RFCODE

How the CME Group Saved Time, Money and Resources by Fully Automating its IT Asset Management Process

Presented at IAITAM CXO - Houston

CME Group at a Glance

Serving the Risk Management Needs of Customers Around the World

- Built on the heritage of CME, CBOT, NYMEX and COMEX
- CME Group serves global risk management
- Largest range of benchmark futures and options products available on any exchange
- Our collective vision: Ongoing global growth, innovative product development, continually enhanced technology and the highest level of service available on any exchange

Background

- Market capitalization: $20.5Bn
- Approximately 2,600 employees worldwide
- IT Driven Organization
  - 1,200 employees responsible for technology
    - Computerworld's 100 Best Places to Work in IT (Since 2005)
    - InformationWeek 500 List of Leading Technology Innovators (Since 2004; Ranked #1 in 2009)

Data Center Specifics

- Operates multiple Global Data Centers
  - Aurora location is a 425,000 square foot facility
    - Utilized for CME applications as well as Customer Colocation
- IT Infrastructure
  - Over 2,000 racks use RF Code today
    - 9400 servers, blades
  - LAN, trading floors, closets

IT Asset Challenges

- Multiple systems
- Manual processes
  - Utilized bar code system
  - Pulled valuable IT resources away to “count” assets
  - Mistake prone
- Very limited exposure of “what was in storage”
- Audit assessment: Needed an asset management system
- Bottom line:
  - No “one stop shop” inventory system
  - Many different systems and processes
  - Easy to lose track of assets
  - Not always sure what the assets were for

Adoption Challenges

IT Finance was not convinced that an automated system would meet their requirements

- A historic view of asset management
- Inventory accuracy, especially of disconnected equipment
- Accountability: who moved what, to where, and why?
- Automation hard to visualize

Implementation Roadmap

- First: Implemented RF Code's wire-free environmental sensors in 2010
  - Over 12,000 temperature and humidity sensors, fluid detectors, PDU monitoring and door contacts
  - Reader infrastructure
  - Asset Manger – live data feeds to BMS
  - Proven solution
- Second: Leverage wire-free infrastructure to implement real-time asset management

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Wire-Free Monitoring

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Automated IT Asset Management System

Develop a process that would provide full asset life cycle management

- Phase 1: Tag all 1U and blade servers
- Phase 2: Tag all network and “Big Iron”
- Phase 3: Tag gear located in network closets
- Phase 4: Tag laptops in office space

