



Customer Solution Case Study

## KnowledgeTree™

## Content Management Provider Supports PHP on Windows to Broaden Customer Base

### Overview

**Country or Region:** United States

**Industry:** Manufacturing—High tech

### Partner Profile

Based in Raleigh, North Carolina, KnowledgeTree is a provider of affordable document management software that is easily installed and used by business professionals.

### Business Situation

KnowledgeTree wanted to extend the market for its PHP-based software by transitioning the application code from Linux to the Windows Server operating system.

### Solution

Working largely on its own, and with help from Microsoft, KnowledgeTree transitioned its document management software to Windows Server in three months.

### Benefits

- Leads to significant increase in revenues
- Broadens partnership opportunities
- Boosts customer satisfaction

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*Tim Spink, Vice President of Sales, KnowledgeTree*

KnowledgeTree, the highly successful provider of open source document management software, needed to offer that software on the native technology of Windows-centric organizations, so it enabled the PHP code of its application to run on Windows Server. KnowledgeTree accomplished the move in just three months, largely on its own, and with help from Microsoft. The company has maintained its open source/commercial business model but, by broadening the environments that it supports, KnowledgeTree expects to significantly increase revenues. The move also opens the door for a range of comarketing and other partnership opportunities both with Microsoft and with the ecosystem of Microsoft channel companies. Best of all, KnowledgeTree believes this decision will help fuel customer satisfaction and lay the foundation for continued growth.

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Daniel Chalef, Chief Executive Officer,  
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## Situation

How well can a Linux-based software application make it in a predominantly Windows-based world? Can it succeed in Microsoft environments without abandoning the open source model to which its developers have been committed?

Those were the questions facing KnowledgeTree in 2009. The software provider, based in Raleigh, North Carolina, is known worldwide for its open-source document management software. That software includes workflow, version control, and audit trails, enabling organizations to manage the entire document management life cycle, promote collaboration, reduce paper, and help ensure regulatory and corporate compliance.

KnowledgeTree customers are as varied as Sony Entertainment, Mazda Motors Europe, and the United States National Aeronautics and Space Administration. While it has customers of every size in industries including life sciences, legal, financial, and government, its focus has been on small to mid-sized companies and departments within larger enterprises. Those customers have been attracted by the simple installation, light footprint, and ease of use that the software offers. Those are particular benefits when a smaller company or department is deploying the software without the aid of an IT department.

The company's document management software was born as a custom solution for a public sector institution in 2003. That solution was based in part on an open source model, which led to the use of Linux for the operating system, Apache as the Web server, MySQL for the database, and PHP for the coding language—the so-called LAMP stack. Today, KnowledgeTree offers community and commercial editions of its software, the latter offering both on-

premise and software-as-a-service deployments. The community edition has been downloaded more than 750,000 times from SourceForge.net and other repositories.

End-users working in the popular Windows-based desktop environment had no problems with the cross-platform, Web-based front-end of the software, which functioned just fine in the Windows world.

But the same wasn't always true of those responsible for maintaining the server-based back-end of the deployment. In Windows Server-based environments—and most of the KnowledgeTree deployments are to customers running Windows Server—the organization or department had to maintain a separate Linux server to run the KnowledgeTree software. That required customers to acquire and maintain Linux skills, which they didn't always have. At the least, it required training and maintenance for two operating system environments, as well as heterogeneous management with Windows Server—a luxury in an increasingly cost-conscious business climate.

Customers began to ask about the possibility of a Windows Server-based version of KnowledgeTree software, which would continue to run with the existing PHP code, but use Windows Server Internet Information Services (IIS) as its Web server, instead of Apache. Just as important—potential customers were asking about Windows, as well.

“Some of our potential engagements ended without a sale because customers would ask us whether we supported the Microsoft platform,” says Daniel Chalef, Chief Executive Officer, KnowledgeTree. “We did not have a fully optimized Windows-based solution, and that hurt our

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Evan Person, Director of Product,  
KnowledgeTree

business. By limiting ourselves to Linux, we had cut ourselves off from a large portion of the market.”

A Windows version of KnowledgeTree software was of particular interest to smaller organizations, which overwhelmingly ran their businesses on Microsoft software—and which were KnowledgeTree’s prime customers.

“We’d always known that supporting Windows was in our future,” says Evan Person, Director of Product, KnowledgeTree. “But we wanted to make that decision for the right reasons, when it made business sense to do so. We were at that point.”

### Solution

KnowledgeTree executives knew that they wanted to remain committed to the open source development model on which they’d built their business. But they also wanted to support the Windows Server operating system.

KnowledgeTree had precedent for this balance of Windows support and open source commitment. The company had already released an Office Business Application (OBA) that integrated KnowledgeTree functionality with the 2007 Microsoft Office suite. The OBA, an add-in to Microsoft Office, made it possible for users to open, edit, save, and e-mail documents that reside in the KnowledgeTree repository from within Microsoft Office applications, exactly as they would if their documents were located on shared drives.

“A significant portion of our customers were running Microsoft Office on their desktops, so extending our software to support that environment was natural,” says Person. “In retrospect, it was a sign of

things to come, because now we were going to extend that support for Microsoft to the server side, as well.”

There had always been some collaboration between KnowledgeTree and Microsoft, says Person, but now KnowledgeTree and Microsoft sought to advance their relationship. Person and his colleagues engaged in discussions with Paulo Ferreira, a Platform Strategy Manager at Microsoft, to understand what would be involved in porting from Apache to Windows Server—from both technology and business perspectives.

