Knowledge sharing technologies can add great value to enterprises, especially when the tools are used as knowledge management enablers.

Six broad categories of KM technologies include collaboration, mobile work, content management, business intelligence, business process management (BPM), and knowledge sharing.

This article highlights industrial strength products that support knowledge sharing, the exchange of information and tacit knowledge among individuals, organizations, and enterprises: SalesForce.com (EskeronDemand), BMC Software, DCASoft (BrightSuite), and Atlassian (Confluence). A comprehensive evaluation of Atlassian’s Confluence product was conducted using a 30-day software evaluation copy.

Integrate third-party Account Intelligence and EskerOnDemand applications with SalesForce.com

SalesForce.com makes available a suite of knowledge sharing products targeted to on-demand customer relationship management (CRM) applications. SaleForce.com’s offerings provide support for information and knowledge sharing among sales, service/support, marketing, software development, financial, administrative, non-profit, human resource, manufacturing, educational, professional service, and real estate groups.

SalesForce.com’s applications extend even beyond their own product base, allowing for the integration of other third party solutions such as OneSource Information Services’ Account Intelligence product. Account Intelligence “offers a unique breadth and depth of ready-to-use information on over 3.2 million public and private companies and seven million executives worldwide”. Another product, EskerOnDemand, provides 24-hour-a-day, seven-day-a-week, real-time tracking and delivery of email, fax, and wireless messages between sales groups.

The Account Intelligence and EskerOnDemand applications support the KM technology categories of knowledge sharing, Business Intelligence, Mobile Work, and Collaboration Tools.

BMC software (BMC Atrium)

BMC Software (www.bmc.com) takes an interesting approach to the management of IT tools, introducing Atrium, an open architecture that helps organizations integrate vast assortments of disparate application interfaces, controls, and datasets. According to the company’s website, Atrium “enables information sharing and centralized management across BMC Software and third-party solutions, facilitating integration”. A repository is used to manage data via graphical user interface (GUI), reporting, web service, service model, and configuration management (CM) constructs.

One can see the significant return-on-investment (ROI) an organization would enjoy by consolidating (and leveraging) the functions of many different applications into one integrated solution. BMC’s solution supports the KM technologies of knowledge sharing, collaboration, business process management, and content management.

DCASoft (BrightSuite)

DCASoft (www.dcasoft.com) designed the BrightSuite application to assist enterprises with group, intranet, and team collaboration activities. BrightSuite consists of twenty-five application modules that provide support for document management, virtual meetings, subject expert repositories, image galleries, instant messaging,
wireless web services, training, help desk administration, and e-mail management.

Four layers of security protect sensitive data as it travels across organizations using BrightSuite, nicely supporting enterprise architectures such as Java 2 Enterprise Edition (J2EE). Source code for all of BrightSuite’s modules is also made available, a significant plus for organizations desiring to customize the operation and “look and feel” of their software applications.

Clearly, DCASoft’s product supports knowledge sharing, Collaboration, Mobile Work, Content Management, Business Intelligence, and Business Process Management.

Atlassian software systems (Confluence)

Atlassian’s website (www.atlassian.com) claims “Our products are aimed at dynamic teams working on knowledge-focused projects. Knowledge-focused projects are projects where experience, thinking and intelligence are the main inputs – such as software development, consulting and scientific research”.

Atlassian is headquartered in Sydney, Australia, and has an American facility located in San Francisco, California. Atlassian was recognized as “Australia’s fastest growing company” and was ranked third on that country’s 2005 BRW Fast 100 list. As indicated in the introduction, a 30-day evaluation demo of Atlassian’s Confluence product was used.

“Confluence is a good KM tool in terms of cost, capability, and ease of use for any-sized organization.”

Confluence can be run as a standalone application, or as a web service hosted by industry-proven application servers such as JBoss, BEA Weblogic, or Tomcat. For evaluation purposes, I hosted Confluence as a web service using the Apache Tomcat 5.5 servlet container (modular holding area for web applications) in Microsoft Windows and Linux operating system environments. Running Confluence as a web application better facilitates scalability (the ability to make networked applications available to multiple users across enterprises). Confluence leverages a J2EE framework in its use of containers consisting of pages and spaces. Pages are used to share and store information that can be grouped into larger spaces (Wikis or containers) and can be linked, searched, and integrated into an organization’s document management structure. Spaces are used as holding areas for news posts, archives, and other pieces of information.

