Rosetta | PREMIS

An Overview

Presented by Andrew French, Solutions Architect
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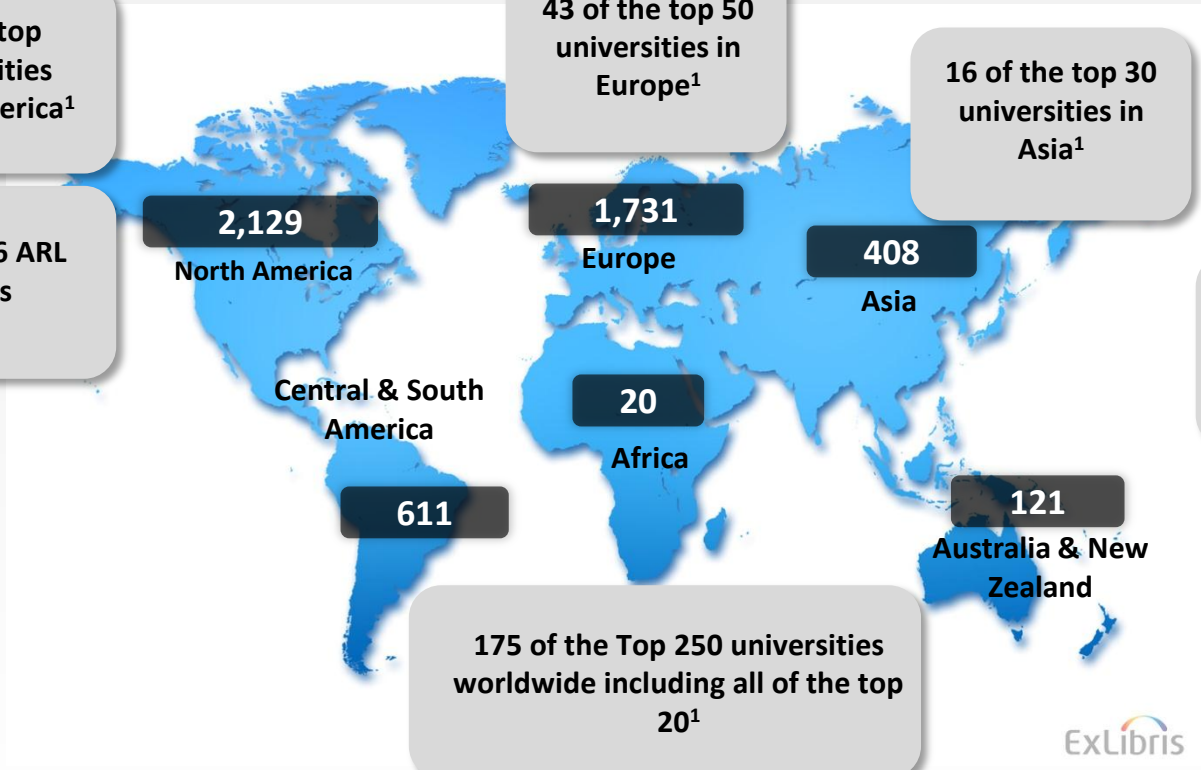
41 of the top 50 universities in North America[1]

90 of the 126 ARL members

43 of the top 50 universities in Europe[1]

16 of the top 30 universities in Asia[1]

41 National Libraries



175 of the Top 250 universities worldwide including all of the top 20[1]

North America

Princeton University · Cornell University · The Library of Congress · Yale University · The California State University · Columbia University · Emory University

Europe

Imperial College London · European Central Bank · The National Library of Finland · University of Oxford · University of Cambridge · ETH Eidgenössische Technische Hochschule Zürich Swiss Federal Institute of Technology Zurich · British Library

