IT ROADMAP: WASHINGTON, DC

NETWORKWORLD LIVE Conference & Expo

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Network Management Strategy for Long-Term Business Growth

Dan Greller
Chief Technology Officer
www.leggmason.com

Agenda

- Legg Mason background
- The Challenge – massive “overnight” growth, consolidation and standardization of management tools
- Choosing the right technology/vendor
- Implementation: timeline, training, hurdles, costs, challenges
- Results/benefits
- Advice to others

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Legg Mason: Background

- One of the largest asset management firms in the world
  - Founded in 1899
  - Headquartered in Baltimore
  - Over $1 trillion in assets under management
  - Clients in over 190 countries with on-the-ground investment operations in the UK, Australia, Brazil, Canada, Chile, Hong Kong, Japan, Poland, Singapore and the US

The Challenge

- 2005 was a landmark year: business swap with Citigroup (almost $5 Billion in acquisitions)
  - Major business consolidation and realignment; Grew from regional to national to international operations
  - More than doubled assets under management from 2005 to 2006
- Major IT initiative: Rapidly support business consolidation/realignment & build infrastructure for future growth
  - Integration and build-out of global technology platforms and 24x7 support infrastructure
  - Ease of administration and elimination of gaps in the monitoring environment
  - Aggregation of tools in one master console to tie everything together
  - Asset management business with highly visible applications requires more complex and heavy computing / management – higher expectations of IT quality and service levels
  - Remote disaster recovery site with high availability monitoring environment

