



Moving Content from Staging to Production Server

Revision 1

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Overview

Before **Ektron CMS300**, HTML files were deployed to a Web site in a three-stage process.

1. An author updates content on a staging server, which has a copy of the Web site.
2. A reviewer checks and possibly modifies the content.
3. The approved content is moved to a production server, which hosts the live Web site.

An Ektron Content Management System (CMS) provides a *virtual staging server*, which lets authors work directly on a production server yet prevents site visitors from viewing modifications until they are approved.

Here's how it works. An author edits one or more content blocks and submits them for approval. Authorized reviewers preview the changes and decide to publish or reject them. Reviewers can also edit the content then publish. All of this can occur on a single server, which acts as a virtual staging and a production server.

Ektron CMS300 also supports the traditional model of separate staging and production servers. This section describes options for managing servers and suggests best practices for a successful deployment.

Best Practice

Ektron's suggested best practice is a combination approach, using both a virtual and a physical staging server.

- Use a *virtual staging server* for the majority of your Web updates. Ektron takes this approach with its site, www.ektron.com.

Most of the time, authoring occurs on the production server, which acts as a virtual staging server. The CMS workflow controls how content is updated to the live site, so content will only go live when it's ready.

- When the Web site is undergoing a significant architectural change, use a *physical staging server*. An example of such a change would be one or more new templates.

Managing an Architectural Change

Sometimes, the changes to your site are so substantial that the use of separate staging and production servers is warranted. Examples would be the release of new templates, or a redesign of the site.

When making such a change, follow these guidelines.

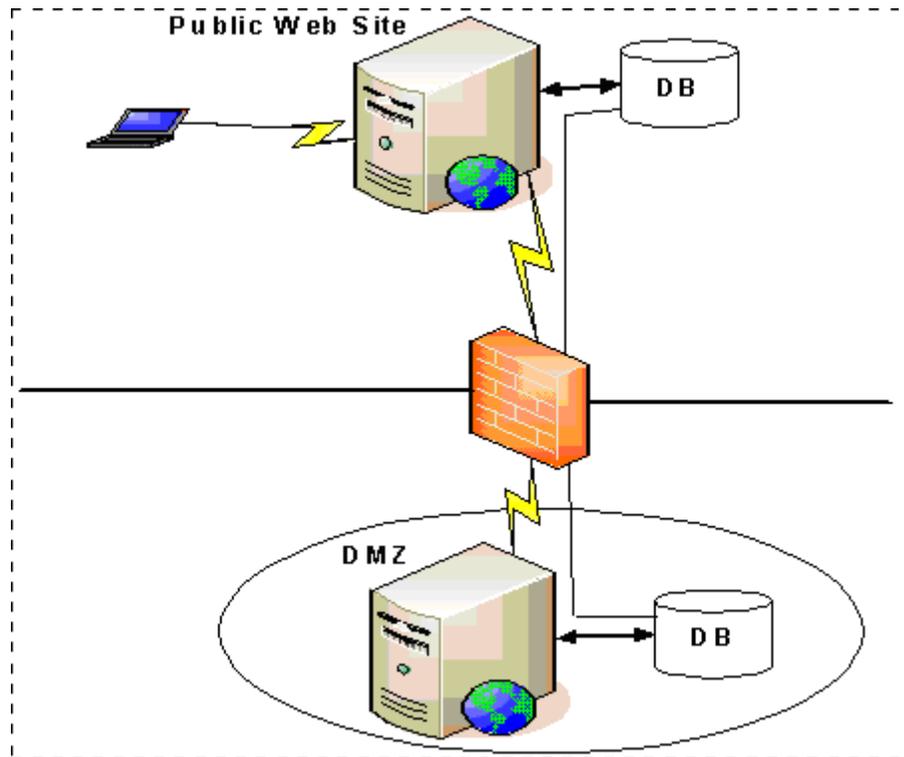
1. Copy the staging server content to the production server. For more information on moving files from the staging to the production server, see ["Deploying Separate Staging and Production Servers" on page 103](#)
2. Disable authoring on the production server. At this point, changes are permitted on the staging server only. For more information, see ["Disabling Authoring on the Production Server" on page 105](#).

3. Test the new architecture on the staging server. Modify as needed until you are satisfied with the results.

The test should involve a full QA sweep to determine that the staging site is acceptable for release in production. Included are functional testing, usability (as necessary), application integration, and bug fixes.

4. Move the updated files from the staging to the production server. Enable authoring on the production server.

Deploying Separate Staging and Production Servers



Ektron CMS300 can support multiple servers. For example, as illustrated above, you can have a staging server inside the DMZ, and a production server outside the DMZ to host the public Web site.