Asia-Pacific

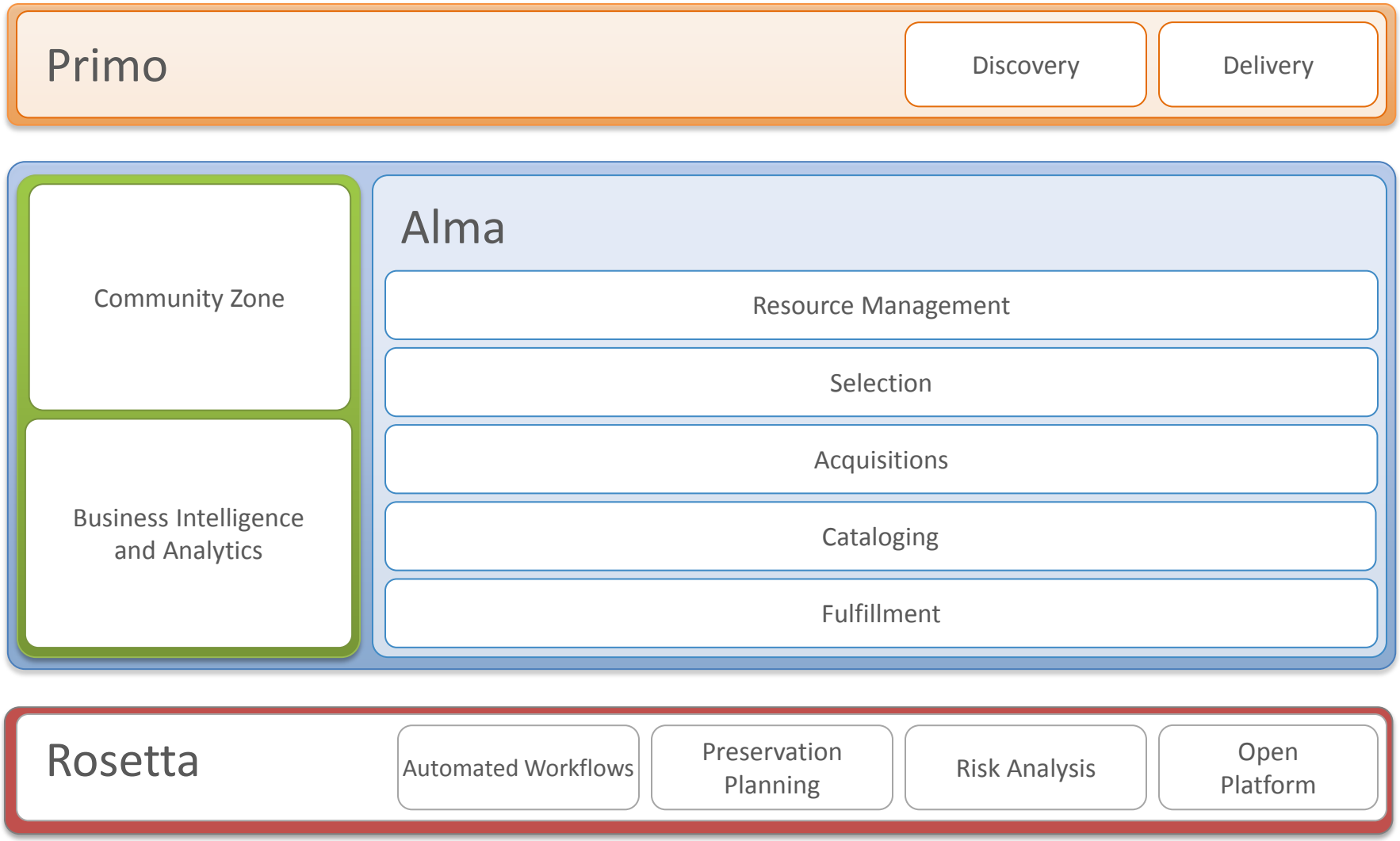
Te Puna Mātauranga o Aotearoa National Library of New Zealand · Shanghai Jiao Tong University · 中国国家图书馆 National Library of China · The University of Melbourne · The Hong Kong University of Science and Technology

Latin America

TSE · Biblioteca Nacional de Chile · UNISINOS Universidade do Vale do Rio dos Sinos

(1) Source: The Times Higher Education – World University Rankings 2011-2012

The Unified Library



What is Rosetta?

Rosetta is a **complete** preservation solution that addresses the **ever-growing** need to collect, archive and preserve the **digitally-born and digitized** materials stored at academic institutions, research organizations, and government institutions, ensuring **data integrity** and **access over time** to information in digital formats.

