When Linux On System z Upgrades Get Complicated

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Agenda

• ISO / Verisk Analytics overview
• Sles11 SP1 - Upgrade Challenges
• Build the right TEAM
• Brainstorm session / Outcome
• Managing Roadblocks
• Implementation strategy
• Checkpoint Results – measure progress
• Strategic Direction (Hosting for Enterprise)
• Summary
ISO / Verisk Analytics

- Risk Mitigation Analytics

- Data Analytics and Decision Support
  - Insurance
  - Healthcare
  - Mortgage
  - Catastrophe Modeling
IST Overview and Strategic Direction

- Mainframe
  - Z/196 and Z9 processors
  - Operating systems
    - 8 z/OS lpars
    - 6 z/VM lpars - Hosting 300 SUSE Linux guest
- 80 Solaris Unix servers
- Windows server – 800+
- Member companies / infrastructure
IST Overview and Strategic Direction

- Why Linux ??
  - Cost savings
  - Organizational Virtualization Strategy
  - WebSphere application Hosting
    - Application isolation
    - Load balancing
    - High Availability

- New development efforts to leverage environment
- Re-platform other workloads
SLES 11 SP1 Upgrade Challenges

- Software currency issue
- Project workload dependencies
  - SLES11 SP 1 upgrade
  - Z/196 implementation
  - z/OS 1.12 Upgrade
  - WAS and WAS/XD upgrade
  - ESCON / FICON conversion

- First Quarter Deliverables
  - Aggressive schedule
  - z/196 implementation
  - SLES 11 SP1 – phase 1
Build the right TEAM

- Cross Training
- “All Hands on Deck”
- Involve other technical areas early in planning process
- Development group / QA cooperation

**Plan for success !!**
- Build a strong TEAM
- Improve the PROCESS
- Deliver a quality work PRODUCT
Brainstorm Session / OUTCOME

- Identify project timeline (z/196 and SLES11)
- Identify an implementation strategy
- What process do we need to improve to succeed?
- **Identify project task !!**
  - z/196 implementation task
  - SLES 11 SP1 Phase 1 task
  - Team roles and responsibilities
Manage the Roadblocks

- Escalation to Vendors
- Team discussion to address issues quickly.

**What issues did occur??**

- http Linux guest
- Edge server Linux guest
- Distributed Scheduling product
- OSA
- Crypto
- z/196 implementation requirements
- Need for alternate SLES upgrade server
Implementation Strategy

• Toleration
• z/196 Task list

• Build Parallel environment for Linux guest
• Golden Image ( How many ?)
• Process improvement ( scripts )
• Coordinate Cutover of Guest ( all teams !! )

• Timeline
• Process management ( day to day activity )
• Daily stand up meetings
Checkpoint / Measure Progress

- Each week “build a story “
- Communicate completion of milestones
- Communicate outstanding issues
- Are we getting better ?? - lessons learned
Strategic Direction

- Continue to leverage Linux on z
- Move more workload over to z/linux
- Enterprise wide application hosting
- New development effort to exploit Linux
Summary

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• Due Diligence

• Team / Process / Product

• Make the next upgrade project simpler