

# RODA-in

A generic tool for the mass creation of  
Submission Information Packages

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Context

Msc thesis developed in a software company and jointly supervised

Part of the work done in the context of an European Union project: FP7 CIP-ICT-PSP-2013-7, “E-Ark - European Archival Records and Knowledge Preservation”



- Provide a normalised and efficient access to the workflows for the three main activities of an archive:
  - \* Acquiring
  - \* Preserving
  - \* Re-using

How should we manage digital  
information?

Digital Repository. **information system** able to store, **preserve**, organize and disseminate digital objects.

# OAIS - Open Archival Information Systems

ISO 14721:2012

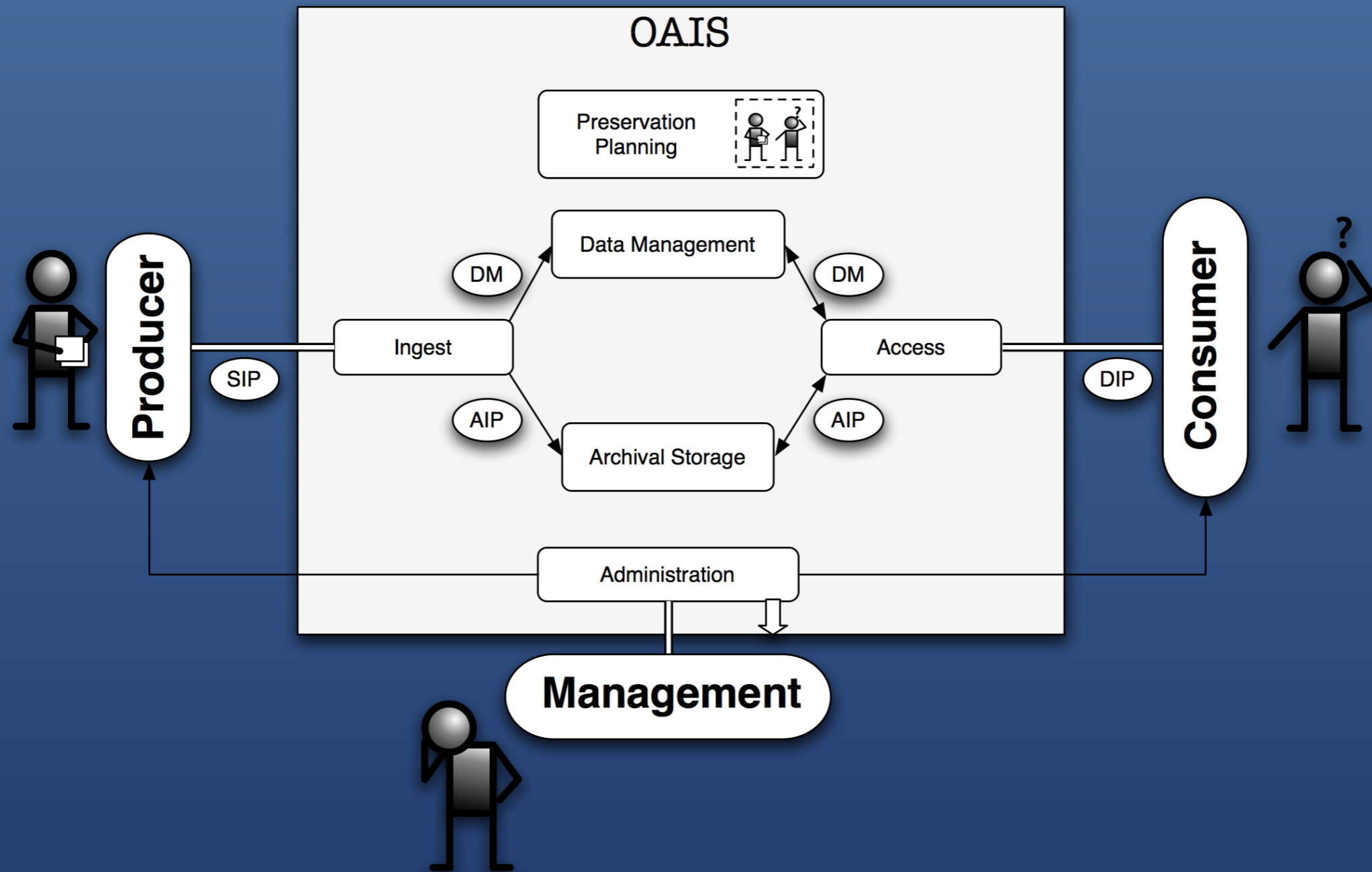
It defines the **functional components** that should be part of an archival system aimed at digital preservation

It defines internal and external **interfaces**

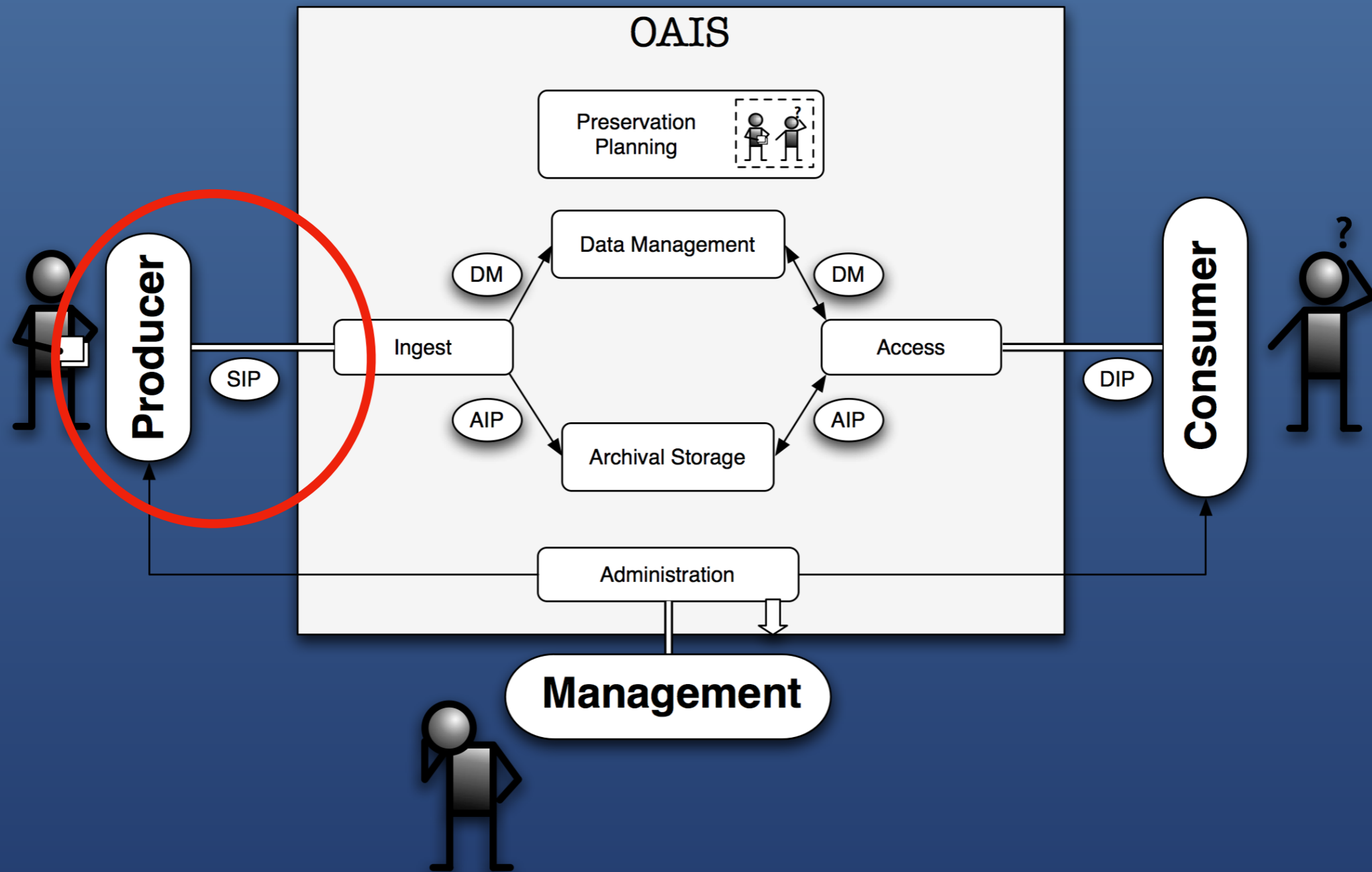
It characterizes digital objects being manipulated