PREMIS

- Standard for preservation metadata and implementation strategies
- International working group concerned with developing metadata for use in digital preservation
- Metadata for intellectual entities, events, agents and rights
- Data model consisted of several entities:
  - Intellectual entity
  - Representation
  - File
  - Bit-stream

PREMIS is at the core of Rosetta

#	PREMIS ELEMENT	Related DNX	Optionality	Repeatable	Rep	File	Bitstream		DNX #	DNX Name	Related PREM	Optional?	Repeatable?	IE	REP	FILE	BS	optionality rems?	Repeatability rems?	IE rems?	Rep rems?	File rems?	BS rems?	Link made in AIP
1	**Object**		M	R													?							
1.1	**objectIdentifier**	8	M	R	y	y	y	TRUE	8	**Object identifier**	1.1	O	R	T		•	•	?	FALSE	TRUE		FALSE	FALSE	FALSE	
1.1.1	objectIdentifierType	8.01	M	NR	y	y	y	TRUE	8.01	objectIdentifierType	1.1.1	O	R	Y		O	O	?	FALSE	FALSE		FALSE	FALSE	FALSE	y
1.1.2	objectIdentifierValue	8.02	M	NR	y	y	y	TRUE	8.02	objectIdentifierValue	1.1.2	O	R	Y		O	O	?	FALSE	FALSE		FALSE	FALSE	FALSE	y
1.2	**objectCategory**		M	NR	y	y	y	TRUE																	
1.3	**preservationLevel**	9	O	R	y	y		TRUE	9	**Preservation level**	1.3	O	NR	•	T		O	?	TRUE	FALSE		TRUE	FALSE	FALSE	
1.3.1	preservationLevelValue	9.01	M	NR	y	y		TRUE	9.01	preservationLevelValue	1.3.1	O	NR	O	Y		O	?	FALSE	TRUE		TRUE	FALSE	FALSE	y
1.3.2	preservationLevelRole	9.02	O	NR	y	y		TRUE	9.02	preservationLevelRole	1.3.2	O	NR	O	Y		O	?	TRUE	TRUE		TRUE	FALSE	FALSE	y
1.3.3	preservationLevelRationale	9.03	O	R	y	y		TRUE	9.03	preservationLevelRationale	1.3.3	O	NR	O	Y		O	?	TRUE	FALSE		TRUE	FALSE	FALSE	y
1.3.4	preservationLevelDateAssigned	9.04	O	NR	y	y		TRUE	9.04	preservationLevelDateAssigned	1.3.4	O	NR	O	Y		O	?	TRUE	TRUE		TRUE	FALSE	FALSE	y
1.4	**significantProperties**	10	O	R	y	y	y	TRUE	10	**significant properties**	1.4	O	R	T	T	T	T	?	TRUE	TRUE		TRUE	TRUE	TRUE	
1.4.1	significantPropertiesType	10.01	O	NR	y	y	y	TRUE	10.01	significantPropertiesType	1.4.1	O	R	Y	Y	Y	Y	?	TRUE	FALSE		TRUE	TRUE	TRUE	y
1.4.2	significantPropertiesValue	10.02	O	NR	y	y	y	TRUE	10.02	significantPropertiesValue	1.4.2	O	R	Y	Y	Y	Y	?	TRUE	FALSE		TRUE	TRUE	TRUE	y
1.4.3	significantPropertiesExtension	10.03	O	R	y	y	y	TRUE	10.03	significantPropertiesExtension	1.4.3	O	R	Y	Y	Y	Y	?	TRUE	TRUE		TRUE	TRUE	TRUE	y
1.5	**objectCharacteristics**		M	R	y	y		TRUE																	
1.5.1	comparisonLevel	3.04	M	NR		y	y	TRUE	3.04	comparisonLevel	1.5.1	O	NR	O	O	Y	Y	?	FALSE	TRUE		TRUE	TRUE	TRUE	y
1.5.2	fixity	11	O	R		y	y	TRUE	11	**File fixity**	1.5.2	M	R	•	•	T	?	?	FALSE	TRUE		TRUE	TRUE	FALSE	
1.5.2.1	messageDigestAlgorithm	11.02	M	NR		y	y	TRUE	11.02	fixityType	1.5.2.1	M	R	O	O	Y	?	?	TRUE	FALSE		TRUE	TRUE	FALSE	y
