COLLABORATIVE ELECTRONIC RECORDS PROJECT

EVALUATION OF TOOLS

In order to process and preserve email collections for the pilot, tools were needed for format conversion, format detection, file comparison, and file extraction. One goal of the project was to address the realities that small to mid-sized institutions face with limited funding and technical staffing. During the project, various software applications (some free), metadata formats, and guides were used and evaluated. The summary below includes product information and the results of our trials. This report should not be considered an official endorsement of any product, nor is it a comprehensive list of every applicable product. *Note: See glossary for format definitions.*

Product	ABC Amber Outlook Converter
Description	ProcessText Group application that converts email into different formats such as PDF, HTML, and TXT. Trial version available.
Vendor information	"ABC Amber Outlook Converter is intended to help you keep your important emails, newsletters, other important messages organized in one file. It is a useful tool that converts your emails from MS Outlook to any document format (PDF, DOC, HTML, CHM, RTF, HLP, TXT, DBF, CSV, XML, MDB, etc.) easily and quickly. It generates the contents with bookmarks (in PDF, DOC, RTF and HTML), keeping hyperlinks. Also you can use this tool as MSG Converter. Currently our software supports more than 50 languages."
Intended CERP Use	SIA tried it for some XML conversion of email before the XML parser-schema work was started by the CERP technical consultant. It can produce a report indicating number of unread items within the folders of an email account. RAC converted PST files to RTF, HTML, and TXT. Attachments displayed correctly and the to/from/date header data displayed; however, the Internet Header metadata including computer identification data that makes the message authentic and reliable did not appear. Trial version tested.
Results	SIA and RAC discontinued testing this application due to time and success with other software.
URL	www.processtext.com/abcoutlk.HTML

Product	ABC Amber PDF Converter
Description	ProcessText Group application that converts email into PDF. Trial version available.
Vendor information	"ABC Amber PDF Converter is a powerful tool which allows you to convert PDF to any document format (HTML, CHM, RTF, HLP, TXT, DOC, DBF, XML, CSV, XLS, MDB, DB, etc.) easily and quickly. You can export all pages or just selected pages, as plain text or as preview pictures. Currently our software supports more than 50 languages."
Intended CERP Use	RAC converted some PSTs to PDF using Amber Outlook Converter, but was unable to get an XML display from Amber PDF Converter. SIA also tried the PDF conversion of emails but CERP decided on XML for the preservation format. Trial version tested.
Results	SIA and RAC discontinued testing this application due to time and success with other software.
URL	www.processtext.com/abcPDF.HTML

Product	Aid4Mail
Description	Fookes Software application that converts email into different formats such as MBOX, EML, MSG, and PST from a variety of formats. Trial version available.
Vendor information	"Aid4Mail is a user-friendly Windows tool that helps you migrate your email messages to a different mail client, export them for viewing through Internet Explorer, MS Excel, or a database, convert them to extract or re-insert attachments, and archive them to save space or for compliance with legal requirements. It supports most popular mail client programs and processes messages quickly and faithfully, including those with file attachments and embedded contents like pictures and background images. Unlike other migration methods, Aid4Mail can also export message status information such as 'unread,' 'read,' 'replied,' and 'forwarded' from most mail clients."
Intended CERP Use	SIA used it to convert MSG files into a PST file. SIA also used it to create MBOX files from PST files, extract attachments and embedded contents, and extract sender names. SIA used it to convert Eudora email (MBX) files to MBOX and PST. RAC used it to convert generic MBOX files to MSG format for ease of sorting non-business from business messages. After sorting, the MSG files were converted back to MBOX format for parsing.
Results	SIA discontinued using it for PST to MBOX conversion because: 1) it failed to capture email attachments from child messages and it created attachments such as winmail.dat files out of email bodies; 2) processed email missing both its attachment and email message body to an Aid4Mail upgrade; and 3) the MBOX output was not as robust or legal as output from other products. SIA continues to use it with email formats other than PST. RAC found it very useful for the wide range of formats encountered in testbed email. This range of formats is typical of RAC depositors. RAC did not use it for PSTs. Some experimentation with selecting different options was necessary before finding a combination that worked and that retained all data. Generally "generic source" and "convert to generic" worked.
URL	http://www.aid4mail.com

