

Interwoven TeamSite Product Overview

Enterprise-Class Content Management

Interwoven TeamSite

Product Overview

May 2000

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About Interwoven, Inc.

Interwoven is a provider of software products and services that enable businesses to build, maintain and extend enterprise-class Web sites. Interwoven introduced TeamSite[®] content management software in May 1997. TeamSite has since been widely implemented by Fortune 1000 companies and leading dotcoms. Interwoven maintains its corporate headquarters in Sunnyvale, California, and offices in New York, Maryland, Texas, Illinois, the United Kingdom, Germany, Australia and Singapore. Interwoven has been public since October 8, 1999, and is traded on the NASDAQ under the symbol "IWOV."

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Content Management

A Key To Innovation

Maintaining Your Internet Presence

In order to maintain a compelling Internet presence that promotes profitable customer relationships, your Web site must be refreshed and enhanced frequently. This ability to rapidly update and extend Web content and functionality allows your company to quickly respond to new opportunities and business models. But as your Web site grows, the amount of content and the number of contributors to it increases. The site's complexity, and the costs of maintaining it, can rapidly spin out of control.

A successful content management solution helps your organization develop, maintain, test, and deploy content on an Internet Web site, an extranet, or a business-critical intranet. It enables your Web development team to:

- ◆ Enable the fast, easy update of any component needed to keep your site fresh and dynamic
- ◆ Access the components in whatever repositories they reside, whether file systems or databases
- ◆ Initiate the workflow needed to create, review, and approve the thousands of various elements needed for your Web site
- ◆ Combine the components into versions that can be viewed, edited, saved, and tested easily by every authorized member of the team
- ◆ Publish a final edition of your content to your Web server or other medium

Beyond the technical day-to-day details of managing the Web site, the successful content management solution is a strategic asset that is one of the keys to profitability. Companies that can quickly innovate are the ones that succeed. Your organization's Web presence is central to its business activities and to its ability to innovate. Therefore, you must think strategically about the systems, tools, and technologies you need to build and maintain it. Your organization's e-business initiatives may include disseminating high-quality information about products and services, managing and building brand, providing customer service and self-service, and selling online. Because these activities are content-driven, the content management solution should be a core element of your organization's e-business strategy.



Key Requirements of a Strategic Content Management Solution

Taking a strategic approach to content management in order to enable innovation requires software systems that exhibit several key characteristics:

Hybrid architecture

A technology foundation should give organizations universal access to their content, regardless of whether it resides in a file system or database. This technology foundation should also address the needs of multiple groups within the organization and give them the flexibility to use any tool of choice, for example, any Web application server or personalization engine for content delivery, or any HTML or XML authoring tool for content creation. It must be open to any content type, including executable code and scripts, as well as the latest standards, including XML, Java, and others. It must also support all major platforms, and allow the Web site to scale in content volume, number of contributors, and frequency of changes.

Collaboration, staging, and virtualization

Collaborative development and production capabilities are key in this model. Content developers should be able to work individually or in teams from either local or remote work locations, enabling parallel development for faster response to opportunities. Web site producers can then pull together the content on staging servers for testing and quality assurance. At each step, users should be able to check their work in the context of the fully operational 'virtualized view' of the Web site. The solution should allow you to structure your Web site into separate development branches, either related (such as alternate language versions of the same Web site) or independent (such as internet and intranet Web sites).

Ease of use

Web sites frequently have large numbers of contributors, many of whom are non-technical. A truly comprehensive system supports and manages the efforts of all contributors, regardless of their technical ability. It should also have an intuitive graphical user interface, and employ file management metaphors that are familiar to the user.

Ease of implementation

Each Web site and Web development team has its own unique goals and requirements. The structure of the Web site and the organization of the team will also change over time. Only a highly configurable solution can support the diverse and changing demands of large-scale, complex Web sites.

Advanced workflow capabilities

Workflow capabilities allow you to manage the various tasks that guide the development of content from creation through final publication. The time to develop, manage, and publish a site increases each time a human being has to "touch" content. Ideally, human intervention should be reserved for high-value tasks, like exercising editorial control.



It therefore becomes important to be able to capture the process logic and assemble the tasks in an automated workflow that is easy to refine and modify as needed. The key is to get the right content, to the right person, at the right time, for the right action.

