RCP-Based BEA Guardian Revolutionizes Customer Support

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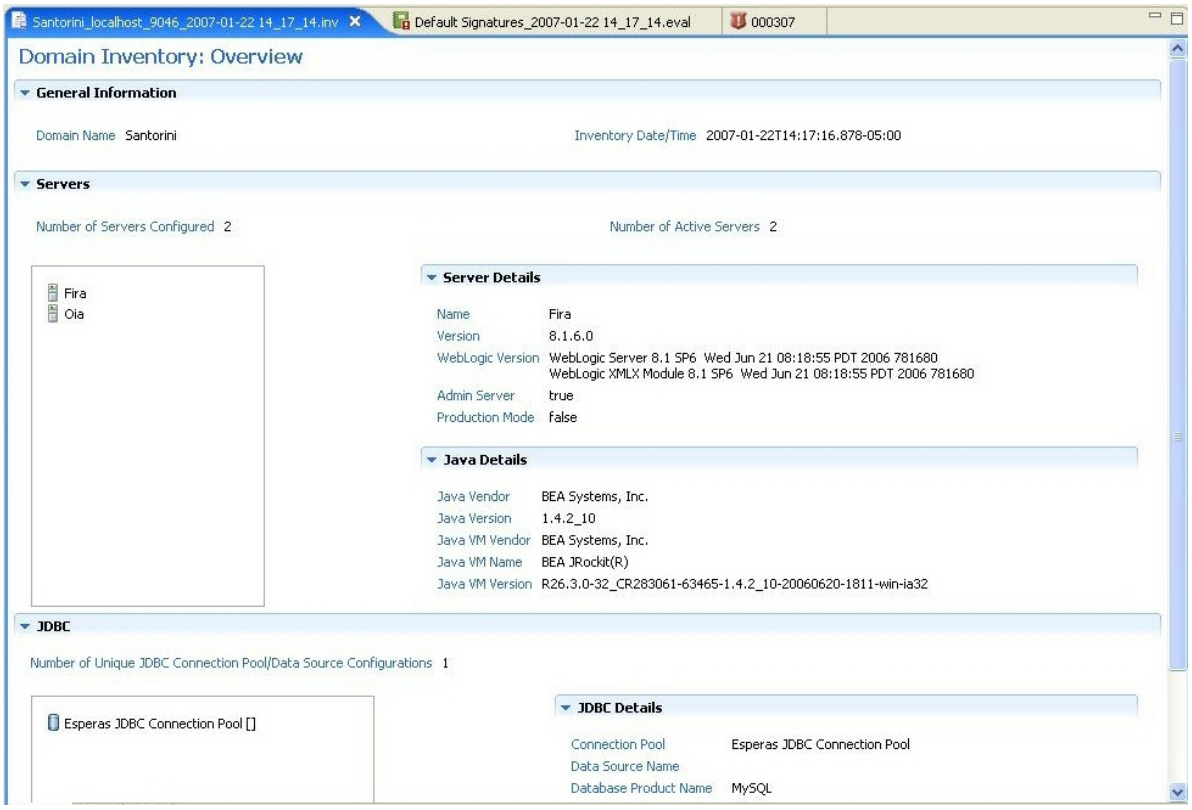
IT departments have been changing rapidly over the past several years. The rise of the Internet, Intranets and Extranets, bound together by web technologies, are radically transforming how business is done. Technologies like Java, application servers and XML, integrated with traditional back-end systems like ERP, payroll and CRM, are enabling a new world of automated work.

In fact, so much of modern business depends on web-based technologies that keeping them up and running trouble-free is absolutely vital to business processes.



BEA Guardian, developed in Eclipse RCP, helps IT Administrators pre-empt potential problems with servers such as BEA WebLogic from a single, integrated desktop application.

BEA Systems, Inc. of San Jose CA, makes just such revolutionary products. With

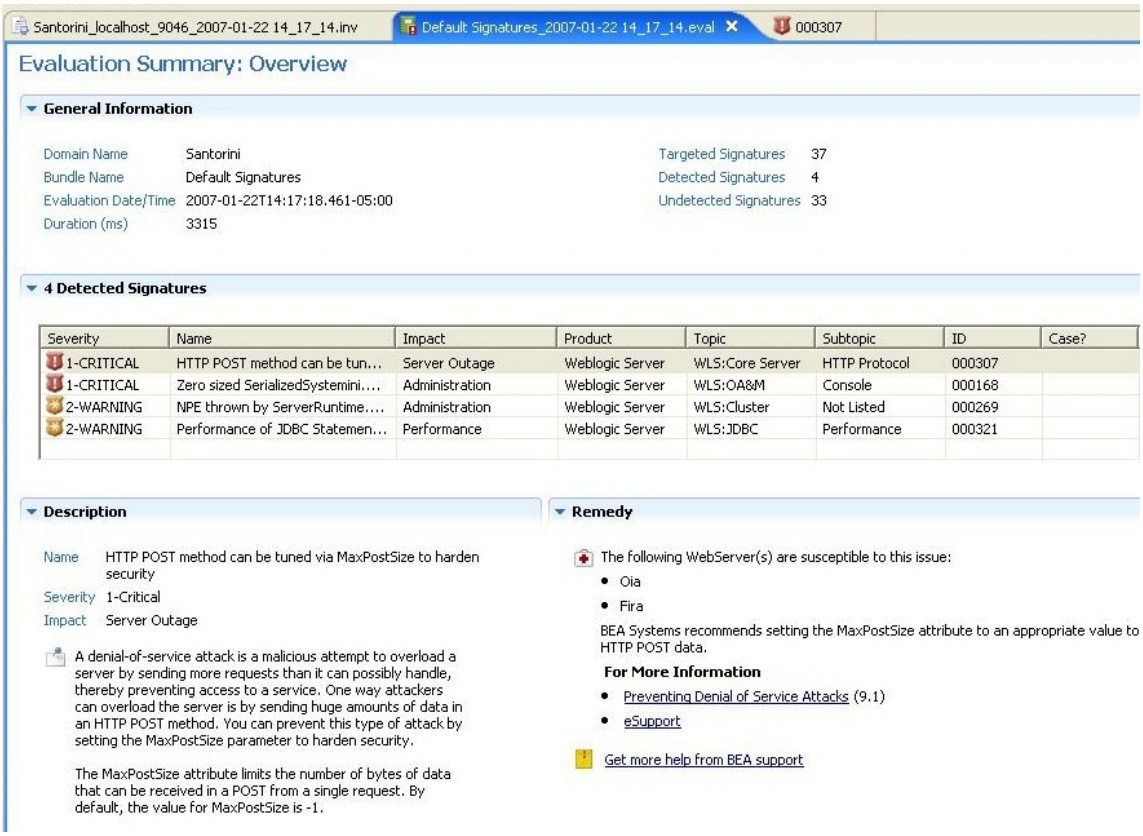
revenues of over $1 billion in 2006, BEA makes industry-leading WebLogic and AquaLogic server products used by major organizations around the world to converge telecommunications services and back-office business processes respectively.

