ASSET-CENTRIC™ WORKFLOW

Intuitive Workflow
for Creative Collaboration

INTRODUCTION

For many years, Artesia Technologies has been leveraging its extensive customer relationships and proprietary research base in order to better understand how enterprise Digital Asset Management can add value to the global business community. Our workflow capabilities are the culmination of these efforts. Based on extensive research, focused customer feedback, and thorough testing, this work is an important piece of intellectual property that will significantly impact the adoption rate, usability, and business value of Digital Asset Management within the workgroup and across the enterprise.

At its heart are innate workflow capabilities that substantially magnify the usability and collaborative capability of our industry-leading technology for stakeholders on every level of the extended enterprise. As a result of in-depth research and experience, Artesia has architected an asset-centric™ workflow unlike any other available for use with DAM systems. This unique approach integrates both the asset and its workflow components in order to increase the value of corporate assets, while at the same time simplifying the user experience with an immediately intuitive interface.

The following document provides an overview of the workflow and collaborative functionality available in Artesia's TEAMS Digital Asset Management system. It also details a vision for workflow that shifts the semantics, behaviors and ultimately the value of lifecycle management (workflow) from its traditional home within a proprietary workflow *application* into the semantics of the assets themselves.

The approach outlined here is intended to provide near-term usability and productivity enhancements and ultimately offer transformational technology able to track an asset's history and drive its future use across business models, architectures and geographies.

VALUE PROPOSITION AND ROI

The value proposition of any workflow and collaboration solution stems primarily from the impact it has on workgroups and individual participants. Artesia's approach uniquely bridges the chasm between value to the individual user and value to the enterprise. While ROI is measured by productivity, reliability and quality improvements; equal emphasis has been put on individual incentives to drive use, e.g. the adoption rate of this powerful approach to asset lifecycle management.

Adoption is defined here as:

- Convenient access to and actual use of software and processes
- Rollout of the specific best practices that formed the basis for the original ROI
- Displacement/abandonment of previous practices intended to be obsolete or updated (this is opposed to incrementally adding tasks to a person's or organization's workload).

In order to entice users, workgroups and organizations to *adopt* new technology, e.g. replace old behaviors with new ones, significant value must be offered to each individual

participant. The following are the high-level benefits of Artesia Technologies' workflow solution.

1. Individual productivity

- In-box providing multiple views on ongoing and upcoming projects
- Notification of events that are of interest to the user, such as changes to content, project status and team member activity
- Summary views of ongoing and historical activities and uses of content

2. Workgroup productivity

- Routing of tasks across groups ensuring smooth coordination and elimination of redundancy
- Capturing and reuse of best practices ensuring that repetitive activities such as publications, review cycles and other creative processes are executed optimally and consistently
- Activities-logging providing audit trails and potentially critical information in work recovery and project reconstruction
- Simple communication and collaboration services to streamline and coordinate tasks across geographies, time-frames and roles

3. Executive oversight

- Rapid view into ongoing activities across organizations and geographies for assessment, coordination and reporting
- Simple views into activity and utilization levels for individuals and workgroups
- Simple views into asset usage and by extension the value of digital assets

4. Integration of collaboration with lifecycle management

- "Where used" immediately presents where an asset is being used and has been used throughout its life as an asset
- "How used" provides immediate contextual information showing how assets have been leveraged in the past, increasing the value of assets and avoiding potentially embarrassing consequences of reuse between competitors or inappropriate pairings of subject matter
- "Who used" provides historical information on which individuals and project groups where directly involved in an asset's history. It provides valuable information when additional information not originally captured in the DAM is required

ASSET-CENTRIC™ WORKFLOW REQUIREMENTS

The following requirements detail specific capabilities and architectural principles that are essential to integrating asset life cycles with the teams of individuals that periodically come together to leverage digital assets in creative, commercial and educational activities.