Strong versioning and rollback capabilities

You might need to "roll back" your site to a previous version for liability issues, or recreate the Web site as it existed during a disputed commerce transaction. Your organization might also have a need for "forward" version control to avoid publishing sensitive data before a particular date.

Reliability, Availability, and Serviceability (RAS)

Because your content management solution is a critical infrastructure requirement for doing business on the Web, your system must be extremely reliable, available, and serviceable. Your system should be highly available to support your business-critical operations. In the unforeseen event of some catastrophic failure, the system should be up and running quickly.

Templating

Automated publishing, which uses templates to enforce standard presentation, is a key to brand management. By separating content from presentation, an organization can serve the same content to different audiences, enabling you to generate Web pages quickly and easily from pre-built components. Your company can then reuse existing content to build new content, and easily update content across the entire site by modifying just one content element. Content developers are much more productive when they are free to focus on content, instead of the details of presentation.

Automated deployment

To keep up with the fast pace of change in your industry and meet critical business opportunities head-on, disseminating and replicating content across multiple servers must be fast, easy, and reliable. Your deployment requirements might also include the need to share content with business partners.

Interwoven TeamSite Content Management Solution

Through TeamSite and its add-on modules TeamSite Templating, OpenDeploy, and DataDeploy, Interwoven provides a solution that meets all the requirements for enterprise-class content management:

- ◆ Hybrid architecture
- ◆ Collaboration, staging, and virtualization
- ◆ Ease of use
- ◆ Ease of implementation
- ◆ Advanced workflow capabilities
- ◆ Strong versioning and rollback capabilities
- ◆ Reliability, Availability, Serviceability (RAS)
- ◆ Automated deployment
- ◆ Templating

TeamSite provides a structured environment for managing your company's information assets. It offers powerful collaborative workflow tools to help Web development teams effectively work together. Its hybrid architecture enables the use of both file system and database content and enables it to integrate with existing software, tools, and processes. The server-based design of TeamSite minimizes client requirements for maintenance and resources, and it exhibits high performance under heavy usage. Its Reliability, Availability, and Serviceability features enable 24x7 operation and recovery in case of failures. And it offers powerful add-on modules for templating as well as for automated deployment, allowing an organization to respond quickly to customer demands and new business opportunities.

Hybrid Architecture

Where do the components of your Web site currently reside? In some cases, you may have catalog data stored in a very structured environment, such as a relational database. But graphics and text documents may reside in your design group's comparatively unstructured file system. TeamSite is designed with a hybrid architecture that enables it

to integrate with your organization's existing information assets, whether they reside in a relational database or in a file system. You have complete freedom to keep your Web assets in any type of repository, thus helping you move your business to the Web faster and more easily than you thought possible.

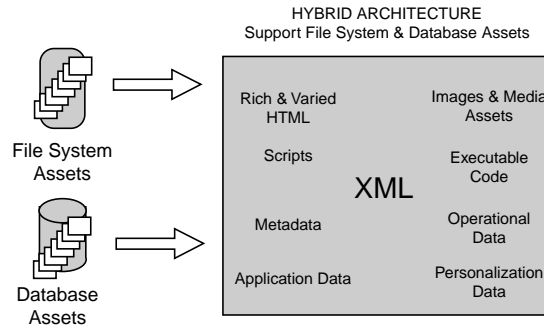


Figure 1: Information Assets

File System Assets

TeamSite's file system interface enables literally any content editing tool to be used with TeamSite. Submitting content is as simple as dragging and dropping it into a normal file folder or directory.

Database Assets

TeamSite supports storing of content in any JDBC-compliant database including Oracle, Microsoft SQL Server, IBM DB/2, Informix, and Sybase. TeamSite includes the ability to version database content, and supports arbitrary schemas to enable integration with content delivery systems and personalization engines.

Best-of-Breed Architecture

TeamSite is the only "pure-play" solution in enterprise-class content management, and has an open architecture to enable integration with all systems on both the content creation side and on the content delivery side of the Web value chain.

