

Bluenog ICE

Executive Summary

Bluenog ICE™ is a comprehensive, tightly integrated suite of content management, collaboration, web portal and business intelligence software. It is an Integrated Collaborative Environment that leverages the latest Web 2.0 technologies and accelerates Enterprise 2.0 web application development, implementation and deployment, at a fraction of the cost of traditional alternatives. Its unified framework simplifies administration and security. ICE also provides ready integration with third party commercial products and open source projects.

Bluenog ICE Reference Architecture

Bluenog ICE addresses an organization's content, collaboration, presentation and reporting needs from a single integrated platform:



- **ICE CMS™**
an XML-based Enterprise Content Management (ECM) system that securely creates, manages, publishes and repurposes a wide range of content for web, print and application access
- **ICE Collaboration™**
feature-rich Wiki and group calendaring software that enables enterprise-wide content sharing and event publishing through a secure, intuitive portal interface
- **ICE Portal™**
a Rich Internet Application (RIA) portal development environment that gives users a highly customizable, interactive experience with secure access to dynamic content, reporting and enterprise applications
- **ICE BI™**
a complete business intelligence and reporting solution that enables users to create, design, chart, distribute and view enterprise-wide reports based on information stored in multiple formats and locations

ICE Foundation Application

included with Bluenog ICE, leverages all of its major features and offers users a starting point for developing their own applications

Integrated Development Environment (IDE)

leverages Eclipse across all four modules so new developers get up to speed more quickly

How Bluenog ICE Works

Bluenog ICE seamlessly integrates content management, wiki, calendar, portal and business intelligence on a common platform and user interface. The ICE Core includes a unified security framework, ICE Central™ administrative console, workflow, scheduling and ready-integration with third party products. This provides organizations with an Integrated Collaborative Environment across the entire content, collaboration, presentation and reporting lifecycle. Each of Bluenog ICE's components contributes significant functionality to the overall platform.

ICE CMS stores an organization's entire array of content in one place in XML. Based on the open source project Hippo CMS, it offers users and administrators an intuitive Explorer-like interface. Non-technical authors are able to create new content using pre-defined document templates and a WYSIWYG text and HTML editor. A built-in search engine, powerful workflow management, security and versioning are also included. This enables users to find, retrieve and edit content quickly and easily, to apply for or grant appropriate approvals. Content can also be published simultaneously in an unlimited number of places and formats—as PDFs, RSS Feeds, Microsoft Office documents, electronic archives, web content and more.

ICE Collaboration consists of two components, **ICE Wiki™** and **ICE Calendar™**. With ICE Wiki, users enterprise-wide can easily create and share content, using inter-linked web pages, securely accessible through an intuitive portal interface. ICE Wiki enhances the popular open source project JSPWiki with granular security permissions, page statistics, full versioning, search and many other enterprise-scale features. Based on the



Powerful features such as ICE Central and ICE Propagator saves administrators time, eliminates redundant tasks and enforces consistent rules across ICE components

widely-used open source project Bedework, ICE Calendar provides the ability to create and maintain a suite of calendars with event publishing capabilities. Available as an ICE portlet, ICE Calendar extends Bedework's core functionality to enable secure, restricted access to calendars based on a user's role and associated permissions.

ICE Portal brings together multiple web applications in a single framework. It supports both Flex and Ajax, and enables developers to create an unlimited number of richly interactive, customizable Web 2.0 websites and portlets. On the development side, ICE Portal seamlessly integrates with both Java frameworks and tools such as JSF, Spring MVC and with non-Java technologies such as Perl, PHP and Silverlight. ICE Portal offers administrators the ability to control the website viewer's experience. This ensures that the right content is delivered to the right people at the right time, in the most suitable format and environment. Users benefit from a highly customizable, engaging and efficient interactive experience.