Product	Archivists' Toolkit (AT)
Description	Open-source software that offers archival data management, which was produced through an Andrew W. Mellon Foundation-funded collaboration among the University of California San Diego Libraries, the New York University Libraries and the Five Colleges Inc. Libraries.
Vendor information	"The Archivists' Toolkit, or the AT, is the first open source archival data management system to provide broad, integrated support for the management of archives. It is intended for a wide range of archival repositories. The main goals of the AT are to support archival processing and production of access instruments, promote data standardization, promote efficiency, and lower training costs. Currently, the application supports accessioning and describing archival materials; establishing names and subjects associated with archival materials, including the names of donors; managing locations for the materials; and exporting EAD finding aids, MARCXML records, and METS, MODS and Dublin Core records. Future functionality will be built to support repository user/resource use information, appraisal for archival materials, expressing and managing rights information, and interoperability with user authentication systems."

Intended CERP Use	SIA tried the 1.1 beta version for its support of EAD and METS import and export. RAC did not use this tool for testbed email and does not have the application in use otherwise.
Results	SIA discontinued using after some testing. User experience included: slow start-up, object type within instances did not allow email as a type, imported EAD was problematic due to missing data such as extent type, and METS output incomplete for CERP's needs. On the plus side, an accession record did not have to be created to produce EAD, METS, and MARC records. The capability of producing multiple schema from one input is useful; with modification, it could be used for accession metadata. RAC did not use it after discovering that it was not compatible with email.
URL	http://www.archiviststoolkit.org

Product	Cooktop
Description	Freeware application for creating XML.
Vendor information	"Cooktop is an editor and development environment for XML, DTD, and XSLT documents. Cooktop is a Windows application. Color-coded XML, DTD, and XSLT editing. Check well-formedness and validate Stylesheet testing with almost any XSLT engine. XPATH testing. Customizable 'Code Bits' library. XML formatting via Tidy. Small download, small footprint"
Intended CERP Use	SIA used it to edit some EAD (see below) stylesheets when working in NoteTab Pro (see below). RAC did not use this tool.
Results	Tool was easy to use. SIA discontinued using once stylesheets were set and oXygen (see below) was implemented.
URL	www.XMLcooktop.com

Product	DROID (Digital Record Object Identification)
Description	National Archives (United Kingdom) software that identifies file formats.
Vendor information	"DROID (Digital Record Object Identification) is a software tool developed by The National Archives to perform automated batch identification of file formats. Developed by its Digital Preservation Department as part of its broader digital preservation activities, DROID is designed to meet the fundamental requirement of any digital repository to be able to identify the precise format of all stored digital objects, and to link that identification to a central registry of technical information about that format and its dependencies. DROID uses internal and external signatures to identify and report the specific file format versions of digital files. These signatures are stored in an XML signature file, generated from information recorded in the PRONOM technical registry. New and updated signatures are regularly added to PRONOM, and DROID can be configured to automatically download updated signature files from the PRONOM website via web services. DROID is a platform-independent Java application, and includes a documented, public API, for ease of integration with other systems. It can be invoked from two interfaces: a Java Swing GUI and a command line interface."
Intended CERP Use	SIA used it for format identification of native attachments extracted from email messages for preservation assessments. RAC did not use as it did not conduct such assessments for the pilot.
Results	Setup was easy and alerts user of possible file extension mismatch. Output available as XML. SIA adopted this tool in conjunction with JHOVE (see below) to perform assessment tasks.

URL	http://droid.sourceforge.net/wiki/index.php/Introduction

Product	**Emailchemy (Demo version)**
Description	Weird Kid Software tool that converts, migrates, and manages email.
Vendor information	"Convert: Emailchemy converts email from the closed, proprietary file formats of the most popular (and many of yesterday's forgotten) email applications to standard, portable formats that any application can use. These standard formats are ideal for long term archival, database entry, or forensic analysis and eDiscovery. Migrate: Emailchemy includes an embedded IMAP mail server from which any IMAP-compatible email application can import your converted email. Emailchemy also includes a utility for uploading converted mail up to a Google Apps email account. Manage: Emailchemy provides utilities for splitting, sorting and merging email archives, and harvesting email addresses from email archives."
Intended CERP Use	RAC used it to convert a batch of MBOX testbed messages. SIA did not test this application.
Results	Worked quickly and showed correct number of messages converted, but output is MBOX only. Internet Header metadata was retained and reasonably reader-friendly displays of the email messages could be viewed in Quick View Plus, Open Office, Explorer, and XML Editor. Several attachments were sampled and compared with ones that were viewable in Aid4Mail conversions (Word and PowerPoint). None of the Emailchemy attachments displayed in a viewable manner; all were simply character strings, typical of MBOX displays. Even though some mail within the captured MBOX was Eudora, Emailchemy produced a "does not match" message when Eudora was selected as the type to be converted.
URL	http://www.weirdkid.com/products/emailchemy/