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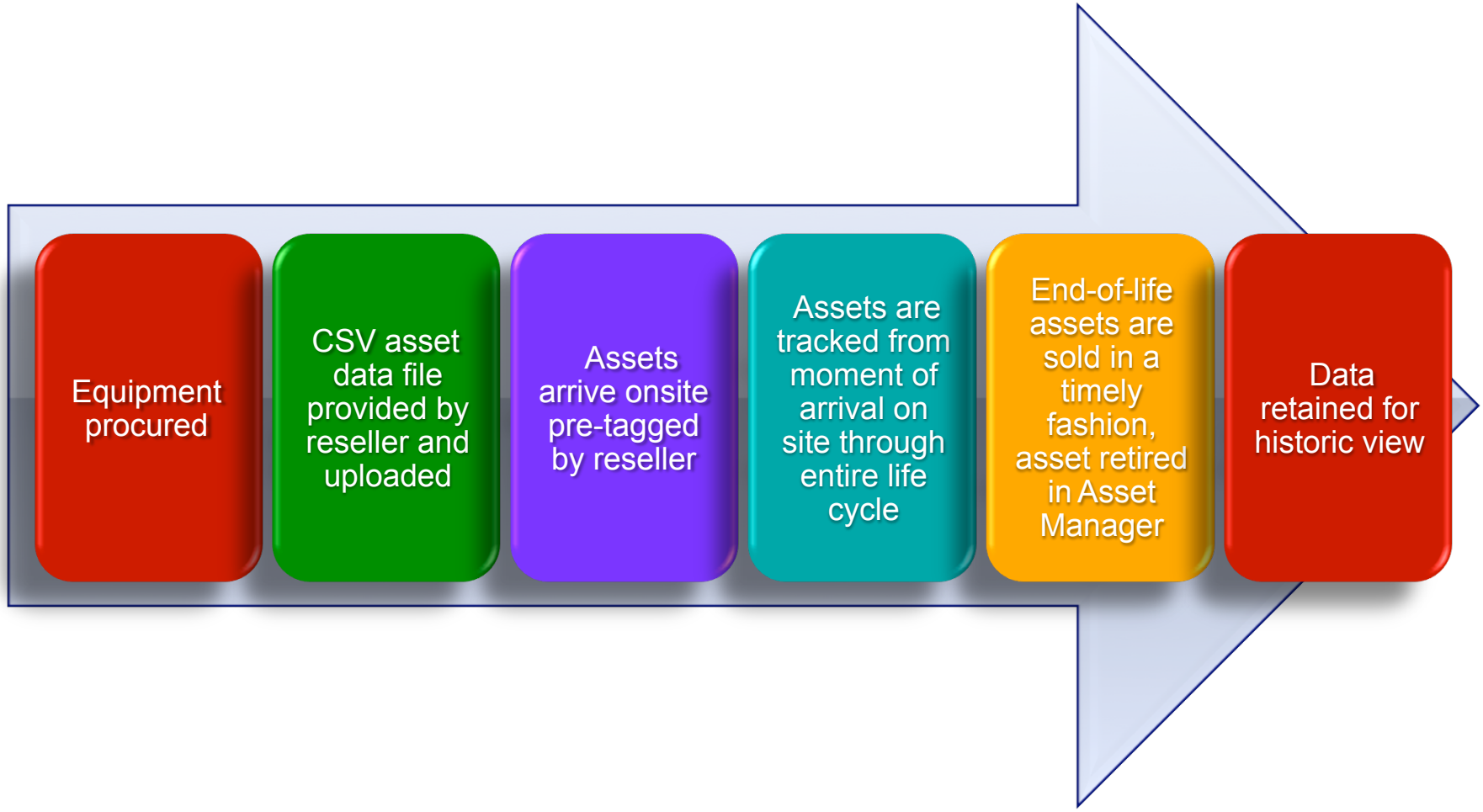
Asset Process



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Asset Process

- 4 manual steps
  - Enter new assets
  - Adding notes to broken assets
  - Adding notes to assets on books but sent off-site
  - Retire asset when it has reached end of life
- Prior to RF Code deployment, process consisted of roughly 25+ steps

Costs/ROI: Operational Efficiencies

Reduced the average time needed to maintain accurate asset data and location information (this includes time required to enter asset information, review data, maintain data, and update locations)

- Old method: ~ 40 minutes per asset
- Using RF Code: ~ 5 minutes per asset
- Improved operational efficiency by 88%

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Costs/ROI: Audit Efficiencies

Reduced time spent on audits and improved audit accuracy.

Old method:

- 2 audits per year, ~ 350 man hours per audit = ~ 700 man hours per year = ~ $105,000 in audit expenses per year
- Audit results 60-70% accurate

Using RF Code:

- ~ 300 hours audit time including time spent investigating offline assets
- ~ $45,000 in audit expenses per year
- Audit results 99% accurate

Results:

- 57% reduction in time spent on audits
- 30+% improvement in audit accuracy

Benefits

- Eliminated manual processes
- Ease of use
- Open architecture, application integration
- Complete visibility

Benefits from Full Automation

- 100% visibility of all IT assets
- Complete asset life-cycle management
- Multi-departmental utilization and cost savings
- Cost savings due to:
  - Elimination of manual activity
  - Tracking of all aspects of the inventory management process, including inventory value, physical location, over-stock, purpose

Next Steps

- Phase 2:
  - Deploy RF Code's new, smaller, more powerful M174 asset tag on:
    - Network assets (network cards)
    - Storage devices
    - Stand-alone IT assets
    - "Big Iron"
  - Deploy RF Code's distributed network closet solution
- Phase 3:
  - Distributed asset management

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Conclusions

- Automation
  - Process
  - Audit
- Improved productivity
- Real-time accurate data
- The higher the ROI, the more the global executive support
- Purchased as a data center tool, now has become an enterprise-dependent solution