ICE BI provides an intuitive "drag-and-drop" report development interface. It includes a powerful Eclipse-based Report Designer which enables users to create an unlimited range of reports based on information from multiple sources throughout their organization. Without any specialized technical knowledge, users can produce reports in a broad range of formats, at any level of detail - sorted, filtered and aggregated in multiple ways. ICE BI's Report Manager offers administrators the ability to view and securely distribute reports to authorized users from a centralized console. An interactive Report Viewer then presents users with a dynamic table of contents of available reports—subject always to

the global permissions set through ICE's centralized security. Viewers can drill down, sort, filter and show/hide results, and can export them in a variety of standard formats (Word, PDF, Excel, CSV, HTML, etc.).

On the back end, Bluenog ICE offers a fully-integrated LDAP-compliant security framework for Single Sign-On (SSO) between all ICE components. This means permissions and rules for individuals and groups can be imported from existing LDAP-compliant applications. On an ongoing basis, administrators then use ICE Central, ICE's central administrative console, to easily apply consistent, fine-grained rules across the entire cycle of information creation, editing and dissemination. This eliminates the otherwise tedious and redundant task of administering these rules in separate content management, wiki, calendar, portal and BI tools. For organizations that need to move code and content between multiple ICE implementations, ICE Propagator, an easy-to-use bulk import/export utility, is also included.

The Value of Integration

Bluenog ICE not only increases developer productivity, it offers significant advantages to IT administrators. ICE Central, as well as the unified security framework, eliminates inconsistencies and inefficiencies, and above all, greatly reduces risk.

Bluenog ICE integrates seamlessly with existing database and application servers, enterprise applications, content management, business intelligence systems and portal environments. A commercial product built on open source projects, it offers an enterprise level solution at an affordable price, based on number of servers rather than on CPU or user counts. Its commercial license includes 9 x 5 support as part of the base package, with 24 x 7 support available as an option. Source code and indemnification are also provided to paying customers.

Supported Configurations

Bluenog ICE is designed to adapt easily to existing environments. It runs equally well on Linux, Solaris and Windows, and integrates seamlessly with a wide range of application and database servers such as Tomcat, Glassfish, WebLogic, Oracle and MySQL. Please visit www.bluenog.com for the latest list of supported configurations.

About Bluenog

Bluenog is an enterprise software and solutions company that specializes in integrated content management, collaboration, portal, and business intelligence. Leading organizations rely on Bluenog products to build and deploy Rich Internet Applications (RIA), manage dynamic website content and readily integrate with existing systems at a fraction of the cost of traditional alternatives. Bluenog Solutions Group meets our customers' unique challenges with pragmatic combinations of commercial and open source software. Headquartered in Piscataway, NJ, Bluenog is also a Red Hat, Oracle and Actuate reseller.