Product	**EAD Cookbook**
Description	Guidebook to use for implementing EAD (Encoded Archival Description).
Vendor information	"The appearance of EAD Version 2002, the shift of the EAD community from SGML to an XML environment, the appearance of new tools for creating and distributing finding aids, and the emergence of community-based encoding protocols necessitate a revision of that earlier work. While the basic EAD recipe has not changed, some of the ingredients have. As an update, this edition focuses on those aspects of implementation that have changed since 2003, specifically changes in the EAD element set, new tools for creating EAD-encoded documents, and the need to provide additional XSLT stylesheets for transforming EAD files into HTML."
Intended CERP Use	SIA used the Cookbook for learning about creating EAD. RAC did not use EAD for its finding aids for the pilot.
Results	It provides assistance for EAD creation in NoteTab, XMetal, and Oxygen. Other references for EAD included: Archives of American Art finding aids http://www.aaa.si.edu/collections/findingaids Archives Hub, EAD 2002 Online Template http://www.archiveshub.ac.uk/eadform2002.HTML EAD Help Pages http://www.archivists.org/saagroups/ead EAD Version 2002 Official Site http://www.loc.gov/ead RLG Best Practice Guidelines for Encoded Archival Description http://www.oclc.org/programs/ourwork/past/ead/bpg.PDF Texas Archival Resources Online http://www.lib.utexas.edu/taro/index.HTML

	University of Illinois Encoded Archival Description (EAD) Projects
	http://www.library.uiuc.edu/archives/ead
	SIA adopted EAD for its finding aids of the email collections for this pilot.
URL	http://www.archivists.org/saagroups/ead/ead2002cookbookhelp.HTML

Product	**ExamDiff Pro**
Description	PrestoSoft application that compares files simultaneously. Trial version available.
Vendor information	"ExamDiff Pro is a powerful yet intuitive and easy to use visual file and directory comparison tool for Windows 98/Me/NT/2000/XP/2003/Vista. It features unique functionality that distinguishes ExamDiff Pro from other comparison programs. If you've been frustrated with other comparison utilities, you will find that ExamDiff Pro offers a much more efficient and user-friendly way to compare files and folders."
Intended CERP Use	SIA used it to view differences in files (changed text, added text, and deleted text) side by side of email XML output from different PCs. RAC did not test this tool.
Results	It delivered fast results as compared to a manual scan of documents. SIA adopted it for document comparison.
URL	http://www.prestosoft.com/edp_examdiffpro.asp

Product	**ExMerge**
Description	Microsoft Exchange utility that captures selected emails from the Exchange Email Server into a PST file.
Vendor information	"Use the Mailbox Merge Program to extract data from mailboxes on a Microsoft Exchange Server and then merge this data into mailboxes on another Microsoft Exchange Server. The program copies data from the source server into Personal Folders (PST files) and then merges the data, in the Personal Folders, into mailboxes on the destination server. The ability to merge data to and from an Exchange Server makes this program an invaluable tool with a variety of uses – especially during disaster recovery. The program can also replace existing data instead of merging new data if specified by the Administrator. Mailbox Merge has some limitations. Please read the tools documentation before using this program."
Intended CERP Use	SIA used it to capture and transfer Outlook Exchange email accounts for CERP. RAC did not use this tool as it did not have access to depositors' MS Exchange email systems.
Results	SIA discontinued using it because data captured was either incomplete (missing folders) and/or too recent for pilot. Setup was time-consuming.
URL	http://www.microsoft.com/downloads/details.aspx?FamilyID=429163ec-dcdf-47dc-96da-1c12d67327d5&displaylang=en

Product	**EZDetach**
Description	TechHit software that extracts email attachments in native formats with options of naming file with sender or message subject and zipping after extraction. Works as plug-in within Outlook. Trial version available.
Vendor information	"Improve productivity and save hours on managing attachments. Save mailbox and PST space and comply with email policies. Speed up Outlook by reducing your PST or mailbox size. Organize attachments in file system folders for easy access and sharing. Automatically save attachments with Outlook Rules Wizard. Automatically print attachments."

