

# Formtek Content Repository Services

## Executive Summary

Content Repository Services (CRS) software technology is a software system for collecting, storing, managing, and disseminating documents and content across an extended enterprise, typically independent of the type of content, or the vertical applications in use within an organization.

Document management software technology, and more recently, content management software technology, has been around in some variation for some time. The growth of the World Wide Web in the 1990's helped further the possibilities for sharing and managing content through the Intranet and Internet. But more recently, organizations have recognized the value of content as a critical asset, and the importance of CRS as a necessary infrastructure service for associating content to, and making it accessible from, the many different applications in use within the organization. With the proper CRS foundation in place, organizations can implement applications without having to re-implement or duplicate commonly used content management functionality.

Formtek's CRS software technology has the trademarked product name: Formtek | Orion 5 (Orion 5). Orion 5 enables the secure management of virtually any content, including documents, drawings, multi-media, and other content types. It provides the technical infrastructure for enabling enterprise content management capabilities, via an extensive set of software capabilities, which can be integrated or embedded within a variety of software applications. The technology is a modern, web-based and Java-based platform. The commercial version of CRS is in production at various client locations and remains under continuous development and modernization. Orion 5 provides discriminating features in the areas of security, storage, reliability and scalability.

The CRS software technology performs as a single virtual electronic vault, storing content and related data in a central repository, and then making it accessible, in a secure fashion, to authorized users, regardless of their method of access. The technology replaces content storage in paper, file cabinets and file servers. CRS is particularly well suited for the management of engineering data and other technical content (engineering data and drawings, related documentation, images, etc.)

CRS is compatible with most standard hardware and software products and can be scaled and adapted quickly to changing needs. It creates a transparent and flexible content repository capability throughout an organization by allowing users to connect with relevant information regardless of application or method used. The reliability of the software allows organizations to focus on the challenges of their business instead of on the challenges of managing content.

## Formtek CRS at a Glance

### Features

- Manages multiple object types, multi-page documents, folders, compound objects, and markups
- Many levels of security based on user, object, state, and role
- Facilitates a secure data environment through access control lists and user roles
- Manages document and content markup using desktop applications
- Provides multi-level content revision and version control
- Control content access according to Access Control List rules
- Captures electronic files in their native as well as neutral format
- Captures paper documents from enhanced scanning subsystems
- Captures documents and content and related metadata in batch mode, according to user-defined rules
- Full library services – check-in/check-out, unlimited revisioning
- Completely tailorable content model
- Content search via multiple methods
- Full text search capability

### Architecture

- Foundation Server
- Security Module
- Pure Java API SDK Module
- Web Services SDK Module
- System Administrator Module
- System Administrator API Module
- Access Module and JSP Tag Library
- UNIX and Windows certified
- Oracle Database certified
- Internationalized Code Base

### What is Formtek CRS?

- Formtek's CRS software technology provides the technical infrastructure for enabling enterprise content management (ECM) capabilities, via an extensive set of software tools, integrated or embedded within any number of software applications.
- Formtek CRS software technology performs as a single virtual electronic vault, storing content and related data in a central repository, and then making it assessable, in a secure fashion, to authorized users, regardless of their method of access.
- Formtek CRS replaces content storage via file cabinets, or file servers, or via an organization's multiple disparate systems.

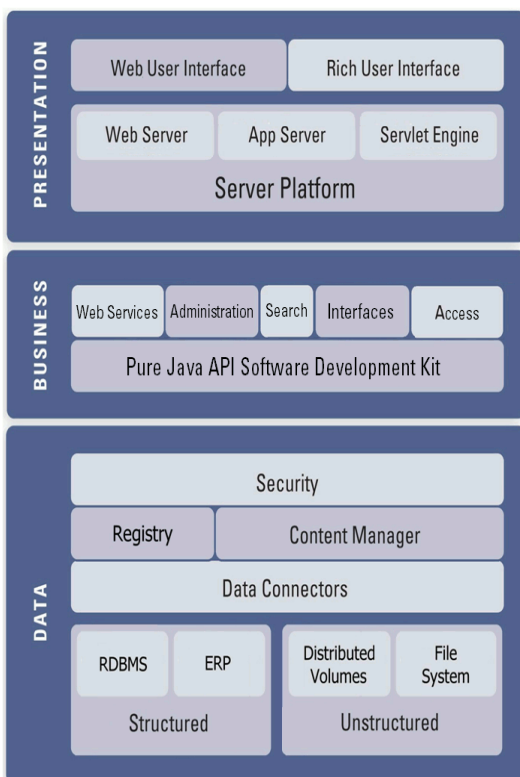
Formtek understands that each organization has unique set of CRS requirements. And so, for over two decades, we have provided mission critical software technology for document management, content management, and CRS capability to some of the most demanding manufacturing, aerospace, industrial and technical operations in the world. We have the experience, products, integration skills, and insight to help our customers meet the challenge and develop competitive advantage.