It determines the **terminology** to be used in a preservation context

# OAIS compliant



# OAIS compliant





Ingest scenarios



Records on the file system



Records Management System



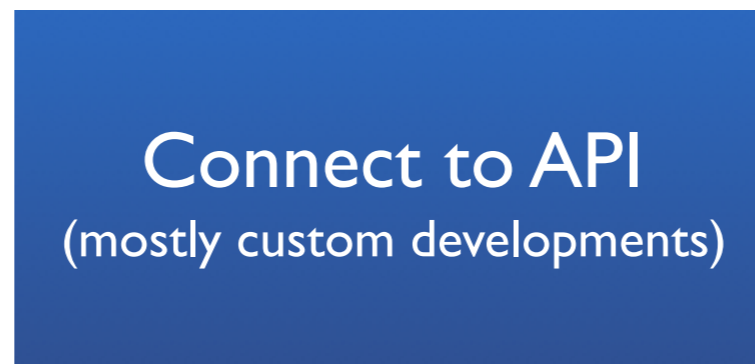
Records on a Database



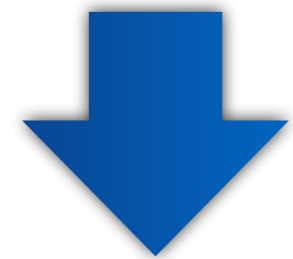
Records on the file system



Records Management System



Records on a Database



RODA  
SIP creation tool



Connect to API  
(mostly custom developments)

db  
database  
preservation toolkit



RODA

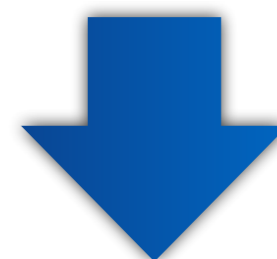
Long-term digital repository

RODA  
SIP creation tool



Connect to API  
(mostly custom developments)

db  
database  
preservation toolkit



RODA

Long-term digital repository

RODA   
SIP creation tool



RODA

Long-term digital repository

The use case scenario...

A government agency accumulated a large volume of digital files under a **shared folder**

That **folder served as the office archive** and as a backup solution

The agency needs to **send a part of that content to the archives** for long-term preservation

The archive requires the agency to submit content in a set of **well-established** Submission Information Packages



Let's see how it works...



Records on the file  
system



Records on the file system



Packaging tool





Records on the file system



Packaging tool





Records on the file system



Packaging tool



Transfer & ingest



Lets take a closer look at the tools...