Advanced integration features enhance Confluence’s capabilities. Security features maintain levels of access for individual users, as well as groups. For example, anonymous users can be granted limited privileges such as read-only access for a designated space. From a web service perspective, Confluence can be used with all web browsers and works well with Atlassian’s JIRA project tracking product (access www.atlassian.com/software/jira for more information). Another excellent feature is Confluence’s ability to export threaded space content to XML, PDF (Adobe Acrobat files), and RSS feeds. RSS stands for “Really Simple Syndication”, web content such as news feeds and blogs that get updated on a very frequent basis. RSS feeds are formatted in XML code and are read by aggregators, programs that render RSS into viewable form in a web browser using the Hyper Text Markup Language (HTML), Wireless Markup Language (WML), or other front-end display technologies. Popular RSS readers include:

- Awasu (www.awasu.com)
- Newsgator (www.newsgator.com)
- FeedReader (www.feedreader.com)
- RSS Bandit (www.rssbandit.org)
- NetNewsWire (ranchero.com/netnewswire) for Macintosh computers.

Using an evaluation copy of Confluence, three spaces for the following sample groups were created: “Administrative”, “Software Development Group”, and “Human Resources”. “Blog-like” comments were exchanged between fictional users in the group and exported as “digital conversations” in compressed “.zip” XML files that were stored into an open source MySQL 5.0 database (www.mysql.com). This feature is great for knowledge capture, and the open-
source Lucene search engine (http://lucene.apache.org/java/docs) conducts fast searches for text appearing anywhere in an enterprise's Confluence instance. Confluence is relatively simple to install and operate, and good product documentation is available on the Atlassian website. Additionally, users can subscribe to online Confluence discussion forums which contain a wealth of helpful information for operating the tool.

Customers of Confluence have given the product high marks, highlighting the collaborative value of the application. Paul Rene Jorgenson of Telnor remarks, “Confluence immediately lowered the entry level of technical expertise – allowing more people to use a knowledge management system. Any new tool requires some degree of training and guidance before staff catch on, but Confluence was so easy and intuitive that it took off in no time. It has been a great relief using Confluence; to get information in and out of our company system so quickly”. Case studies from Jorgenson’s Telnor and The University of California’s Berkeley Technology Enhanced Learning in Science (TELS) Center further prove Confluence’s worth to knowledge management applications. Telnor is Norway’s largest telecommunication provider, and used Confluence to replace a proprietary portal that hampered production of its more than 20,000 employees. Berkeley’s TELS Center used Confluence for document tracking, “Wiki-storms” (Wikis that support events such as an open source conference in San Francisco), and help on researching learning objects. Again, productivity was increased and expenses lowered because of Confluence’s pricing structure for academic institutions.

Confluence is a good KM tool in terms of cost, capability, and ease of use for any-sized organization; the application easily supports KM’s knowledge sharing, Collaboration, Mobile Work, Content Management, Business Intelligence, and Business Process Management technologies. Confluence’s “pros” include:

1. Extensibility. The tool accommodates technological growth well in its ability to interface with open source software and popular web technologies such as XML, Java, and database connectivity.
2. High Return on Investment. Confluence’s low cost model provides much functionality by making organizations more productive and by codifying tacit knowledge.
3. Customizability. The “one size fits all approach” is not used by Confluence as it allows organizations to customize the tool to best meet their operational and strategic needs.

Conclusion

Though the leveraging of an enterprise’s relevant intellectual assets is not limited to technology, knowledge sharing applications can greatly support knowledge management activities. KM product offerings by SalesForce.com, BMC Software, DCASoft, and Atlassian are examples of available tools that can assist business groups, governments, educational institutions, and other entities to achieve organizational goals and objectives. Of course the installation and maintenance of these products require the expertise of technical experts such as software engineers and the like, and managers should plan accordingly for IT staffing requirements. It must also be remembered that proper KM planning, especially the alignment of an organization’s activities and strategic objectives, must always take place before technology solutions are considered.

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