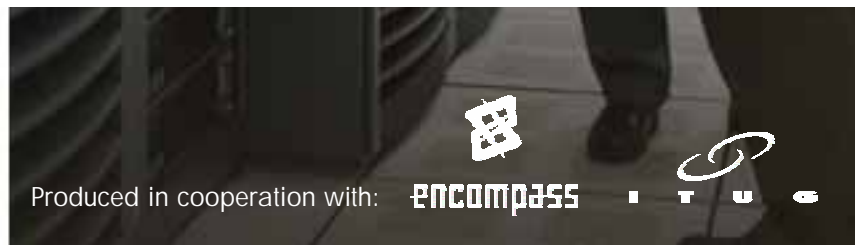
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get connected PEOPLE. TECHNOLOGY. SOLUTIONS.

HP Technology Forum & Expo 2008

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“Virtualization introduces many benefits, but also the challenge of coordinating virtualized machines across the infrastructure. **HP Insight Dynamics VSE is at the forefront of a new class of management software** built to manage a thoroughly virtualised world.”

Jonathan Eunice
Principal IT adviser
Illuminata



Does your infrastructure get in the way of better business outcomes?



Too costly?

Sprawl is expensive - virtual servers are growing much faster than physical servers



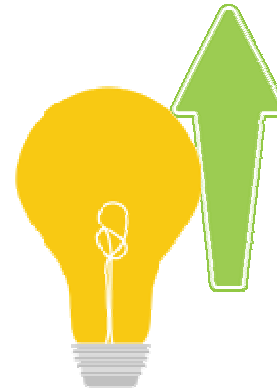
Too time consuming?

73% of consolidations took a year or more¹



Too unpredictable?

Few servers have traditional HA clustering



Too energy hungry?

Data center electricity use more than doubled since 2000

1. IT executive and managers survey: Forrester Research, Inc: How Large Enterprises Approach IT Infrastructure Consolidation December 2007

HP Adaptive Infrastructure

Technology for better business outcomes

Business outcomes

- Lower **cost** of IT operations
- Deliver higher **quality** of service
- Accelerate the **speed** of IT change
- Increase **energy efficiency**

Current state
High-cost IT islands



Future state
Low-cost pooled IT assets

24x7 lights-out computing environment, based on standard building blocks, automated using modular software, delivered through comprehensive services.

Turn your next generation data center from idea to reality with powerful HP innovations

- Proactively plan IT capacity
- Repurpose infrastructure with ease
- Deliver fast, affordable high availability
- Optimize energy consumption