RODA  
SIP creation tool



It's a **SIP creation** tool

To be used by producers to prepare data to be sent to the repository

Compatible with the **E-ARK SIP specification**

Also supports the **BagIt** format

Designed to create thousands of SIPs with **just a few clicks**

SIPs can be gigabyte-size



## Support for multiple **descriptive metadata** schemas

**Templating system** enables the user to create new metadata profiles

Templates provided for EAD 3, EAD 2002 and DC

## Multi-language

English, Portuguese, Spanish and Hungarian at the moment

## Multi-platform

Windows, Mac OS X, Linux

## **Offline** operation

No network is necessary to operate the tool. Essential for some producers

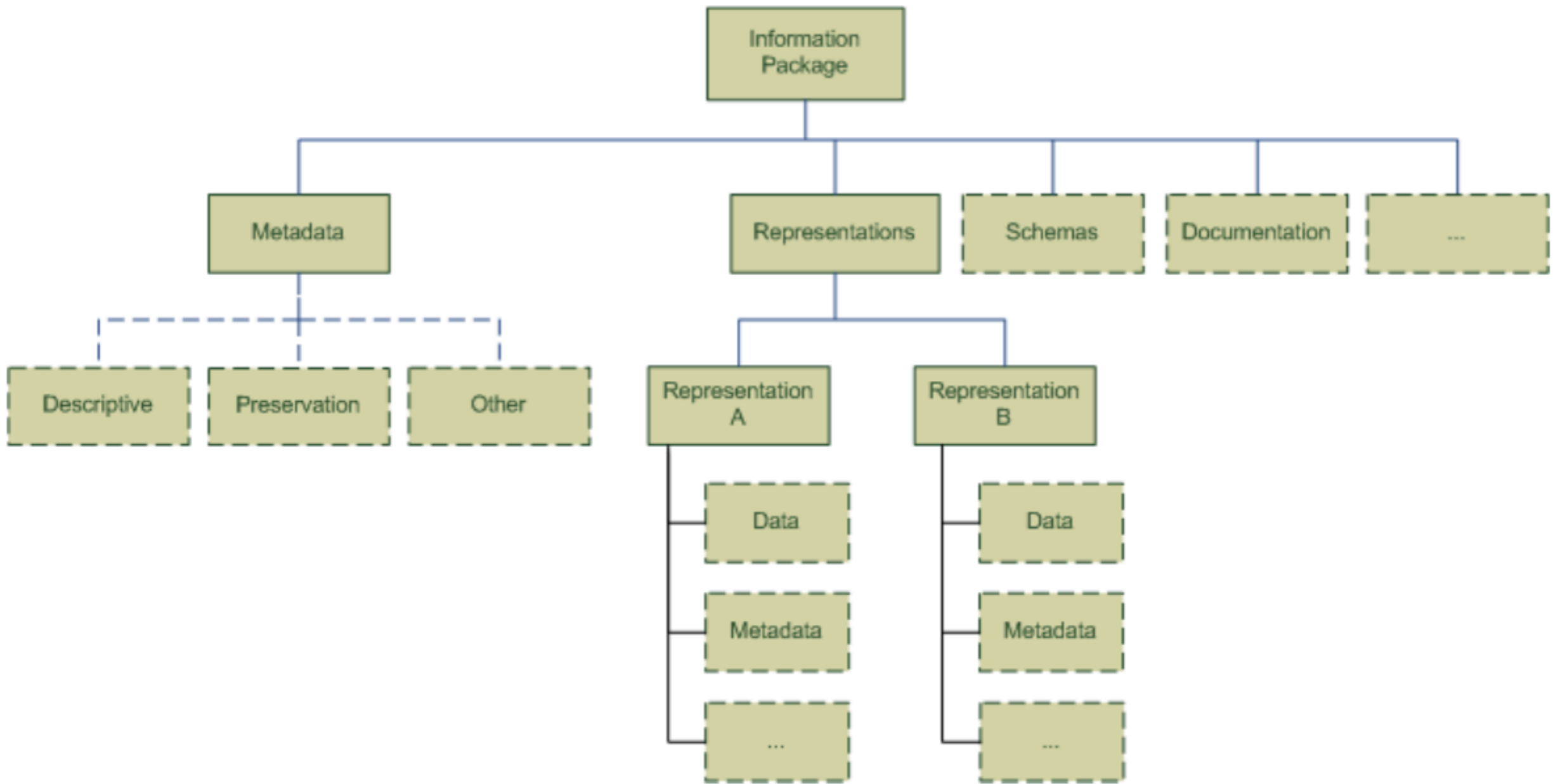
**E-ARK  
SIP**

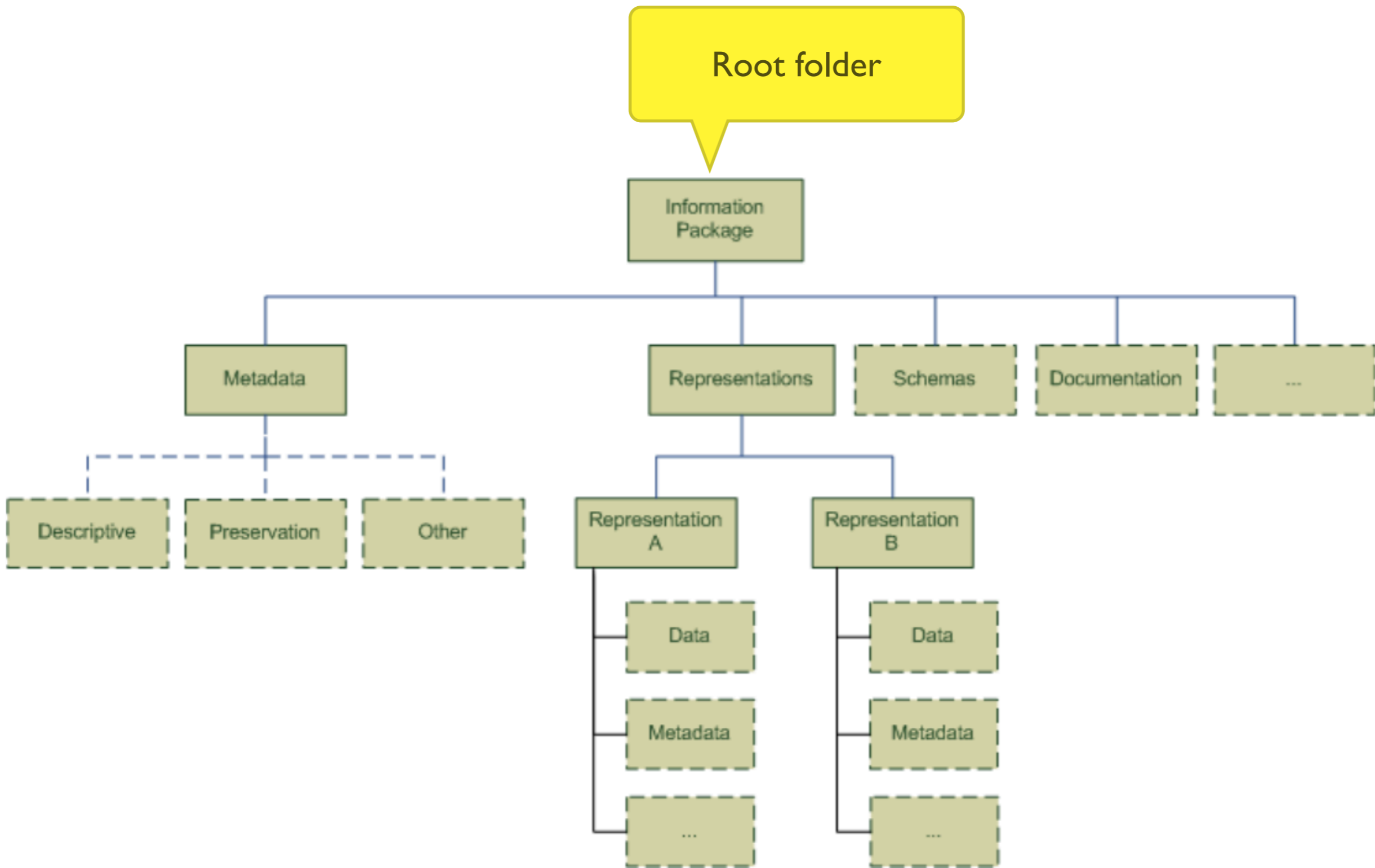
**Common  
Specification**

**E-ARK  
DIP**

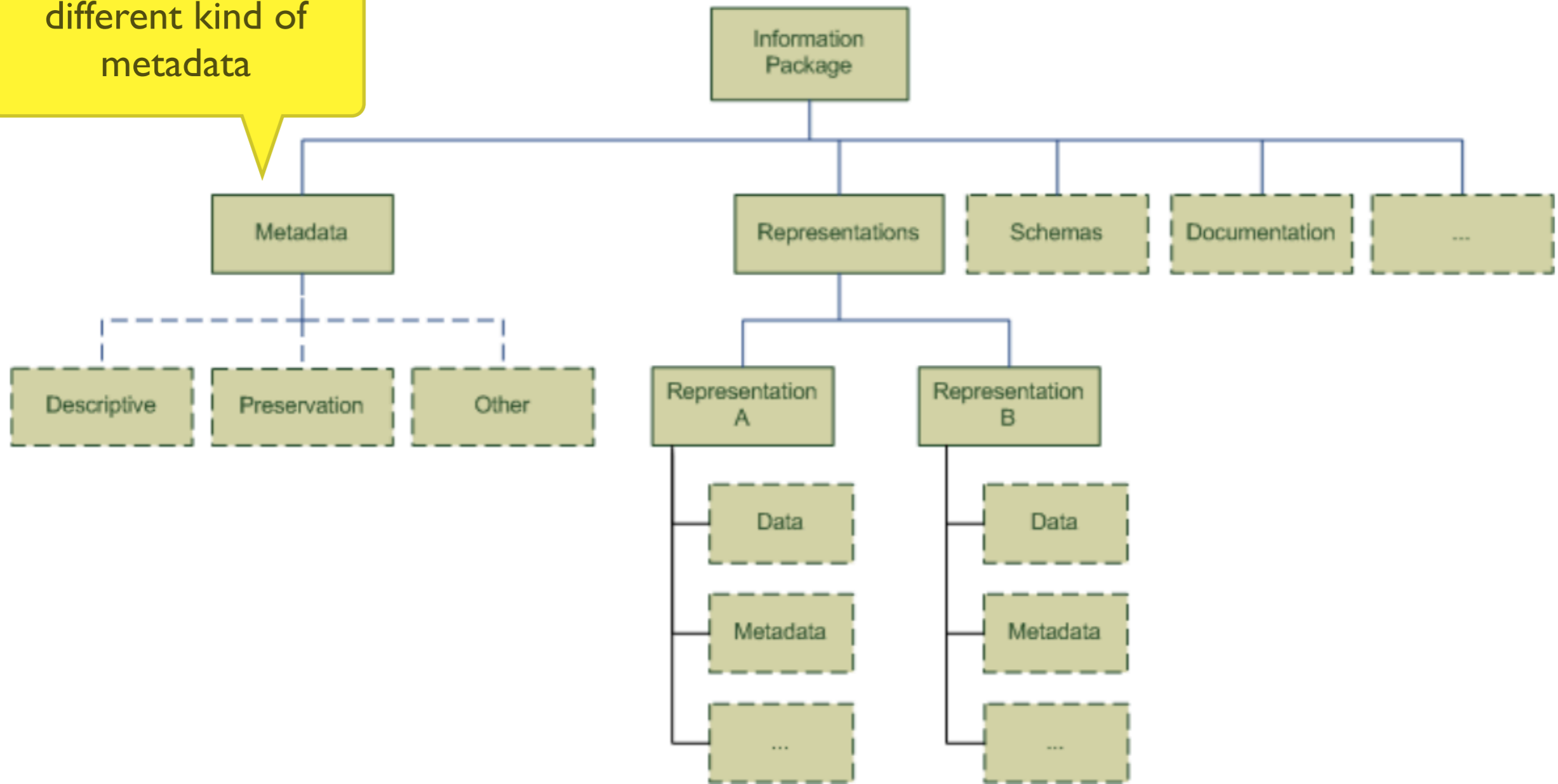