## Formtek Content Repository Services Architecture

In most companies where products or projects are designed, or services are provided, the knowledge necessary to design, analyze, manufacture, assemble, test, validate, deliver, and/or provide support is distributed in individuals throughout the enterprise and/or stored in multiple disparate locations and systems with varying rules, security, and accessibility.

Until recently, storing and controlling this information in one enterprise system, while still providing easy access to the information from various applications, was nearly impossible. Formtek | Orion 5 (Orion 5) solves these problems by providing easy access to information in a diverse computing environment using a three-tiered, web-based system architecture and extensive integration tools. Orion 5 offers modular functionality, and multi-platform support.

### Formtek CRS Architecture



### The Presentation Tier

- Supports thin and thick clients both inside and outside the enterprise firewall
- Thin client access to content management functionality using standard web browsers (Internet Explorer, Firefox)
- Rich UI applications (like Microsoft Office, AutoCAD and Adobe Reader) can be integrated to provide transparent access
- J2EE and Web Services based Server platforms support access to the Data tier

### The Business Service Tier

- Tools built on a common core SDK
- Basic storage and retrieval capability
- Search
- Administration provides the means to configure the system
- Interface tools may facilitate or automate proprietary lifecycle process

### The Data Service Tier

- Data-Centric Infrastructure
- Highly available, robust, scalable, and secure
- Access to distributed data
- Data virtualization from a single entry point
- Manages and Transforms Data
- Multiple, Heterogeneous sources
- Multiple Representations / Renditions
- The right data in the right format

# Content Modeling

Orion 5 content modeling capabilities are designed to handle complex user requirements.

## Powerful Indexing Schema

Unlike other solutions that identify files by their file names (e.g., SPECDOC.TXT), the content objects in Orion 5 are identified by using an organization's own identifiers. While there can be only one unique set of identifiers, there can be multiple sets of indexes that describe content objects. Some of these index sets may already exist in a back-end data source. These individual sets point to the same content object within Orion 5. Using this feature, different groups within an organization can maintain their own content resulting in content-type-independent objects and providing each group with a content model that is relevant to its function.

For example, a manufacturing department may refer to a part by using a part number or by the machine used to manufacture the part. The engineering group may refer to the same part by using a product or project code and the sales/marketing department may refer to it using the customer's name. Formtek allows each department to maintain its own unique information about the part.

Indexes can also be used to logically organize content within Orion 5. A content object's indexes define key information that distinguishes one object from another. These indexes are typically used for searching the content repository.

## Content Classes

Content classes allow users to automatically assign characteristics and services to specific groups of content objects. Classes are pre-defined descriptions or categories for information that are set up by the system administrator using an intuitive GUI or via the System Administration API. When a content object is checked-in to the system, it is placed in a class. The naming conventions, index sets, and index forms for the class are assigned to the content automatically.

## Application Integration

When a user accesses a content object for viewing, the system locates the appropriate object and the corresponding host application, and then launches that application and loads the object. This activity is transparent to the user and does not require any knowledge of data type or application. This feature is a direct result of the unique Orion 5 multiple representation types concept.

Representations encapsulate all the physical aspects of the content object and the applications that were used to generate the object. The representation maintains this information so the user does not have to interact with these physical aspects of content. For example, the user does not have to know the format of a file, or that a certain application must be launched to view the file, or that a single object is represented by any number of file formats (PDF, PPT, TIFF, DOC, DOCX, etc.). The privileged user or system administrator defines which application to use for each object type and task (viewing, annotating, check-out, and export). Orion 5 retrieves the specified file and launches the appropriate application per the business rules defined by the organization.

If the CRS software technology used by an organization does not support the users preferred applications, the users will be less likely to accept and use it. To succeed within an organization, the CRS infrastructure must support preferred applications for each type of object and task, and also support distribution formats. Orion 5 does this. In addition, it supports multiple representations for handling the management of markups or comments. Markups to content are handled as separate files so as to maintain the integrity of the original content.

## Content Class Examples

**Default Check-In**

Quick Tip: To check-in a Default class document:  
1. Enter the attribute values. Bold text indicates a required attribute.  
2. For single page documents, optionally enter the Rev and Aux values in the first row. Click Browse, and select a file to upload.  
3. Click Check-In to add the new document to the Orion 5 vault.

