Project Management Meets Change Management – A Success Story

Focus Area: Tech Perspectives

TI012SN

Name: Wayne Hall
Title: System Integration Analyst
Abstract

• Utilizing the concepts and terminology from Project Management, the process of planning and executing a Change Management (CM) Infrastructure improvement project is described. The primary audience for this presentation includes both experienced and relatively new CM administrators and their managers. It also includes anyone with an interest in the application of project management knowledge to CM administration. There are several benefits: the complexity of the CM tool technology is more manageable, CM administrators get to use project management knowledge to complete a project (not "firefighting"), improve relations with your customers (that means developers and managers), and get the opportunity to do it again.
Biography

• Wayne Hall
  Staff Integration Analyst, Lockheed Martin Space Systems
• Last 10 Years in Software Configuration Management
  – All Fusion Harvest Change Manager
• Work Experience: 25+ Years in Information Technology
• Education: MS Engineering, BA Mathematics
• User Communities: CMCrossroads
Agenda

- Project Management Concepts and Terminology
- Change Management Infrastructure
- Project Plan
- Lessons Learned
- Session summary
Project Management
Concepts and Terminology
Project Management
Concepts and Terminology

• Project Management
• Stakeholders
• Scope
• Work Breakdown Structure
• Schedule
  – Gantt Chart
  – Critical Path
• Triple Constraint
Project Management
Concepts and Terminology

• Project
  – A Temporary Endeavor Undertaken to Create a Unique Product or Service
  – Temporary - definite beginning and definite end
  – Unique - has not been done before

• Project Management
  – Meet or exceed stakeholder needs and expectations
  – Knowledge, skills, tools, techniques
Project Management
Concepts and Terminology

• Stakeholders
  – Active Project Involvement
  – Interests Impacted by Project

• Scope
  – Summary of products and services
  – Depicted in the Work Breakdown Structure
# Project Management Concepts and Terminology - Stakeholders

<table>
<thead>
<tr>
<th>Service Provider / Stakeholder</th>
<th>Responsibility</th>
<th>Required Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wayne</td>
<td>Project Lead</td>
<td>Overall Project Success</td>
</tr>
<tr>
<td>Teri</td>
<td>Project Lead Backup</td>
<td>Harvest Administration</td>
</tr>
<tr>
<td>Tom</td>
<td>On-site consultant</td>
<td>CAI Software Installation Oversight, Test Plan</td>
</tr>
<tr>
<td>Kristie</td>
<td>Configuration Management</td>
<td>UNIX subsystem integration</td>
</tr>
<tr>
<td>Mike</td>
<td>File Server Administration</td>
<td>Software Installation and Configuration</td>
</tr>
<tr>
<td>Melissa</td>
<td>Database Administration</td>
<td>Software Installation and Configuration</td>
</tr>
<tr>
<td>Thanh</td>
<td>Web Master</td>
<td>Software Installation and Configuration</td>
</tr>
<tr>
<td>Dennis</td>
<td>User testing and training</td>
<td>Harvest application users</td>
</tr>
<tr>
<td>Jimmy</td>
<td>Windows Desktop support</td>
<td>Client system access</td>
</tr>
<tr>
<td>Steve</td>
<td>UNIX support</td>
<td>UNIX Client, server system access</td>
</tr>
</tbody>
</table>
• The Harvest r7 project when complete will accomplish the following objectives:
  – Establish the production instance of Harvest on a Windows 2003 server
  – Establish LAN-based software build facility
  – Installation and configuration of Harvest v7.1
  – Provide the foundation of CM support for UNIX-based application systems.
  – Establish the web-browser as the standard Harvest client
  – Install and maintain a second server that supports development and test of ITS CM infrastructure.
• Benefits of this project include:
  – Migration to contemporary, supported systems
  – Introduction of automated build processes
  – Use improvements made to Harvest
  – Standard cross-platform CM processes
  – Web browser usage reduces maintenance cost
  – Dual development/production environment in CM infrastructure
Project Management
Concepts and Terminology - WBS

• **Work Breakdown Structure**
  – Defines Total Project Scope
  – Deliverable-oriented
  – Project Element Grouping and Organization
Project Management
Concepts and Terminology - WBS

Harvest r7 Infrastructure Upgrade

New Production r7 Server
- Install and Configure: Server, Database, Web, Build Software
  - Transition to Production Configuration