**E-ARK AIP**

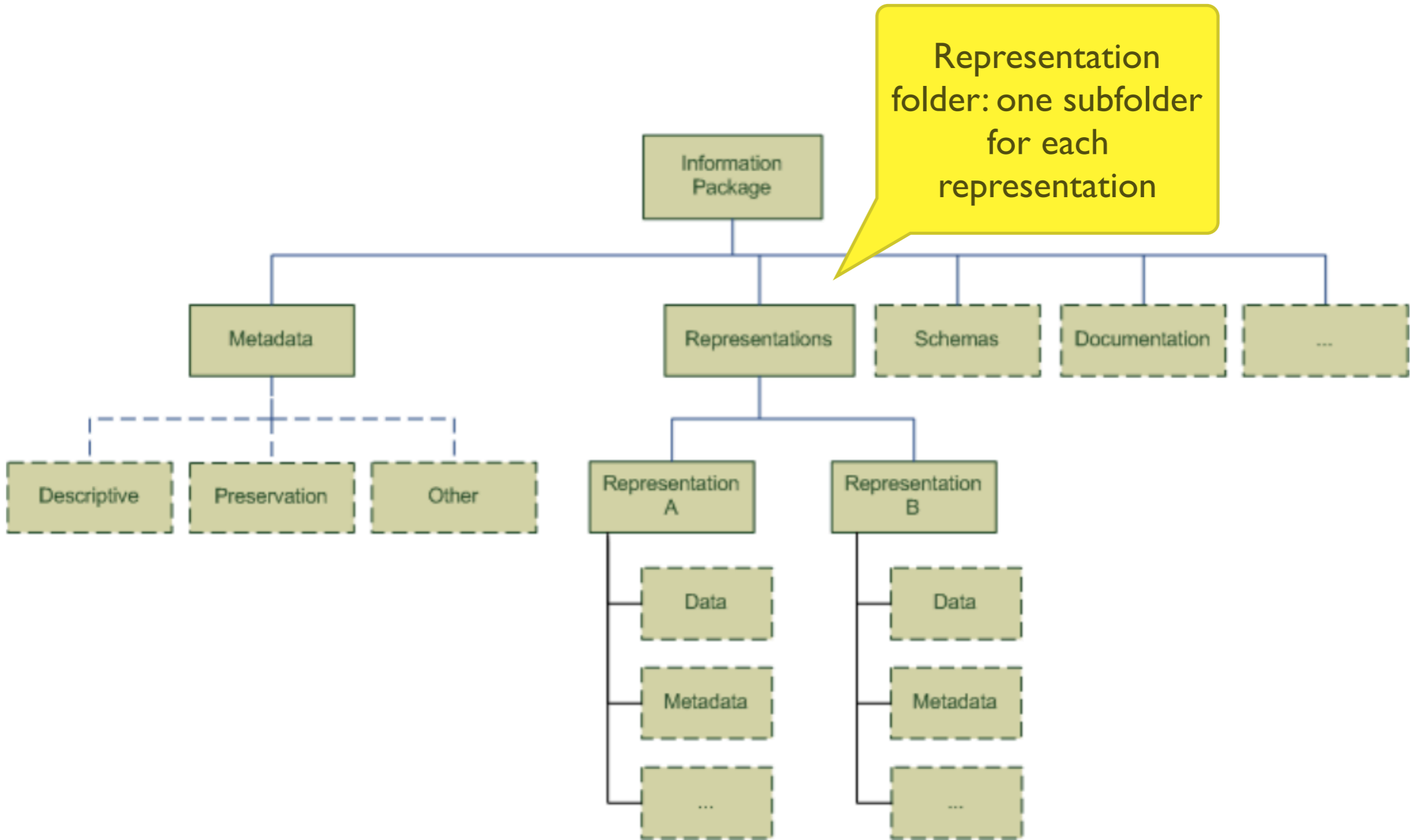


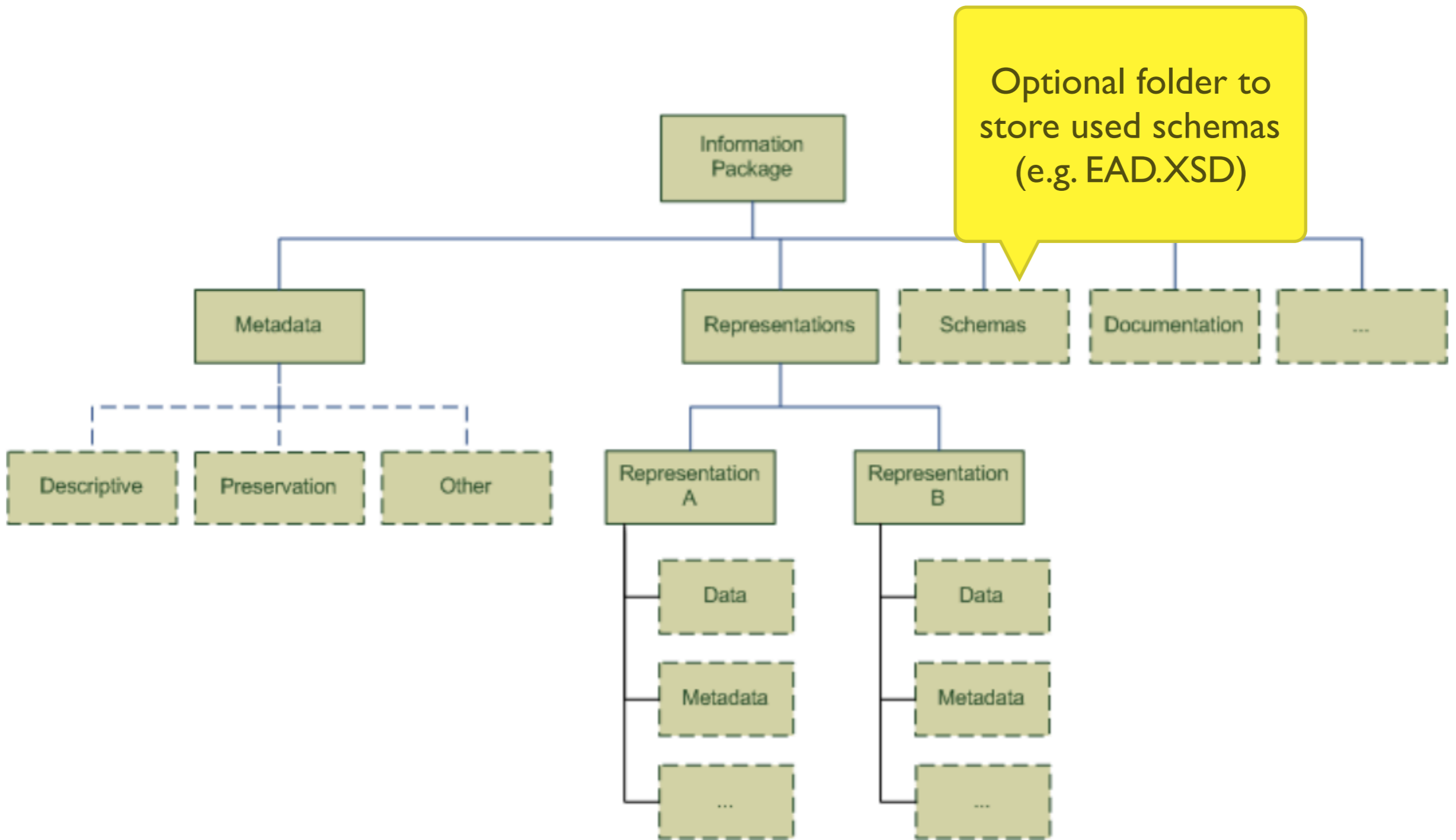


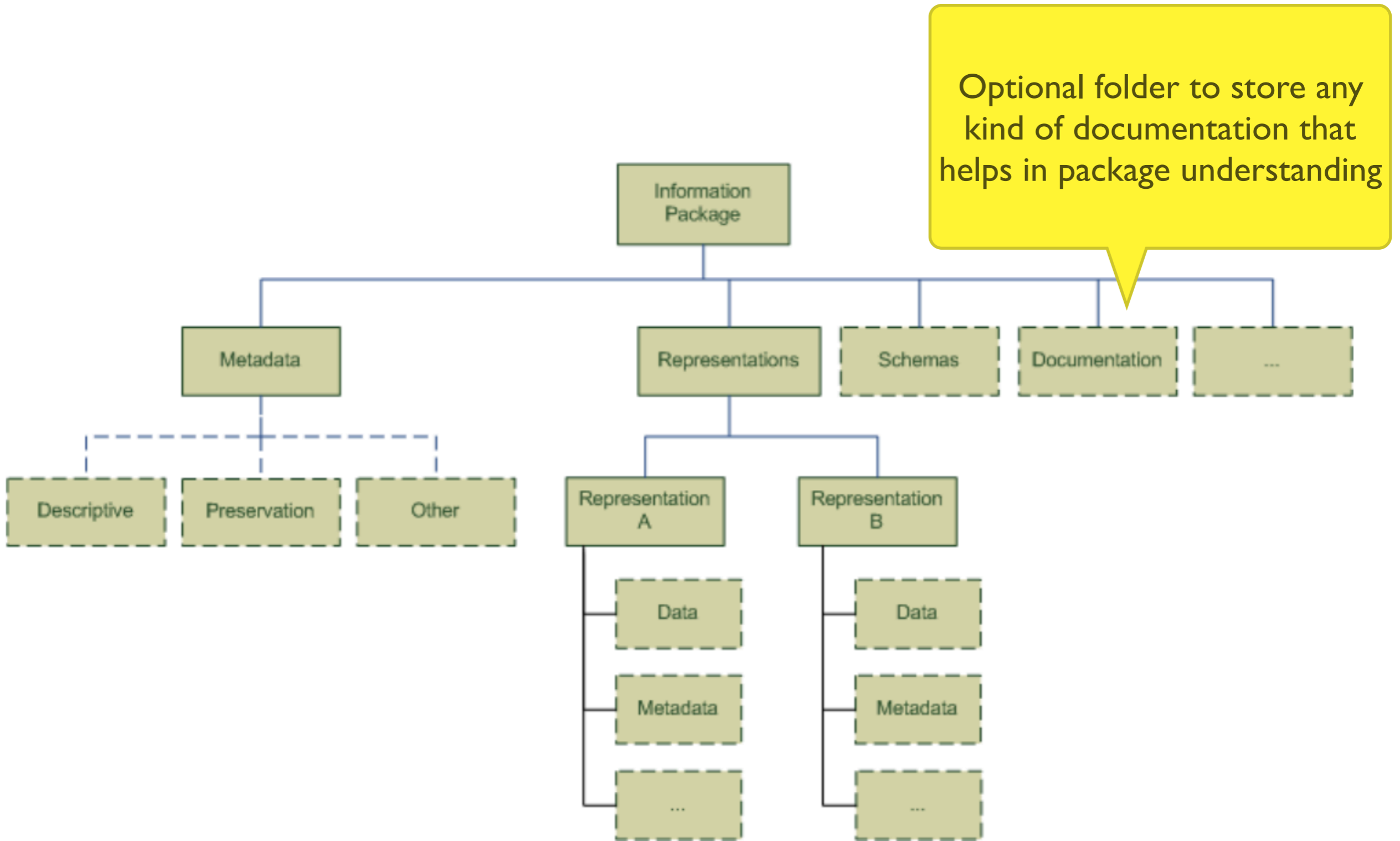


Metadata folder: each subfolder holds a different kind of metadata

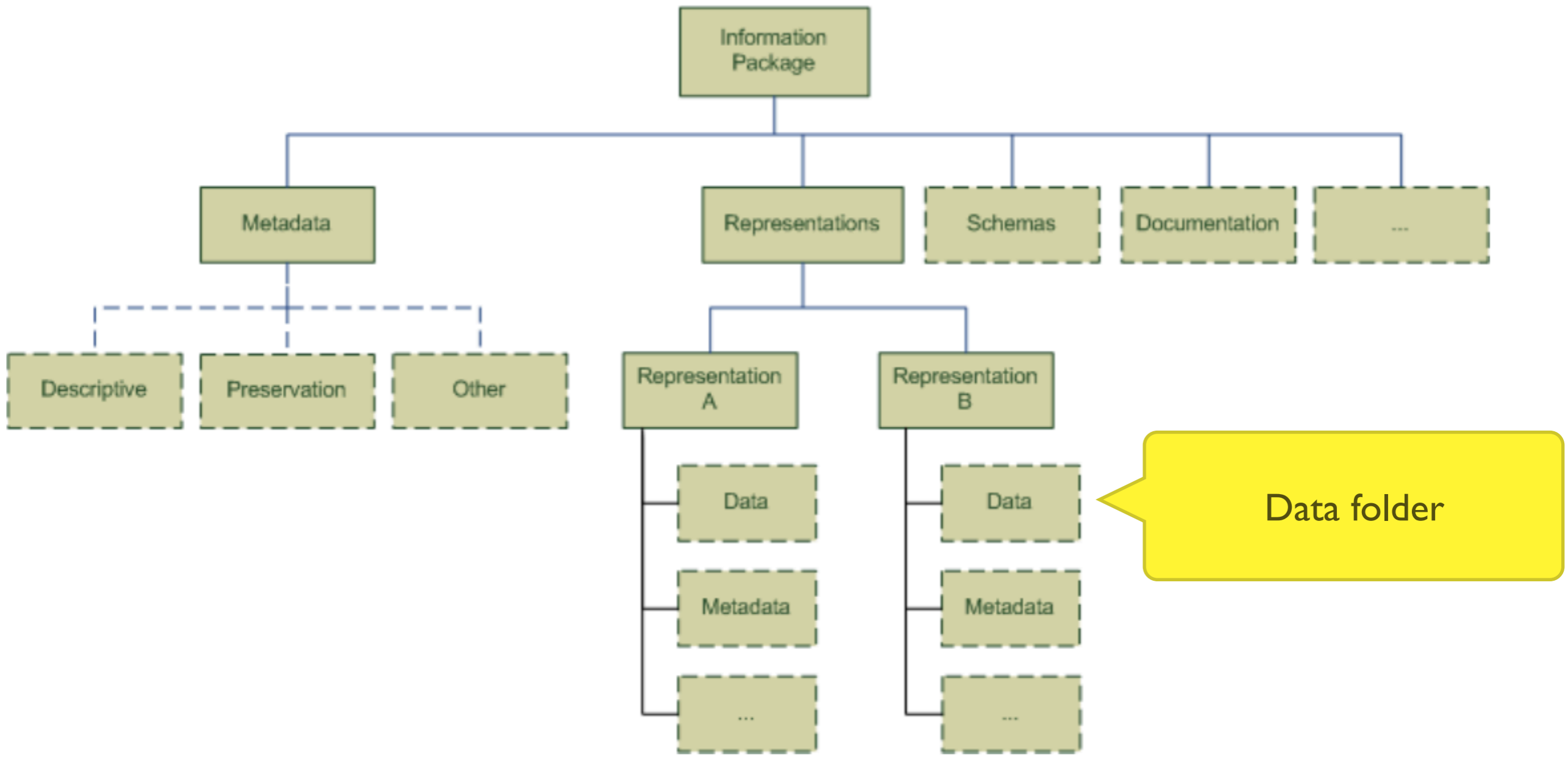


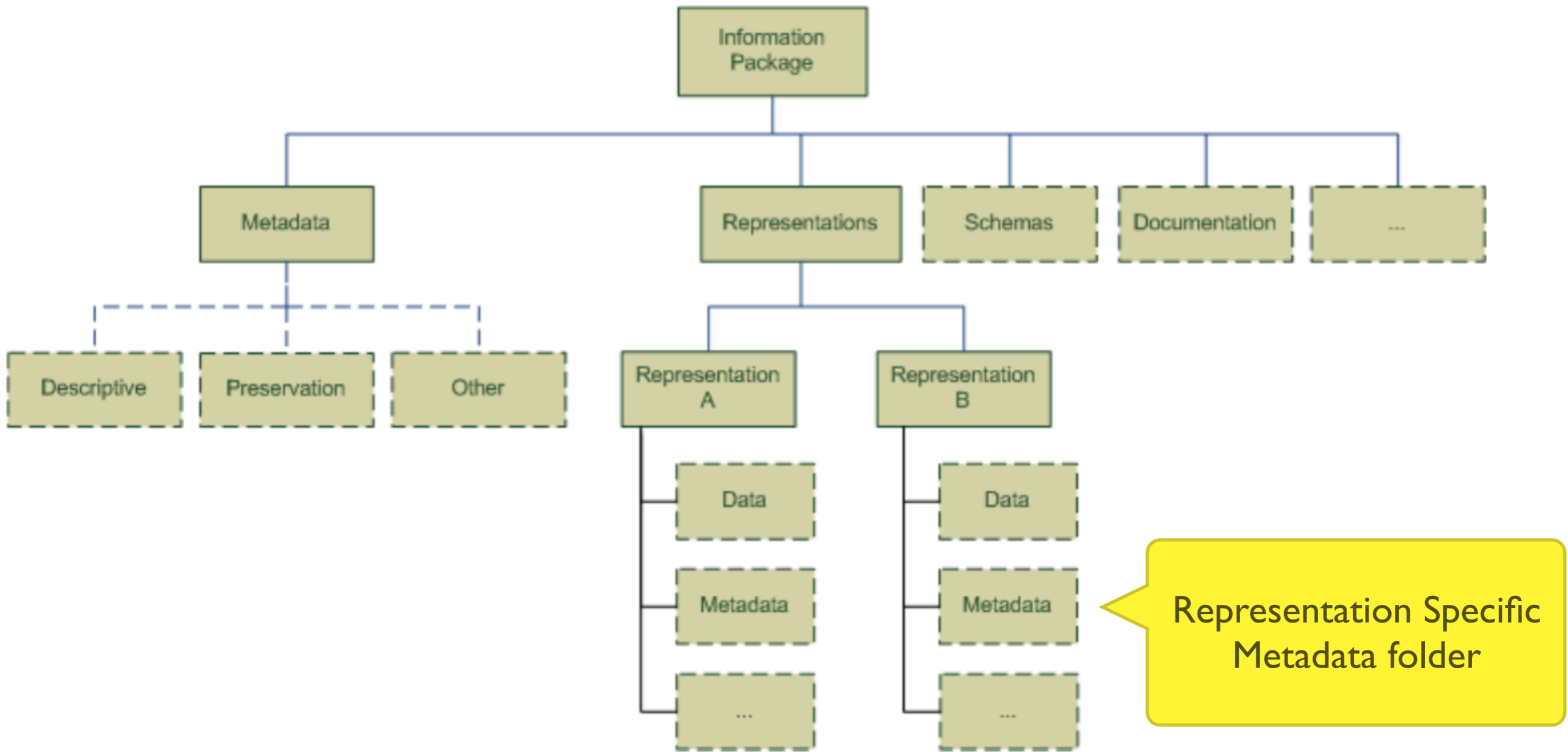












Simple IP example

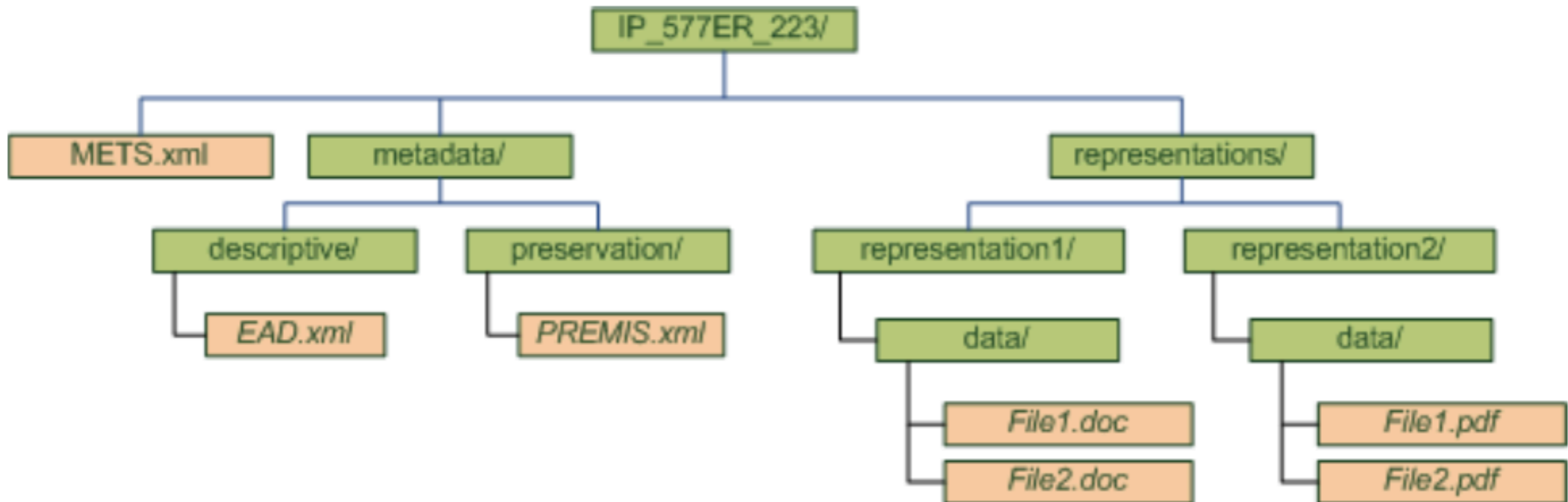


Figure 9: Example of a simple use of the Common Specification structure

# Complex IP example

IP\_577\_344E\_2/

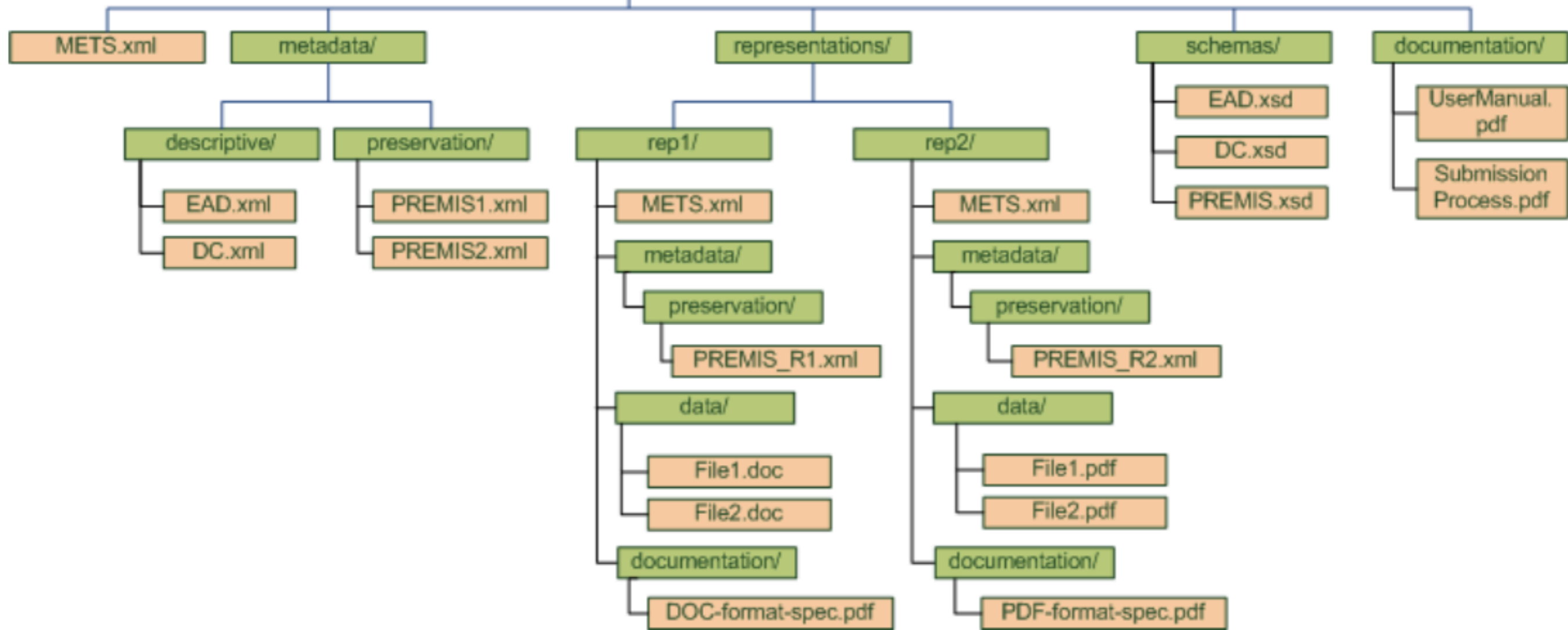


Figure 10: Example of the full use of the Common Specification structure

### SOURCE FILE EXPLORER

- ▼ 20160607 - The Hague - DLM Forum /Users/mferr
  - ▼ Presentation
    - ▶ 00-studio
      - 2016-06-09 - DLM Forum.ppt
      - 2016-06-09 - DLM Forum.pptx
      - DLM forum presentation ideas.mm
      - hotel reservation day 2.pdf
      - Reserva voo.pdf
      - TAP receipt.pdf