For more information, visit www.bluenog.com

ICE Features

ICE Functions

ICE Resulting Benefits

Pre-integrated suite of content management, collaboration, portal and BI software	<ul style="list-style-type: none"> - Create a seamless loop of collaborative content creation, storage, presentation and reporting, with built-in security for entitlements and access - Share information and enforce consistent security controls across all 4 functional areas - IT no longer spends weeks or months getting disparate components to work together 	<ul style="list-style-type: none"> - Significantly lowers cost to develop applications and manage infrastructure - Simplifies and speeds application development, implementation and deployment
Manage and deliver information to multiple endpoints from a common platform	<ul style="list-style-type: none"> - Simultaneously publish content to multiple websites, portals, reports and printed documentation with easy-to-define content attributes - Centrally administer versioning, workflow, and security controls across all endpoints 	
ICE Foundation Application	<ul style="list-style-type: none"> - A sample application included with Bluenog ICE that leverages its major features and can be used as a starting point for a customer's own application development 	
Security Framework	<ul style="list-style-type: none"> - Single security framework for Single Sign-On (SSO) between ICE components - No need to code authentication into your applications, it is built in 	
ICE Central	<ul style="list-style-type: none"> - Manage all ICE assets from this Central Administration Console, including users/groups/roles, portlets, reports, content, entitlements for CMS, Portal, and Calendar functionality, etc. - Delegate administration to sets of users - Deploy incremental portals without restarting the underlying application server 	<ul style="list-style-type: none"> - Eases administrative burden - Maximizes application uptime
ICE Propagator	<ul style="list-style-type: none"> - Bulk import/export of ICE CMS Content Types and Content Data assets - Easily move selected code and content between separate development, staging and production tiers without replication 	
Configurable installer	<ul style="list-style-type: none"> - Automatically installs the entire Bluenog ICE suite using a default configuration (Tomcat Application Server) 	
Ready-made integration with existing investments across the enterprise stack: database, application, app server, CMS and reporting	Access or share data, tap functionality in a wide range of other products including: <ul style="list-style-type: none"> - Operating Systems: Linux, Solaris, Windows, MacOS - Databases: Oracle, SQL Server, DB2, MySQL - App Servers: Weblogic, GlassFish, Tomcat, Jboss - Applications: SAP, Oracle, Banner - CMS: Alfresco, Documentum, Interwoven, Oracle UCM - BI: Actuate, Pentaho, Jaspersoft, Oracle Reports - Portals: Any standards-compliant portal such as Oracle Portal - Collaboration Tools: XWiki, iCalendar 	<ul style="list-style-type: none"> - Lowers TCO by leveraging existing software and expertise investments - Speeds time to production for new applications - Shortens learning curve for new Bluenog developers
Integrated development environment (IDE) across CMS, Collaboration, Portal and BI	<ul style="list-style-type: none"> - Eclipse-based development functionality - Support for portlet plugins for rapid development of Portal applications <ul style="list-style-type: none"> - Supported plugins include: BIRT Report Designer, Maven with cargo plug-in, Checkstyle, Spring, Wicket, XML 	
Support for RIA	<ul style="list-style-type: none"> - Choose from a variety of RIA toolkits; Flex, DOJO, EXT, YahooUI, and more - Create rich user experience for Web 2.0 enabled applications 	<ul style="list-style-type: none"> - Secure and flexible programming model for creating Web 2.0 applications - No lock-in for a specific RIA technology - Workflow support built-in for approvals
Enterprise 2.0 wiki and group calendaring	<ul style="list-style-type: none"> - Create, maintain and share content using inter-linked web pages - Define and maintain shared calendars with event publishing capabilities - Restrict wiki and calendar access based on user/group/role permissions 	<ul style="list-style-type: none"> - Empower non-technical users to generate and share content enterprise-wide - Enhances standard wiki/blog functionality to add workflow/approval/security
Supports high-availability and clustering	<ul style="list-style-type: none"> - Load balance processing across multiple servers - Completely cluster and failover aware across all business tiers 	<ul style="list-style-type: none"> - Reduced downtime - Improved performance and scalability
Heterogeneous support	<ul style="list-style-type: none"> - Supports integration with a wide-range of platforms (e.g., Linux, Solaris, Windows and MacOS), Java Application Servers (e.g., Tomcat, Weblogic, GlassFish, jBoss) and Database Servers (e.g., MySQL, Oracle, Postgres) 	<ul style="list-style-type: none"> - Maximizes existing hardware and software investments - Easily adapts to changes or additions to OS and infrastructure environment
Commercially licensed suite of products based on open source projects	<ul style="list-style-type: none"> - All products backed by 9x5 (standard) or 24x7 (optional) support, maintenance updates and professional services - Leverages extensive development efforts of respected, well-documented open source projects including Hippo CMS, Eclipse BIRT, JetSpeed 2, JSPWiki and Bedework - Bluenog offers indemnification for all its products 	<ul style="list-style-type: none"> - Lower cost, enterprise-caliber solution - More power and control for the software developer who has access to the source code - Reduced maintenance costs, lower overall TCO - Innovate without the burden of maintaining and supporting open source projects yourself - Reduced risk and liability
Simplified pricing model	Pricing based on number of servers rather than CPU or user counts	<ul style="list-style-type: none"> - Easier to configure and administer licenses - Pay only for what is needed