The discussions centered on not just how to implement the solution, but also around the support that Microsoft could provide as it was underway. For example, Ferreira offered to put KnowledgeTree in touch with Microsoft experts to smooth issues, should they occur. Ferreira and KnowledgeTree also discussed the steps for certification of the document management software on Windows Server 2008, and the marketing benefits that certification could bring. For example, certification would enable KnowledgeTree to include a Microsoft logo in its marketing materials, indicating a confirmation from Microsoft of the software’s ability to run on Windows Server 2008.

“It was encouraging to know that Microsoft was there for us as we began this project,” says Person. “Microsoft is of course an immense organization. Having someone who could get us to the right person for help was reassuring.”

KnowledgeTree implemented the project in-house. Its engineers are specialists in the LAMP stack, not on Windows, “so there was some reticence about the adoption of Microsoft,” says Person. To gain the knowledge they needed, the

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KnowledgeTree staff turned to MSDN, the Microsoft Developer Network, and to other online resources. The combination of ready resources and a simple process contributed to the team’s success.

“We were pleasantly surprised by how easy the transition to Windows Server was,” says Person. “Our application logic ran on the Web server, so we had to get the PHP code to run on Internet Information Services. It was remarkably easy to get PHP to do that, with no significant engineering changes.”

The project began in August, 2009, and the community edition of KnowledgeTree for Windows Server became available three months later. The commercial edition became available a month after that, in December 2009.

### Benefits

KnowledgeTree projects that the transition to Windows Server will expand its market, contribute to a significant increase in its revenues, open the door to new marketing and partnership opportunities, and—most important for long-term growth—increase customer satisfaction.

#### Leads to Increased Revenues

“We wanted as big a potential market as possible,” says Tim Spink, Vice President of Sales, KnowledgeTree. “With the transition to support Windows, we now have that market opportunity.” Given the low cost of supporting Windows Server, he points out, the likely return on investment to KnowledgeTree is significant.

The company’s potential market is not only larger, it also includes more opportunity at both ends of the customer spectrum. Always a good fit for smaller organizations looking for a cost-effective choice, KnowledgeTree software is now an even better fit for such organizations, because

they can run the solution without having to maintain two operating systems. That opens the door to a large volume of small companies that may have been priced out of the market before due to the cost associated with dual operating system maintenance.

Meanwhile, at the other end of the market, KnowledgeTree software is now a better fit for large organizations—many of which run on Windows Server, and which have centralized IT policies that discourage the use of additional operating systems. The availability of KnowledgeTree support for Windows Server also reduces the potential for conflict between line-of-business departments that may have been willing to run Linux servers and central IT departments opposed to the additional complexity and cost.

“We are already starting to see interest in KnowledgeTree among departments in larger enterprises, where our technology platform was a sticking point in the past,” says Spink.

#### Broadens Innovation Opportunities

Beyond reaching a broader market because of the availability of Windows Server support for its software, KnowledgeTree also gains greater market opportunities because of the new partner relationships possible with Microsoft and the enormous ecosystem of Microsoft partners. For example, the company is pursuing certification of its software on Windows Server 2008.

“Certification on Windows Server 2008 will be helpful because it won’t just be KnowledgeTree saying that we support Windows Server; Microsoft will be saying it, too,” says Person. “That will increase the comfort level of many customers with our software for their Windows environments—

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which will increase sales to those customers.”

In addition, KnowledgeTree will have the potential to join and benefit from the Microsoft Partner Network, and from specific comarketing opportunities with Microsoft such as the Microsoft Web Application Gallery, which promotes .NET and PHP applications for the Windows environment. KnowledgeTree will also have greater access to the millions of participants in the broad ecosystem of developers, systems integrators, value added resellers (VARs), and other channel companies that support Windows, opening equally broad opportunities for partnership and innovation.

#### **Boosts Customer Satisfaction**

Any long-term increase in KnowledgeTree’s fortunes will have to be based on increasing customer satisfaction with its software. Person expects to see that increase, as well. He points to the ability of customers to extend their investments in Windows hardware, software, training, and expertise as they adopt and expand their KnowledgeTree deployments—thereby gaining greater return on those investments.

KnowledgeTree’s customer support may also be more effective with the transition to Windows Server, leading to further increases in customer satisfaction. In the past, some KnowledgeTree customers experienced technical problems because of incompatibilities between the document management software and the specific versions of LAMP software that they were running. KnowledgeTree addressed these problems by moving the customers to the Windows platform as part of the support process. As KnowledgeTree’s customer base shifts to Windows, those

incompatibility issues are less likely to occur, says Person.

“Ultimately, we made the transition to Windows because it’s what many of our customers wanted,” says Person. “Listening to and responding to our customers is a key way to increase customer satisfaction.”

## 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 in the United States and Canada who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234. Outside the 50 United States and Canada, please contact your local Microsoft subsidiary. To access information using the World Wide Web, go to:

[www.microsoft.com](http://www.microsoft.com)

For more information about KnowledgeTree, call (877) 900-0350 or visit the Web site at:

[www.knowledgetree.com](http://www.knowledgetree.com)

## Windows Server 2008

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For more information, go to:

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### Software and Services

- Microsoft Server Product Portfolio
  - Windows Server 2008
- Microsoft Office
  - Microsoft Office 2007