Document Name: \_\_\_\_\_ Form: Default Check-In  
Title: \_\_\_\_\_ Release Date: 25-OCT-2004  
Index 1: \_\_\_\_\_ Index 2: \_\_\_\_\_ Index 3: \_\_\_\_\_ Index 4: \_\_\_\_\_  
Sheet Name: \_\_\_\_\_ Rev: \_\_\_\_\_ Aux: \_\_\_\_\_ Filename: \_\_\_\_\_  
Check-In Reset Cancel

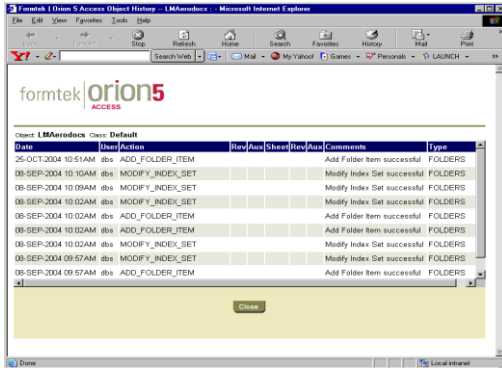
**Office Check-In**

Quick Tip: To check-in an Office class document:  
1. Enter the attribute values. Bold text indicates a required attribute.  
2. For single page documents, optionally enter the Rev and Aux values in the first row. Click Browse, and select a file to upload.  
3. Click Check-In to add the new document to the Orion 5 vault.

Doc Type: \_\_\_\_\_ Form: Office Check-In  
Title: \_\_\_\_\_ Release Date: 25-OCT-2004  
Index 1: \_\_\_\_\_ Index 2: \_\_\_\_\_ Index 3: \_\_\_\_\_ Index 4: \_\_\_\_\_  
Sheet Name: \_\_\_\_\_ Rev: \_\_\_\_\_ Aux: \_\_\_\_\_ Filename: \_\_\_\_\_  
Check-In Reset Cancel

## Flexible Revision Control

Formtek's CRS software technology provides the revision control flexibility to meet your organization's specific content repository requirements.



Date	User/Action	Item/Action	Shared/Item/Action	Comments	Type
25-OCT-2004 10:51AM	dbi	ADD_FOLDER_ITEM		Add Folder Item successful	FOLDERS
08-SEP-2004 10:10AM	dbi	MODIFY_INDEX_SET		Modify Index Set successful	FOLDERS
08-SEP-2004 10:09AM	dbi	MODIFY_INDEX_SET		Modify Index Set successful	FOLDERS
08-SEP-2004 10:02AM	dbi	MODIFY_INDEX_SET		Modify Index Set successful	FOLDERS
08-SEP-2004 10:02AM	dbi	ADD_FOLDER_ITEM		Add Folder Item successful	FOLDERS
08-SEP-2004 10:02AM	dbi	ADD_FOLDER_ITEM		Add Folder Item successful	FOLDERS
08-SEP-2004 10:02AM	dbi	MODIFY_INDEX_SET		Modify Index Set successful	FOLDERS
08-SEP-2004 09:57AM	dbi	MODIFY_INDEX_SET		Modify Index Set successful	FOLDERS
08-SEP-2004 09:57AM	dbi	ADD_FOLDER_ITEM		Add Folder Item successful	FOLDERS

- The Formtek | Orion Transaction Log (as seen above) stores all user and system actions related to content
- The Transaction Log is searchable by user identification, date/time, action, or content object
- Or, individual document or content history, including full revision and version history, can be retrieved

## Revision Control

Formtek's CRS software technology allows users to revise objects and control concurrent modifications. When a content object is scheduled for change, it can be checked-out of the repository for modification. During the time the object is checked-out, other users may access the object for viewing and printing, but they will not be able to edit it. When the new revision is ready for release, it is checked back in to the repository and marked as the newer version. The repository stores and controls both the current and older releases of all content objects. As new revisions are released, older revisions can be superseded automatically. After a search, the current release of an object is presented unless an older release is specifically requested.

While many content systems allow users to revise data, they do not offer the flexibility to adopt a variety of revision schemes. Formtek's CRS software technology offers flexible revision schemes to support the diverse configuration management practices in use by organizations today. With Orion 5, companies don't have to change or adapt their revision policies.

