



Microsoft Content Management Server
Customer Solution

Case study

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Anuja Parikh
Producer of Web Marketing
Trend Micro, Inc.



Leading Antivirus and Internet Content Security Solution Provider Rolls Out Redesigned Corporate Web Site in 6 Weeks

When Trend Micro Incorporated launched the largest branding campaign in the company's 15-year history, Microsoft Content Management Server played a key part in helping roll out the new look and feel to Trend Micro's regional Web sites quickly and consistently. While the Corporate Web team controls the look and feel of the sites through Content Management Server template design, individual content experts manage their own content, leaving developers to focus on site functionality. The site looks great, content gets updated efficiently, and the Web team can focus on higher-order tasks like globalization, user experience improvements, and online marketing initiatives.

CUSTOMER PROFILE	BUSINESS SITUATION	SOLUTION	BENEFITS
With 1,800 employees and annual sales of U.S. \$364 million, Trend Micro is a leader in network antivirus and Internet content security software and services.	With homegrown, special-purpose Web applications throughout five regional Web sites, Trend Micro needed a solution that would provide uniformity across sites, corporate-level manageability, and scalability to meet increasing site use.	With Microsoft® Content Management Server, Trend Micro gets the management tools, business processes, and scalability it needs to meet site requirements.	<ul style="list-style-type: none"> ▪ Powerful workflow processes ▪ Improved manageability ▪ Reliability and availability ▪ Scalability ▪ Faster time-to-market ▪ Better content quality

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Mark Havran

*Executive Producer and Web Architect
Trend Micro, Inc.*

Situation

Over the past 4 years, Trend Micro Incorporated has grown from 400 employees to more than 1,800 operating in 25 countries and organized into 5 regions. During this period of growth, the amount and variety of content that the company was creating for its regional Web sites was becoming increasingly unmanageable. Trend Micro's five regional Web teams in different countries were each struggling independently to solve the same problems. Web site redesigns and information updates were taking months to roll out in individual regions; content eventually had to pass through a single Webmaster, via e-mail, to be posted.

The use of homegrown, special-purpose Web applications with different levels of content management functionality was not only expensive to maintain, but, tied up development resources, which kept the organization from focusing on other projects. Core content management functions such as workflow, access control, and revision tracking were only some of the infrastructure functions that were tying up resources.

Initially, Trend Micro started using a content management solution that proved to be unsatisfactory in the long run. Set up and installation were very complicated and staff had to learn custom programming to implement the solution, making it difficult for the company to implement globally. In addition, documentation and support were less than satisfactory, and the cost to train users was extreme. Eventually, the solution was no longer able to meet increasing traffic loads. Trend Micro decided it was time to look for a new technology solution that had the functionality to help the company improve its efficiency in Web content management as well as ensure scalability to meet site demands..

Solution

There are more than 200 software products on the market claiming some level of Web content management capability. For Trend Micro, vendor viability was an important factor in its vendor selection process, as were cost, ability to integrate with other applications, ease of training, and time-to-market.

Before making a final decision, Trend Micro assessed content management solution products from Microsoft and several other top content management systems providers. Ultimately, the company decided to conduct a proof of concept with Microsoft® Content Management Server to assess its "hands on" functionality with site content. They converted approximately 80 Web pages into Content Management Server templates and added content—essentially importing a section of Trend Micro's current Web site into Content Management Server. This proof of concept then served as a training ground for the company to evaluate the application. "Our pilot project gave us confidence that Microsoft Content Management Server could meet Trend Micro's needs in terms of time-to-market, ease of use for our internal content authors, and scalability," notes Mark Havran, Executive Producer and Web Architect at Trend Micro.

When all evaluations were complete, Trend Micro selected Microsoft Content Management Server to be its Web content management solution. "We have faith in Microsoft's long-term viability and like the future direction of the Microsoft .NET Framework for creating integration with back-end systems," says Anuja Parikh, Producer of Web Marketing for Trend Micro.

Terrace Consulting, a Microsoft Gold Certified Partner for E-Commerce Solutions, assisted Trend Micro with the

redesign and launch of its Web sites. With one consultant and one Trend Micro developer, the bulk of the Content Management Server rollout was completed in just six weeks for the U.S. site. This included development, migrating content from more than 1,000 pages of existing FrontPage Web pages into Content Management Server templates. Developers then spent the following month fine-tuning before migrating the company's Japanese Web site (another 1,000+ pages) in only eight weeks—this time using one part-time developer to globalize templates.

Trend Micro's solution runs on the Microsoft Windows® 2000 operating system with Internet Information Services (IIS) and the Microsoft SQL Server™ 2000 database. This platform is giving Trend Micro the reliable performance, manageability, and the scalability it was looking for. With Content Management Server, Trend Micro has advanced its regional Web sites from static to dynamic pages, filling its sites with fresh and compelling product information, including up-to-the-minute updates for dealing with security threats. "Microsoft Content Management Server allows us to focus on our online customers' needs for critical content on the latest network and Internet security threats," explains Bert DuMars, Global Director, Business Process and Web Marketing for Trend Micro. "It has also allowed us to deliver our Web content and services on a stable, reliable, and high performing platform, especially during virus or malware alerts—this is absolutely essential for our enterprise customers."