1.5.2.2	messageDigest	11.03	M	NR		y	y	TRUE	11.03	fixityValue	1.5.2.2	M	R	O	O	Y	?	?	TRUE	FALSE		TRUE	TRUE	FALSE	y
1.5.2.3	messageDigestOriginator	11.01	O	NR		y	y	TRUE	11.01	agent	1.5.2.3	M	R	O	O	Y	?	?	FALSE	FALSE		TRUE	TRUE	FALSE	y
1.5.3	size	3.12	O	NR		y	y	TRUE	3.12	fileSizeBytes	1.5.3	O	NR	O	O	Y	Y	?	TRUE	TRUE		TRUE	TRUE	TRUE	y
1.5.4	format	12	M	R		y	y	TRUE	12	**File format**	1.5.4	M	NR	O	O	Y	?	?	TRUE	FALSE		TRUE	TRUE	FALSE	
1.5.4.1	formatDesignation		O	NR		y	y	TRUE																	
1.5.4.1.1	formatName	12.05	M	NR		y	y	TRUE	12.05	formatName	1.5.4.1.1	M	NR	O	O	Y	?	?	TRUE	TRUE		TRUE	TRUE	FALSE	y
1.5.4.1.2	formatVersion	12.06	O	NR		y	y	TRUE	12.06	formatVersion	1.5.4.1.2	M	NR	O	O	Y	?	?	FALSE	TRUE		TRUE	TRUE	FALSE	y
1.5.4.2	formatRegistry		O	NR		y	y	TRUE																	
1.5.4.2.1	formatRegistryName	12.02	M	NR		y	y	TRUE	12.02	formatRegistry	1.5.4.2.1	O	NR	O	O	Y	?	?	FALSE	TRUE		TRUE	TRUE	FALSE	y
1.5.4.2.2	formatRegistryKey	12.03	M	NR		y	y	TRUE	12.03	formatRegistryId	1.5.4.2.2	O	NR	O	O	Y	?	?	FALSE	TRUE		TRUE	TRUE	FALSE	y
1.5.4.2.3	formatRegistryRole	12.04	O	NR		y	y	TRUE	12.04	formatRegistryRole	1.5.4.2.3	O	NR	O	O	Y	?	?	TRUE	TRUE		TRUE	TRUE	FALSE	y
1.5.4.3	formatNote	12.08	O	R		y	y	TRUE	12.08	formatNote	1.5.4.3	O	NR	O	O	Y	?	?	TRUE	FALSE		TRUE	TRUE	FALSE	y
1.5.5	creatingApplication	16	O	R		y	y	TRUE	16	**Creating application**	1.5.5	O	NR	•	•	T	?	?		FALSE		TRUE	TRUE	FALSE	
1.5.5.1	creatingApplicationName	16.01	O	NR		y	y	TRUE	16.01	creatingApplicationName	1.5.5.1	O	NR	O	O	Y	?	?	TRUE	TRUE		TRUE	TRUE	FALSE	y
1.5.5.2	creatingApplicationVersion	16.02	O	NR		y	y	TRUE	16.02	creatingApplicationVersion	1.5.5.2	O	NR	O	O	Y	?	?	TRUE	TRUE		TRUE	TRUE	FALSE	y
1.5.5.3	dateCreatedByApplication	16.03	O	NR		y	y	TRUE	16.03	dateCreatedByApplication	1.5.5.3	O	NR	O	O	Y	?	?	TRUE	TRUE		TRUE	TRUE	FALSE	y
1.5.5.4	creatingApplicationExtension	16.04	O	R		y	y	TRUE	16.04	creatingApplicationExtension	1.5.5.4	O	NR	O	O	Y	?	?	TRUE	FALSE		TRUE	TRUE	FALSE	y
1.5.6	inhibitors	17	O	R		y	y	TRUE	17	**inhibitors**	1.5.6	O	R	•	•	T	?	?	TRUE	TRUE		TRUE	TRUE	FALSE	
1.5.6.1	inhibitorType	17.01	M	NR		y	y	TRUE	17.01	inhibitorType	1.5.6.1	O	R	O	O	Y	?	?	FALSE	FALSE		TRUE	TRUE	FALSE	y
1.5.6.2	inhibitorTarget	17.02	O	R		y	y	TRUE	17.02	inhibitorTarget	1.5.6.2	O	R	O	O	Y	?	?	TRUE	TRUE		TRUE	TRUE	FALSE	y
1.5.6.3	inhibitorKey	17.03	O	NR		y	y	TRUE	17.03	inhibitorKey	1.5.6.3	O	R	O	O	Y	?	?	TRUE	FALSE		TRUE	TRUE	FALSE	y
1.5.7	objectCharacteristicsExtension	18.01	O	R		y	y	TRUE	18.01	objectCharacteristicsExtension	1.5.7	O	R	O	O	Y	?	?	TRUE	TRUE		TRUE	TRUE	FALSE	y
1.6	**originalName**	3.07	O	NR	y	y		TRUE	3.07	File OriginalName, REP OriginalName	1.6	O	NR	O	Y	Y	Y	?	TRUE	TRUE		TRUE	TRUE	FALSE	y,y