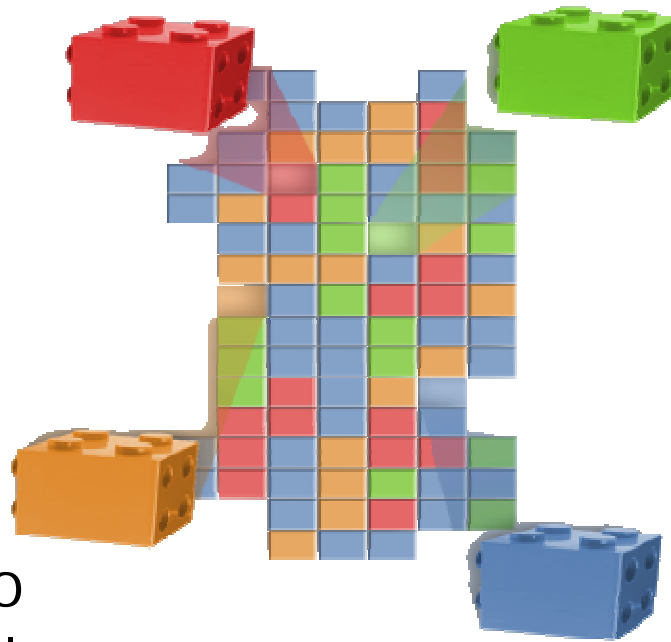


Deliver better business outcomes

Building blocks of our solution

1. Wire-once,
modular
infrastructure

2. Virtual fabric to
add and change
on-the-fly



3. Software to
continuously analyze
and optimize

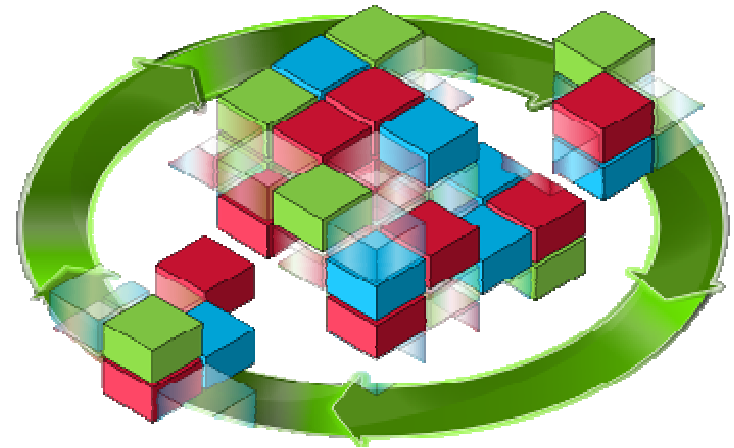
4. Collaboration
with industry
leaders

New HP Insight Dynamics - VSE

Continuously analyze and optimize your infrastructure



- Bring the flexibility of virtualization to physical servers
- Real-time capacity planning for servers and power
- Control physical and virtual resources in the same way



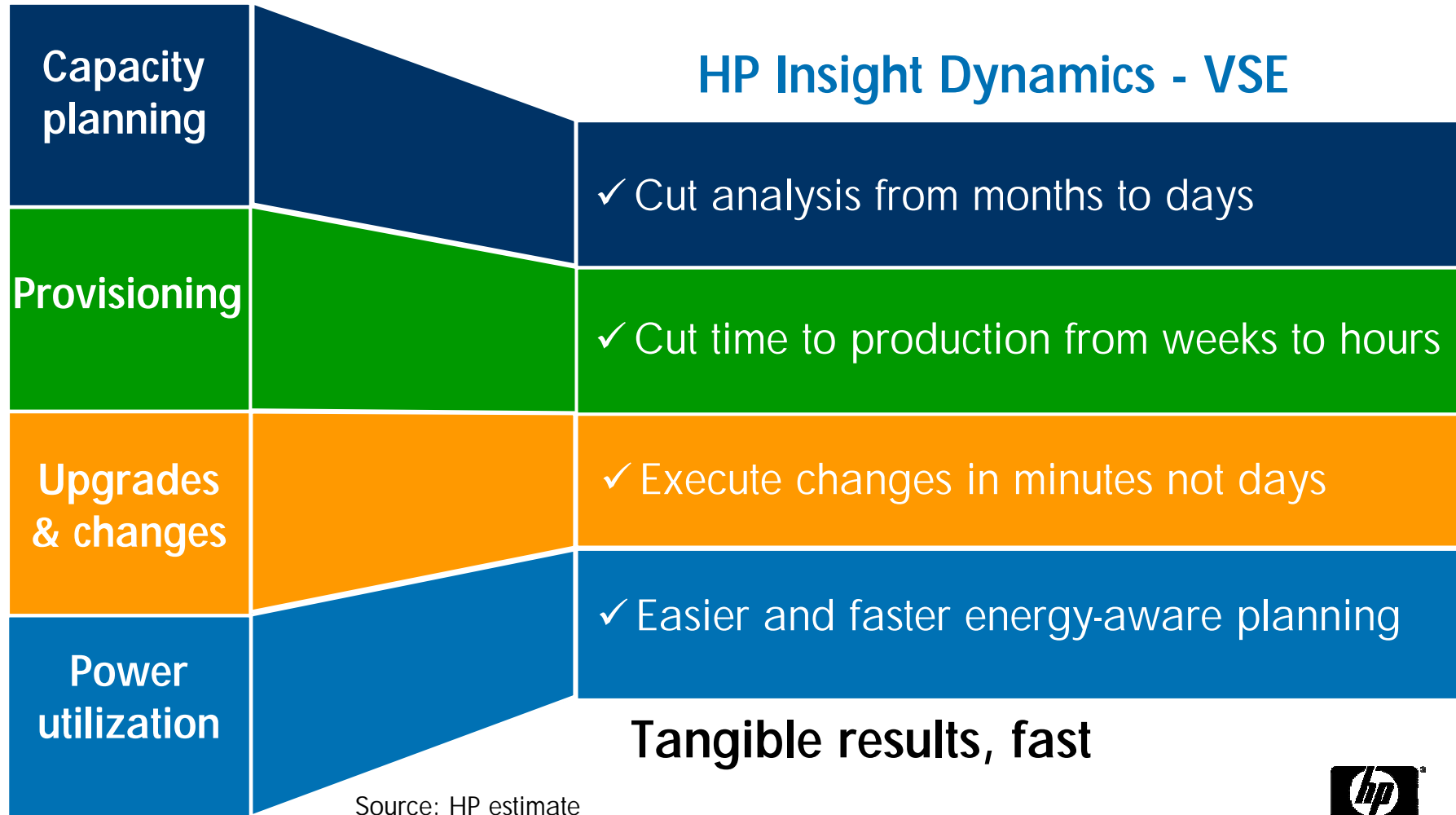
Building on the value of
HP Systems Insight Manager,
Insight Control and
Virtual Server Environment