"Being basically a Microsoft shop," explains Mark, "we were able to leverage the skill set of our development staff with Active Server Pages (ASP) and SQL Server, as well as take advantage of staff familiarity with Microsoft Windows and IIS on the Web hosting side, which contributed to rapid application deployment." While Mark wasn't able to

provide statistics, he estimates that it would have taken twice as long to implement a solution based on Java or a proprietary platform.

Benefits

A combination of ease of use, workflow functionality, comprehensive management tools, support for fast deployment, and lower cost put Microsoft Content Management Server ahead of the competition in Trend Micro's decision process. "With Content Management Server providing the framework for us to manage the content of our regional Web sites, we are getting all the workflow functionality we were looking for, including support for multilingual delivery," says Parikh.

Powerful Workflow Processes

Content Management Server is streamlining Trend Micro's Web publishing process with support for serial processing; approval and rejection options; translation options; and a reporting tool that captures process detail, status, and backlog detail. This frees the Trend Micro Web team to focus on other projects such as marketing initiatives and Web site improvements.

Content authoring is easy to learn and most business users are up and running after just one 60-minute training session. The interface presented to the business user is simple: just browse to the page they want to change and click "edit." For the editor, it's easy to review all pages that are waiting for approval because they are available as one simple list, eliminating countless emails back and forth.

Improved Manageability

Prior to the implementation of Content Management Server, updating content or posting new information was the responsibility of a local Webmaster. Now,

individual departments have the necessary authorizations to fully administer the content in their respective sections of the sites. “By putting the content approval process into the hands of content providers who understand the needs of our customers, we are ensuring that published content is always fresh,” says Havran.

The dynamic content repository and template-based publishing of Content Management Server enables Trend Micro’s Web developers and designers to maintain control over the look and feel, layout, and navigation logic of the sites, while allowing for localized content customization by individual sites. Corporate updates now can be completed rapidly across all sites by simply changing templates, as opposed to the previous process of updating pages manually.

Faster Time-to-Market

Six weeks from design completion to development to launch, including testing, demonstrates how Content Management Server’s built-in functionality benefited Trend Micro. “As for migrating content, the rich API was very beneficial for customizing and integrating content into the templates quickly. To import content into a template and have Content Management Server give it the desired look and feel was a seamless process,” says Havran.

Scalability

As a leader in the antivirus space, it is critical that Trend Micro have the ability to handle additional traffic to its sites during a virus outbreak so information gets out to customers when they need it most. Prior to implementing Content Management Server, sudden increases in traffic pushed system load tolerances to their limits. “Now we have no trouble handling increased loads, and we won’t be faced

with the potential of turning customers away,” says Havran.

Reliability and Availability

“A site is only as reliable as it is available,” says Havran. “Reliability only counts if our application servers are running to handle site traffic.” With Content Management Server, backed by the reliability of Microsoft Windows 2000, Trend Micro has the availability it needs to ensure that its site is up and running for customers. “If you have to continually reboot or write new code to keep the system stable, you’re not getting the price for performance you’re looking for,” says Havran. “With Content Management Server, it was basically a ‘set it and forget it’ situation once we launched the U.S. site. It performs as expected, and it’s very stable.”

Better Content Accuracy, Quality, and Value

Most business users are ready to create their own pages after a single training session because content authoring and editing is as simple as using Microsoft Word—users don’t have to learn HTML. In addition, Content Management Server tracks all changes and revisions, giving the Web site administrator information regarding when specific changes were made, and by whom. Globally centralized systems use to run regional Web sites make them easier to manage and reduce costs associated with a distributed system, all the while distributing the responsibility for updating content to the individuals who actually create it. The bottom line: Content Management Server is helping Trend Micro reduce costs and increase efficiency in overall site management and content quality.

Software and Services

Microsoft® Windows® 2000
Microsoft SQL Server™ 2000
Microsoft Content Management
Server 2001
Microsoft Consulting Services

Hardware

Compaq ProLiant DL360 and
DL380 G2, both with dual
Pentium III 1.4-GHz processors
Compaq ProLiant DL380 G3 with
dual Xeon 2.8-GHz processors

Partners

Terrace Consulting, Inc

Microsoft Windows Server System™ is the comprehensive, integrated, and interoperable server infrastructure that helps reduce the complexity and costs of building, deploying, connecting, and operating agile business solutions. Windows Server System helps customers create new value for their business through the strategic use of their IT assets. With the Windows Server platform as the foundation, Windows Server System delivers dependable infrastructure for data management and analysis; enterprise integration; customer, partner, and employee portals; business process automation; communications and collaboration; and core IT operations including security, deployment, and systems management.

For more information about Microsoft Content Management Server, go to:
<http://www.microsoft.com/cmsserver/>

Software for the Agile Business

For More Information

For more information about Microsoft products and services, call the Microsoft Sales Information Center at (800) 426-9400. In Canada, call the Microsoft Canada Information Centre at (877) 568-2495. Customers who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234 in the United States or (905) 568-9641 in Canada. Outside the 50 United States and Canada, please contact your local Microsoft subsidiary. To access information using the World Wide Web, go to:
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