On the content creation side, your team may be composed of Microsoft Office users, HTML experts, subject matter experts, or even application developers. With TeamSite, you have the ability to use any desktop tool you choose, so that your team can more easily contribute content. Microsoft Office users can simply drag content into TeamSite directly from their desktop. Subject matter experts can quickly submit content via the forms-based TeamSite Templating interface. Application developers can easily collaborate by developing and testing their code in concert with the rest of the team.

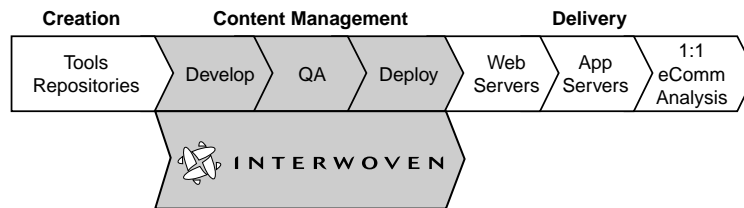


Figure 2: Web Value Chain

On the content delivery side, you may have existing investments in particular Web servers or application servers, or even e-commerce solutions. Your content management solution should not dictate a particular content delivery approach. TeamSite has the ability, through OpenDeploy, to move content to any delivery solution you choose, giving you the freedom to take advantage of the latest technologies available. If a new Product Recommendation Engine comes into vogue, you could easily add that capability to your site without upsetting your content management environment.

Collaboration, Staging, Virtualization

Your Web site is most likely developed and maintained by a large, geographically dispersed team of contributors. With TeamSite, you can facilitate and manage this chaotic process, and guarantee that all work by your distributed contributors fits seamlessly within the context of the finished site. Content developers can work individually or in teams, from either local or remote work locations, enabling parallel site development. Web site producers can then pull together the content on staging servers for testing and quality assurance. At every step of the process, users can check their work in the context of the fully operational "virtualized view" of the Web site. Powerful collaboration, staging, and virtualization capabilities bring your team together, no matter how far apart they may be, and make it easier to manage their efforts for faster "time to Web."

TeamSite Structure

TeamSite allows you to structure your Web development into different branches. Branches facilitate distributed workflow by allowing separate teams to work independently on different projects. Because all branches are located on the same TeamSite server, it is easy for one team to incorporate the work of another team into their project.

Each branch contains private workareas, which contain complete virtual copies of the Web site. Workarea content can be modified in any way without affecting the work of other contributors.

Each branch also contains one staging area in which contributors merge their changes with the work of others. Contributors submit files from their workareas to the staging area to integrate their work with other contributions, then test the integrity of the resulting Web site. Conflicts can be easily identified and different versions of the same file can be merged, rather than overwritten.



Editions are read-only snapshots of the Web site at various points in its development. Content is submitted from workareas to the staging area, and the staging area is then published as an edition. Editions may then be deployed to the production server.

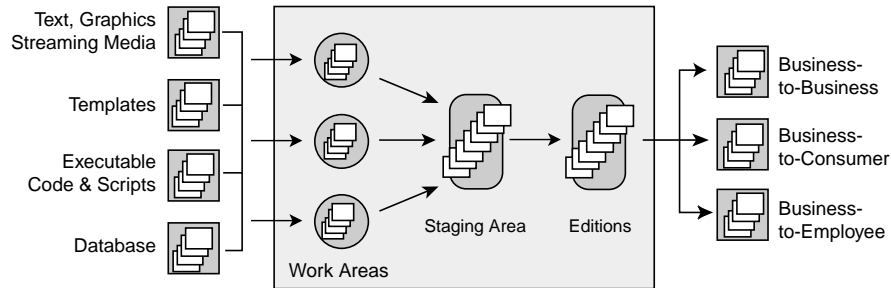


Figure 3: TeamSite Editions

Each time the staging area is published, a new edition is created that contains the entire contents of the Web site at that moment in time. The current edition is usually deployed to a production server. Older editions are archived and can be accessed at any time. TeamSite versions all files in a system, including source code and graphics. These archives are complete records of the Web site over time, which can be used to reconstruct the Web site in the case of litigation, breached security, data loss, or operations integrity failure.