## Foundation Server

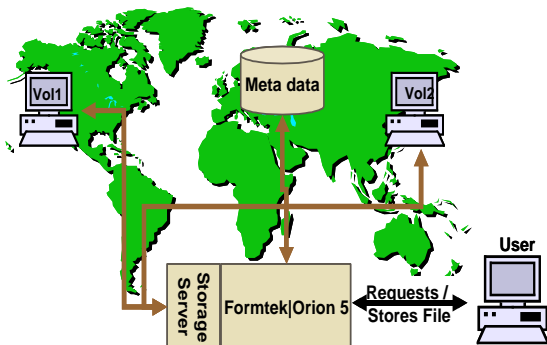
The Orion 5 Foundation Server is at the heart of the CRS architecture. The Foundation Server contains the content repository, which provides the rules for content modeling, management structures, privileges, and metadata. It is built on top of a database platform with SQL Access encapsulated to combine the entire relational database management-dependent aspects of each content object. The Foundation Server is made up of several components:

### Storage Server

The Formtek | Orion 5 Storage Server module is designed to support an efficient distributed repository system with distributed access. The Storage Server module provides a powerful tool for the distributed storage of data. The system administrator may define storage locations (or volumes) efficiently across the network and hide the media and drive considerations from the average user.

Defining distributed volumes across the network provides optimal configuration, resolving input and output subsystem bottlenecks resulting from a central storage system strategy. For example, CADD models may default to a storage device within the engineering facility, while related administrative documents could be stored at corporate headquarters in another city.

Additional Storage Server functionality facilitates transparent, efficient, distributed content storage by controlling access and storage where the content resides, and providing the most convenient copy to the user. Unique storage attributes can be deployed on each server in a distributed environment, and software agents can automate data replication across distributed servers. Content metadata can be distributed across multiple databases.





### **You can use the Formtek Event Triggers to:**

- Automatically place a content object in a folder or working list upon check-in
- Automatically convert an Office document to PDF format, and then check-in both file formats as multiple document representations
- Send an email notification to a list of users when a document is revised
- Upon Delete of the current version of a document, delete all earlier revisions
- Upon changing the Life Cycle of a document to "Approval-Pending", send an email notification to the project lead

### **Flexible Licensing Options**

Orion 5 provides both Authorized User and Concurrent User licensing options, as well as both Perpetual License and Annual Subscription pricing models

### **Easy system management with System Administration tools and API**

Orion 5 includes easy-to-use System Administration tools for managing users, groups, data types, security, revisions, privileges, and distributed storage, as well as an API for integrating CRS administration functionality into other applications

## **Command Server**

The Orion 5 Command server provides Event Triggers used for automating information handling and exchange. Event Triggers encapsulate procedural intelligence, automate adherence to organizational information policies, and provide a new "event-flow" mechanism for re-assessing and decomposing traditional user collaboration problems.

Event profiles (such as the act of modifying a document's project code) can trigger an automatic follow-up action to be taken by the system (such as automatically updating project folders to include the modified document). Event Triggers encapsulate procedural intelligence, automate adherence to organizational information policies, and provide a new "event-flow" mechanism for re-assessing and decomposing traditional user collaboration problems.

As they increase their familiarity with Formtek's CRS capabilities, information technology organizations become more adept at recognizing the potential to automate routine tasks and processes.

Events that may trigger actions include check-in, check-out, folder creation, export, register, and open. Actions can be constructed from any operating system level command or script, including Formtek | Orion 5 CLIs. Event Triggers can cause internal actions that check or add data within the repository and/or external actions where data is used to cause an external information system to perform some task.

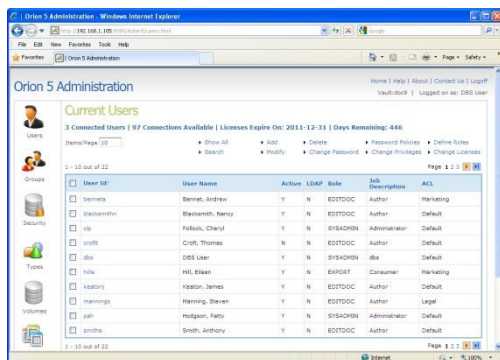
Two other significant aspects to Orion 5 Event Triggers are pre-triggers and expanded trigger support. Pre-triggers are initiated after a user requests an event, but before the event actually occurs. They support validation checking and other actions that might need to occur prior to Orion 5 fulfilling a request. Expanded trigger support includes check-in, add file, rename, delete document/sheet, delete folder, login, logout, open, register object, rename, and print.

## **License Server**

Orion 5 provides both Authorized User and Concurrent User licensing options. The Orion 5 License Server is a Java-based application that manages the number of concurrent users logged on to the Orion Vault. This application runs on only one computer based on its machine ID or physical address.