**Addressing key data center issues:
cost, speed, quality and energy**



HP Insight Dynamics - VSE: Lower the cost of key data center tasks by up to 40%

Cost, Speed,
Energy, Quality



Source: HP estimate



New HP Insight Dynamics - VSE: In action

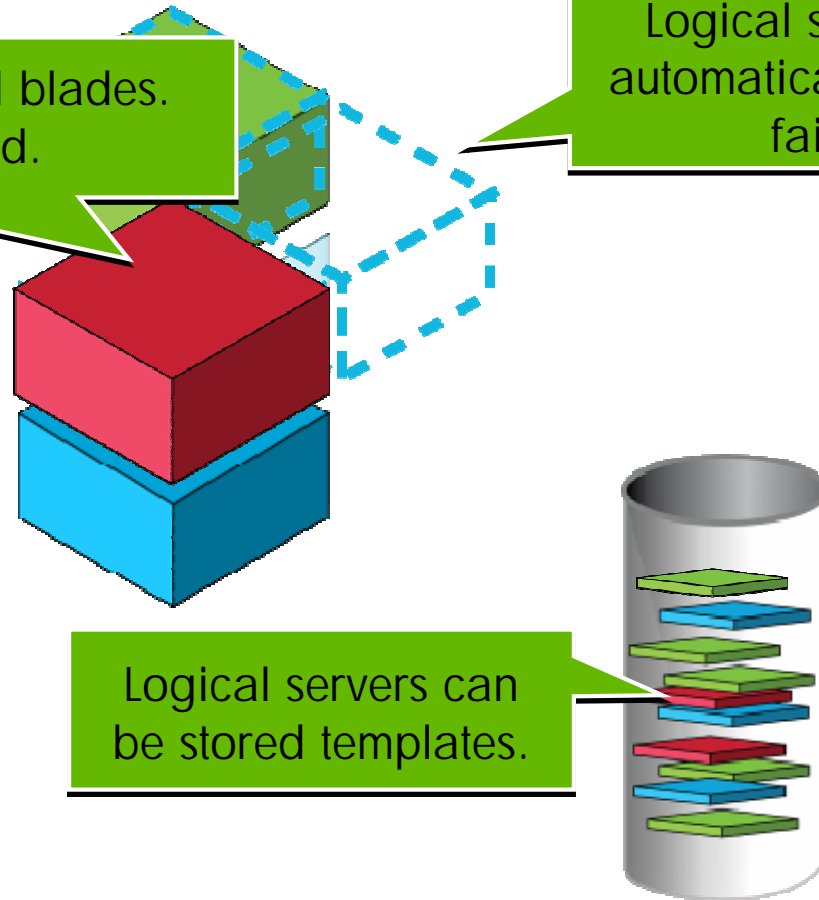
- Logical server: A server profile that is easily created and freely moved across physical and virtual machines

Logical servers can be physical blades.
They can be easily moved.

Logical servers can automatically move on failure.