1.7	**storage**		O	R		y	y	TRUE																	
1.7.1	contentLocation		O	NR		y	y	TRUE																	
1.7.1.1	contentLocationType	3.05	M	NR		y	y	TRUE	3.05	fileLocationType	1.7.1.1	M	NR	O	O	Y	Y	?	TRUE	TRUE		TRUE	TRUE	TRUE	y
1.7.1.2	contentLocationValue	3.06	M	NR		y	y	TRUE	3.06	fileLocation	1.7.1.2	O	NR	O	O	Y	Y	?	FALSE	TRUE		TRUE	TRUE	TRUE	y
1.7.2	storageMedium		O	NR				FALSE		storageID	1.7.2	M	NR			Y	Y	?	FALSE	TRUE		TRUE	TRUE	TRUE	y
1.8	**environment**																								E
1.8.1	environmentCharacteristic																								E y
1.8.2	environmentPurpose																								E y
1.8.3	environmentNote																								E
1.8.4	dependency																								E
1.8.4.1	dependencyName																								E y
1.8.4.2	dependencyIdentifier																								
1.8.4.2.1	dependencyIdentifierType																								E y
1.8.4.2.2	dependencyIdentifierValue																								E y
1.8.5	software	21	O	R	y	y	y	TRUE	21	**environment software**	1.8.5	O	R	•	T	T	?		TRUE	TRUE		TRUE	TRUE	FALSE	
1.8.5.1	swName	21.01	M	NR	y	y	y	TRUE	21.01	softwareName	1.8.5.1	O	R	O	Y	Y	?	?	FALSE	FALSE		TRUE	TRUE	FALSE	y
1.8.5.2	swVersion	21.02	O	NR	y	y	y	TRUE	21.02	softwareVersion	1.8.5.2	O	R	O	Y	Y	?	?	TRUE	FALSE		TRUE	TRUE	FALSE	y
1.8.5.3	swType	21.03	M	NR	y	y	y	TRUE	21.03	softwareType	1.8.5.3	O	R	O	Y	Y	?	?	FALSE	FALSE		TRUE	TRUE	FALSE	y
1.8.5.4	swOtherInformation	21.04	O	R	y	y	y	TRUE	21.04	softwareOtherInformation	1.8.5.4	O	R	O	Y	Y	?	?	TRUE	TRUE		TRUE	TRUE	FALSE	y
1.8.5.5	swDependency	21.05	O	R	y	y	y	TRUE	21.05	softwareDependency	1.8.5.5	O	R	O	Y	Y	?	?	TRUE	TRUE		TRUE	TRUE	FALSE	y
1.8.6	hardware	27	O	R	y	y	y	TRUE	27	**environment hardware**	1.8.6	O	R	•	T	T	?	?	TRUE	TRUE		TRUE	TRUE	FALSE	
1.8.6.1	hwName	27.01	M	NR	y	y	y	TRUE	27.01	hardwareName	1.8.6.1	O	R	O	Y	Y	?	?	FALSE	FALSE		TRUE	TRUE	FALSE	y
1.8.6.2	hwType	27.02	M	NR	y	y	y	TRUE	27.02	hardwareType	1.8.6.2	O	R	O	Y	Y	?	?	FALSE	FALSE		TRUE	TRUE	FALSE	y
1.8.6.3	hwOtherInformation	27.03	O	R	y	y	y	TRUE	27.03	hardwareOtherInformation	1.8.6.3	O	R	O	Y	Y	?	?	TRUE	TRUE		TRUE	TRUE	FALSE	y
1.8.7	environmentExtension	29.01	O	R	y	y	y	TRUE	29.01	environmentExtension	1.8.7	O	R	O	Y	Y	?	?	TRUE	TRUE		TRUE	TRUE	FALSE	y
1.9	**signatureInformation**	30	O	R		y	y	TRUE	30	**signature information**	1.9	O	NR	•		•	T	?	TRUE	FALSE		TRUE	TRUE	FALSE	
1.9.1	signature		O	R	y	y	y	TRUE																	
1.9.1.1	signatureEncoding	30.01	M	NR		y	y	TRUE	30.01	signatureInformationEncoding	1.9.1.1	O	NR	O	O	Y	?	?	FALSE	TRUE		TRUE	TRUE	FALSE	y
1.9.1.2	signer	30.02	O	NR		y	y	TRUE	30.02	signer	1.9.1.2	O	NR	O	O	Y	?	?	TRUE	TRUE		TRUE	TRUE	FALSE	y