Several methods are available for moving information between servers.

- "Basic Deployment" on page 104
- "SQL Replication and CMS Load Balancing" on page 104
- "Deploying with MS Application Center" on page 104

Basic Deployment

This scheme provides the most rudimentary methods for transferring data from a staging to a production server.

To move the database, back it up on the staging server and restore it on the production server.

To move the non-database files (library assets, .dlls, etc.), use FTP to transfer from the staging to the production server.

SQL Replication and CMS Load Balancing

To move the database, use database replication techniques to copy changes from staging to production server. Doing this via Microsoft Application center is explained in the Ektron CMS Setup Manual section "Deploying Ektron CMS300 via MS Application Center".

To move non-database files from staging to production server, enable load balancing support in the CMS. When used properly, load balancing is an extremely efficient and time-saving tool for your Ektron CMS300 site. Instead of uploading an image or file on each Web server that makes up your Web site, you only need to upload once. The load balancing feature replicates the image or file in each directory specified by Ektron CMS300. For more information, see the "Load Balancing" chapter of the **Ektron CMS300 Administrator Manual**.

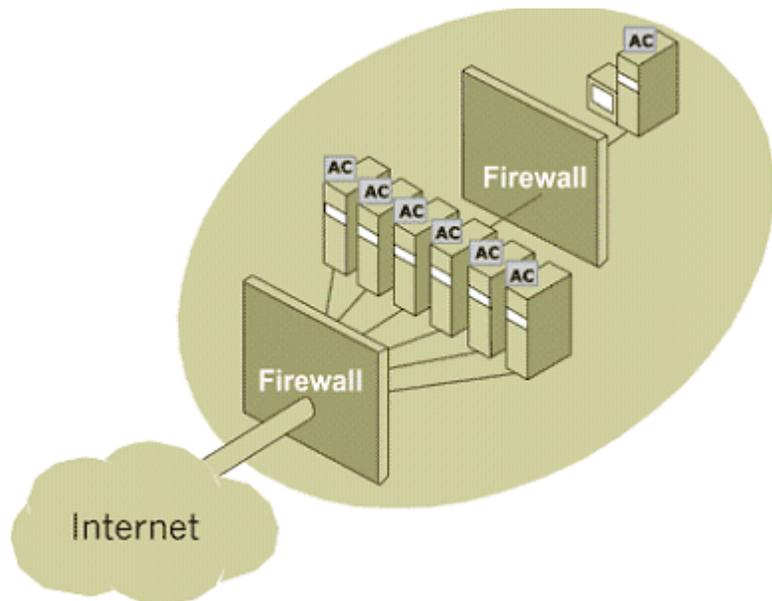
Deploying with MS Application Center

Application Center 2000 is Microsoft's deployment and management tool for high-availability Web applications built on the Microsoft Windows® 2000 and Windows Server™ 2003 operating systems. Application Center 2000 makes managing groups of servers as simple as managing a single computer. It was designed to replicate content from one server to many.

You can move Ektron CMS files, templates, assets (uploaded images & files), DLLs, registry entries, and even DSNs from one server to another using Microsoft's Application Center. Use SQL Server to move the database content. This strategy lets you move a staging version to a production server with a click of a button.

Application Center 2000 divides Web site content and code into *applications* that can be updated independently. These applications can consist of any combination of HTML and ASP files, COM+ components, .NET components, Windows registry settings, and Internet Information Services (IIS) settings. Each server in the cluster hosts a copy of the application, which Application Center keeps synchronized.

Microsoft Application Center 2000 is deployed on each server in a cluster. In a typical development environment, Application Center is also deployed to a staging server that is not a member of the cluster. This staging server acts as the drop-off point for Web content and application developers. With Application Center, you can move content and configuration settings from the staging server to the cluster with an easy, point-and-click interface.



Application Center can deploy content to foreign clusters, so that network administrators can easily move content and applications from a staging server to a production cluster of multiple servers. The staging server does not need to be a member of the production cluster. For more information, see ["Deploying Ektron CMS300 via MS Application Center" on page 117.](#)

Disabling Authoring on the Production Server

Follow these steps to disable authoring on the production server.

1. Hide login buttons by setting the the Login Server Control's `visible` property to **false**.
2. Add a message to the login page, explaining that the system is under maintenance.
3. Apply the "denydatawriter" restriction to the database user in SQL server to actively stop any updating of the system. This restriction should even prevent updating through Web services and direct database writes.