Challenges

- Complex, multi-system process
- Lack of control and timing of information flow
- Unavoidable bottlenecks due to approval hierarchy
- Increased risk for error due to manual intervention

Solutions

- Simulate process in sandbox environment
- Implement seamless information flow
- Improved visibility and tracking of requests
- Identify bottlenecks and reassign tasks

Successes

- Decreased processing time
- Reduced errors and fewer requests
- Simulate new processes without impacting current workflows
- Sophisticated data analysis and algorithms

Background

Northrop Grumman Information Systems is a leading global provider of advanced solutions that deliver timely, enabling information to where it's needed most for its military, intelligence, civilian, state, local and commercial customers. Northrop Grumman is a \$10 billion business employing approximately 35,000 employees with offices in 50 states and 18 countries.



The Maintenance and Support Service Organization (MSSO) requires a rigorously defined business process to track and manage change requests and resulting place of MedDRA (Medical Directory for Regulatory Activities) terms. The process is complex, requiring the integration of several systems and close scrutiny of each step. Challenges with the process included:

• **Complex process**. All requests require a full medical review and consensus from an international medical committee based upon strict MSSO guidelines.



- Lack of control of information flow. The request information was passed from system to system in its path to approval with a combination of manual and automated steps along the way. It was nearly impossible to track the status of a request in process or generate detailed reports.
- Bottlenecks throughout process. With such a complex process, bottlenecks were unavoidable as requests flowed between systems and departments for approval.
- Little room for error. The manual steps in the process were prone to human errors which could delay the request or even worse, result in non-compliance according to MSSO standards.





Key Benefits

- Simple tools map business processes to workflow and create process links
- Bottlenecks identified and eliminated on the spot
- Sandbox testing allows for no-risk process simulation and changes
- Seamless flow of electronic information between steps reduces processing time
- Greater visibility, accurate tracking, and detailed reporting of requests

"The ability to simulate a process step-by-step before going LIVE allows us to identify bottlenecks without impacting our day-to-day business."

Ultimus' Approach

To manage this lengthy and complex process, MSSO uses Ultimus Workflow comprised of developer tools, a relational database, a worldwide web server, and administration utilities. The Designer tool allows developers to graphically map business processes to the workflow. Each step of the process is mapped and links between processes are added as defined by the order in which the process operates. Steps may be manual or automated, and they may not be enacted until all previous steps are completed.

During the design phase, processes can be simulated in a sandbox environment to allow for identification of bottlenecks. Each step in the process utilizes an underlying electronic form for data entry and display, and spreadsheets are used to pass specific data from step to step or to perform algorithms. When a form is submitted, data is passed to the server and a designated administrator registers the process to begin its execution. Data is stored upon process registration which enables real-time tracking of requests and the ability to generate system statistics.

Implementation

The implementation of Ultimus' Workflow solution was smooth and efficient with Northrop Grumman seeing results almost immediately. This complex process was automated, simplified, and tested without noticeable impact to day-to-day operations. The Ultimus solution manages the processes and adapts to changes along the way, which allows Northrop Grumman to effortlessly adhere to the stringent guidelines inherent in their business.

About Ultimus

Ultimus has automated more business processes than any other Business Process Management (BPM) vendor worldwide. Ultimus Adaptive BPM Suite has enabled companies to accelerate their performance goals at every stage of corporate growth. Ultimus' award-winning technology seamlessly adapts to people, systems and change. Utilized by more than 1,900 customers worldwide, Ultimus provides solutions to organizations such as Pfizer, ProHealth, Bausch & Lomb, Northrup Grumman, DHL, Microsoft, Daimler, Perdue Farms, Chevron, and Tulane University. Ultimus is headquartered in North America, and has additional offices in Latin America, Europe, Asia, the Middle East and Australia.

