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 devlopment effort to exploit Linux

Summary

- Email - ggarcia@iso.com

- Due Diligence

- Team / Process / Product

- Make the next upgrade project simpler