PREMIS to DNX comparison sheet | DNX Control sheet | Sheet1

METS

- Metadata Encoding and Transmission Standard
- Ex Libris has a METS profile that will be published and open
- Each Intellectual Entity is one METS
- Each representation is a file group
- Structure map is on the representation level
- Metadata stored for all levels descriptive as DMD and preservation as AMD

Rosetta's Data Model

Intellectual Entity

a coherent set of content that is reasonably described as a unit, for example, a particular book, map, photograph, or database

1

N

Representation

is the set of files, including structural metadata, needed for a complete and reasonable rendition of an Intellectual Entity

1

N

File

is a named and ordered sequence of bytes that is known by an operating system

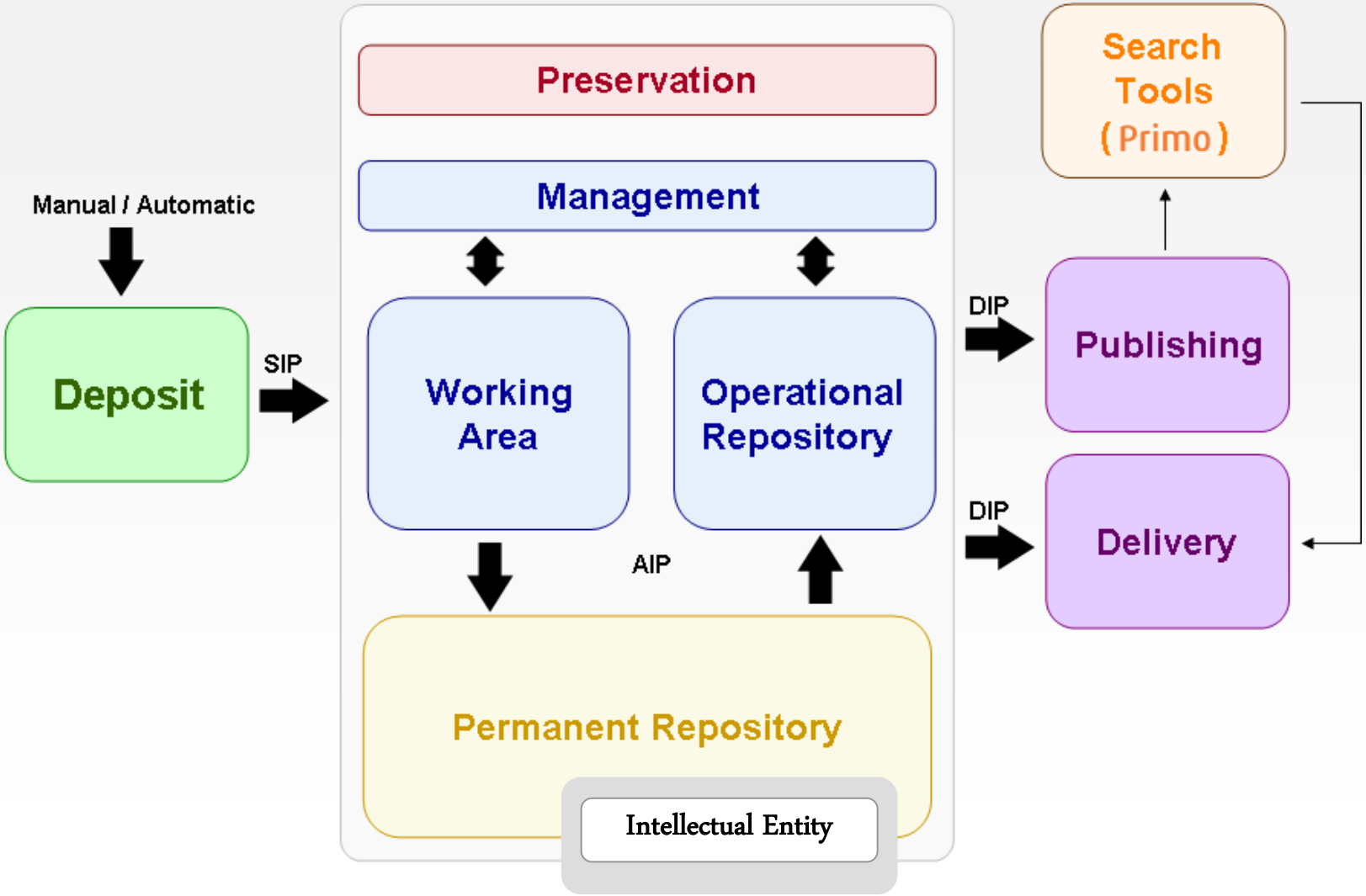
1

N

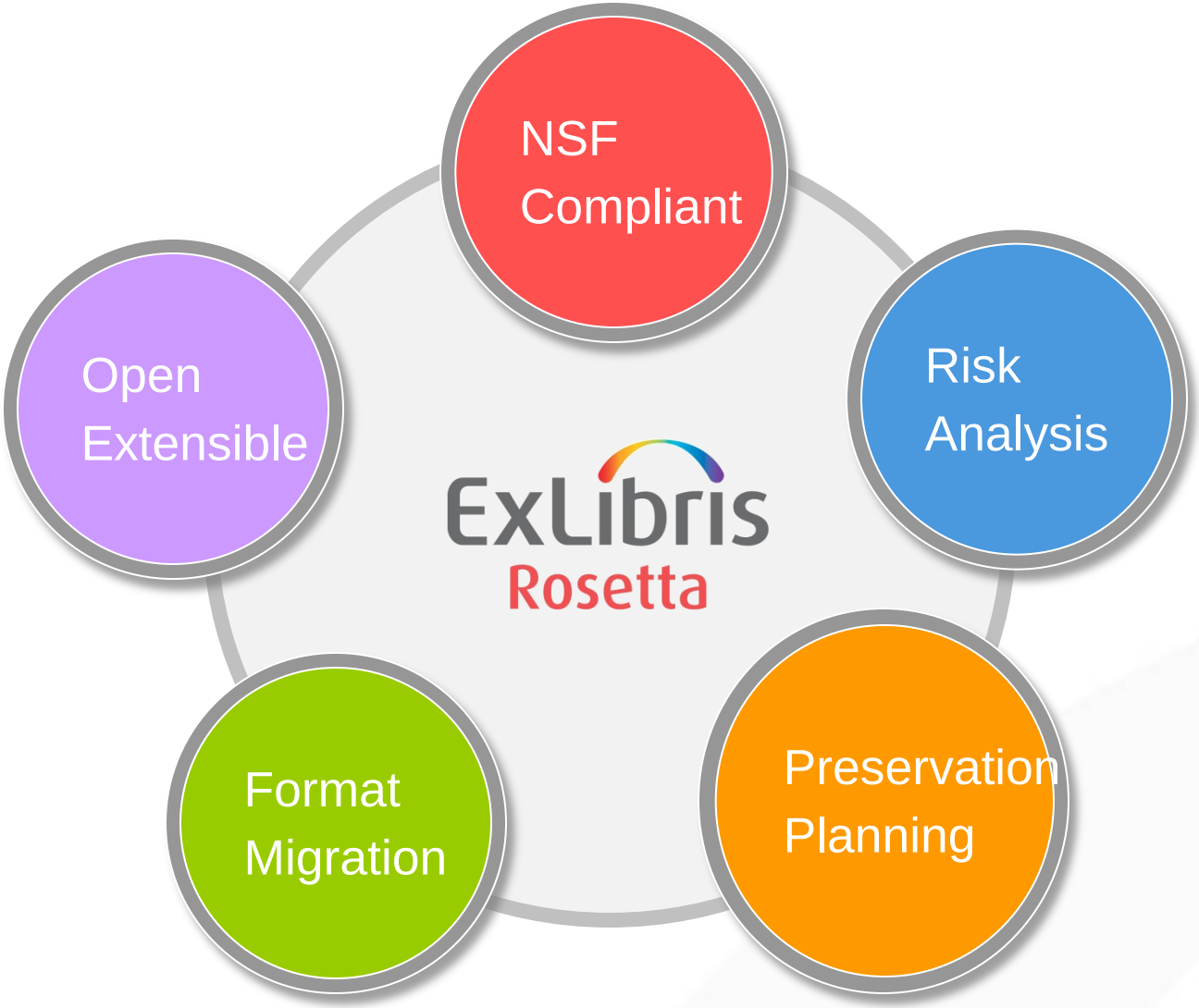
Bit-Stream

A bit-stream is data within a file that has meaningful common properties for preservation purposes.