- ▼ 20160619 - Copenhagen - WP5 meeting /Users/n
  - ▶ Agenda
    - 20160619\_FERREIRA\_5RJA2J.pdf
    - Booking.com: Confirmation.pdf
    - eticket.pdf
    - Hotel reservation.pdf
    - LH\_WEBITR.PT.PORTAL.5yqAysi1QXDSM0oC5C
    - LH\_WEBITR.PT.PORTAL.rL22HY6GevzJbcVakPc

### CLASSIFICATION SCHEME

- DLM\_AGM\_The Hague\_Final program.docx
- DLM\_AGM\_The Hague\_Practical guide.docx
- DLM\_AGM\_The Hague\_Preliminary program.docx
- Hotel reservation day 1.pdf

### INSPECTION

DLM\_AGM\_The Hague\_Preliminary program.docx

#### METADATA

Title	DLM_AGM_The Hague_Preliminary program.docx	
Creator		
Description		
Description level	item ▼	
Final date		📅
ID	6f85e576-cc7a-45e3-ac62-70b02ce96c65	
Initial date		📅

#### DATA

- ▼  rep1
  - DLM\_AGM\_The Hague\_Preliminary program.docx

Ignore

Associate

Add

Remove

Export

Add representation

Remove

SOURCE FILE EXPLORER

- 20160607 - The Hague - DLM Forum /Users/mferr...
- Presentation
  - 00-studio
    - 2016-06-09 - DLM Forum
    - 2016-06-09 - DLM Forum
    - DLM forum presentatio
    - hotel reservation day 2.pdf
    - Reserva voo.pdf
    - TAP receipt.pdf
- 20160619 - Copenhagen - WF
  - Agenda
    - 20160619\_FERREIRA\_5RJ
    - Booking.com: Confirmation
    - eticket.pdf
    - Hotel reservation.pdf
    - LH\_WEBITR.PT.PORTAL.5y
    - LH\_WEBITR.PT.PORTAL.rL

CLASSIFICATION SCHEME

- DLM\_AGM\_The Hague\_Final program.docx
- DLM\_AGM\_The Hague\_Practical guide.docx

INSPECTION

DLM\_AGM\_The Hague\_Preliminary program.docx

METADATA

</> ✓ +

CREATE ASSOCIATION TO "Root"

CHOOSE THE METADATA METHOD



Create new metadata from a template

Use this option to create metadata from a predefined model. The associated metadata for each SIP will be the same. After the SIP creation, the user should edit the metadata according to the data associated to each packet.

