

### Introduction

#### Workflow Technologies

- Range From Formal Templated Systems to Ad-Hoc collaboration
- Templated Systems facilitate workflow through execution of a formal model.
- Ad-Hoc allow users to work as they see fit. By sharing information through shared spaces. E.g. Sharepoint

#### Traceability VS. Flexibility

- Templated Systems provide value in terms of traceability. Model allows explicit tracking of tasks and metrics.
  - Provides Increased Efficiency, more process control, and the ability for process reengineering
  - The template limits flexibility. Adapting to unforeseen circumstances not implemented in the template is hard.
- Ad-hoc systems provide value in terms of flexibility.
  - Users can react to unforeseen situations because system imposes no strict work and activity routing criteria.
  - This however limits traceability. No mechanism to track what activities users are performing

#### Project Goals

- Creation of a system to provide traceability to collaborative document based processes.
  - Processes based on users capturing information by filling out a series of document templates.
- Examples of such a process is the Architecture Design Review.
  - This process documents information about installed IT systems to ensure compliance to overall architecture goals.
  - Based on a set of documents which various system and Enterprise Architecture experts fill out during the deployment of a new IT system.
  - Changes to documents reflect installed infrastructure and as well as work and decision making structure. Traceability is paramount to ensure Architecture integrity.
- By providing an activity based meta model over document content.
  - Allows related content to be linked together into activities or spaces.
  - Windows services and embedded interfaces track changes to content based on meta model.

### The MySight System

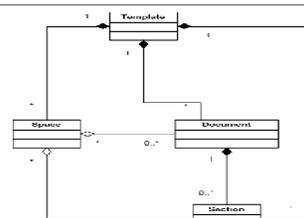


Figure 1: The MySight Meta model

- Templates contains content
- Content can be
  - Document: Standard Word Document
  - Section: Part of a word document that can be edited independently
  - Space: Collection of semantically related content that will be work on in the context of one activity.
- Users instantiate templates as process and checkout content
- Built in interfaces track activity structure and document changes.
- From this information process trace can be generated.
- Users can also view changes to documents in context of activity
- Background Service manages locally checkout documents so users don't have to deal with folder structure
- Provides activity centric views on documents.

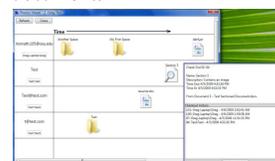


Figure 2: MySight Process Viewer

#### Benefits

- Increased Traceability
  - Combining user data with space history provides accurate and on demand process status
  - Content changes at each step are tracked so a clear picture of how decisions were arrived at can be ascertained.
- Increased Information Management
  - Because MySight manages the physical locations of documents users will no longer have to deal with the complicated and unintuitive repository storage structures.
  - Space based checkout and check-in allows users to manage semantically related documents as a single entity thus eliminating the need for users to memorize the physical location for each file they work on
- Concurrent Checkout based on sectioning of a Space allows multiple users to check out and edit different parts of the same document concurrently, thus increasing process throughput.
- Process Improvement. Because each process provides a clear audit trail we also have the ability to do process mining by looking across all instances of a particular process.
- Perhaps the biggest gain of MySight is that it allows business users to create workflows for collaborative processes with little to no developer interaction. This is attributed to the fact the template creation through standard office tools.

### MySight System Architecture

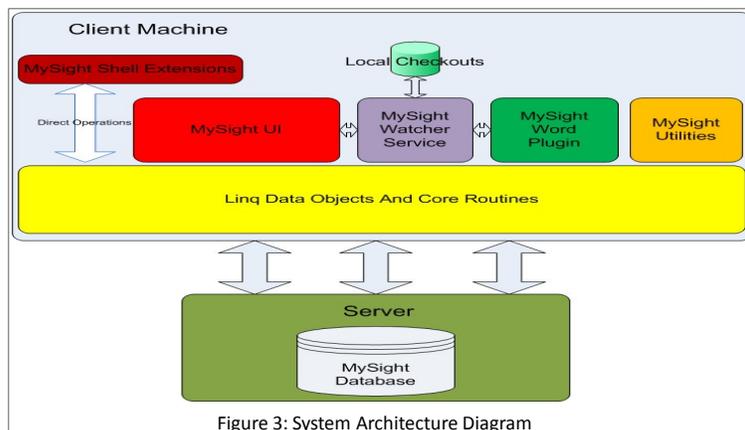
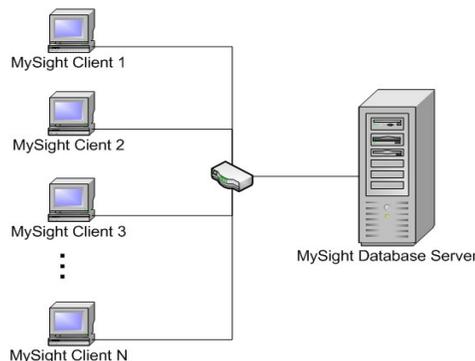


Figure 3: System Architecture Diagram

- Distributed Rich Client Architecture utilizing .NET 3.5 and LINQ to SQL
- Windows Forms and Windows Presentation Foundation based UI
- Windows Shell Integration for ease of access to the MySight System
- Background windows service monitors checked out documents to facilitate easy check-in.



### Future Work

#### Architecture

- Support for dynamically created spaces in a template.
- Linking document content between related templates and process instances

#### Interface

- Usability Enhancements
  - Utilize the Windows explorer extension more creatively to allow on click check-in.
- More Detailed Process Viewer
  - Current Process Viewer shows very simple view of process.
  - We want to include support for more complex such as those present in production workflow systems.

#### Template Creation

- Create My Sight templates for various Enterprise Architecture Frameworks
  - ITIL, TOGAF, Zachman

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