## **System Administration**

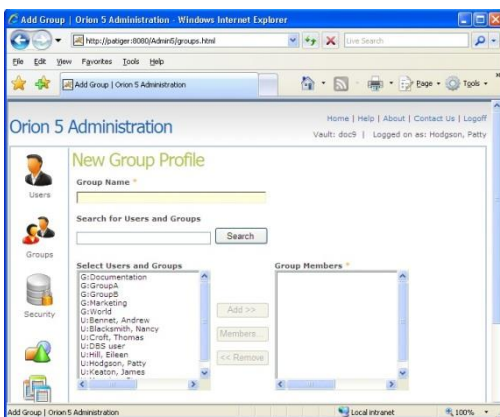
Formtek's Content Repository Services software technology includes easy-to-use system administration tools for managing users, data types, security, revisions, privileges, and distributed storage. Formtek | Orion 5 Administration is a platform-independent, thin client application that provides Orion system administration capabilities via a JavaServer Faces (JSF) web interface. System Administration functions can be performed via the set of included tools, or the functionality can be embedded in other content-enabled applications via the Formtek | Orion 5 SDK Administration API. Formtek | Orion 5 Administration is composed of several components, each of which is described in more detail in the following sections:



## Managing Users

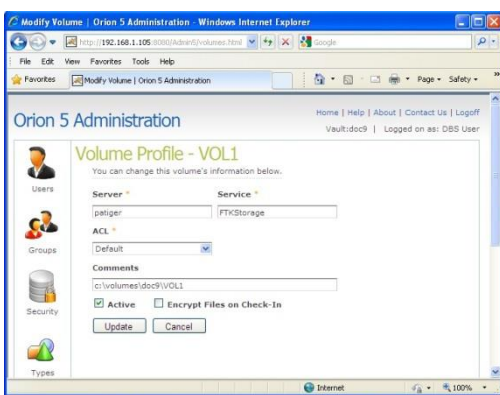
The Users module allows system administrators to create and maintain Orion user accounts, grant access to the repository, change the privileges associated with each Orion role, enable or disable privileges assigned to a user via their role, define command availability, assign forms access, and set user preferences.

If licensed for named users, this module also displays the number of licensed users and the number of available licenses. If licensed for concurrent users, the number of connected users and the number of available connections are displayed instead. Additionally, the license expiration date is also displayed.



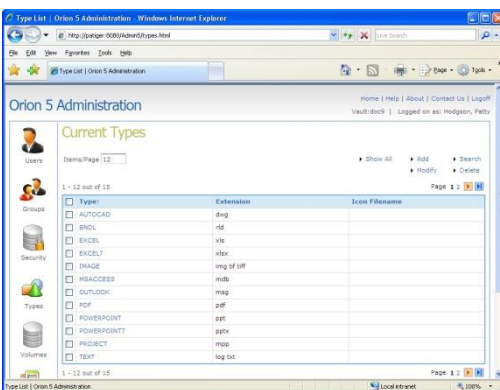
## Managing Groups

The Groups module is used to create and maintain Orion groups. You can create groups to organize Orion users. These groups are then used to define the members of an Access Control List (ACL) in the Security module. A group can also specify the users when configuring a default volume in the Volumes module. By default, new users are automatically added to the World Group when the user is added. Any user can be a member of more than one group.



## Managing Volumes

Managing Volumes - The Volumes module allows system administrators to logically divide your organization's content into different storage locations, which can be local or distributed throughout the enterprise. Volumes work in conjunction with the Orion Storage Server, which is used to transport data to and from volumes. The Volumes module defines the name of each storage volume, identifies the associated Storage Server, and optionally encrypts the volume..



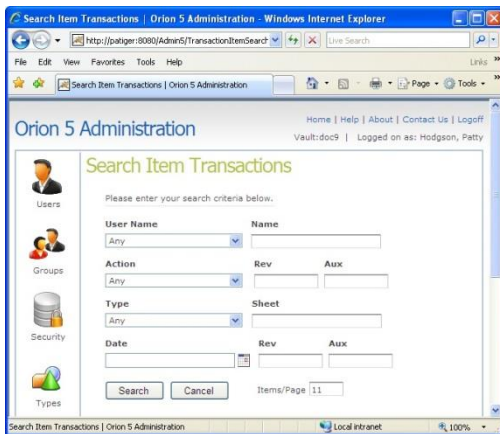
## Managing Types

The Types module provides the ability to manage representation content data types, and associate them with host applications. Each content object can be registered and stored in an unlimited number of representations, and linked to any number of applications. This allows an administrator to hide the complexity of content data types from the average user by mapping data types, actions, and applications according to the organization's unique business rules.

There are no restrictions on the number of content formats and applications that can be registered. Each content object can be registered and stored in an unlimited number of representations, and linked to any number of applications.