TeamSite User Roles

User roles allow different levels of access and responsibility within TeamSite:

- ◆ Authors, who own Web site content. They are primary content creators with limited access to the TeamSite system. Authors have full access to the content in their Editors' workareas, but do not need to understand the larger structure and functionality of TeamSite.
- ◆ Editors, who own workareas. They create and edit content, just as Authors do, but they are primarily responsible for managing the development taking place within their workareas. Editors have access to specialized TeamSite content and workflow management functions.
- ◆ Administrators, who own branches. They have all the abilities of Editors, but they are primarily responsible for the content and functioning of their branches. Administrators can manage project workflow by creating new workareas for Editors and groups, and by creating sub-branches of their own branches to explore separate paths of development.
- ◆ Masters, who own the Web site from which all sub-branches are created. The Master can perform all the functions of Editors and Administrators on any branch. The Master is generally involved in the installation of TeamSite, and can reconfigure TeamSite systemwide.



Ease of Use

To support large numbers of contributors, many of whom are non-technical, TeamSite offers an intuitive browser-based GUI with point-and-click access to all Web components. InContext™ QA, SmartContext® Editing, and the data capture capability of TeamSite Templating help users and knowledge workers throughout an enterprise easily contribute Web content and test changes. Advanced administrator controls enhance and simplify management of the system across the enterprise.

Web-Browser based GUI

The TeamSite graphical user interface is browser-based, and has two main views: the Workflow view, which displays information about jobs and tasks, and the Branch view, which allows you to navigate through TeamSite areas. In the Workflow view, you can learn about the tasks you own by clicking the Tasks button in the Button Bar. To view the details of an individual task, click its underlined name. In the Branch view, the Navigation Window allows you to navigate through TeamSite. This easy-to-use navigational system allows users, especially non-technical contributors, to utilize the power of TeamSite with minimal training.

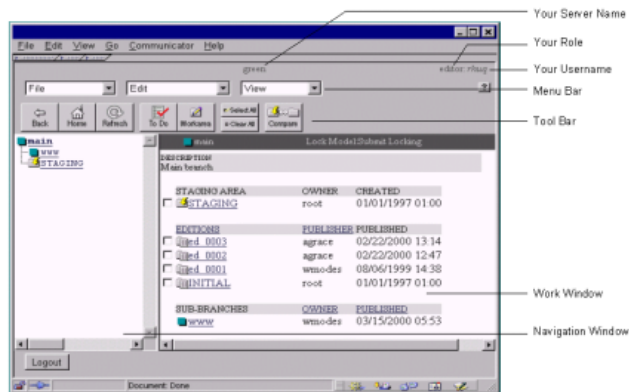


Figure 4: The TeamSite Window

SmartContext Editing

TeamSite's SmartContext Editing feature allows users to edit Web pages as they browse through the site. Users can start browsing at any point, and edit files as they browse. The user can pull out the SmartContext Editing tab in the browser window to gain access to SmartContext Editing functions such as editing the current page, editing the images that appear on the current page, refreshing the page to display recent edits, or submitting changed files to the staging area.



InContext QA

TeamSite InContext QA is a powerful feature that allows users to check their work in the context of the fully operational Web site. Contributors can first test their own work, then test how well their work integrates with that of other contributors. Individual workareas allow contributors to edit files, then test them in the context of the virtual Web site contained within their own workareas. Because each workarea contains a virtual copy of the entire Web site, contributors can immediately see the impact of their changes on other parts of the Web site, and make any necessary corrections.

Administrator Controls

TeamSite includes these administrator controls for easier management:

- ◆ **Audit Trails** — TeamSite allows Editors and Administrators to establish audit trails by viewing the full revision history of any file. The History command will display the state of a file at each time that it was submitted to the staging area, including statistics such as the time and date it was modified and who modified it. Additionally, each archived edition contains a copy of the entire Web site at the time of publication, and includes such statistics as who published it, and when, and what comments were attached at the time of publication.
- ◆ **Event Logging** — TeamSite keeps a real-time log of every event that occurs within the system. This log can be used to track the development of files, the activities of users, or the development of the site as a whole. It can also be used to establish ISO 9000 compliance, or as a reference for customizing and fine-tuning TeamSite. Events that appear in the log can be used as triggers for custom scripts.
- ◆ **Filtered Views and Permissions** — TeamSite respects standard file and directory permissions, so that it works with existing systems. TeamSite Branch and Workarea Security can be configured so that users are shown only those items that they need to see.
- ◆ **Command-Line Tools** — TeamSite includes a suite of more than 70 Command-Line Tools, which allow TeamSite operations to be performed from a command-line prompt. TeamSite's Command-Line Tools can be used for custom scripting, and offer a high degree of flexibility in automating routine tasks or workflow patterns; they also facilitate remote administration of TeamSite.

