Science.

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Pacific Northwest National Laboratory

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eRM Web Tool Suite ©

Providing web-based EDRM system access to the enterprise

How do we best leverage our electronic document and record management (EDRM) system across our entire enterprise? Furthermore, how do we seamlessly integrate this system with our other current business systems in order to provide complete electronic workflow and record capture?

These questions are often posed by managers, analysts, and information specialists that work in cross-matrix and multi-dimensional business environments. Scientists from the Computational and Information Sciences Directorate at the Pacific Northwest National Laboratory recognize that people need integrated solutions to efficiently complete business processes while maintaining record capture and document management. As a result, they developed a suite of web based tools and components for extending capability and adding value to Tower Software's award winning TRIM Context® product.

The components in the eRM Web Tool Suite© encapsulate the functionality of TRIM Context such that a large and virtually unlimited number of business applications and custom web sites can interact directly and seamlessly in real time with the product. Some of this exposed functionality includes basic and advanced searches and document retrieval, document check-in and check-out, and instant record capture.

eRM Web Service ™

Encapsulating and publishing EDRM functionality

An XML web service is a fundamental building block in distributed computing on the Internet. New open standards along with increased focus on communication and collaboration among applications have led to XML web services becoming the platform for application integration. A web service exposes encapsulated functionality to users via the standard web Simple Object Access Protocol (SOAP).

The eRM Web Service© works "behind the scenes" allowing remote applications to access specific data with no human intervention. For example, users can develop a component within their accounting software system that interfaces programmatically with the eRM Web Service. This would allow the end user to automatically perform electronic records management tasks from within their accounting software package, thus improving workflow and eliminating the need to perform records management from the EDRM application proper.

eRM Web Client™

Exposing EDRM functionality to the enterprise

The eRM Web Client© is an advanced web-based user interface for interaction with the EDRM system. It is a zero footprint application utilizing the eRM Web Service, thus free of TRIM Context® installation files. The eRM Web Client is a cross platform and cross browser compliant application that runs on Microsoft Internet Information Server® (IIS) and supports Secure Socket Layers (SSL).

The eRM Web Client allows users to select from many possible datasets and perform advanced searches. Users can create multiple search criteria entries selected from a vast list of standard and user defined fields (UDF) for any given record type. In addition, searches can be filtered by record type and users may opt to show or hide containers in the search result set.

The search result screen displays a wealth of information, more than one hundred metadata fields. In addition, the user has the option to download a document to the local hard drive or open the document in a new window, using the native software for the given file type.

The eRM Web Client also supports document management, allowing the end user to check out an existing document for edit. Once the given document is complete, the user may then check in the document with options to check in, check in with comments, or "undo" the checkout (meaning no changes were made). Further, a user may add a new document to the repository using the new check in feature. This requires the user to select a pre-defined record type, and prompts for the necessary metadata.

eRM SharePoint Component Suite TM

Integrating EDRM functionality with Windows SharePoint Services©

The eRM Web SharePoint Component Suite© is a set of Microsoft SharePoint Web Parts® (compliant with both Windows SharePoint Services and SharePoint Portal) that allow a user to build customized SharePoint sites integrating TRIM Context as the backend EDRM. The functionality is identical to that of the default SharePoint document management web part, so the implementation can be built transparent to the end user. Since the suite utilizes the eRM Web Service, there is no TRIM Context installation necessary on the SharePoint server. Further, all the functionality that is available via the eRM Web Client is also available as part of the eRM Web SharePoint Component Suite.

eRM Script Library™

Adding value to the EDRM through automated scripts

The eRM Script Library© is a set of scripts designed to automate or semiautomate tedious tasks associated with the daily maintenance of TRIM Context®. For example, scripts exist for multiple document loading (load 100 documents at once, instead of manually), security synchronization with Microsoft Active Directory®, loading of new locations, and many, many more!

Logging On

The eRM Web Tool Suite components are all web based with security features to ensure that only

authorized users can access the underlying EDRM system. Users must enter a username and password to log in, and the system supports SSL for encryption of data being transmitted over the Internet. Once the user has authenticated successfully the eRM Web Service passes those security credentials onto the EDRM system for appropriate accessibility.

Ready for the Marketplace

Pacific Northwest National Laboratory is seeking opportunities to license the eRM Web Tool Suite to organizations that would use it directly in their work or that are interested in reselling the software tools to other industries.

Coming Soon

While the software is ready to license, Pacific Northwest National Laboratory is continuing to expand and enhance the eRM Web Tool Suite for potential users. Exciting additions being investigated involve integration with even more third party COTS products along with advanced features and capabilities.

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