EAD (2002)



Load from a single file

Use this option to add to each SIP one metadata file of your choice. The selected file will be added to each of the created SIPs.

Choose File...

Type: EAD



Load from each directory

Use this option to include in the SIP a metadata file located in the root of the directory used to create the packet. The metadata file must have a defined pattern (e.g. metadata.\*).

Pattern metadata.xml

Type: EAD



Load from one directory

Use this option to select one directory where all the metadata files to include in the SIPs can be found. The association between metadata files and SIPs is done through the file name (ignoring the extension). In the cases where no association can be made, the SIP will not contain metadata.

Choose Directory...

Type: EAD

Cancel ✕

< Back

Confirm >

Ignore

Associate

Add

Remove

Export

Add representation

Remove

### SOURCE FILE EXPLORER

- 20160607 - The Hague - DLM Forum /Users/mferr...
- Presentation
    - 00-studio
      - 2016-06-09 - DLM Forum
      - 2016-06-09 - DLM Forum
      - DLM forum presentation
      - hotel reservation day 2.pdf
      - Reserva voo.pdf
      - TAP receipt.pdf
- 20160619 - Copenhagen - WF
  - Agenda
    - 20160619\_FERREIRA\_SRJA
    - Booking.com: Confirmation
    - eticket.pdf
    - Hotel reservation.pdf
    - LH\_WEBITR.PT.PORTAL.5y
    - LH\_WEBITR.PT.PORTAL.rL

### CLASSIFICATION SCHEME

- DLM\_AGM\_The Hague\_Final program.docx
- DLM\_AGM\_The Hague\_Practical guide.docx

### INSPECTION


DLM\_AGM\_The Hague\_Preliminary program.docx


### METADATA


</> ✓ +


## CREATE ASSOCIATION TO "Root"

### CHOOSE THE ASSOCIATION METHOD

- 

**One description item for each selected files or folders**  
Use this option to create a SIP for each of the selected files or folders. If you selected five files and/or folders, the association will create five SIPs, i.e. five descriptive items. Each one of these items can correspond to a distinct description level.
- 

**One description item with all selected files and/or folders**  
Use this option to create one and only one SIP containing all selected files and folders. If you selected five folders and/or files the association will result in one SIP corresponding to one item with a set description level.
- 

**One description item for each file under the selected folder(s)**  
Use this option to create one SIP for each file under the selected folder(s). This operation will create a set of SIPs equal to the number of files under the selected folder(s).
- 

**One classification scheme from folder structure**  
This option creates description objects in addition to submission packages. It should be used when the folder structure is well organized and resembles the desired output plan. If a folder only has sub-folders, it creates a Series. When a folder's children are just files, the whole folder will be used to create one submission package. In a situation where a folder has a mixed content, files and sub-folders, each file will be a submission package and each sub-folder will be a Series.

Cancel ✕ Continue >

Ignore

Associate

Add

Remove

Export

Add representation

Remove

Where can I find it?





# RODA


## SIP creation tool



Tool to create Submission Information Packages (SIP)

 [Download for Windows](#)

 [Download for Mac](#)

 [Download for Linux](#)

## RODA-In

RODA-in is a tool specially designed for producers and archivists to create Submission Information Packages (SIP) ready to be submitted to an Open Archival Information System (OAIS). The tool creates SIPs from files and folders available on the local file system.

In version 2 we revolutionized the way SIPs are created to satisfy the need for mass processing of data. In this version you can create thousands of valid SIPs with just a few clicks, complete with data and metadata.

# RODA

SIP creation tool



Tool to create Submission Information Packages (SIP)

[rodain.roda-community.org](http://rodain.roda-community.org)

## RODA-In

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E-Ark SIP moving towards standardisation

RODA-in: in use at Hungarian National Arch and DGLAB

RODA: in use at European Publications Office, DGLAB,  
and soon in other large institutions

[www.dashboard.eu](http://www.dashboard.eu)

## Advisory board

- Karin Bredenberg (National Archives of Sweden, chair)
- Janet Delve (University of Brighton, deputy chair)
- David Anderson (DLM Forum/University of Brighton)
- Kuldar Aas (National Archives of Estonia)
- Miguel Ferreira (KEEP SOLUTINS)
- Anders Bo Nielsen (National Archives of Denmark)
- Krystyna Ohnesorge (Swiss Federal Archives)
- Susana Rodriguez (World Meteorological Organization)
- Gregor Završnik (National Archives of Slovenia)

[www.dashboard.eu](http://www.dashboard.eu)

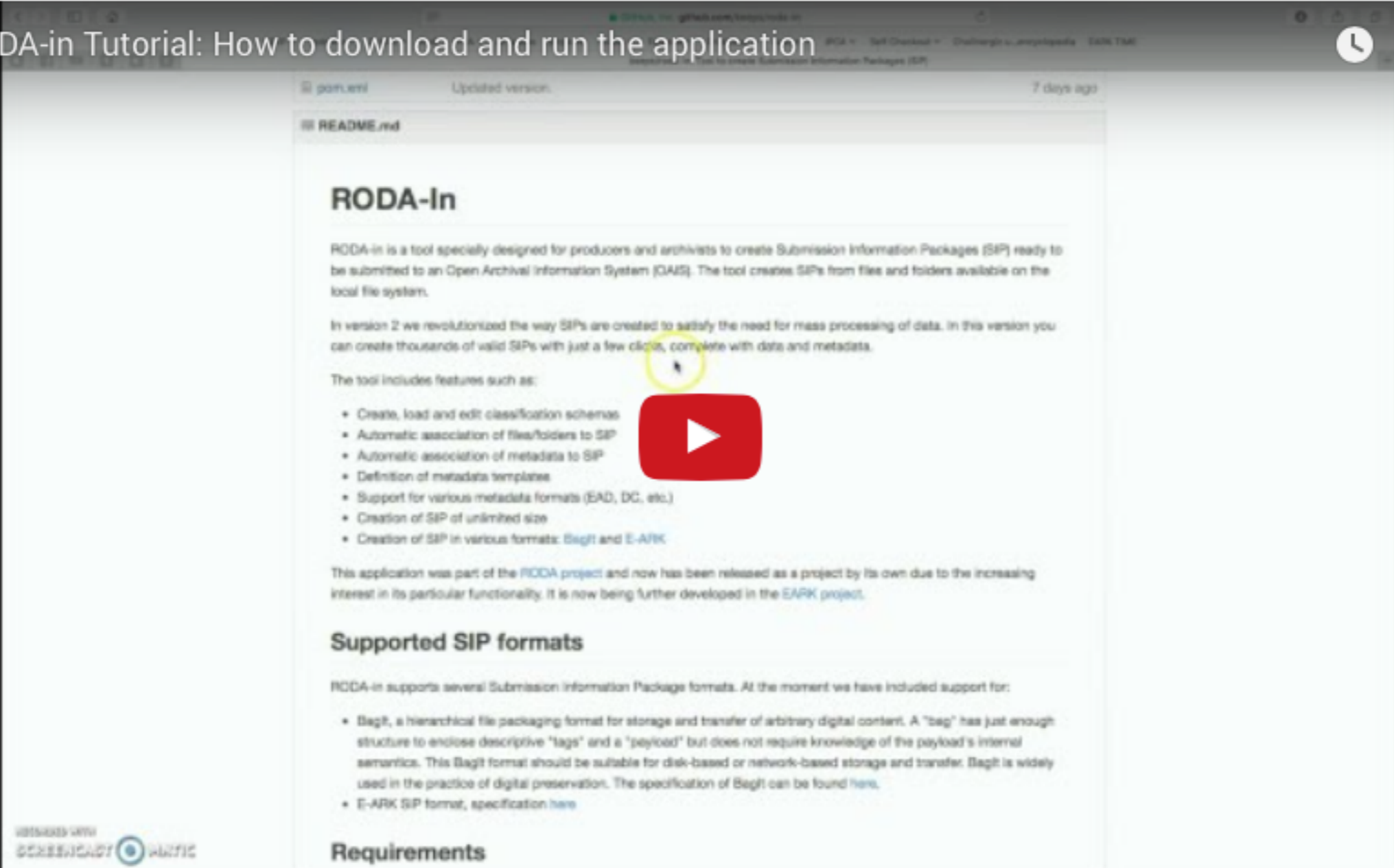
What about documentation?

