CISMET

“Since 2002, Java has been the weapon of choice for our infrastructure projects and desktop applications, while NetBeans IDE, with its rich set of features for Java development based on Maven, has continually helped guarantee our success.”

Executive Summary

cismet is a software company focused on contractual system development on the basis of Java and open source geographical information system (GIS) software.

Organization

In 2002, cismet was founded as a spin off from the Environmental Informatics Group at Saarland State University of Applied Sciences in Germany. As accomplished computer scientists with substantial experience in software development and research, the team has the relevant knowledge and capacity for the design and implementation of complex geospatial information systems.

The Business Issue

cismet’s main business consists of contractual software development on the basis of open source geographic information system (GIS) software, using their own open source product, the "CIDS Geo Integration Platform".

Moreover, cismet is very active as a software development partner in Applied Research EU projects, in the areas of information and communication technologies, environment, security, and space research. cismet offers consultancy services relating to large scale system architectures and spatial data infrastructures.

Key Challenges

- To be able to quickly and cost effectively develop new customer extensions to the cismet platform.
- To establish a Maven-based auto deployment at each customer site.

Solution

- All cismet developers, in several different contexts, from semantic technologies to decision support, use the NetBeans IDE projects and wizards for getting started with technologies, on Windows, Linux, and Mac OS.
- The team finds great benefits from the mature and sophisticated Java Swing GUI Builder in NetBeans IDE, for the design and layouting of applications and for the beans binding support that it provides. With little effort and time, beans binding allows the team to design and maintain complex user interfaces. This was the initial reason for the introduction of NetBeans IDE as the standardized company development environment.
To set up and maintain their backend databases, the team uses the IDE's built-in feature-rich database management features.

Another important factor for adoption of NetBeans IDE has been its Maven support. NetBeans IDE integrates perfectly into the team's Maven-based project, library, and build process management. Building, deploying, checkouts, and testing is now reduced to one-click tasks, without the problems of "library hell".

The Beanmill log viewer is a plugin created by the team as an extension for NetBeans IDE. The initial goal was to increase comfort and productivity by seamlessly integrating the team's favorite log viewer into their favorite IDE. The team is happy to see that the NetBeans APIs offered all the functionality needed to easily implement the additional features they had been missing.

The NetBeans Platform, that is, the framework beneath NetBeans IDE, allows the team to integrate all their tools within a single application. The team has written three applications based on the NetBeans Platform, leveraging the same infrastructure and minimizing the overhead of starting new application development cycles.

Business Value

With the logging solution that cismet has implemented, the team can now apply a filter to log events, which enables them to only shows events associated with the currently selected code in the editor window. Developers can click on logged stack traces to jump to the respective position in the code. cismet has made this time saving technology freely available to all other developers via the NetBeans Plugin Portal, where it has proved very popular.

NetBeans IDE and its APIs have saved cismet several months of development time. The possibilities of customization and internationalization have become easier over time, while the NetBeans Update Center technology helps cismet in delivering their latest releases to team members, as well as external customers.

Credits:
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