Signature Delegation and Exception to Policy Application

Jennifer Lombardi
Director, Application Development Department

Ric Cowan
Office of Technical and Scientific Computing

UCLA Software Engineering Course
CS 130,
08 January 2010
The Aerospace Corporation

- Created in 1960 at the request of Congress to provide technical and engineering support to the U.S. Air Force
- Nonprofit organization
  - Operates a Federally-Funded Research and Development Center (FFRDC)
- Purpose is purely technical
- Applies engineering and scientific expertise to advance performance of national security space systems
- Headquarters in El Segundo, CA

Dedicated to National Security Space mission success
Aerospace Staff

**Discipline and Technical Degree**

**Discipline**
- Electrical Engineering: 23%
- Mechanical and Aeronautical Engineering: 22%
- Other Engineering/Science Degrees: 16%
- Computer Science: 10%
- Math: 6%
- Chemistry: 4%
- Physics: 4%
- Civil, Chemical and General Engineering: 9%
- Non Technical Degrees: 5%
- Other: 1%

**Highest Technical Degree**
- Master of Science: 42%
- Bachelor of Science: 25%
- Ph.D.: 28%
- Non Technical Degrees: 5%
- No Degree: 25%
- Other: 1%
Motivation

• In a corporation, not everybody has permission to do everything
• Corporate policies are set to establish who has authority to do what
• Typically, this is used to set monetary limits for spending
• If manager A has authority to spend, say $10K, but is leaving town, she may want to delegate the spending authority to someone else for a specific period of time. [Delegation of Authority]
• Similarly, manager A may go out on extended leave. Then A’s manager may want to delegate A’s authority to another. [Delegation of Authority]
• Another case is where manager A may have a staff member B that she wants to delegate authority for staff member B to sign check requests up to $5000 for the next year, but by corporate policy B should not have that level of authority. [Exception to Policy]
Signature Delegation and Exception to Policy (SDEP)

**System Overview**

- The SDEP system is used by managers to delegate their signature authority to a peer or subordinate employee.
- It is also used to grant exceptions to policy regarding signature authority to an employee with budget responsibility so that person has a higher level of authority for a specified period of time.
- The system allows users to verify the level of signature authority for any employee and any employee can initiate the creation of a new authorization request.
Signature Delegation and Exception to Policy (SDEP)

System Actors

• Requester
  – A Requester is any employee
  – The Requester can:
    • Verify authority of him/herself or of another employee
    • Initiate an authorization to be granted
    • View the current Standard Authorizations Matrix

• Delegator
  – A Delegator is an employee with budget responsibility (a manager) who requires the ability to grant his or her own level of authority to another employee of lesser authority. The delegation is either:
    • Delegation of Authority - to cover an absence
    • Exception to Policy - to give the other employee greater authority for a given duration of time
  – The Delegator may or may not initiate the authorization. Those he or she does initiate, he or she will approve as part of the same process.
Signature Delegation and Exception to Policy (SDEP)

System Actors

• Delegate
  – A Delegate is an employee who has increased signature authority granted to him or her to either cover for someone during an absence (e.g. vacation) or as an Exception to Policy.

• Approver
  – In most cases the Delegator will be the Approver for an authorization. However, in the event that the Delegator is unavailable (e.g. medical leave), then another manager of equal or greater management level as the Delegator may be the Approver of the authorization.

• Financial Systems Administrator
  – The Financial Systems Admin is manages the signature authority process
  – This person is able to change the Approver specified for a given authorization if need be
  – This person may also revoke a given authorization if required
# Standard Authorization Matrix

**Signature Levels of Approval**

<table>
<thead>
<tr>
<th>Form No</th>
<th>Title</th>
<th>L-1</th>
<th>L-2</th>
<th>L-3</th>
<th>L-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>Check Request</td>
<td></td>
<td>$1,000</td>
<td>$10,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>002</td>
<td>Purchase Request</td>
<td>$500</td>
<td>$2000</td>
<td>$20,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>003</td>
<td>Timecards</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>004</td>
<td>Facilities Work Order</td>
<td></td>
<td></td>
<td>$50,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>005</td>
<td>Travel Expense Report</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*This Matrix will change over time in parallel with corporate polices and practices*
Architectural Constraints

• Application is accessible through the Web
  – IE 6.0 + and Firefox
• Must use open standard based technologies
• User authentication is handled by the Domain (assume user is authenticated)
• Java technologies
• Business logic served as a web service
  – Application will be accessible to suite of other business applications
Collaboration and coordination

• Telephone conference calls
  – *Aerospace will provide an 800 or 866 number*

• Email
  – *Jennifer Lombardi*
    • lombardi@aero.org
  – *Ric Cowan*
    • cowan@aero.org

• Google Wave
  • If you need an invite, we can provide one