1. Enterprise-wide value supported by end-user adoption

Described below are characteristics of the asset-centric™ workflow enhancements that further extend the value of the these assets throughout the enterprise:

- **Express all of the semantics of an asset lifecycle inside the asset itself**. This includes: the history and role of individuals; multiple, ongoing and historical project details; and relationships to other digital assets such as books, advertisements and courseware. This is opposed to having "silo'ed" workflow applications that segregate this information from the asset and from the various teams that may work with an asset over time.

- **Utilize existing constructs such as metadata, link engines and taxonomy to model the asset lifecycle and project dynamics**. This ensures that the same high levels of integrity, security, distribution and connectivity support all facets of an asset, e.g. its lifecycle, rights and permissions and the content itself. This is opposed to modeling and managing all of the workflow and lifecycle related information in proprietary formats hidden from the basic tools and utilities that users and system administrators are familiar with and trust.

- **Specialized application "skins"** wrap all of the enterprise lifecycle management and collaboration functionality in straightforward and simplified interfaces providing focused, turnkey and intuitive interaction with the digital asset management system. The architectural principals that ensure that the complete asset[1] is managed, secured and validated should be invisible to the end-user who simply wants to execute their specific tasks in the context of their individual schedules and work styles.

2. General Purpose

The longevity of digital assets combined with the variety of uses for an asset (including entertainment, placement, education and promotion) demand that the underlying lifecycle management capabilities be able to support all of the use cases and functional requirements that these diverse scenarios imply. In other words, celebrity, brand or product –centered assets should be able to seamlessly move across the various organizations and workflows that derive value from that asset. The underlying technology should be an enabler -- not an obstacle -- for reuse, synergy and collaboration across business functions.

3. Open interface and standards driven

The limitation of most workflows is that access to the behaviors such as notification, status setting, and project definition require manual intervention, access through a proprietary application or both. The asset-centric workflow system must provide the same level of openness, and leverage the same broad range of standards, as the underlying DAM system.

This enables and simplifies a number of critical capabilities including:

- Integration with downstream systems such as web publishing, pre-press and syndication servers.

- Integration with (or migration from) legacy workflow applications such as pre-press, or video production – centric applications
- Embedding collaboration capabilities into highly vertical applications such as professional publishing, brand resource management and courseware development.

USE CASE CATEGORIES

The following "umbrella" categories outline the breadth of functionality and applicability planned. They are based on over 3 years worth of requirements submitted through RFPs/RFIs; hard won domain expertise developed through 100+ enterprise deployments and design reviews with the Artesia Customer Council.

1. Ingestion

Assets include content, information about the format of the content, business information, rights and permissions, history, lifecycle, etc. Ingestion includes all manner of getting that information digitized, organized and inserted inside a DAM system.

- Automatic: examples include hot folders, wire services, email delivery and other automated and often bulk use cases that would require projects to be defined and started without human intervention and on demand.
- Upgrading: covers the cases where some or all of the information may already be inside a DAM, but the process of upgrading the content/metadata, re-organizing and reviewing is required.
- User-driven: includes individuals manually checking-in/inserting assets and all of their associated information into the DAM.

2. Product Development

Product development covers the use cases where new products are created from within the repository through a combination of reuse, re-combination and original work/creation.

- Publishing: Commercial publishing is quite broad but is intended to minimally include professional, educational, trade, magazine and journal publishing.
- Brand: Categories included here are brand development, campaign management and brand licensing
- Courseware Development: The use cases covered include digital courseware development and the licensing, localization and updating of traditional and e-learning curriculum.
- Movie/Broadcast Production: This category includes the development of primary works, derivative formats and promotional material for time-based video and audio assets for sale and distribution.

3. Asset Distribution

Asset distribution covers the workflow and collaboration use cases where assets are inserted into channel-specific environments for final reformatting, proofing and delivery.