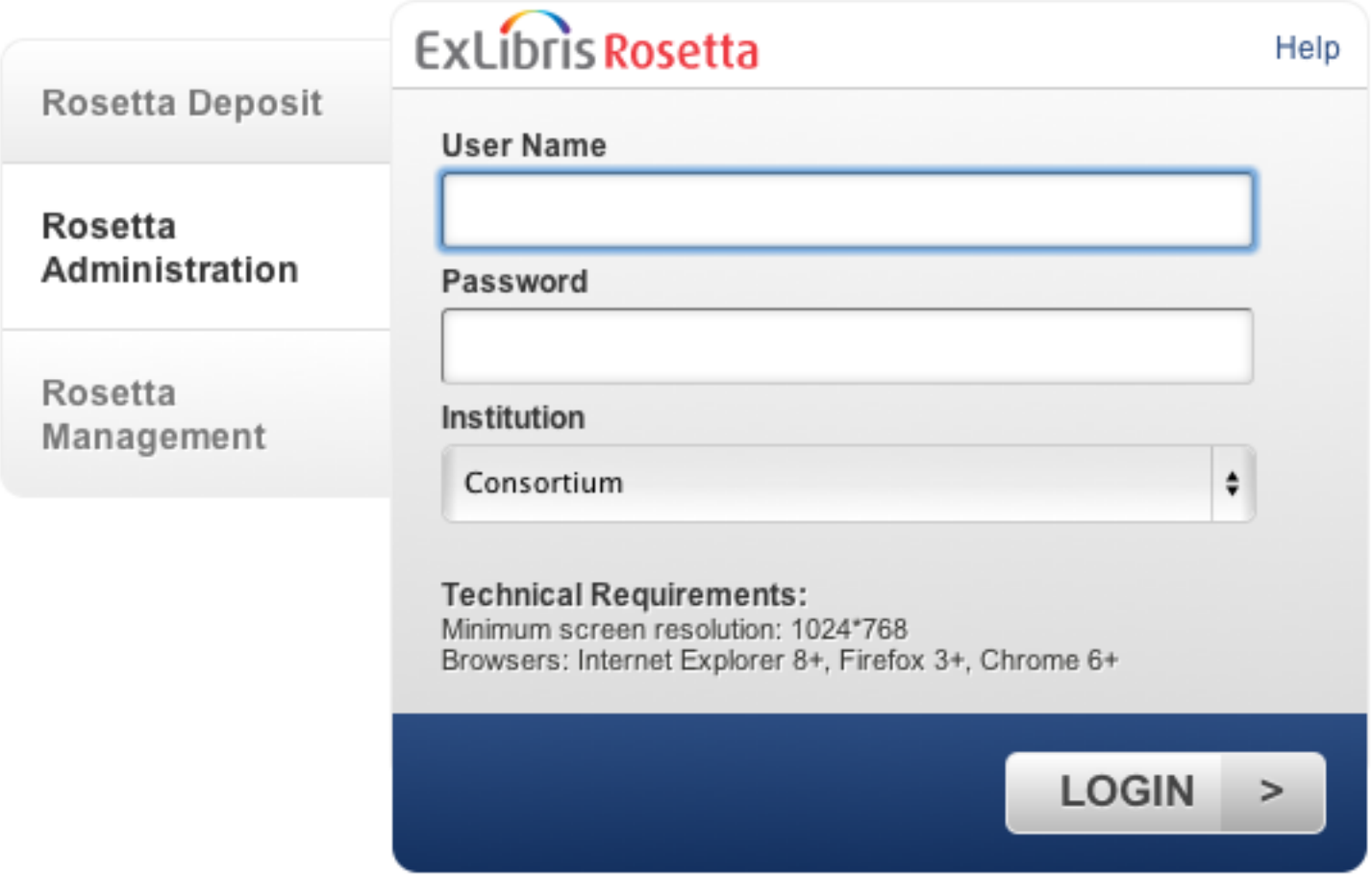
Rosetta Solutions - System



Key Characteristics



Product Demonstration



Thank You!

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