Intended CERP Use	SIA used it to extract the email attachments for preservation assessments. RAC did not test this tool because Aid4Mail performed the same function.
Results	SIA adopted this tool for attachment processing. EZDetach also saves attachments from embedded messages. Original attachments remain with the PST file.
URL	http://www.techhit.com/ezdetach

Product	Fentun
Description	Freeware that extracts attachments.
Vendor information	"Fentun's program understands Microsoft's Transport Neutral Encapsulation Format (TNEF). Register it as Netscape's helper application for 'application/ms-tnef,' and you will be able to extract attachments embedded in the TNEF. It should be easy enough to use Fentun with other email programs as well."
Intended CERP Use	RAC used it to open attachments in unidentified formats. SIA did not test this tool.
Results	It successfully opened .dat attachments from within current Outlook Inboxes; however, it was not useful for testbed legacy attachments from various email clients.
URL	http://www.fentun.com

Product	File Investigator
Description	Forensics Innovations Software that identifies file type. Trial version available.
Vendor information	"The File Investigator Engine is the core library that identifies a file by its content rather than filename extension. You might assume that it has to be slow if it opens every file, but it is almost as fast as any other program that just reads the disk directory. MS Windows, and most applications, only look at a file's extension when identifying or loading it. If the file has the wrong extension or the application doesn't recognize the extension, then you are out of luck. Unless you have an application that uses the File Investigator Engine. This engine also extracts valuable information out of many different types of files. Information like: image resolutions, sound file sampling rates, document titles, and much more. It then adds general information about that particular file type/format."
Intended CERP Use	SIA used it to determine formats of files after JHOVE indicated problems with specific attachments. RAC did not test this tool. Trial version tested.
Results	File report included checksum, extensions for the format, and other metadata. Works with more than 2,000 file formats. SIA discontinued testing this application due to time.
URL	http://www.forensicinnovations.com/fiengine.HTML

Product	File Merlin
Description	Advanced Computer Innovations software that converts files.
Vendor information	"FileMerlin accurately converts word processing, spreadsheet, presentation and data base files between a very wide range of file formats. Widely regarded as the premier document conversion product, it is suitable for straight-forward as well as complex documents, and is the most accurate, complete and flexible such solution we know of."
Intended CERP Use	RAC tried converting folders and individual attachments in unknown formats. SIA did not test this application on testbed email attachments.

Results	RAC had no success, typically receiving a "could not identify" message. Attachments known to be text and spreadsheet documents, some with DOC extensions, were not converted and received various messages such as "unsupported source format," and "empty file," and "could not identify." RAC also tested it on batch MBOX and individual MSG messages with no success (expected result).
URL	http://www.file-convert.com/fmn.htm

Product	**JHOVE**
Description	JHOVE – JSTOR/Harvard Object Validation Environment's open-source application identifies open formats.
Vendor information	"JHOVE provides functions to perform format-specific identification, validation, and characterization of digital objects. Identification, validation, and characterization actions are frequently necessary during routine operation of digital repositories and for digital preservation activities. These actions are performed by modules. The output from JHOVE is controlled by output handlers. JHOVE uses an extensible plug-in architecture; it can be configured at the time of its invocation to include whatever specific format modules and output handlers that are desired. The initial release of JHOVE includes modules for arbitrary byte streams, ASCII and UTF-8 encoded text, GIF, JPEG2000, and JPEG, and TIFF images, AIFF and WAVE audio, PDF, HTML, and XML; and text and XML output handlers."
Intended CERP Use	SIA used it for format validation of native attachments extracted from email messages for preservation assessments. RAC did not test this tool.
Results	Setup at SIA was complicated due to some Java issues on the workstation but technical assistance from Harvard was very helpful. Only works with open formats such as JPG, PDF, TIFF, etc. Output available as XML. SIA adopted this tool in conjunction with DROID (see above) to perform assessment tasks.
URL	http://hul.harvard.edu/jhove

Product	**Lookout**
Description	Unsupported application that searches words/strings in MS Outlook.
Vendor information	"Lookout is lightning-fast search for your email, files, and desktop integrated with Microsoft Outlook. Built on top of a powerful search engine, Lookout is the only personal search engine that can search all of your email from directly within Outlook – in seconds... You can use Lookout to search your: Email messages. Contacts, calendar, notes, tasks, etc. Data from exchange, POP, IMAP, PST files, Public Folders. Files on your computer or other computers. Just enter your search and press enter. Results are instant. Lookout will find your search terms hiding nearly anywhere in your Outlook mailbox – subjects, bodies, phone numbers, addresses, etc."
Intended CERP Use	RAC and SIA used it for keyword searching within email collections.
Results	Product produced more accurate results than Outlook's search tool. For example, when searching for "mission" the Outlook search would also find "commission" and "submission" as opposed to only finding "mission." SIA adopted this tool for more refined searching when applicable with email collections. RAC used it for testbed messages only.
URL	http://web.archive.org/web/20060831223528/http://www.lookoutsoft.com/Lookout/download.HTML