## Defining Classes

The Orion Vault installs the Default, Engineering, and Office classes. The Classes module allows custom classes to also be defined. A class is used to group similar types of items with a common set of attributes. A class is assigned to a document, sheet, markup, or folder when it is checked-in or created, and determines the item's identifiers, which indexes are associated with the item, and the format of the filename when a document, sheet, or markup is exported or checked- out.



## Transactions

The Transactions module is used to view and maintain the System Transaction Log and Item Transaction Log. The System Transaction Log records actions performed on users, groups, Access Control Lists, types, volumes, classes, and transaction logs. The Item Transaction Log records actions performed on items—documents, sheets, markups, and folders. The Search command allows you to search for either system transactions or item transactions using user-defined search criteria.

## Security

When an organization uses a single system to manage information throughout the enterprise, the ability to effectively administer the access privileges of a large number of users in different departments is critical. Design engineers should not have access to human resource information, such as salary data. However, it might be useful for engineering managers to have access to the salary information of the people who report to them.

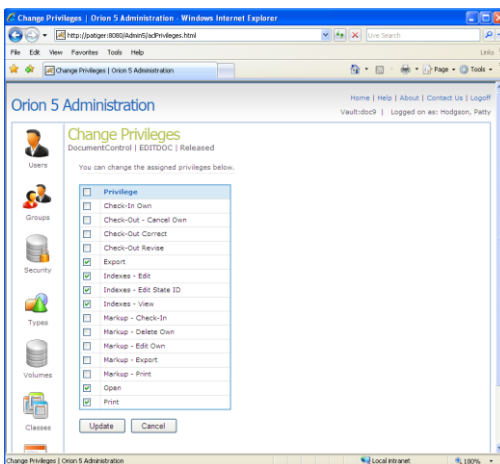
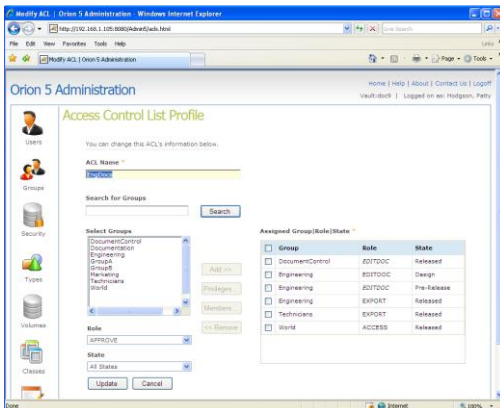
Formtek's CRS software technology offers an extremely robust and flexible security model that allows control profiles to vary content presentation by per-object, per-user, per-workgroup, and per-release state. The Formtek | Orion 5 Security module contains many separately configurable security features.

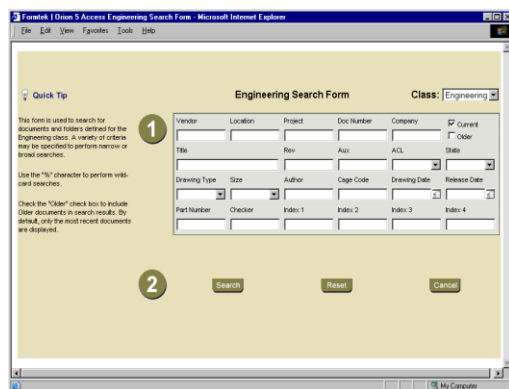
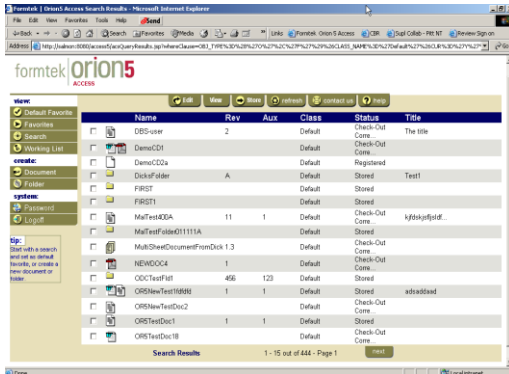
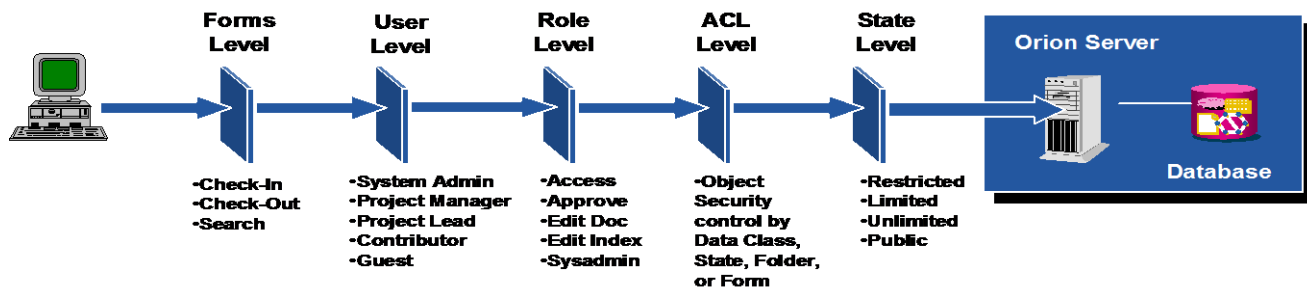
The Security module provides advanced security features and helps simplify security administration by providing both group-based and object-based access controls. Each content object or content class can be assigned specific access restrictions. Groups of users with specific privileges can also be created. The combination allows system administrators to protect valuable content while providing for diverse enterprise needs.