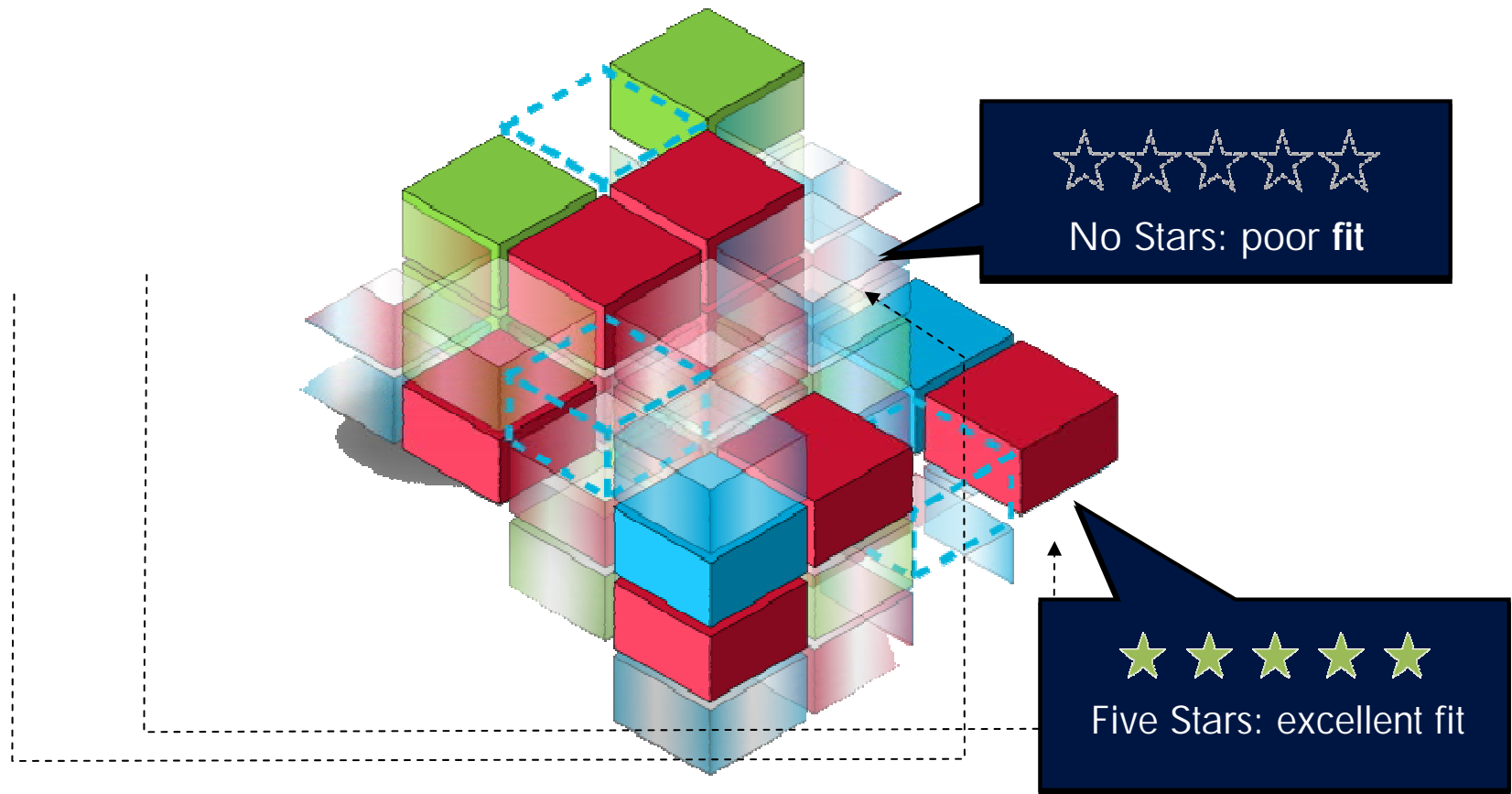
Logical servers can be virtual machines.

Logical servers can be stored templates.