Ease of Implementation

Some competitive systems force you to retrofit all existing content to a new model, or require users to go through a different interface to reach unconverted content. Products that force you to retrofit your content into a database repository prior to developing your Web site make the process extremely time-consuming and expensive. The enhanced configurability of TeamSite allows you to easily integrate existing assets, enabling you to get up and running very quickly. You can easily take advantage of your existing file system assets without any costly and impractical retrofitting into a database. Database content can be more easily and rapidly integrated into the site, helping to ensure

more scalable Web operations-up to hundreds of thousands of pages. If you choose to convert to a template-based model, you can still access "non-templated" pieces of content in their original form.

Advanced Workflow Capabilities

Because your team collaborates on creating and reviewing text, images, and countless other elements, the review and approval process must work smoothly. The advanced TeamSite task-based workflow system provides the ability to automate complex Web production processes, helping move your team through all the steps necessary to quickly get your content on the Web. Any business process or development model can be automated using TeamSite's workflow subsystem, through XML-based configuration files.

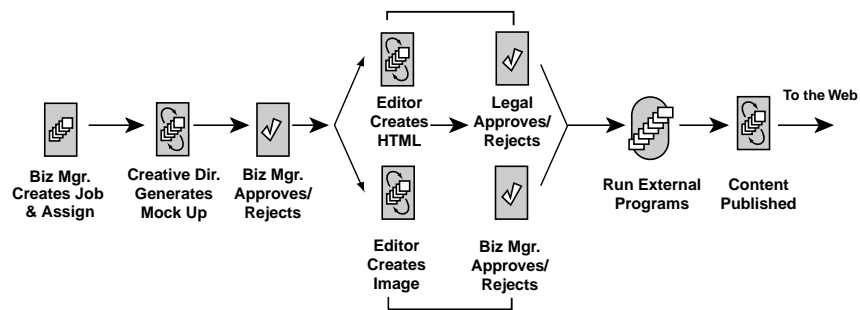


Figure 5: A Workflow Example

Task-based workflow means that each task, defined as an unit item of work performed by a single user or process, is associated with a particular TeamSite workarea, and includes a set of files. The user, or process which owns a task, can modify, add, or remove files from this set. Tasks can be in two states: Active or Inactive. In general, a task is active when it is doing work. For example, a user task is active while the user is working on the files contained in the task. An external task is active when its external program is running. A user task that is active will appear in the user's task list. An inactive task does not appear on the list.

TeamSite workflow provides up-to-date information on all assignments, for both assigners and recipients, and supports the creation of "jobs" which include one or more tasks. TeamSite provides a general purpose definition language for creating workflow templates that start a workflow and assign specific users (or roles) and Web assets to a specific instance of a workflow. It also provides the flexibility to create parallel and sequential workflows that map to virtually any business process. TeamSite manages a wide variety of content types, supports custom-definable approval processes, offers expanded support for automated publishing processes, and supports both parallel and sequential development efforts.



Strong Versioning and Rollback Capabilities

Your Web site will probably go through hundreds or even thousands of iterations to keep it fresh and dynamic. Keeping your site's content refreshed is an ongoing effort that will produce countless more versions. If you had to rename, save and distribute every new version or edition of your entire Web site (which can contain thousands or millions of files), the implications for your network traffic and storage systems would be mind-boggling. Additionally, your Web site is a critical repository of information, and can have significant implications for legal protection, ISO 9000 certification, and operational efficiency. Webmasters and development managers need detailed file version histories and audit trails to identify all changes made to any Web asset, even when files have been moved or renamed. Access to prior versions of your content can be important in allowing users to find the changes that caused a bug, revert to previous versions, or identify new bugs.