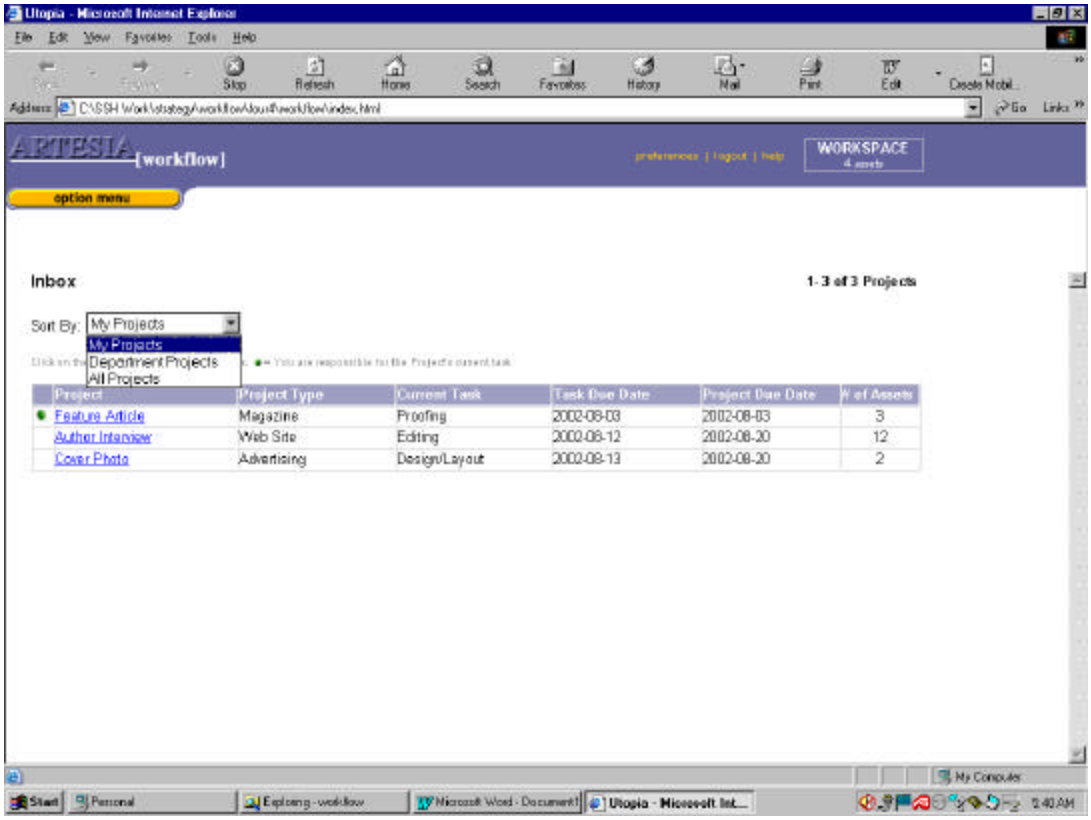
- Web content management

- Pre-press/publishing workflow
- Broadcast networks
- Wireless networks

SAMPLE FEATURES

1. The Inbox

This inbox acts as the primary interface to the Artesia workflow functionality and is designed to be capable of being the exclusive interface to TEAMS, providing an alternative to the asset-centric™ category view typically used in a DAM system.



- Figure 1: A sample Inbox showing out-of-the-box presentation of tasks projects where the user has been assigned to one or more tasks.

Selected functionality is listed here.

Automatic filtering and sorting of projects to select and highlight projects to meet each user's individual requirements. Specific preferences include:

- All projects for which user is a participant with assigned tasks
- All projects that are in a state where the user is tasked with a specific action

2. Projects

Projects are the primary construct that models and manages collaborative efforts. The project is suitable for managing ad hoc workflow, loose collaboration and formalized workflows that include scheduled tasks with dependencies and approvals.

