Performance Monitoring and Autonomic Computing

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CA Technologies

August 7 2014
Session 15863
Abstract

In this session, the speaker will answer how to avoid being on the wrong end of service disruption conversions. Monitoring for critical events will allow you to take corrective actions and minimize the extent of an outage. Monitoring for performance will alert you to bottlenecks or the need to grow your configuration. Attend this session and get some ideas on how to use event and performance management to avoid service disruptions. When you get back to your shop you can apply many, if not all, of the suggestions offered with your own event and performance management products.
Agenda

• Autonomic Computing
  – What is it?
  – Why is it important?
  – What are the challenges?
  – How do we do it?

• Autonomic Opportunities

• Summary

• Questions and Answers
What is it?

• Self-protecting
  – Able to anticipate and cure intrusions

• Self-healing
  – Able to recover from mistakes

• Self-optimizing
  – Able to improve performance

• Self-configuring
  – Able to adapt to changes in the system
Why is it important?

- Cost
- Application economy
- Complexity
The Application Economy: Business Solutions on Demand

- Bring Your Own Device
- Java
- Big Data
- System z
- Linux on System z
- Continuous Delivery
- Predictive Analytics
- Cloud Agility
- Exceptional User Experience
## The Dynamic Data Center

**Evolving Role of System z in the Application Economy**

<table>
<thead>
<tr>
<th>Business Responsiveness</th>
<th>Dynamic expansion/contractation</th>
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<tbody>
<tr>
<td>Transaction Growth</td>
<td>Infinite Scalability</td>
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<td>Cost Optimization</td>
<td>Spans across</td>
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<td>Emerging Opportunities</td>
<td>Rapidly adapts</td>
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**CURRENT**
- Data Center

**0-18 MONTHS**
- Transaction Processing Engine
- Private Cloud

**12-36 MONTHS**
- Hybrid Cloud
- Cloud Component
- Cloud Platform

Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval
Would you fly this?
With the same monitoring and control Systems that were in this?
Then why would you monitor this?
The way we monitored this?
## Cost of Downtime

<table>
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<th>Type of Business</th>
<th>Average Hourly Impact</th>
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<td>Retail Brokerage</td>
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<td>Credit Card Sales Authorization</td>
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<td>Home Shopping Channel</td>
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<td>Catalog Sales Centers</td>
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<td>Airline Reservations Centers</td>
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<td>On-line Network Connect Fees</td>
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<td>ATM Service Fees</td>
<td>$14,500</td>
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</table>
What are the Challenges?

- More users
- Overwhelming complexity
- Faster hardware (no one can type faster than the System can process)
- Operating System sophistication (WLM Hyper Dispatch)
Can you spell “M.O.B.I.L.E”?!
40% of IT executives say they allow their users to access corporate information with their own smartphone...

70% of users say they are already accessing corporate information with their own smartphone.

-IDC
How Do We Do It?

Integration between Your Monitoring solution and your Automation and event Management solution

– Results in higher levels of system availability
– Performance data is available for automation decisions.
– Performance alerts can trigger an automation event.
How Do We Do It? (Cont.)

• Customers have deployed and configured these products to better meet the self-healing objectives required for continuous availability
• Provide automation for system monitoring when thresholds are exceeded
Autonomic Opportunities

- CICS Events such as Short on Storage (SOS)
- CICS Events such as Maximum Tasks (MXT)
- System Write to Operator (WTO) buffer shortages
- System Common Storage Area (CSA) shortages
- JES2 Spool Utilization Thresholds
### SSM Resource Status

**Command**: `CA06 -- OPSVIEWS`  
**Date/Time**: 2008/07/25 12:04  
**System**: *  
**SSM Mode**: Active  
**Version**: 2

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Exceptions exist
Common Storage Event

• Autonomic Attributes
  – Self Configuring
  – Self Healing
  – Self Protecting
  – Self Optimizing
LIVE DEMO
Summary

• Operational efficiency
• Human resources
• Decrease costs
• Reducing complexity
• Enhancing agility
Questions

- And Responses

Thank-you for Attending

Please fill out your session evaluations

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