In addition to object-based and group-based access control, SQL-level constraints prevent applications from bypassing the Security module and making direct SQL calls.

Security module privileges depend on the general privileges of the user (role-based security) and the state of the content (object-based security). Access to a content object may be restricted by state. For example, if a document is in review or is checked-out for revision, users who normally have full access may be temporarily unable to read or edit the document.

Security can also be set up to alter the access privilege of objects automatically when their state changes. For example, designated users may not have access to a document until it has reached the released state. To simplify privilege assignment, content classes can be created. Access restrictions placed on a class apply automatically to each content object in that content class. Similarly, groups of users can be created and the access privileges applied to each member of that group.





### JSP Tag Library Highlights

- For embedding Formtek | Orion functionality into web pages
- Provides page layout customization of templates using commercially available web authoring tools
- Style Sheets are used by all templates
- Similar to HTML - Enables quick development

## Access

For those customers that wish to utilize Formtek CRS software technology functionality via a standard browser-based client, the Orion 5 Access module exposes the Formtek CRS business layer functionality out-of-the-box, including the ability to check-in, check-out, search, edit, control, export, delete, and distribute content. Additionally, the Access module is the component that holds the business templates and forms, determines the business rules, and manages the versions of documents through their lifecycle.

For added protection, the Access module takes advantage of the data encryption, server authentication, message integrity, and client authentication provided by the Secure Sockets Layer (SSL) protocol. This protocol means that users with SSL-enabled browsers can communicate securely with the Orion 5 server and the data repository via a web server.

The Access module provides an interactive, intelligent check-in facility that captures all the relevant data about an object so it can be categorized and stored logically. As objects are checked-in to the system, they are forwarded automatically to the appropriate folder or working list, depending on the type of object. All check-in forms are easily customizable. The Orion check-in facility also retains attributes and file information from prior check-out, so this does not have to be re-entered.

The Formtek | Orion 5 Open Access module provides a mechanism for supporting an unlimited and unnamed number of users with an "anonymous" login. Open Access users use a single shared login. Consequently, Open Access does not provide for individual named user security. A general access application or public walk-up terminal not requiring a specific named user would be an example of an unlimited Open Access application.

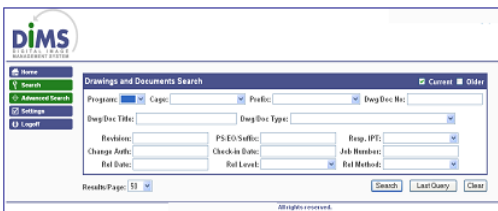
## JSP Tag Library

Formtek | Orion 5 Access applications have been built around a core set of reusable Java Server Page (JSP) tags that are packaged as part of the Orion 5 Access module. By inserting JSP Tag Library tags into a web page, complex library service functionality can easily be added to browser-based applications. The Orion 5 Access application serves as a template that emulates the JSP Tag Library usage and its capability. This allows developers to concentrate on creating the overall business logic of their application without spending excessive time on the integration of library service functionality.



### Software Development Kit Features

- Robust, scalable distributed-object architecture written in Java
- Configurable to achieve corporate firewall compliance
  - Exposes a component-based infrastructure that allows application development in an Object-Oriented environment
- Provides flexibility to quickly build web-based and/or Client-Server Content Management Applications
- Easy to use, extendable and allows integration with other applications



The Orion 5 SDK allows for development of customer-specific user interfaces that embed Formtek Content Repository Services functionality

### SDK Web Services Highlights

- Provides a natural foundation for building content repository components within a Service Oriented Architecture (SOA)
- XML-centric, language-neutral SOAP protocol allows easy integration with a variety of platforms and development languages
  - Both .NET and Java clients can interact with the same Web Services interface

## Software Development Kit

The Formtek | Orion 5 Software Development Kit (SDK) provides a breadth of Content Repository Services development and integration tools for creating content and document management solutions, or content-enabling any number of software applications. Equipped with these tools, organizations can apply their own business policies and rules to custom tailor a common content repository infrastructure to meet their unique requirements.

