



## News Release

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Contacts: Tod Jackson, Steve Wheat  
(217) 766-4558; [info@OpenEAI.org](mailto:info@OpenEAI.org)

## Formation of the OpenEAI Project, an Open Source Integration Technology Initiative

Champaign, Illinois

The OpenEAI Software Foundation and the University of Illinois today announced the formation of the OpenEAI Project, an open source Enterprise Application Integration (EAI) initiative that will collaboratively develop and perfect standards-based integration technologies.

The OpenEAI Project will investigate and document the controlling dynamics, principles and practices of enterprise application integration and present, implement and promote these findings. The OpenEAI Project will present findings in the form of the OpenEAI integration methodology and OpenEAI integration software and documentation.

According to Richard Mendola, Associate Vice-President for Administrative Information Technology Services at the University of Illinois, "The OpenEAI methodology and work products have the potential to drastically reduce the costs and time involved in integrating systems at the University of Illinois. In addition, with the support of a major ERP vendor like SCT, we believe these benefits can be extended to the larger higher education domain. The open source nature of the project will allow us to collaborate with others to expedite the evolution of the software and realize these benefits together in as rapid a fashion as possible." The OpenEAI Project is comprised of six distinct, closely related departments, which address OpenEAI methodology, application foundation APIs, message object API, message definitions, messaging infrastructure applications, and deployment and administration. The OpenEAI Project is characterized by:

- collaborative research and development;
- clear understanding and documenting the principles of EAI;
- creation of high-quality software that leads the way in the field, and
- open software licenses that allow embedding OpenEAI software in proprietary products.

The OpenEAI Software Foundation, an Illinois not-for-profit corporation, guides the OpenEAI Project, and provides organizational, legal and financial support to the project. Foundation members are individuals who have demonstrated a sustained commitment to the OpenEAI Project and made significant contributions in the form of EAI research and open-source software development.

The OpenEAI Project web site will be publicly available in January 2003 at <http://www.OpenEAI.org>. This site will provide a detailed description of the open source project and the OpenEAI Software Foundation, release 3.0 beta of the OpenEAI foundational APIs and documentation, as well as reference implementations and corresponding documentation. Visit <http://www.OpenEAI.org/lists> and subscribe to the "Announce" list to receive future OpenEAI announcements and press releases. An announcement will be sent to this list as soon as the OpenEAI Project web site is publicly available.

## Historical Background

In 2000, the University of Illinois began to define an enterprise application integration strategy that could be applied methodically and uniformly to the wide variety of legacy and contemporary enterprise information systems at the University. The main goal was to prepare for the implementation of an enterprise resource planning (ERP) system at the University. At the time, the University was operating and maintaining more than 150 enterprise applications. The implementation of an ERP system at the University meant that a number of these 150 systems would be replaced by the ERP system. However, many of these existing systems, whose specialized functions could not be assumed by the ERP system, would have to be interfaced with the new ERP system. The University also recognized that it would have to purchase or develop a number of new applications to fulfill critical, University-specific functional needs that would not be met by any ERP software.

During 2000, University IT staff conducted an intensive initial study of EAI concepts and products in the EAI market space. This process included experimentation with traditional, proprietary integration products and an investigation of integration development using relevant standards such as the Extensible Markup Language (XML) and the Java™ Message Service (JMS). This initial research culminated in an RFP process in which the University prepared comprehensive integration requirements. At the conclusion of this process, the University determined that standards and products such as Java™, XML, JMS, and JMS providers had matured sufficiently for the University to base its integration strategy directly on them rather than on proprietary integration platforms. In doing so, the University saved a significant amount of money, because it did not assume the purchase, training, and consulting costs, which are a common when implementing a proprietary integration platform. The University addressed its immediate and long-term integration needs with Java™ and XML

technologies—the same technologies to which the University had already committed itself for future enterprise application development. In 2001, the Enterprise Architecture Group of Administrative IT Services at the University of Illinois developed a comprehensive enterprise application integration methodology, a Java™ message object API, and Java™ messaging and application foundation components—all based on open standards. This methodology and foundation were used to implement integrations required for the University's ERP implementation project. The clarity of the University's methodology and the quality of its implementation drew the interest of corporate and academic organizations that work closely with the University of Illinois—especially those involved in integration projects with the University. Given this broad interest, the University of Illinois sought to make these integration concepts and software available to these other organizations and the general public on a sound basis.