Product	**MessageSave**
Description	TechHit software converts Outlook email into other formats such as MBOX, MSG, TXT, and EML. Works as plug-in within Outlook. Trial version available.
Vendor information	"Backup, save and archive Outlook messages on hard disk, network drive, CD-R, etc. Save Outlook email messages, including attachments, as individual files. Organize messages in file system folders for easy access, sharing and filing. Institute consistent email archiving policy in your organization. File sent messages. Keep email message along with other related documents. Store messages for legal compliance. Keep audit trail of email messages. Standardize your organization's email storage policy. Read messages in plain text without annoying images and popups. Reduce mailbox size. Automatically save messages with rules wizard. Process Outlook messages with custom scripts. Easily view/save full Internet (RFC 822) message headers."
Intended CERP Use	SIA used it to convert PST files to MBOX format within MS Outlook application. Since most of RAC's testbed messages were not PSTs, this tool was not tested.
Results	SIA adopted this tool for PST conversion. Application only works with Outlook but handles idiosyncrasies well by creating complete MBOX files that are RFC2822-compliant. It does not appear to report on status of email message (read, unread). It also produces a sender-subject log.
URL	http://www.techhit.com/messagesave

Product	**Metadata Extractor**
Description	National Library of New Zealand open-source tool reads header information of a file to extract preservation metadata.
Vendor information	"The Metadata Extraction Tool was developed by the National Library of New Zealand to programmatically extract preservation metadata from a range of file formats like PDF documents, image files, sound files Microsoft office documents, and many others. The tool was initially developed in 2003 and released as open source software in 2007. The current version can be downloaded from the SourceForge download page. Purpose of the Metadata Extraction Tool: The Tool builds on the Library's work on digital preservation, and its logical preservation metadata schema. It is designed to automatically extract preservation-related metadata from digital files; and to output that metadata in a standard format (XML) for use in preservation activities. The Tool was designed for preservation processes and activities, but can be used to for other tasks, such as the extraction of metadata for resource discovery."
Intended CERP Use	SIA tested it on some extracted attachments and PSTs for metadata reports. RAC did not test this tool.
Results	Results produced file name, extension, size, mimetype, and date and time. It detected Microsoft Office formats. SIA discontinued testing this application due to time.
URL	http://meta-extractor.sourceforge.net

Product	Notetab Pro (trial available)
Description	Fookes Software application for HTML and XML editing.
Vendor information	"NoteTab is a leading-edge text and HTML editor. Winner of software industry awards since 1998, this application does it all: it easily handles a stack of huge files; lets you format text to your heart's content; does system-wide searches, and multi-line global replacements. It even corrects your spelling mistakes. Build document templates, add bookmarks, convert text to HTML on-the-fly, and take charge of your code. Use a simple, power-packed scripting language to create anything from a text macro to a mini-application."
Intended CERP Use	SIA used it initially to create EAD in conjunction with the EAD Cookbook 2002. RAC did not test this tool.
Results	NoteTab served as a useful tool for learning about EAD at SIA. Set up was manual and time-consuming. SIA discontinued using it for EAD after working with oXygen (see below).
URL	http://www.notetab.com

Product	oXygen XML editor (trial available)
Description	SyncRO Soft Ltd., Romania, software is a multi-platform XML editor.
Vendor information	"<oXygen/> is a complete cross platform XML editor providing the tools for XML authoring, XML conversion, XML Schema, DTD, Relax NG and Schematron development, XPath, XSLT, XQuery debugging, SOAP and WSDL testing. The integration with the XML document repositories is made through the WebDAV, Subversion and S/FTP protocols. <oXygen/> has also support to browse, manage and query native XML and relational databases. The <oXygen/> XML editor is also available as an Eclipse IDE plugin, bringing unique XML development features to this widely used Java IDE."
Intended CERP Use	RAC and SIA used it to create EAD and validate XML from email parser.
Results	SIA adopted this tool for XML work but uses other applications as well. It offers a clean display and numerous functions such as validation while typing. It did have problems opening larger XML files (41 MB>) for editing/validating though. RAC had successful results for XML editing and validating.
URL	http://www.oxygenXML.com