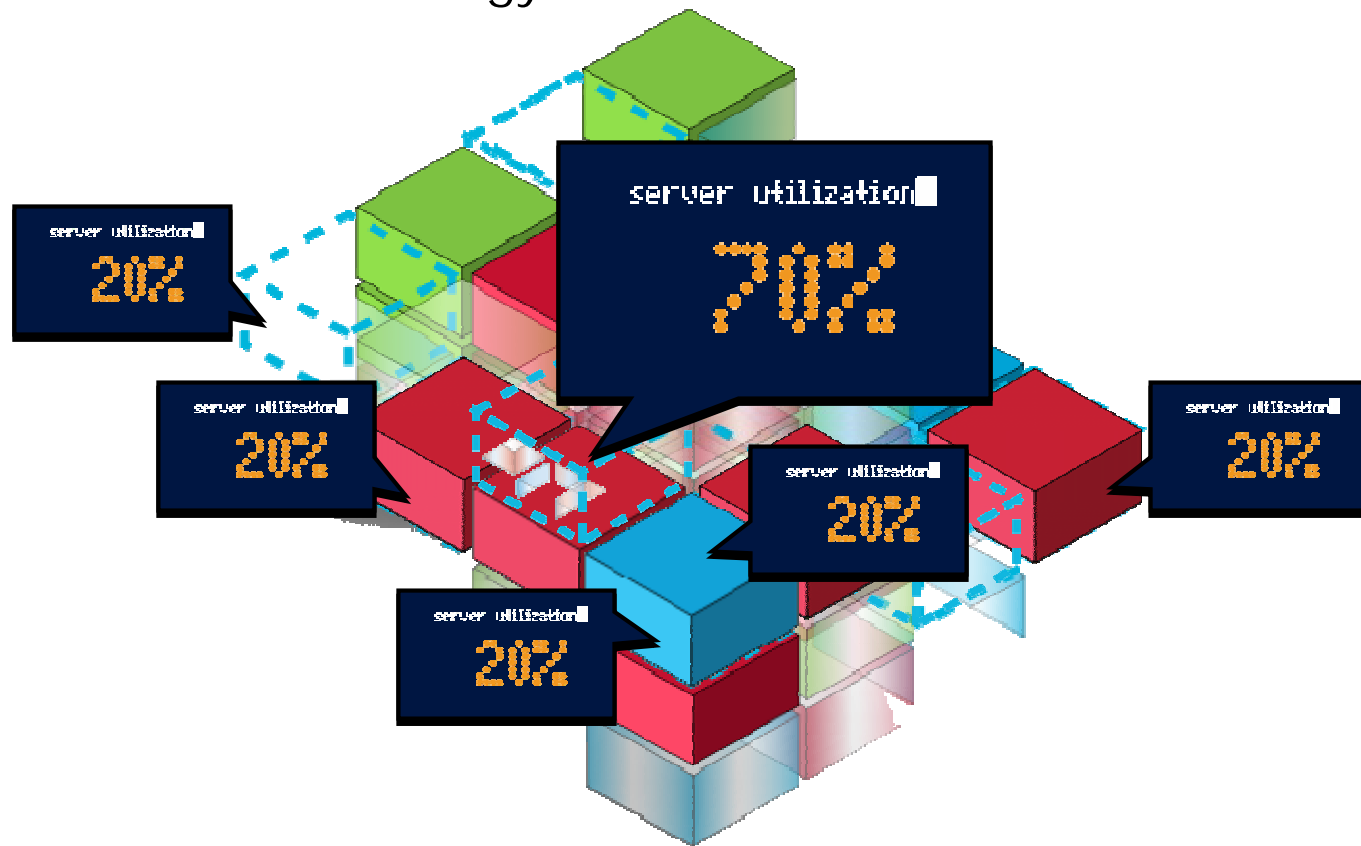
New HP Insight Dynamics - VSE: In action