Today, “integration” and “connectivity” apply to business practices as much as to computer systems. In integrated work environments, successful data sharing requires more than an information infrastructure – it requires the effective application of shared data to solve unique and individual business problems. Applications must aggressively and directly address users’ immediate requirements. While data may be shared, the application solution around that data should be unique in its ability to target a problem.

Given the wide range of user and solution problems across the data life cycle and enterprise, organizations require many specific applications, each of which creates new content, or accesses existing content. Addressing these content requirements poses a challenge as each of these applications may be highly reliant on customized development, or reliant on a full implementation of a proprietary content management product.

The Formtek | Orion 5 SDK responds to this challenge by enabling Formtek | Orion 5 to function as the common storage facility for content. This in turn enables developers to implement applications without having to re-implement or duplicate commonly used content repository functions. And it allows IT to support a single content repository infrastructure, versus having to support multiple customized or proprietary content management systems.

The Orion 5 SDK includes both a Web Services capability, and a Java API for adapting an organizations complex application environment to specific problems, while preserving underlying content management consistency. Equipped with this toolkit, IT organizations apply their own expertise to encapsulate business structures and policies within a single, unified content repository.

### SDK Web Services

The Formtek | Orion 5 SDK Web Services (SDK Web Services) provides a Web Services interface to Formtek CRS functionality. The SDK Web Services module is a natural foundation for building content repository components within a Services-Oriented Architecture (SOA). SDK Web Services are the tool of choice for creating portal and browser-based applications that embed Content Repository Services.

The always-connected event-interaction capability also makes SDK Web Services an attractive choice when building next-generation, rich graphic user interface clients. The XML-centric, language-neutral SOAP protocol used by the SDK Web Services allows easy integration with a variety of platforms and development languages. For example, both .NET and Java clients can interact with the same SDK Web Services interface.

### SDK Pure Java API Highlights

- Provides very granular control of the Formtek Content Repository Services via an object-oriented Java interface
- Includes a comprehensive set of object interfaces for enabling complete control of all aspects of CRS functionality
- Core library service functionality includes check-in, check-out, versioning, security control, and transaction logging

### Formtek Content Repository Services Benefits

- Securely manage all types of content
- Make information accessible 24/7 from disparate locations via a standard repository infrastructure
- Facilitate knowledge and information reuse
- Reduce errors through version control
- Reduce overall schedules and costs
  - Enhance process continuity
  - Increase quality
- Facilitates regulatory compliance
- Reduces risk and potential liability

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## SDK Pure Java API

The Formtek | Orion 5 JSP Tag Libraries are built as a layer on top of the Formtek | Orion 5 SDK Pure Java Application Programming Interface (SDK Java API) and designed specifically for creating browser-based applications. The SDK Java API module is more flexible and intended to be used more generically in creating content repository solutions.

The SDK Pure Java API provides very granular control of the Formtek Content Repository Services through an object-oriented Java interface. The low-level extensibility of the SDK Pure Java API provides a comprehensive set of object interfaces to enable complete control of all aspects of the CRS functionality, such as check-in, check-out, versioning, security control, and transaction logging.

## Summary

As many companies are discovering, consolidating, securing, and managing an organization's mission critical content is a business imperative. Mature technologies now exist to meet this need. Formtek leverages these technologies so that developing and installing an effective content repository infrastructure no longer has to be difficult and time-consuming. Formtek helps customers gain control of their most important and valuable information assets regardless of the content type or application used - and in the process meet productivity, time-to-market, and cost control goals.

Formtek deployed solutions are some of the largest content repository installations around the world, and have simplified some of the most complex content management requirements. Our modular, integrated CRS software technology has been designed to be easily upgraded, supported, and extended across your entire enterprise—no matter how large or geographically widespread. The Formtek CRS software technology enables the “virtual enterprise”—worldwide connectivity anywhere, anytime, resulting in a significant return on investment.

## About Formtek

Formtek, Inc. provides secure and scalable enterprise content management (ECM) and document management software and implementation services to worldwide customers and partners in the manufacturing, aerospace, defense, telecommunication, utility, government, and other markets. We build solutions on software technology platforms that are open and adaptable to complex IT environments, including Formtek | Orion Content Repository Services, Ephesoft Smart Capture, and the Alfresco Content and Process Services platform. To learn more about Formtek, visit [www.formtek.com](http://www.formtek.com).

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