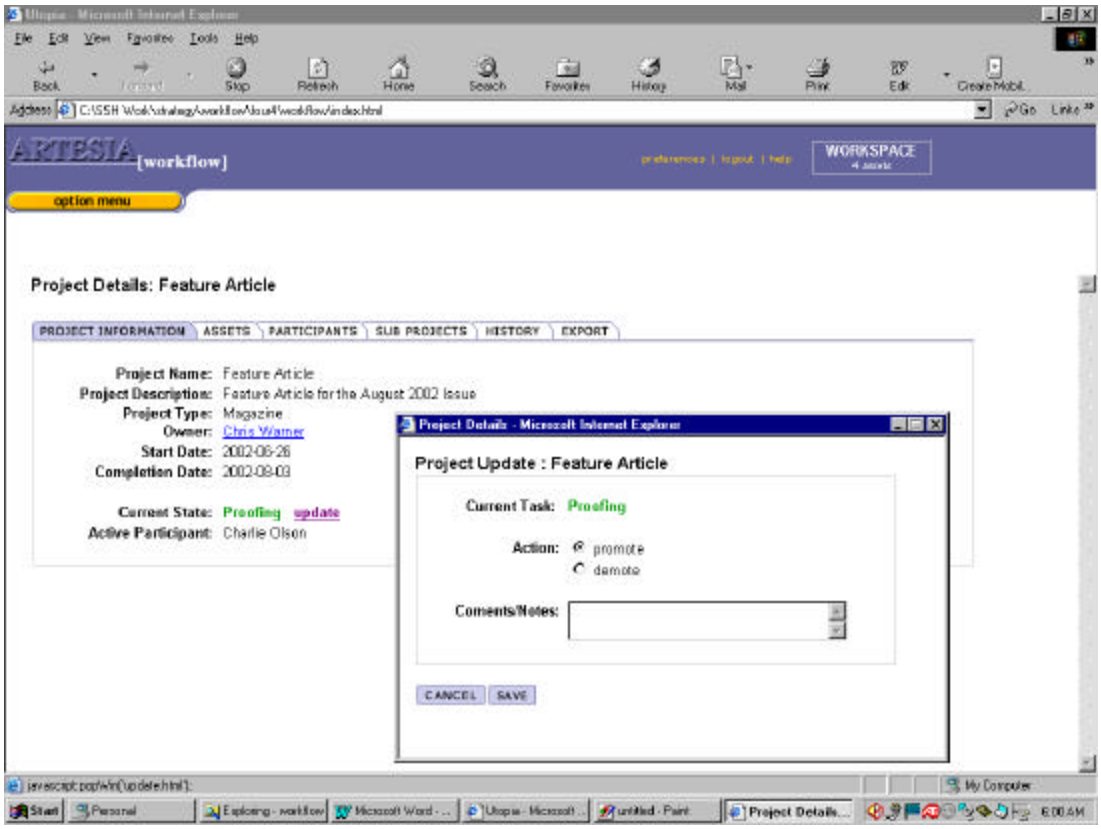


Figure 2: A sample screen from a user's view of a project detail. This is "one click" from the Inbox. Project names are always linked to this dialogue and as such can be "one click" from any online report, email notification or other online reference.