- 5-star rating system makes it easy to identify best-fit placement



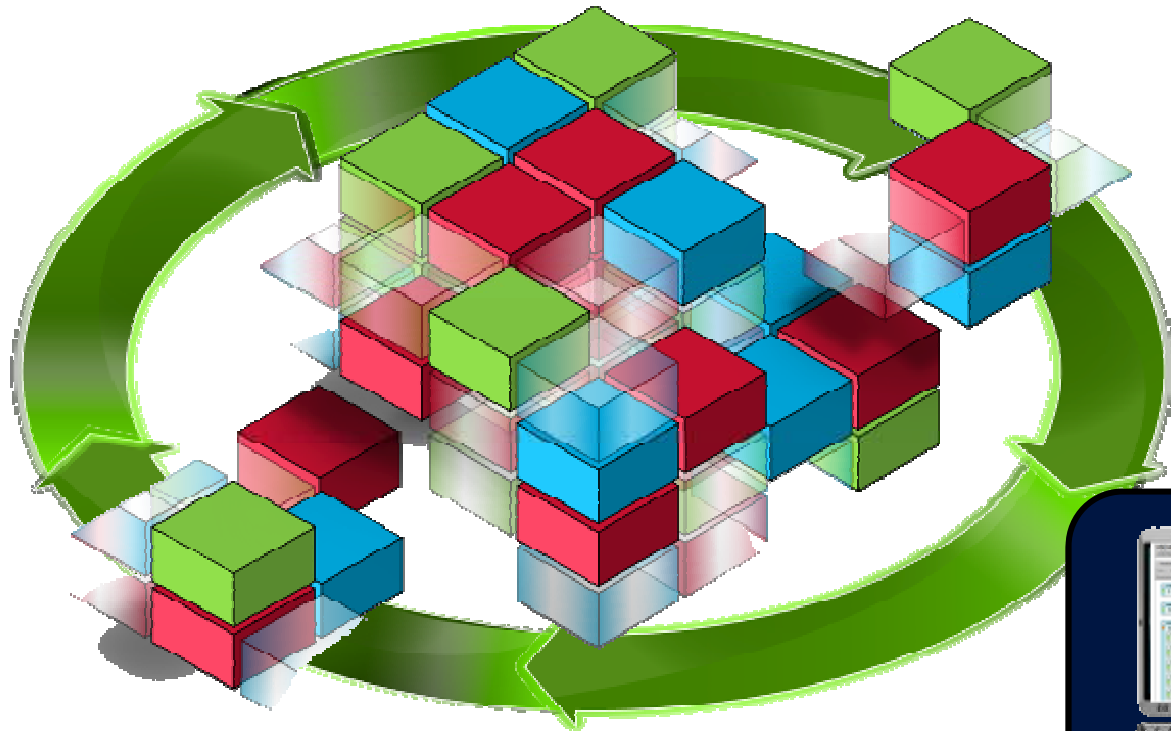
New HP Insight Dynamics - VSE: In action

- Capacity planning for larger consolidations in hours with Smart Solver technology

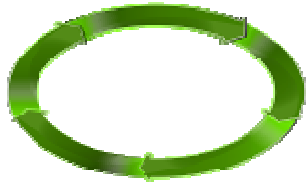


New HP Insight Dynamics - VSE: In action

- Control physical and virtual resources in the same way, based on HP Systems Insight Manager



Tackling the toughest IT projects



Continuous consolidation

Transform long-term projects into ongoing efforts



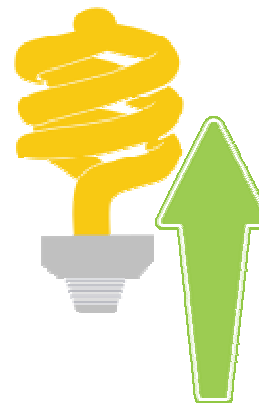
Dynamic test and development

Quickly repurpose infrastructure without re-installation



Everyday high availability

Fast and affordable recovery and maintenance



Energy-aware planning

Consolidate workloads for maximum power efficiency

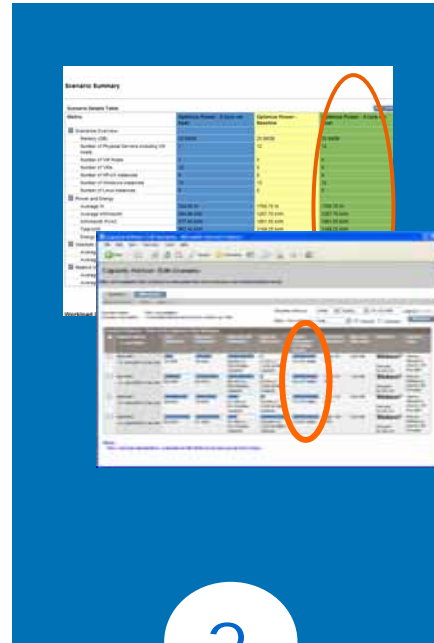
Energy-aware planning

manage power proactively, before it gets out of hand...



1

Capture historical data on power usage



2

Smart Solver recommends scenarios based on power



3

Consolidate using logical servers



4

Resources optimized, energy savings realized

analyze optimize

Time elapsed: hours or days rather than weeks or months

Make insightful decisions to reduce power usage

Scenario Summary

	Baseline	Optimal placement scenario
Scenario Details Table		
Metric	Optimize Power - Baseline	Optimize Power - 8 core vm host
Scenarios Overview		
Memory (GB)	25.98GB	32.00GB
Number of Physical Servers including VM hosts	12	1
Number of VM Hosts	0	1
Number of VMs	0	12
Number of HP-UX instances	0	0
Number of Windows instances	12	13
Number of Linux instances	0	0
Power and Energy		
Average W	1760.70 W	534.66 W
Average kWh/month	1267.70 kWh	384.96 kWh
kWh/month HVAC	1901.55 kWh	577.44 kWh
Total kWh	3169.25 kWh	962.40 kWh
Energy cost/month	\$ 380.31	\$ 115.49
Absolute Utilization		
Average CPU	3.56 cores	3.56 cores
Average Memory	17.32 GB	17.32 GB
Relative Utilization		
Average CPU	18.73 %	33.44 %
Average Memory	66.69 %	82.74 %