The University structured an open source project patterned on other successful open source initiatives, such as the Apache Projects. It established the OpenEAI Software Foundation, modeled closely after the Apache Software Foundation. In October 2002, the University of Illinois and the OpenEAI Software Foundation executed an agreement to initiate the OpenEAI Project. In that agreement, the University gifted its EAI work to the OpenEAI Software Foundation as a seminal contribution to the OpenEAI Project.

Organizations that currently practice the OpenEAI methodology, use OpenEAI software in their integration projects, embed OpenEAI technology in their products, or contribute to the OpenEAI project include the University of Illinois, SCT Corp., Campus Pipeline, Inc. (recently acquired by SCT Corp.), and Open Integration, Inc.

## About OpenEAI

OpenEAI defines a straightforward messaging protocol and message format in XML for both request/reply and publish/subscribe messaging models for any enterprise message object. The message protocol is based on principles inherent to EAI and is not tied to any specific technology used to implement integrations. These fundamental principles are all derived from the root concept of an authoritative source. This root concept as well as the derivation of the fundamental principles of EAI are explained in detail in the OpenEAI methodology documentation.

The OpenEAI methodology outlines a clear process for documenting requirements for interfaces between enterprise applications, requirements for enterprise data services and requirements for information exchange with trading partners. A comprehensive analysis template and instructions facilitate this process for analysts and functional experts. The analysis culminates in defining enterprise message objects using XML and specifying which XML messages

defined in the OpenEAI Message Protocol will be required for each enterprise message object identified during the analysis.

The OpenEAI application foundation and message object APIs provide patterns and foundation for building application gateways and message-aware applications using a business-object-oriented API generated from the XML message object definitions specified during integration analysis. Although Java™, JMS and XML are the native technology, message transport, and message format for OpenEAI, many non-Java™ technologies can also be exposed through gateways or made message-aware using OpenEAI concepts and foundational APIs.

The OpenEAI Project provides a suite of runtime management and monitoring scripts and documentation for managing deployed messaging gateways and applications. Complete reference implementations of typical message-aware applications and message gateways as well as critical infrastructure applications such as message routers, message proxies, point-to-point destination polling applications, and testing applications are also maintained and documented by the project.

OpenEAI Project software and documentation artifacts will be available to the public under the terms of one of the following licenses: the GNU Lesser General Public License (LGPL), the GNU General Public License (GPL), or the GNU Free Documentation License (GFDL).

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The University of Illinois enrolls 66,000 students at its three campuses in Chicago, Springfield and Urbana-Champaign. It has an annual operating budget that tops \$3 billion; nearly 30 percent of that comes from gifts, grants and contracts. The University employs more than 20,000 faculty and staff and has more than a half-million living alumni. The Urbana campus is a pioneer in high-speed computing and houses the National Center for Supercomputing Applications.

SCT, the global e-education solutions leader with over 34 years of native higher education experience, is the only company to offer higher education a choice in both technology and products that best fit the unique needs of institutions of any size and complexity. The Company provides end-to-end solutions that include applications, technology, and services that support higher education's administration of teaching and learning. SCT works collaboratively with clients and partners to provide an e-Education Infrastructure that enables institutions to serve 21st-century learners. SCT has more than 1,300 higher education clients

worldwide, representing more than 8 million learners. SCT's global headquarters is located in Malvern, PA and the Company has several offices around the world.

Open Integration, Inc. is an integration technology company, providing services and software for organizations that practice standards-based enterprise application integration and software vendors who wish to provide standards-based interfaces to their products.