TeamSite's strong versioning and rollback capabilities make it simple for every contributor to make, store and view changes at any time during the Web development process without overburdening the network. Using TeamSite, contributors create small text files, sophisticated Java applets, or complex HTML scripting, regardless of whether those assets are stored as an in-development copies or as part of a shared copy of the full Web site. TeamSite easily stores an unlimited number of versions of these assets, storing only the differences between the various versions so your storage systems are not unduly taxed. Contributors can quickly refer back to prior versions as needed for development and QA. If errors are detected in any version, or file corruption occurs, contributors can quickly roll back the Web site to any previous, error-free version. TeamSite can efficiently and reliably preserve completely functional versions of the Web site, including all static files and dynamic scripts and code.

Reliability, Availability, and Serviceability (RAS)

An enterprise-class solution must meet three key RAS objectives:

- ◆ Minimal planned downtime
- ◆ Minimal unplanned downtime
- ◆ Rapid recovery from an unforeseen failure

For mission-critical enterprise applications such as TeamSite, RAS features are even more important because the software may be used by thousands of users to manage hundreds of thousands of assets. TeamSite provides enhanced RAS features to support 24x7 operations, enabling consistently accurate results, high availability to service client requests, and excellent serviceability to improve availability and avoid outages.



Add-On Modules: TeamSite Templating, OpenDeploy, DataDeploy

Interwoven offers several add-on modules to enhance your TeamSite system:

- ◆ TeamSite Templating, for easy and inexpensive content reuse
- ◆ OpenDeploy, for automating the manual and time-consuming process of content deployment, and minimizing costly human errors when deploying file-based content.
- ◆ DataDeploy, for automating the deployment of database-driven content

TeamSite Templating

TeamSite Templating is an add-on module that enables easy and inexpensive content reuse by providing the ability to include individual content elements in any number of Web pages. Your site probably employs some components that remain fairly static, such as the "About Our Company" block, an order form, or graphics images. Why reinvent the wheel every time you need to make a change? Instead of forcing you to recreate these elements each time your site is refreshed, TeamSite Templating enables your content developers to easily reuse the material in future versions and allows non-technical as well as technical knowledge workers to play an important role in the Web development process. By empowering every member of your organization to develop and contribute Web content, automating your workflow processes, and streamlining your deployment procedures, you can speed your organization's "time to Web" and enhance its ability to innovate ahead of the competition.

TeamSite Templating helps your organization to:

- ◆ Extend content contributions — The browser-based model of TeamSite Templating allows non-technical users to contribute content via a simple HTML form from anywhere on the network, and from almost any desktop system. Knowledge of HTML is not necessary.
- ◆ Enable content reuse — TeamSite helps users identify areas where sharing can help reduce the production costs associated with maintaining the site. Advanced capabilities, such as the automatic assignment of metadata and the ability to browse for images during template input, further increase the ability to share content, providing leverage for faster development.
- ◆ Protect the brand — TeamSite Templating allows flexibility and creativity in the Web development process while maintaining the consistency in "look and feel" that is critical to brand identity.
- ◆ Enable a dynamic experience — TeamSite Templating enables you to manage the complexity of personalized or frequently changing content in order for you to deliver a personalized, interactive, compelling Web experience specifically tailored to the user. TeamSite Templating provides the flexibility to use any application server to create dynamic, data-driven Web sites, allowing developers to quickly build dynamic Web pages by combining common content elements with data stored in either a database or a file system.



TeamSite Templating embraces a component-based page design. A central XML data capture specification defines what content elements need to be captured, how, and by whom. This specification does not prescribe presentation format. To define content "look and feel," or presentation, one or more separate TeamSite presentation template files are created. These files might include such elements as HTML, application server code, and special TeamSite Templating mark-up tags. Together, data capture specifications and these presentation templates give you everything you need to create a Web page.

