Improving Server Utilization –
A practical use of HP's Virtual Server Environment

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Agenda

- Why increase server utilization?
    - Defining 'utilization'

- Steps

- Roadmap

- Q&A

Why increase server utilization – defining utilization

- Utilization is not a **metric**, rather a **goal** for planning (12 – 18 months) – not a meter
  - It is projected (predicted) over time
  - Old goal was 80% of resources should be used within 3 years
  - New goal is 65-70% of resources used over 12 months with 80% used over 18 months (10-15% growth per year)

Steps - initially

- Step 1 – Gather lists of "good" candidates

- Step 2 – Eliminate "bad" candidates

- Step 3 – Intercept applications as they come into production

- Step 4 – Validate application suitability
  - Can this application co-exist with another application?
  - Is there an existing server (from the list) in the right data-center?
  - Does the DBA have concerns?
  - Does the network/SAN have capacity?
  - Is the platform able to scale well enough?

Steps – changed to incorporate WLM/PRM and hp services

- Step 1 – Gather lists of "good" candidates

- Step 2 – Eliminate "bad" candidates

- Step 3 – Validate application suitability
  - Can this application co-exist with another application?
  - Is there an existing server (from the list) in the right data-center?
  - Does the DBA have concerns?
  - Does the network/SAN have capacity?
  - Is the platform able to scale well enough?

- Step 4 – Contract with hp professional services
  - HP C&I provides methodology and repeatability for application stacking and consolidation
  - HP C&I provide implementation & integration expertise with WLM & PRM to jump-start program

Questions and challenges

- What is the high-level vision for data-center operations?
  - **To operate as efficiently and effectively as possible**

- Are accounting charge backs going to be implemented based on the percentage of the server a given application uses?
  - **Shadow billings based on allocation**

- If charge backs will be implemented as a percentage, how is this going to work if a given application's use is greater than anticipated?
  - **Long-term, intent is to be able to identify the cost of providing an application service to the business – not a chargeback – cost value rather than cost recovery**

- Given the capacity play is 80% in 18 months, can we reduce capital expenditures in the immediate timeframe?
  - **Need to plan for servers to reach effective end-of-service life**

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