Existing Production Server
- Install and Configure: Server, Database, Web, Build Software
  - Transition to Development Configuration

Multi-client Infrastructure
- Selection and deployment of Agents and Clients for Win32, Web, and Unix
  - Transition to Production Configuration

Project Mgt
- Plans and Schedule

Testing
- Plans and Results

Training
- Train the Trainer, Administrator, and Users

On-site Vendor Support
Project Management
Concepts and Terminology

• Schedule – Activities and Milestones
• Gantt Chart and The Critical Path
Project Management
Concepts and Terminology – Milestones

- Project Plan Approval by CCB
- All Acquisitions Complete
- Consultant begins on-site engagement
- All software and hardware installed
- Production Cutover Complete
Project Management Concepts and Terminology – Gantt Chart, Milestones

<table>
<thead>
<tr>
<th>ID</th>
<th>Task Name</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
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<tr>
<td>2</td>
<td>Project Management</td>
<td>7/29</td>
<td>8/5</td>
<td>8/12</td>
<td>8/19</td>
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<td>Plans</td>
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<td>12</td>
<td>All Plans Complete</td>
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<td>13</td>
<td>CCB Approval - Project Plan</td>
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<td>14</td>
<td>Acquisitions</td>
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<td>15</td>
<td>Start Acquisitions</td>
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<tr>
<td>18</td>
<td>All Acquisitions Complete</td>
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<tr>
<td>19</td>
<td>CA Consultant Begins On-Site Engagement</td>
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<tr>
<td>20</td>
<td>New Production Server 413</td>
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<tr>
<td>21</td>
<td>Installation of h/w and s/w</td>
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<tr>
<td>23</td>
<td>Software</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>34</td>
<td>All S/w and H/w installed</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>35</td>
<td>Perform UDP Conversion</td>
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<td>38</td>
<td>UDP Conversion Complete</td>
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<tr>
<td>41</td>
<td>Testing</td>
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<td>50</td>
<td>Testing Complete</td>
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<td>54</td>
<td>Production Deployment</td>
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<tr>
<td>55</td>
<td>Secure CCB approval to proceed</td>
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<tr>
<td>64</td>
<td>Production Cutover Complete</td>
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<td></td>
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Project Management
Concepts and Terminology – Network Diagram, Critical Path

[Network Diagram]

Start
Milestone Date: Mon 7/24/06
ID: 1

Node a:
Start: 7/24/06
ID: 2
Finish: 7/27/06
Dur: 4 days
Rest:

Node b:
Start: 7/24/06
ID: 3
Finish: 7/31/06
Dur: 5 days
Rest:

Node c:
Start: 7/28/06
ID: 4
Finish: 8/4/06
Dur: 17 days
Rest:

Node d:
Start: 7/28/06
ID: 5
Finish: 8/7/06
Dur: 5 days
Rest:

Node e:
Start: 8/4/06
ID: 6
Finish: 8/11/06
Dur: 17 days
Rest:

Node f:
Start: 8/7/06
ID: 7
Finish: 8/11/06
Dur: 4.5 days
Rest:

Node g:
Start: 8/11/06
ID: 8
Finish: 8/18/06
Dur: 17 days
Rest:

Finish
Milestone Date: Fri 8/18/06
ID: 9
Project Management
Concepts and Terminology – The Triple Constraint
Change Management
Infrastructure
Change Management
Infrastructure - Processes

• Change Request - Documents requirements
  – Enhancements (Scope change)
  – Bug fixes
  – Emergency fixes
• Change Notice – Details changes
  – System specific
  – LAN (Windows, Unix) or Mainframe (z/OS)
Change Management
Infrastructure - Resources

- Configuration Management customers
  - Project leads
  - Developers
- Configuration Management
- Change Control Board
Change Management

Infrastructure Resources – CM Customers

• Project leads
  – Responsible for new and existing systems
  – Attend CCB as a key stakeholder

• Developers
  – Use CM Tools
  – Interact with CM directly
Change Management
Infrastructure Resources - CM

• Configuration Management
  – Supports and facilitates the Change Control Board
  – Administers and maintains CM toolset
Change Management
Infrastructure Resources – Change Control Board

- Consists of CM and IT managers
  - CM Facilitates
  - Managers review and vote
- Maintains integrity of IT architecture
- Reviews changes that:
  - Meet specific cost threshold, or
  - Meet specific labor threshold, or
  - Pose significant risk
## Change Management Infrastructure CM Tool Technology

