REDMAP INTEGRATION
WHITE PAPER

SIMPLY FIND IT FAST

WWW.REDMAP.COM

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Overview

Redmap provides its clients with a more efficient way to perform many business critical functions.

Integration leverages existing systems and uses core business data to connect the business intelligence, often hidden in paper or email attachments, to these records. Typically these systems are in the form of a CRM or ERP solution.

Redmap's architecture is designed around this concept of integration. Redmap makes this possible in several ways, which are covered in greater detail later, but at a high level the following are required to successfully implement a solution:

- A well defined manual process that is already in place or is at least precisely out-lined. This process must include document control, which means that everyone is filing and retrieving records using simple and well defined criteria.
- Clearly defined and well understood business requirements.

Requirements

Typically, the Redmap solution is a repository for electronic business records. These records are generated as a result of work carried out and transactions being recorded in a CRM/ERP system.

Therefore, a typical requirement is to store electronic records, such as scanned paper or emails, in Redmap using indexing information that already exist in the CRM/ERP system.

Storing the documents in Redmap is only the first step. Inevitably, the next step is to provide access to these stored documents. It is worth noting that this step can often be complicated by issues such legacy systems or limited bandwidth.

Publishing Records

The following methods enable integration of documents archived in the Redmap library with the information stored in external systems.

Data sharing

Data sharing is by far the simplest and most popular method to ensure data integrity when storing records in Redmap. The one requirement is that the business data is stored in a database that can be accessed via OLEDB or ODBC.

By creating a link to an external database, it is possible to populate the fields on all the forms within Redmap from that external source, for example, the client name or company details can be automatically extracted from the source database.

You can go a step further and create hierarchical relationships between the parent and child fields on a form. This enables the user to select a single value from the parent field, such as name or account number, and all other associated details are automatically extracted and displayed in the remaining fields. This reduces the time taken to enter details and greatly improves data integrity and consistency.

External publishing

External publishing basically means, that if an external system or business process generates an

electronic document together with some meta data to identify that document, the system can store both the indexing information (meta data) and the document as an electronic record in Redmap.

XML

The simplest method is to store the meta data in an XML file and to copy the paired XML and document files to the sessions folder on the Redmap server.

The sessions folder can also be accessed using the following registry entry:

HKEY_LOCAL_MACHINE\SOFTWARE\REDMAP NETWORKS\CONNECTOR\QUEUEDIRECTORY

The following is an example of an XML file that contains meta data:

```
- <Index>
  <LibraryName>Redmap</LibraryName>
  <GroupName>Admin</GroupName>
- <Fields>
- <Field>
  <Name>Author</Name>
  <Value>Fred Jones</Value>
    </Field>
- <Field>
  <Name>Department</Name>
  <Value>Administration</Value>
    </Field>
- <Field>
  <Name>DocType</Name>
  <Value>Agreement</Value>
    </Field>
- <Field>
  <Name>Description</Name>
  <Value>Employment agreement – John Smith</Value>
    </Field>
- <Field>
  <Name>DocDate</Name>
  <Value>2006-06-01</Value>
    </Field>
- <Field>
  <Name>Company</Name>
  <Value>Redmap Networks</Value>
    </Field>
- <Field>
  <Name>Confidential</Name>
  <Value>1</Value>
    </Field>
    </Fields>
  <Users />
  <Keywords />
  <User>fred</User>
  <FileDescription>Agreement.tif</FileDescription>
    </Index>
```

The Redmap Connector

The Redmap connector is a Windows service that generally resides on the Redmap application server. The Connector's main responsibility is to poll the sessions folder and process the above mentioned XML and document files, and to commit the record to the repository. For more details about the Connector please refer to the documentation provided with the application.

The Connector can form part of a larger process by providing a copy of the XML file it processes to another location on the network. This means that every record that is processed by the Connector can also be synchronously routed to another process or application. The XML file provided also includes an additional piece of information, the ItemId, which is a unique identifier that represents the record in the repository. This enables the external process to record that information and, using the COM interface, access the document in Redmap.