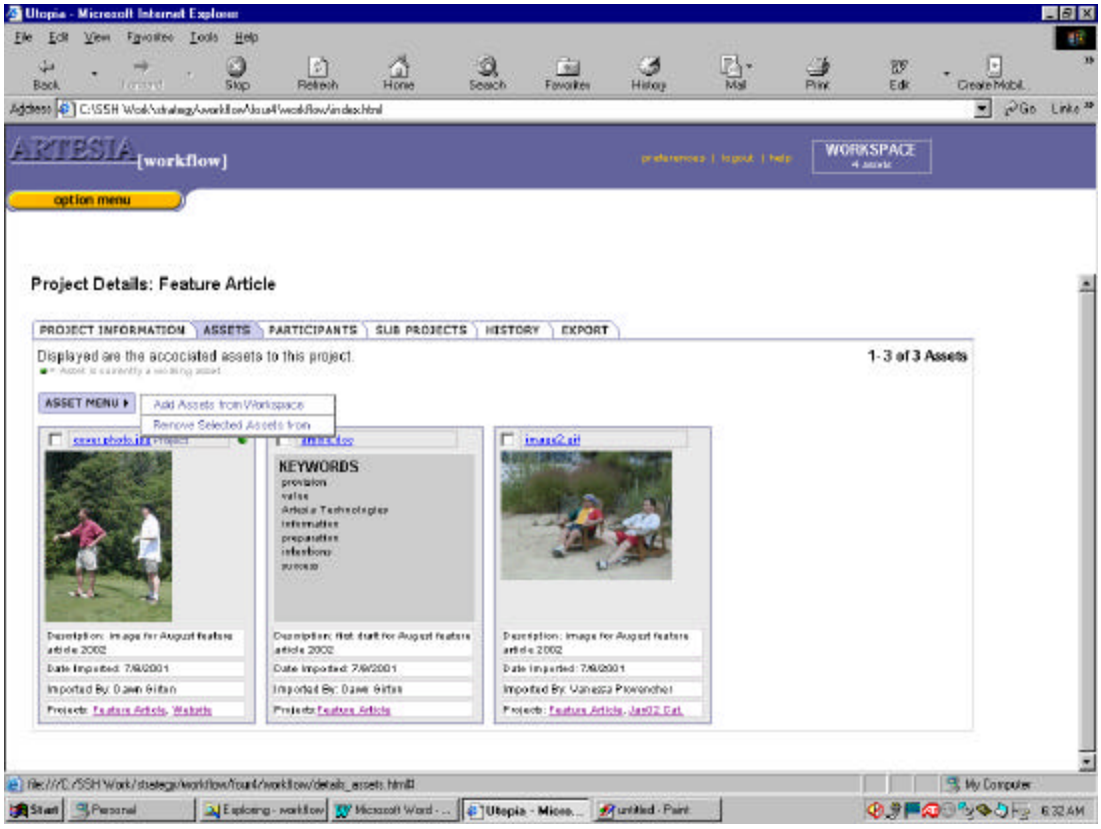
Selected functionality is listed here.

View and modify (as permitted by TEAMS access controls) the following:

- Associated digital assets
- History of the project and the assets within a project
- The Tasks within a project, their respective target dates and the participants assigned to each task. NOTE: This supports modifying projects *in process*.
- Personnel information including other contact information and project commitments of project leads and participants
- Events and their respective notification settings, e.g. email for new version of asset checked-in to a project or a milestone date has been missed
- Subprojects and all of their respective information
- A user shall be able to promote or demote a project's state

3. Selected Project Detail: Digital Asset Management

Artesia Technologies' workflow and collaborative capabilities are defined, modeled and managed in relation to one or more assets. This unique *asset-centric*™ approach enables and dramatically simplifies the tracking and visualization of an asset's history across multiple projects, over time and across multiple DAM, content management and delivery systems. An asset's lifecycle is an intrinsic part of the asset itself and not stored in a proprietary workflow application. Where used, how used, when used and by whom become "one-click" inquiries.



- Figure 3: A sample screen from a user's view of the assets associated with a specific project.

Selected functionality is listed here.