“VMware and HP have a shared vision for an agile datacenter. **VMware's market-leading virtualization solutions combined with HP's strength in infrastructure management provides customers with dynamic mobility, high availability and improved resource management in their datacenters.** We look forward to the combination of VMware virtualization with HP Insight Dynamics - VSE to deliver an effective environment that spans both virtual and physical resources.”

Brian Byun

Vice President of global partners and solutions

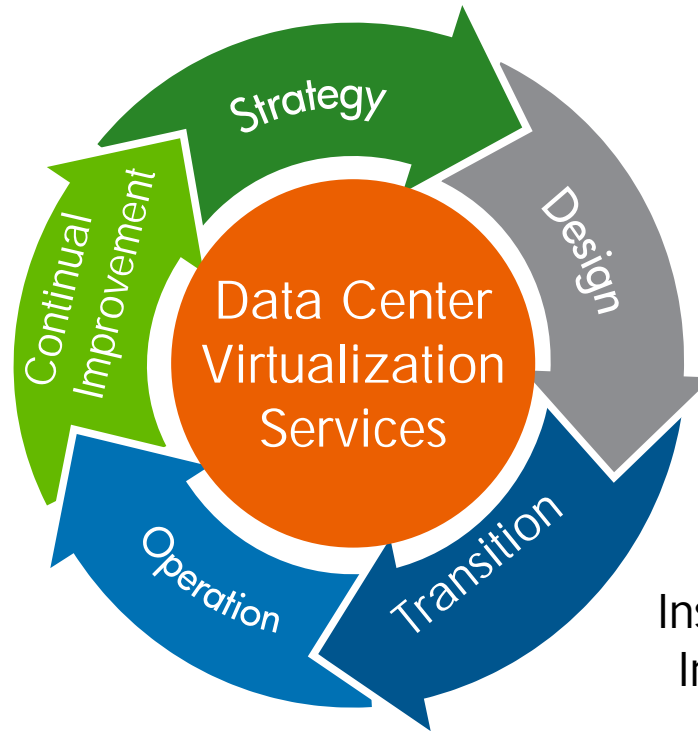
VMware



Complete portfolio of HP Services for success with HP Insight Dynamics - VSE

Assess impact of
Insight Dynamics - VSE
on your environment

Comprehensive
Education
Services



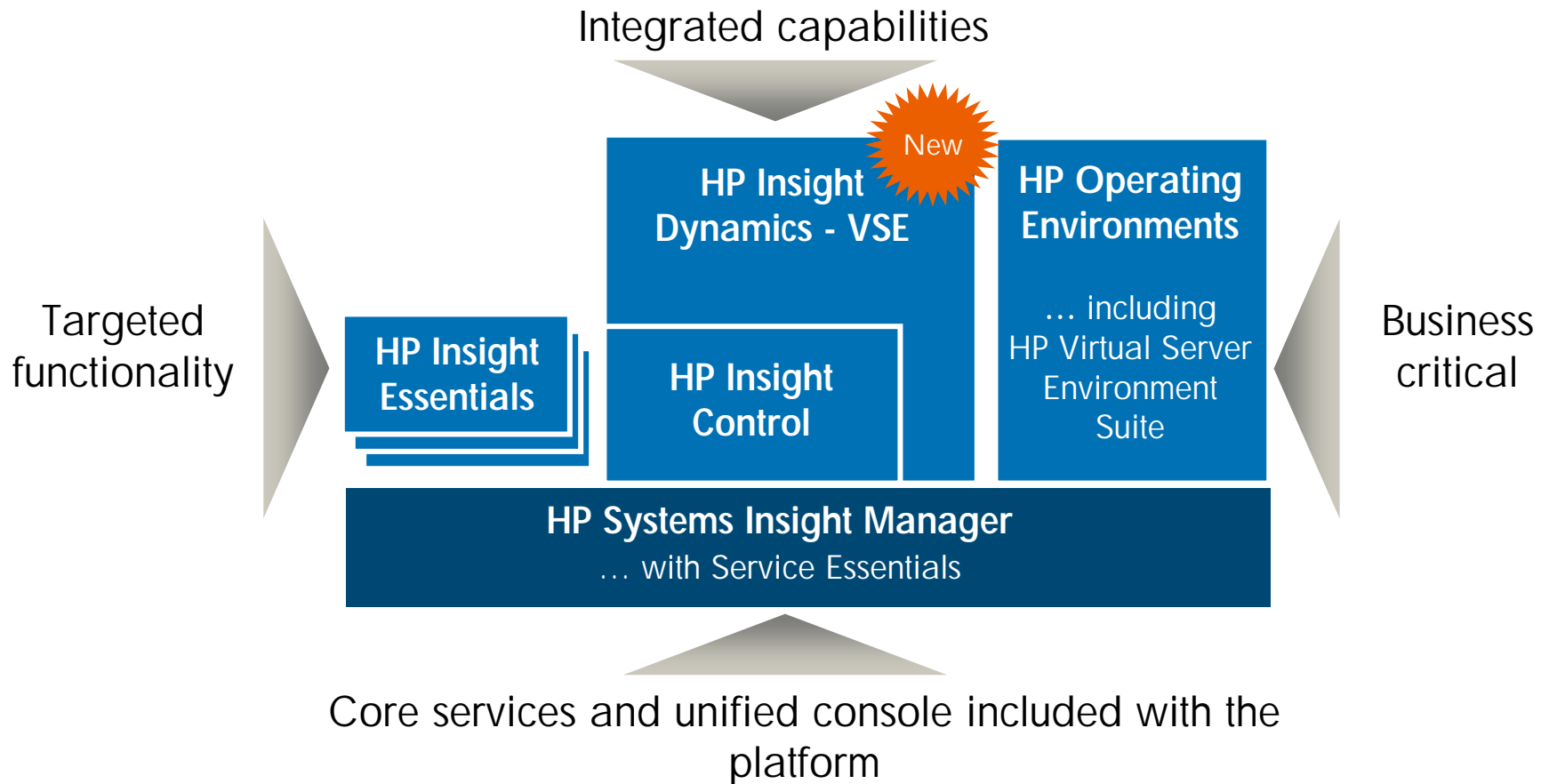
Design and integrate
your virtualization
management framework

24 X 7
support

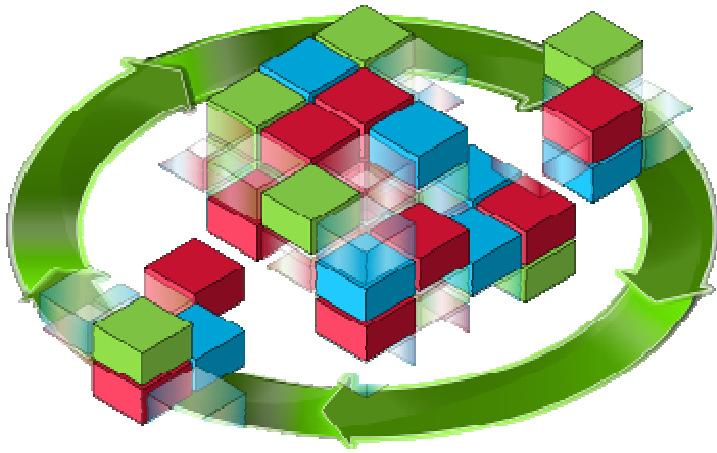
Install and implement HP
Insight Dynamics - VSE
into your existing
environment

The HP Insight Software Portfolio

Continuously controlling and optimizing HP platforms



HP Insight Dynamics - VSE: From Insight to Action to Results



- World's first integrated solution to analyze and optimize your physical and virtual resources in the same way
- Proactively plan and manage your infrastructure
- Streamline and lower the cost of key data center tasks by up to 40 percent

www.hp.com/go/insightdynamics



Got questions? Get answers!

Make the most of your infrastructure

www.hp.com/go/TechForumInsight

Learn more

about the Insight Software you've seen here at Tech Forum with white papers, podcasts, and videos



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for our online customer community to get tips, tricks, forums, and special webinars

Use Customer Connect Access Code "TechForum08"
and be entered into a drawing (grand prize: Nintendo Wii)



Technology for better business outcomes