A good example of this process is a CRM/ERP application being notified of new records created in the Redmap library. The CRM/ERP application can then record the ItemIds in its database and provide a button for users to call the documents from within the CRM/ERP application.

Another example is to use this as purely a notification process. At a basic level, a supervisor can be notified of emails sent and received by employees relating to a certain subject. If, for instance, a project number is recorded in the subject of the email, then a process can be triggered to send an email.

An additional example that is worth discussing is the ability to create a backup copy of all the meta data and documents in another location for disaster recovery. Every time a particular type of document, or even every document, is processed by the connector, a copy of the XML and document files can be routed synchronously to another server or location. The possible applications for this are far reaching.

It is also worth noting that it is possible to develop customized drivers, which can be plugged into the Connector in order to provide further processes. For more detail please contact the Redmap support desk.

API - Indexing

There is a documented COM integration interface available that enables records to be published directly into the repository. This is a fairy high level interface and is designed to be simple. This object enables you to call the interface and pass in the filename and meta data directly from within another application, using a script or macro. Typically, a prototype can be scripted fairly quickly. Please refer to the "Redmap ManageSuite Integration Interface" for details and sample code.

Finding Records

The most common requirement presented to us by organisations is the ability to link the core business data stored in a CRM/ERP application to electronic documents and email records held in the Redmap library. The main goal is to access all the business documents and emails relating to a customer or vendor with a single search presented in one screen. Redmap provides several methods to enable businesses to fulfil this requirement.

The basic requirement is to use a single value from the CRM/ERP application, such as a patient Id, customer number or vendor number, to call a search against the repository and return any matching documents for selection.

In planning a solution, there are some issues that will impact the user interface and the way the results of a search are presented on the screen, for example, will the unique value used to search Redmap retrieve a single record every time or multiple records?

Web search – parsing the URL

The most common, and perhaps the easiest, way to access records from a CRM/ERP application, is to execute a search against Redmap via ManageAnywhere.

ManageAnywhere is a web based interface that provides access to the library via the internet or intranet. The caller can construct a URL with all relevant information to execute the search. The URL is then processed by the ManageAnywhere server and the resulting hit list is constructed and presented to the caller via the web browser. This can also be embedded inside a frame on a company's website as a part of the intranet. The hit list provides most of the commonly needed functions, such as viewing a document, emailing the document or editing the meta data. Using security setup by the administrator at the server level, most of the functions can be locked down if required.

The site also takes advantage of a CSS file, which enables the caller to customize the look of the web page to match the company's profile.

Following is a sample of a url that enables the caller to access the site where ManageAnywhere is hosted, and search for all documents that are stored against the company name Redmap in a library called "Library" and a document group called "Archive". The table displays a brief description of each parameter in this string:

```
http://document.redmap.net/default.asp?
usr=user&pwd=password&lib=Library&grp=Archive&fldn=Company&fldv=Redmap
```

Parameter	Description
document.redmap.net/default.asp	This is the site address where ManageAnywhere is hosted.
Usr	This is the security account that must have access to the records that are being requested. The calling application simply needs the credentials to be able to log in.
Pwd	This is the password for the account specified in usr.
Lib	This parameter contains the library name.
Grp	This parameter contains the document group name.
Fldn	This parameter contains the fieldname that is being queried.
Fldv	This parameter contains the search criteria that will be used to query the repository.

API – Searching

The same documented COM integration interface mentioned in "API – Indexing", also enables retrieval of records directly from the repository. This is a fairy high level interface and is designed to be simple. This object allows you to call the interface and pass in the search parameters directly from within another application, using a script or macro. The main difference from the Web search method is that there is no user interface provided. The result of the search is programmatically returned to the caller. It is then the responsibility of the calling application to deal with visually displaying the results. The viewing and emailing functions must also be provided by the caller. This approach gives the calling application total control and allows a fairly tight integration between the systems. Please refer to the "Redmap ManageSuite Integration Interface" for details and sample code.

For More Information
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