View and navigate into:

- Other projects referencing (or having referenced) an asset
- Action dialogues including check-out and export of an asset

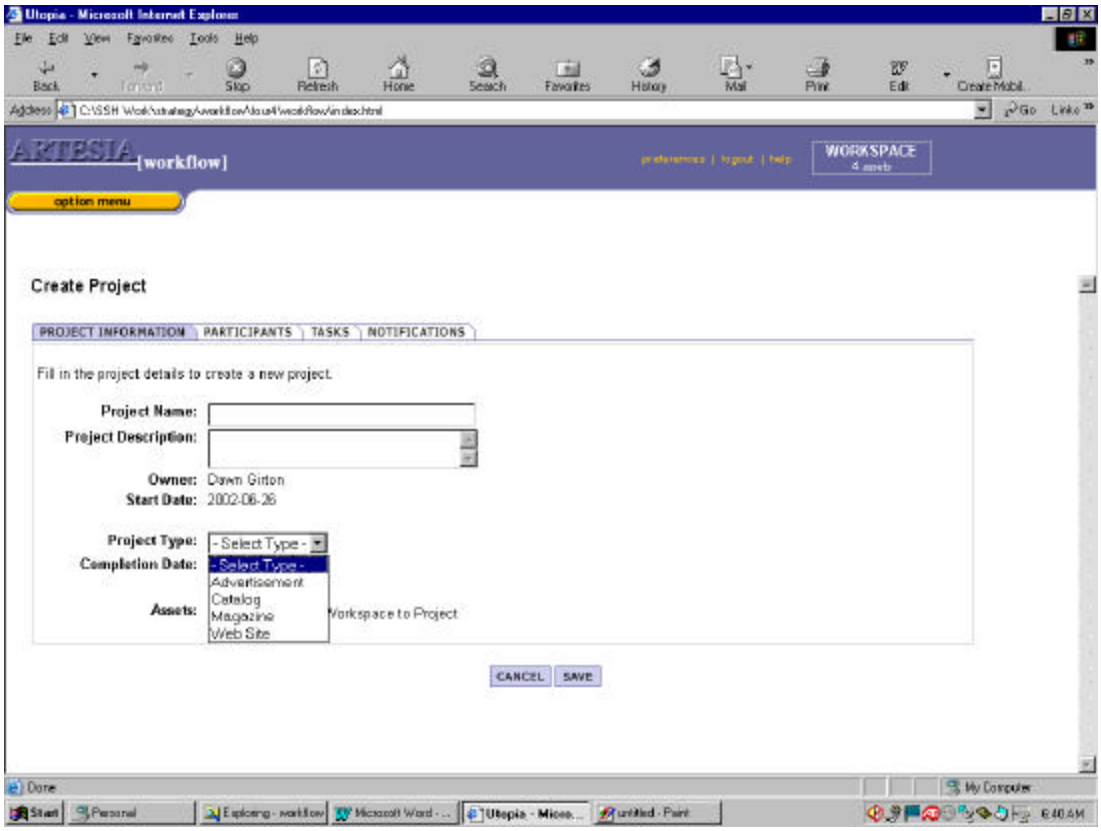
View and modify:

- The focus of the current collection of assets, e.g. which of a set of assets is to be worked on versus others that may support or contribute to that work
- The specific assets associated with a project

NOTE: It should be noted that analogous functionality including graphical navigation and management for participants, tasks and subprojects are also included in this release.

4. Project Creation

Project creation is an entirely graphical process. This process is simplified and accelerated through the use of project templates. Project templates encode best practices and assumptions regarding the number of tasks within a project, their duration and other general characteristics.



- Figure 4: A sample screen from a project manager's dialogue when creating a new project.