Product	Stylus Studio (trial available)
Description	Progress Software Corp software for XML editing.
Vendor information	"Stylus Studio 2009 XML Enterprise Suite raises the bar for productivity in XML development tools. Approximately 2 Million XML developers and data integration specialists turn to Stylus Studio's comprehensive and intuitive XML toolset to tackle today's advanced XML data transformation and aggregation challenges. … Whether you are developing Web applications that transform relational data to XML, leveraging legacy data in EDI, HL7, or other flat file formats like CSV, or wrestling with complex XSLT stylesheets, Stylus Studio helps you realize the promise of existing and emerging XML technologies. From XQuery to XML Pipelines to Java or C# for .NET code generation, Stylus Studio is the one XML IDE that does it all."
Intended CERP Use	SIA used it to validate XML from email parser. RAC did not use this tool.

Results	SIA tried unsuccessfully in using the trial version to validate an 185 MB XML file. The CERP consultant was able to validate the same file using the full version of Stylus Studio though.
URL	http://www.stylusstudio.com

Product	TrID
Description	Online tool that determines file format.
Vendor information	"Got a file via email and don't know how to open it? Have a .DOC file that Office won't open? Downloaded a document and don't know what archiver was used to compress it? Check what TrID can tell about it!"
Intended CERP Use	SIA used it to discover format of single files when extension was missing. RAC did not test this tool.
Results	Identification results are fast and offer alternative formats as well. SIA adopted this tool in cases of single files.
URL	http://mark0.net/onlinetrid.aspx

Product	Xena
Description	National Archives of Australia open-source software that detects file formats and converts files.
Vendor information	"Xena is free and open source software developed by the National Archives of Australia to aid in the long term preservation of digital records. Xena is an acronym meaning 'XML Electronic Normalising for Archives.' Xena software aids digital preservation by performing two important tasks: Detecting the file formats of digital objects; Converting digital objects into open formats for preservation."
Intended CERP Use	SIA tried to convert email attachments and PSTs. RAC tried to convert PSTs, MSGs, and attachments.
Results	Processing of PST files resulted in no output at SIA. References online indicate Xena does not work with Outlook 2003 at this time. SIA discontinued testing this application due to time and might revisit. RAC testbed word processor attachments opened and displayed; however, Xena would not batch convert either PSTs or MSGs. Individual test PST email messages did not convert, although individual MSG messages (converted via Aid4Mail to MBOX format then converted via Xena) displayed in Open Office. Internet Header metadata was not retained.
URL	http://xena.sourceforge.net

Repository systems

Product	**DSpace**
Description	MIT and Hewlett-Packard developed this open-source application that serves as a digital repository.
Vendor information	"A groundbreaking digital repository system, DSpace captures, stores, indexes, preserves and redistributes an organization's research material in digital formats. Research institutions worldwide use DSpace for a variety of digital archiving needs -- from institutional repositories (IRs) to learning object repositories or electronic records management, and more. DSpace is freely available as open source software you can customize and extend. An active community of developers, researchers and users worldwide contribute their expertise to the DSpace Community."
Intended CERP Use	RAC and SIA used it to house the pilot email collections.
Results	Customization required, including creation of a METS ingest function by a CERP IT consultant. End-user searching is straight-forward. RAC and SIA adopted it for the digital repository for the pilot material.
URL	http://www.dspace.org

Product	**Fedora**
Description	Flexible Extensible Digital Object Repository Architecture is an open-source application that serves as a digital repository from Cornell University and University of Virginia.
Vendor information	"A robust integrated repository-centered platform that enables the storage, access and management of virtually any kind of digital content. … Using a standards-based, service-oriented architecture, the Fedora platform provides an extensible framework of service components to support features such as OIA-PMH, search engine integration, messaging, workflow, format conversion, bulk ingest, and others. In addition, features such as authentication, fine-grained access control, content versioning, replication, integrity checking, dynamic views of digital objects, and more are incorporated into the Fedora repository service. Fedora provided services can be seamlessly integrated into an organization's existing infrastructure, protecting and enhancing prior investments."
Intended CERP Use	RAC and SIA considered it to house the pilot email collections.
Results	Extensive customization and technical staffing required. RAC and SIA adopted DSpace.
URL	http://www.fedora.info

Information in this report, including links, was current as of October 2008.

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Updated December 2008