<table>
<thead>
<tr>
<th></th>
<th>LAN</th>
<th>Mainframe</th>
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</thead>
<tbody>
<tr>
<td><strong>Primary Tool</strong></td>
<td>All Fusion Harvest Change Manager</td>
<td>SCLM</td>
</tr>
<tr>
<td><strong>Architecture</strong></td>
<td>Distributed Client Server</td>
<td>Centralized</td>
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## Change Management Infrastructure CM Tool Technology - LAN

<table>
<thead>
<tr>
<th></th>
<th>Existing</th>
<th>Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Tool</strong></td>
<td>Harvest 5.1</td>
<td>Harvest 7.1</td>
</tr>
<tr>
<td><strong>Server Number and Type</strong></td>
<td>(1) Production</td>
<td>(2) Production and Development</td>
</tr>
<tr>
<td><strong>Operating System</strong></td>
<td>Windows 2000</td>
<td>Windows 2003</td>
</tr>
<tr>
<td><strong>Build Service</strong></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Web clients</strong></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Unix support</strong></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Database</strong></td>
<td>Oracle 9i</td>
<td>Oracle 10g</td>
</tr>
<tr>
<td><strong>UDPs</strong></td>
<td>PERL 5.6.0.616</td>
<td>PERL 5.6.1.638</td>
</tr>
</tbody>
</table>
The Project Plan
The Project Plan
Motivation and Improvements

• Motivation and Improvements
• Development
• Execution
The Project Plan
Motivation and Improvements

- History
- Project Mgt Training and Experience
- Improvements
The Project Plan
Motivation and Improvements

• History
    • Database conversion
    • Resource availability
  – 2007 > Planning Completed. Project Planned and Implemented.
The Project Plan

Motivation and Improvements

• Project Mgt Training and Experience
  – Classroom
  – Lean Thinking
  – Other Projects
The Project Plan
Motivation and Improvements

• Improvements – Making It Better, and a Wish List
  – Using a Consultant
  – What is Your Vision?
The Project Plan
Motivation and Improvements

• Using a Consultant
  – Pros and Cons
    • Expert Knowledge is Valuable for Complex Installations
    • Cost Increases
    • Risk Management
  – Chemistry is Important
The Project Plan
Motivation and Improvements

• What is Your Vision?
  – Two-server System
  – Web-based User Interface
  – Windows and UNIX client support
  – Build Tool Integration
The Project Plan
Development

• Standard Templates and Forms
• You Can’t Have Too Many Plans
• The Importance of the WBS
• Building the Team
• Secure Management Buy-In Early
The Project Plan
Development

• Standard Templates and Forms
• You Can’t Have Too Many Plans
  – Project
  – Risk Management
  – Configuration Management
  – Communications
  – Test
  – Acquisition
  – Security
The Project Plan
Development

• **Importance of the WBS**
  – Embodies definition of project scope
  – Improves accuracy of cost, time, resource estimates
  – Establishes project baseline estimates
  – Clarifies responsibility assignments
The Project Plan
Execution

• Commit to the Completion of Critical Tasks
• Use Your Status Meetings
• Use Your People Skills
• Reframe Your View of Technical Staff
Lessons Learned
Lessons Learned

- **Plans and Contingencies**
  - Plan Carefully and Thoroughly
  - Anticipate Problems and Define Alternates

- **Murphy’s Law**
  - Unplanned events will happen
  - Sometimes they expose plan defects

- **The Value of Project Management**
  - Develops organized view of work activities
  - Produces successful results
Summary
A Few Words to Review

- Change Management tool maintenance is important
- Project Management knowledge is a powerful tool
- Focus is on objectives and results, not tool features
- Understand and use project skills effectively
- Increase Configuration Management’s value to the organization
# Related Sessions

<table>
<thead>
<tr>
<th>SESSION #</th>
<th>TITLE</th>
<th>Date / Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>BC107SN</td>
<td>Change and Configuration Management: Strategy and Vision</td>
<td>11/17/2008 at 11 a.m.</td>
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<tr>
<td>BC115SN</td>
<td>Introducing CA Software Change Manager r12</td>
<td>11/17/2008 at 1:15 p.m.</td>
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</table>
Please Complete a Session Evaluation Form

- The number for this session is XXXX-XXXX

- After completing your session evaluation form, place it in the basket at the back of the room
  - Please left-justify the session number