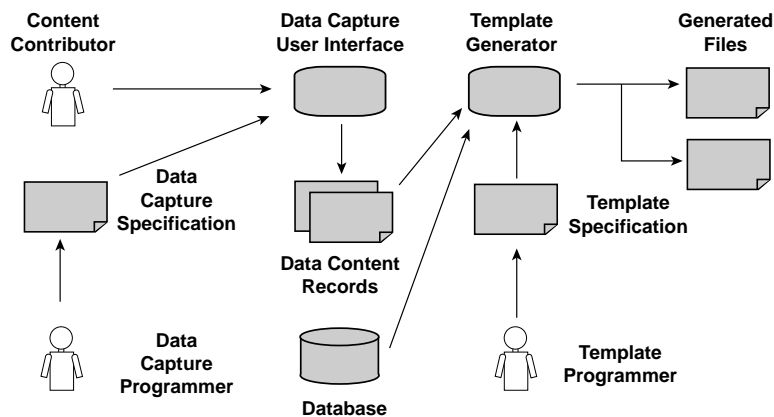


Figure 6: TeamSite Templating Process Flow

A pure content capture form is created from the data capture rules file. When the user fills in this form, the workflow engine takes over. Instead of automatically generating a single Web page immediately upon save of the data, TeamSite simply writes an XML file and allows the workflow engine to drive the next steps.

The next step might include simply generating a regular Web page by combining this new data with the presentation template defined earlier. Another alternative might be to write the XML data to a database where ten different presentation templates could access the data to generate ten different Web pages, each with a slightly different look and feel.

TeamSite Templating provides a rich development environment for both non-technical contributors and Web application developers. Business managers can set rules that determine which content elements are reusable. Content contributors can easily create new template-based files, and set metadata on those files to describe how the individual elements could be reused across the site. In addition, these template-based files can be presented in different ways using the presentation format desired by the organization. TeamSite templates provide a higher-level abstraction for creating commonly used business content, and enable the reuse of content and the separation of form from content. TeamSite Templating is also highly integrated with TeamSite for industry-leading content management for component-based Web sites.

OpenDeploy

When content has been created on the TeamSite development server, it must be pushed out to the production servers which serve content to end users. If your e-commerce site is up and running, you are probably pushing out thousands of files every day, and some sites are updated on a near-continuous or continuous basis. Interwoven's OpenDeploy is an add-on module that automates the manual and time-consuming process of content deployment, and minimizes costly human errors. It helps you manage the flow of all of this dynamic data in a secure, transactional environment with replication and syndication capabilities.

- ◆ Replication is the process of copying databases and file systems across any number of production servers and development servers worldwide. OpenDeploy lets you securely transfer and manage ever-changing content on your intranet, extranet, or Internet or eBusiness Web site.
- ◆ Syndication is a new and powerful business model gaining ground on the Internet. It stems from the idea that the Internet supports networks of relationships, or value chains. Companies, partners, and customers are linked through their Web sites, where the exchange of data is determined by business rules and the laws of supply and demand. Content created for one site can be programmatically replicated to another, where a further value-added process can take place. OpenDeploy provides secure, rules-based distribution of all content across a global network of production servers. These rules support automated processes, such as one-button publishing, and transformation processes, such as deployment to Web farm configurations.

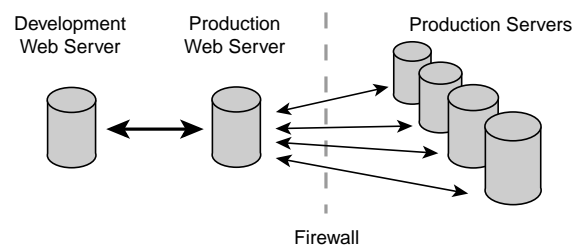


Figure 7: OpenDeploy

OpenDeploy offers a number of powerful features to enhance deployment.

- ◆ Cross-Platform Support — OpenDeploy supports Solaris, HP-UX, Linux, AIX, Windows NT, and Windows NT Alpha. OpenDeploy allows you to deploy to and from any of these platforms.
- ◆ Minimal Incremental Deployment — When only a small number of assets have changed in the development environment, OpenDeploy permits incremental deployment. Because OpenDeploy tracks the status of all content in both the development environment and the production server, it can synchronize servers by transferring only necessary files and directories.