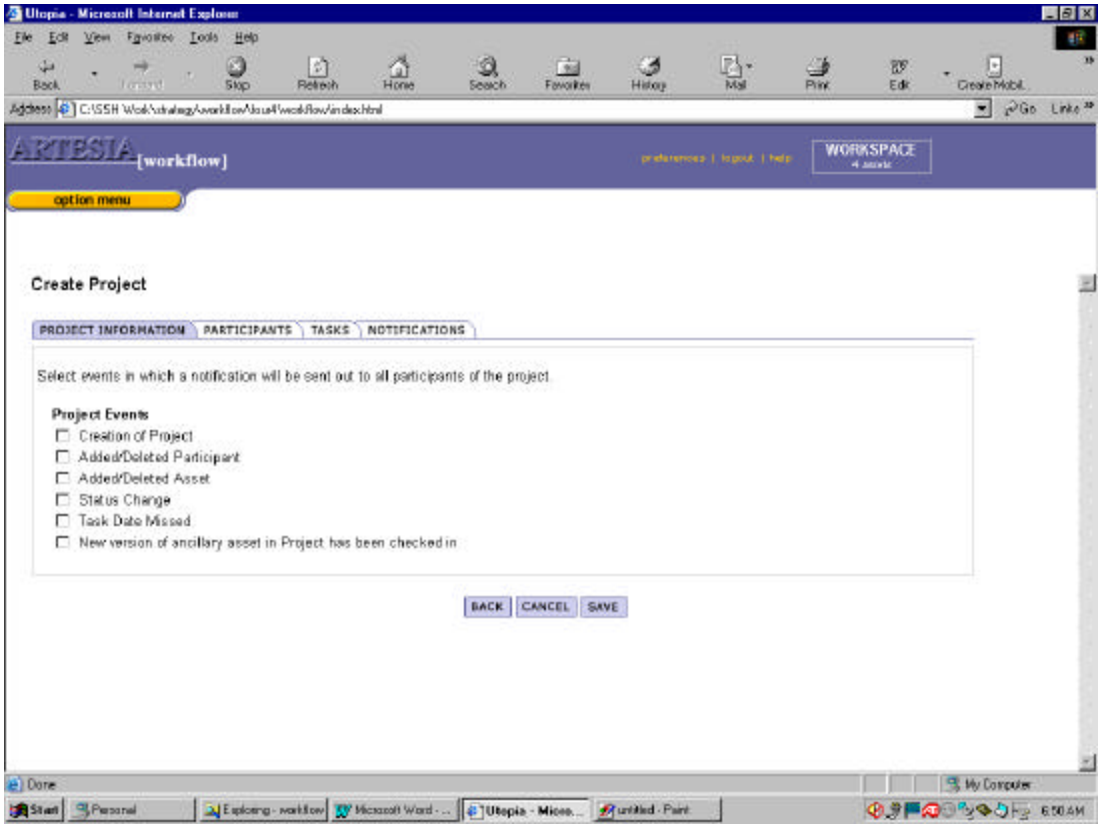
Selected project functionality is listed here.

Define and (re)view:

- Project detail information
- Associated digital assets
- The participants assigned to a project
- The Tasks within a project, their respective target dates and the participants assigned to each task.
- Personnel information including other contact information and project commitments of project leads and participants
- Events and their respective notification settings, e.g. email for new version of asset checked-in to a project or a milestone date has been missed
- Subprojects and all of their respective information

5. Selected Project Creation Detail: Notifications

Project, workflow and collaboration functionality is built upon proven Artesia Technologies' TEAMS functionality. Among the software services reused are the event detection, notification and scheduling services. The incorporation of these replicable, distributed and load balanced services enables simple yet powerful notification options.



- Figure 5: A sample screen from a project manager's dialogue when setting notification thresholds for a new project.

Selected functionality for the notification portion of this dialogue is listed here.

Define and (re)view:

- The events that will trigger an email notification to the participants in a project

CONCLUSION

At Artesia Technologies, we know that the successful implementation of any Digital Asset Management system is gauged by the number of people who use the system. The more users who can benefit from the efficiencies of Digital Asset Management, the greater the total value of the DAM system to the organization. We also know that our success as a company is dependent on our customers' success with our products.

Our asset-centric™ workflow design is based on strategic input from the Artesia Customer Council and hard won domain expertise developed through hundreds of Digital Asset Management deployments. The result is a user-focused workflow system that enables simple reuse and collaboration across business functions with a breadth of functionality unrivaled in the DAM space -- workflow capabilities that significantly improve the adoption rate, usability, and value of Digital Asset Management within the workgroup and across the enterprise.