Staying in Front of the 8 Ball

Knowing that their customers needed rock-solid reliability, BEA set out to develop tools that would keep their customers out from behind the 8 ball. As Terry Clearkin, Senior V.P. of Customer Support explains, "Traditional approaches to IT availability were reactive, scrambling to fix things when they went wrong. Other approaches have tried to spot potential problems before they get out of hand." But both of these strategies tasked administrators to actually step in and solve problems when they cropped up. "Keeping systems running has always come down to lots of manual intervention," continues Clearkin. "We wanted to change all that with preemptive systems that find and fix problems automatically".

The result of this vision is BEA Guardian, an Eclipse RCP-based application that finds and fixes issues with BEA's server products before they can cause problems. This radical approach frees IT staff from finding and fixing problems by doing the work for them.

Released in January, 2007, Guardian automates mundane tasks like finding and installing updates and maintenance packs. But more importantly, it works with Signature Patterns™, XML-based, fine-grained problem descriptions and remedies that it uses to scan BEA servers, find potential problems, and recommend fixes. Ian Goldstein, Guardian Architect, explains "as we discover new problem profiles, and as



Signature Patterns are fine-grained, XML-based descriptions of potential problems and solutions that allow BEA Guardian to deal with issues preemptively.

our server product line grows and changes, we will be publishing many new and updated Signature Patterns to keep our customer installations healthy."

A Desktop Perspective

During the design process for BEA Guardian, Goldstein's team looked at a lot of options, from command-line to server-based designs. They quickly focused on a pure desktop approach. "Some of our customers have many BEA servers, so running and updating Guardian Signature Patterns on each would have been pretty heavy-handed."

Goldstein adds that this approach is easier to administer and helps free up IT staff for projects that add value for the organization.

Finally, desktop applications are simple to evaluate. "They are less threatening and more likely to actually be installed and looked at." says Goldstein. For instance, software and signature Pattern updates, which entail connecting outside the organization, are less threatening when made from a desktop system than when production servers are directly involved.

Multi-platform Support

Since some of their customers' IT shops run Linux or OS X in addition to Windows, platform independence was another critical concern. Just as important, they needed to provide rich, responsive UIs consistent with other BEA products on each platform.

With these requirements in mind, BEA looked for an appropriate development framework. They dismissed .Net immediately, since it did not meet their cross-platform needs. Of the other options available, which included Java Swing and RIA/Ajax, only Eclipse RCP covered all the bases. Eclipse is also used by other groups within BEA, and is well understood and well liked. "BEA has an established commitment to working with Eclipse." related Goldstein.

Particularly important, according to Goldstein, was the native GUI support, which allowed them to meet user expectations on each platform from a single code-base and represented a significant savings in both infrastructure and Quality Assurance resources.

They also found that they benefited from productivity gains by developing the Guardian UI in the Eclipse IDE. Not only did they deliver BEA Guardian on time, they were even able to squeeze in a few extra features.

As important as Eclipse's rich IDE was, knowing that they could look under the hood any time they needed a detailed understanding of how something worked was equally useful. Goldstein relates that at one point they had very specific questions about the behavior of the Update Manager. "By accessing the source code, we were able to answer our questions quickly without derailing the project."

The Eclipse Update Manager was vital for supporting their need to efficiently distribute Signature Patterns. "The Update Manager helps us ensure that every Guardian user can stay current and know that they are using the best signatures available. The Eclipse approach is clean and efficient – we simply post our updates to a distribution server and we're done." says Goldstein.

Finding Good Help

Although RCP proved to be a very productive development environment, Goldstein was surprised to find that it was difficult to recruit experienced Eclipse developers. "Eclipse programmers seem to stay where they are, but luckily it's also straightforward for Java developers to get up to speed in Eclipse." BEA was able to ramp up on Guardian development without delays.

Planning is already underway for the next version of Guardian, and BEA plans to

continue working with RCP. The rich desktop approach gives them superior flexibility, scalability and resource management; and RCP gives them everything they need.

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