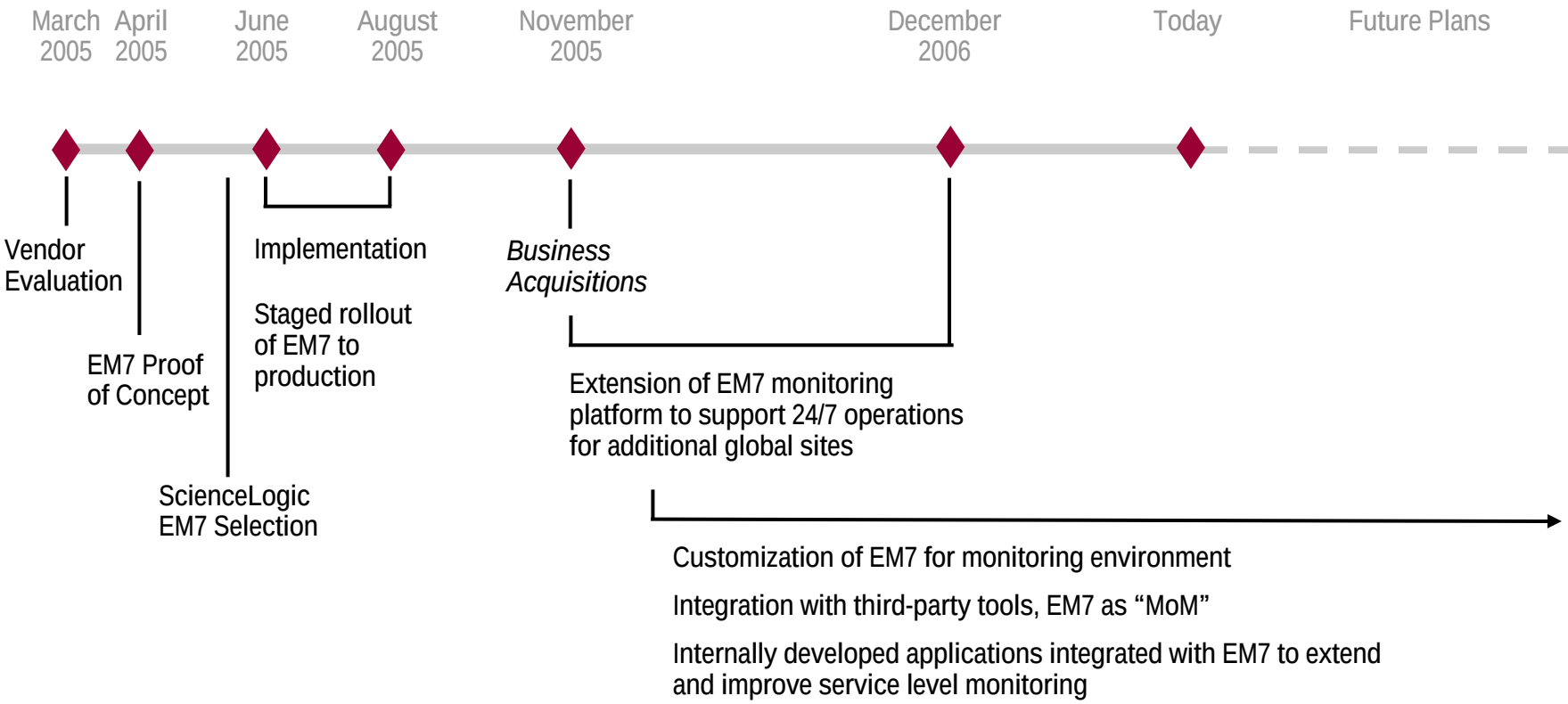
The Process

- Key selection criteria:
  - Minimize impact (installation and configuration) on clients.
  - Simple administration. Easy to use, doesn't require extensive training to administer.
  - Extensible to a variety of hardware and operating systems.
- Vendor selection:
  - Major vendors already in house (IBM/Tivoli, CA, HP/Mercury).
  - "Specialty" providers (ScienceLogic).
- Budgetary Approval:
  - Not ROI focused. Similar to security requirements, considered a must-have.

Implementation Plan

- Staged Production Cut-Over:
  - Minimize business disruption and impact
  - Production Control running ScienceLogic EM7 and legacy monitoring in parallel for 2-3 weeks
  - Gradual cut-over of system blocks in a manageable timeframe
- Implementation Resources:
  - Existing resources worked closely with the vendor. Most monitors worked “out of the box”, additional applications developed as a joint activity with the vendor
  - EM7 – appliance model requires no additional hardware and no heavy agents
- Implementation Results: On time and on budget
  - Full implementation staged over 2-month period
  - All systems monitored by EM7 with additional customization underway
  - Extended model to affiliate companies (very easy to leverage economy of scale)

Implementation



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Implementation Plan: Ongoing Customization (1)

- Function- and Task-specific Views for a Global, Distributed Environment
  - Functions: Production Control, Developers, Sr. managers
  - Locations: Baltimore, Stamford redundant facility, Nighttime support is out of Singapore
  - Tasks/Environments: Custom Applications, Operations, Test, QA. Administration of Linux, Windows, AIX, Solaris
  - Goal: get everybody on the same page with a unified standard toolset to create efficiencies and break down artificial business and functional barriers. Everyone gets the view they need
- Virtual Devices
  - Consolidate business activities into “devices”. Useful for monitoring services which are not specificatlly tied to a single device
  - AutoSys – batch processing virtual device
  - Audit – status of audit exceptions
  - WebContent - Web site monitoring services

Implementation Plan: Ongoing Customization (2)

- Focus on smarter, more efficient ways IT can help the business operate
  - Customize Monitoring Templates.
  - Dashboards – Operational Business Intelligence.
  - Monitoring for business-critical Trading Desk Application.
- Integration with 3rd party tools and custom applications
  - CA AutoSys batch job alerting.
  - SWIFT network transaction events.
  - Integration with Dell OpenManage for proactive hardware alerts.
  - Advanced agents to support Microsoft Exchange monitoring.
  - Determination of maintenance windows for servers, integrated into reboot automation tool.
  - Asset mapping and reporting. Open source database supports ad-hoc reporting.

Results

- Supported Business Consolidation and Realignment
  - Rapid support for major “overnight” changes to IT management infrastructure
  - Dramatically increased the size of our environment but economies of scale using EM7 let us do so without the usual commensurate increase in operations staff/resources
  - Single pane of glass for all administrators to be on the same page and look at issues across a global, heterogeneous computing environment
  - Customized user views for expanded global operations: standard interface and monitoring
  - Minimal impact on affiliate systems and their existing operations - no extra heavy agent added, non-intrusive extension of monitoring and best practices
- Infrastructure in Place for Rapid Intelligent Growth
  - IT staff time focused on higher-level functions
  - Ease of extending monitoring platform and standards to acquired businesses/affiliate sites

Results

- User Response
  - Most users learn to navigate the system quickly and are happy with one-stop shopping for network monitoring activities. This allows us focus teams addressing issues using a common tool.
  - With more users in the system, we get constant requests for improvements and additions to monitors (this is a good thing).
  - Administrators in the environment are able to administer and extend the environment with very little training.
- Future Plans
  - More extensive use of dashboards - Increasing information density
  - Increasing use of synthetic transactions with EM7 database dynamic applications.
  - Extension of EM7 into the virtual realm.

Advice

Lessons Learned

- Establish standards for SNMP extensions early on. We delayed this somewhat and it resulted in a fair amount of rework (going back and enabling Dell OpenManage, re-deploying MS Exchange agents).
- If you are going to monitor non-production environments, consider a separate EM7 environment to avoid impact on production monitoring.

General Advice

- Never underestimate the ongoing administrative costs of a network management system. Keeping the administration as simple as possible is extremely important.
- Have a mechanism to ensure completeness of the coverage of the network. Even the best management system cannot deal with what it doesn't know about.

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Thank You

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