- ◆ Encryption — All Web site data is encrypted for transfer so that sensitive Web content can be safely transported to deployment servers over the Internet beyond the firewall. OpenDeploy provides both symmetric (48-bit) and asymmetric (up to 128-bit) encryption. (128-bit encryption is available only for transfers within the United States.)
- ◆ Deployment Logging — OpenDeploy generates a complete record of all actions taken, such as files copied or deleted. If an error occurs, it can be rapidly traced and corrected, and the deployment process can be adjusted to prevent repetition of the error.
- ◆ Site Rollback — OpenDeploy integrates with Interwoven TeamSite or any other development solution to provide instantaneous rollback of the production server to a previous version of the Web site. TeamSite's Site Rollback is incremental, so that it can copy the older versions of only the necessary files to the Web server. In the event of a partially failed deployment, OpenDeploy can return the Web site to its original state, ensuring that the Web site always retains its integrity.
- ◆ Flexible Attribute Control — OpenDeploy gives the Webmaster precise control over ownership of and access permissions for all deployed files and directories.
- ◆ Authentication by IP Address — OpenDeploy can be configured to work with your firewall to ensure that the OpenDeploy listener is communicating with a known server in a known manner.
- ◆ Deploy and Run — OpenDeploy allows you to run custom scripts on the source or destination server at various phases of deployment. For example, you can run a script to automatically stop and restart the Web server before the deployment starts, execute a notification script upon a failed deployment, run a language-checking script during deployment, or enter items in a Windows NT server's Registry after deployment.
- ◆ Precise Content Control — OpenDeploy lets the administrator specify precisely which files and directories are to be deployed, and where they will be deployed. Selected files and directories on both the development and the production Web server can be ignored in the deployment process, leaving work in progress or important legacy files untouched.

DataDeploy

DataDeploy automates the deployment of database-driven content to the production environment. Database content includes extended attributes for the assets stored in TeamSite and the data content records created during the templating process.

DataDeploy lets you transfer extended attribute data and data content records (used in TeamSite Templating) among TeamSite, an external SQL database, and an XML File. Extended attributes, also known as metadata, are attributes that can be set on any assets managed by TeamSite. Once the extended attributes are present in a database, they can be queried using SQL in order to dynamically present information to the users. Data content records are reusable



content components that can be used to dynamically generate pages, once these components are stored in the database. These data content records are generated using data capture templates.

For example, you can configure DataDeploy and TeamSite so that metadata is transferred from TeamSite to a database any time files are submitted to a staging area from a workarea. Once in the database, the data can be reorganized via SQL queries to create customized data sets based on criteria of your choice. Or, instead of exporting to a database, you could configure the same workarea submission to trigger the export of metadata to an XML file. The other scenarios shown above work in a similar fashion. Exported data sets residing in a database or XML file can then be used by an application server as it interprets predefined business rules to generate Web pages with highly specialized content. Similar rules apply for transferring data content records.

Enabling Business Innovation with Interwoven TeamSite

Organizations managing large, sophisticated Web operations know that a system for enterprise-class content management is a highly strategic investment. Such a system helps companies maintain compelling Internet presences that promote profitable customer relationships. Only a solution that was designed from the ground up to address these problems can provide a satisfactory solution.

Your enterprise-class content management solution should offer a hybrid architecture, powerful features for collaboration, staging, and virtualization, strong versioning and rollback capabilities, and advanced workflow capabilities. It should be easy to implement and use. It should offer templating to extend content contributions, protect your corporate brand, and enable content reuse as well as a dynamic user experience. It should include features for automated deployment to reduce deployment time and minimize errors. And finally, it should offer superior reliability, availability, and serviceability.

TeamSite has been designed to fulfill both the functional needs of today's Web managers and the strategic needs of organizations that will play a role in the eCommerce economy. Its branched structure and hierarchy of user roles provides an open, yet secure, foundation for development efforts. TeamSite can actively manage and support any type of Web site content, and work with existing tools. TeamSite empowers users to use their tools of choice for authoring content, managing Web site files, or developing sophisticated Web applications. TeamSite frees the Web development team from the tedious burden of QA and integration, and supplies powerful file management and workflow functions. Its comprehensive audit trails and event logging provide a high degree of administrative control. It also scales to accommodate large and complex Web sites and development teams, so it can grow with your organization to meet your future needs.

Innovation is a critical strategy in today's fast-moving and rapidly changing business world. A solid technology foundation will allow your company to implement innovative ideas rapidly and build your competitive advantage. Interwoven TeamSite is a key building block in enabling eBusiness innovation for your company's future.

