Use Case: ERP Hosting

On-Demand ERP Provisioning with SLA Transparency across 4 Layers

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Business Motivation

Market trends*

- Market for On Demand Applications forecast to grow at higher rate than On Premise Applications during 2008-2012
- On Demand revenue will grow from 7% of overall application spend in 2008 to 11% in 2012

Customer expectations / trends

- keen to reduce capital expenditures
- buying power moves from CIO to LoBs

Support for SLAs (in SaaS)

- still very poor and hard to manage for customers
- though customer demand for SLAs is significant**

* On Premise Market size estimates from IDC Megamodel, On Demand estimates from IDC (Q3’08),
** Ray Wang: Customer Bill of Rights - SaaS
Use Case Overview

OnDemand Provisioning of ERP applications via hierarchical SLA Management

1. SaaS provisioning of ERP solutions
2. SLA/Service hierarchy across 4 layers
3. Measurable improvements on service consumption, dependability, efficiency, transparency

A typical SAP Landscape

SLA/Service hierarchy

Evaluation Results

Framework adoption
Key Objectives for OnDemand delivery

1. Enable dynamic service provisioning
2. Increase efficiency and reduce costs
3. Enhance transparency
Dependable on-demand services through hierarchical SLA management.
Specific Extensions

Planning Procedure

- generic algorithm within generic SLA manager
- specific translation functions at each layer

Prediction / Planning models

- system performance model => assessment of the performance of a specific infrastructure setup for NetWeaver
- cost model => operational costs
- multi-criteria optimization model => cost vs. performance
- Palladio component model => software performance
- sizing model => initial guess for required system performance
## Evaluation: Improvements over baseline

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Indicators</th>
<th>Metric</th>
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<tbody>
<tr>
<td>Enable dynamic service provisioning</td>
<td>Service consumption possibilities are enhanced and easy-to-use</td>
<td>time to quotation</td>
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<tr>
<td></td>
<td>Services get dependable through SLAs</td>
<td>time to provision</td>
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<tr>
<td></td>
<td></td>
<td>number of SLA terms monitored</td>
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<tr>
<td>Increase efficiency and reduce costs</td>
<td>Environmental/Energy Efficiency</td>
<td>energy consumption per 1000 SAPS</td>
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<td>Technical Efficiency</td>
<td>CPU capacity per requested SAPS</td>
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<td>Process Efficiency</td>
<td>number of working hours per service request</td>
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<td>Enhance transparency</td>
<td>End2End manageability</td>
<td>number of tools</td>
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<td>Agility to change.</td>
<td>Number of change procedures supported</td>
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Demo: Scenario

**Customer**
- Browse Product Catalog
  - Select & Customize SLAT
  - Request for Quote

**Sales Officer**
- Process Cust. Request
  - Request IT solution
  - Plan IT solution
  - Create IT offer

**IT Administrator**
- Create business offer
  - Send quote
  - Accept Offer

**Negotiate**
- Provision Business Service
- Provision IT

**Provision**
- Use & Monitor Business SLA
- Monitor Business/IT SLA & Adjust

**Operate**
- Monitor IT SLA & Adjust
Demo: Screenshot

Product Catalog

SLAT Customization

IT Planning

Monitoring
Conclusions

- SLA management highly relevant for OnDemand business
- Successful adoption of SLA@SOI framework
- Realization of clear business value

Next steps

- Strengthen efforts in analysing existing service stacks
  - Statistical performance analysis
- Expand range to business performance & business continuity

See our demo!
Thank you!