# Tutorials

In this section you may find a few video tutorials on how to use the RODA-in tool to create Submission Information Packages (SIP).

## How to download and run the application

RODA-in Tutorial: How to download and run the application



The screenshot shows a GitHub repository page for 'RODA-In'. The main content is the README file, which describes the tool's purpose and features. A red YouTube video player is overlaid on the text, with a yellow circle highlighting a mouse cursor over the play button. The README text includes:

### RODA-In

RODA-in is a tool specially designed for producers and archivists to create Submission Information Packages (SIP) ready to be submitted to an Open Archival Information System (OAIS). The tool creates SIPs from files and folders available on the local file system.

In version 2 we revolutionized the way SIPs are created to satisfy the need for mass processing of data. In this version you can create thousands of valid SIPs with just a few clicks, complete with data and metadata.

The tool includes features such as:

- Create, load and edit classification schemas
- Automatic association of files/folders to SIP
- Automatic association of metadata to SIP
- Definition of metadata templates
- Support for various metadata formats (EAD, DC, etc.)
- Creation of SIP of unlimited size
- Creation of SIP in various formats: BagIt and E-ARK

This application was part of the [RODA project](#) and now has been released as a project by its own due to the increasing interest in its particular functionality. It is now being further developed in the [EARK project](#).

### Supported SIP formats

RODA-in supports several Submission Information Package formats. At the moment we have included support for:

- BagIt, a hierarchical file packaging format for storage and transfer of arbitrary digital content. A "bag" has just enough structure to enclose descriptive "tags" and a "payload" but does not require knowledge of the payload's internal semantics. This BagIt format should be suitable for disk-based or network-based storage and transfer. BagIt is widely used in the practice of digital preservation. The specification of BagIt can be found [here](#).
- E-ARK SIP format, [specification here](#)

### Requirements

SCREENCAST WITH OBSERVATORY

## How to create SIPs from local files and folders

## CLASSIFICATION SCHEME

## HELP

## Menu

[Associate](#)  
[Association method](#)  
[Classification scheme](#)  
[Creating SIPs: first step](#)  
[Creating SIPs: second step](#)  
[Export](#)  
[FileExplorer](#)  
[Inspection panel](#)  
[Inspection: Associations](#)  
[Inspection: Data / Documentation](#)  
[Inspection: Metadata](#)  
[Metadata method](#)  
[Templating system](#)

## FileExplorer

An item can be in one of three states: normal, ignored or mapped. **Normal** is the default state of the items and the only state from which SIPs can be created.

Items in the **ignored** state will not be used to create packages. They can be ignored based on rules defined in the configuration of the application, or manually using the "Ignore" button. These items are hidden by default, but can be made visible by turning on a menu option.

**Mapped** items are the ones that have already been added to an SIP. The goal is to implement a "map and forget" strategy in which users drag n' drop items from their file system to create SIPs after which they disappear from the user interface. This enables users to fully focus on the remaining items and thus be more productive in their SIP creation project.

Close

1. Choose the folder  
that contain your

Choose folder

Add

Remove

Export





RODA

Long-term digital repository



## Open source

Vendor freedom, no licensing costs



## Turn-key solution

Ready to be used by archivists, producers and consumers



## Preservation and authenticity

Preservation metadata

Preservation actions

Risk management

## User-friendly design

The system was developed having end-users in mind

## Blazing fast search

Supported by horizontally scalable search technologies

## Custom descriptive metadata

Supports any XML based metadata schema

## Multiple SIP formats

BagIt, E-ARK, EUPO SIP

## Customisable ingest workflows

Ingest tasks can be turned on/off and parameters can be set right at the UI

# Welcome to RODA!

## An open-source digital repository designed for preservation

RODA is a complete digital repository solution that delivers functionality for all the main functional units of the OAIS reference model. RODA is capable of ingesting, managing and providing access to the various types of digital content produced by large corporations or public bodies. RODA is based on open-source technologies and is supported by existing standards such as the Open Archival Information System (OAIS), Metadata Encoding and Transmission Standard (METS), Encoded Archival Description (EAD), Dublin Core (DC) and PREMIS (Preservation Metadata).



### Conforms to open standards

RODA follows open standards using EAD for description metadata, PREMIS for preservation metadata, METS for structural metadata, and several standards for technical metadata (e.g. NISO Z39.87 for digital still images).



### Vendor independent

RODA is 100% built on top of open-source technologies. The entire infrastructure required to support RODA is vendor independent. This means that you may use the hardware and Linux distributions that best fit your institutional needs.



### Scalable

The service-oriented nature of RODA's architecture allows the system to be highly scalable, enabling the distribution of the processing load between several servers. Furthermore, the use of advanced indexing components enable RODA's discovery services to be spread through various servers on a cluster for even greater performance.



### Embedded preservation actions

Preservation actions and management within RODA is handled by a job execution module. The job execution module allows the repository manager to run preservation tasks over a given set of data. Preservation actions include format conversions, checksum verifications, reporting (e.g. to automatically send SIP acceptance/rejection emails), virus checks, etc.



### Authenticity

RODA uses preservation metadata (PREMIS) to create a trust chain between all format migrations and content verifications. The preservation metadata, together with the establishment of trust of its surrounding environment (ISO 16363) ensures reliability of the service and authenticity of the enclosed digital records.



### Support for multiple formats

RODA is capable of ingesting all sorts of content types. Migration action components support migrating text documents, raster images, relational databases, video, and audio into normalized formats for long-term preservation. A plug-in mechanism enables RODA to easily support additional format migrations.



### Copes with the rapid changing nature of technology

The plug-in and job execution module allows an easy way to add more functionality to the system (e.g. new preservation actions, alerts, tools, etc.). Also, the service oriented architecture of



### Advanced access control

Users must be authenticated before accessing the repository. All user actions are logged for future accountability. Permissions are granular and can be defined at repository level, all the way down to individual data objects.

# Ingest process

The Ingest process contains services and functions to accept Submission Information Packages (SIP) from Producers, prepare Archival Information Packages (AIP) for storage, and ensure that Archival Information Packages and their supporting Descriptive Information become established within the repository. This page lists all the ingest jobs that are currently being executed, and all the jobs that have been run in the past. On the right side panel, it is possible to filter jobs based on their state, user that initiated the job, and start date. By clicking on an item from the table, it is possible to see the progress of the job as well as additional details.

Name	Creator	▼ Start date	Duration	Status	Progress	Total	Successful	Failed	Processing	Waiting
Job 6/1/16, 10:05 AM	admin	2016-06-01 10:05:52	2s	done	100%	1	1	0	0	0
Job 6/1/16, 9:50 AM	admin	2016-06-01 09:50:41	4s	done	100%	1	1	0	0	0
Job 6/1/16, 9:48 AM	admin	2016-06-01 09:48:35	0s	done	100%	1	0	1	0	0
Job 5/19/16, 5:52 PM	admin	2016-05-19 17:52:52	2s	done	100%	1	1	0	0	0
Job 5/19/16, 5:49 PM	admin	2016-05-19 17:49:48	1s	done	100%	1	1	0	0	0
Job 5/19/16, 4:01 PM	admin	2016-05-19 16:02:04	14s	done	100%	40	40	0	0	0
Job 5/19/16, 3:45 PM	admin	2016-05-19 15:47:07	1m 28s	done	100%	100	100	0	0	0
Job 5/19/16, 2:26 PM	admin	2016-05-19 14:27:18	18s	done	100%	40	40	0	0	0
Job 5/19/16, 12:22 PM	admin	2016-05-19 12:23:13	4s	done	100%	10	10	0	0	0
Job 5/19/16, 12:19 PM	admin	2016-05-19 12:19:39	5s	done	100%	10	10	0	0	0
Job 5/19/16, 10:57 AM	admin	2016-05-19 10:57:58	6s	done	100%	10	10	0	0	0
Job 5/19/16, 10:37 AM	admin	2016-05-19 10:38:01	0s	done	100%	1	1	0	0	0
Job 5/19/16, 10:32 AM	admin	2016-05-19 10:32:20	0s	done	100%	1	1	0	0	0
Job 5/19/16, 10:29 AM	admin	2016-05-19 10:29:43	0s	done	100%	1	0	1	0	0
Job 5/19/16, 10:21 AM	admin	2016-05-19 10:22:15	1s	done	100%	1	1	0	0	0
Job 5/18/16, 2:24 PM	admin	2016-05-18 14:25:48	1h 0m 7s	done	100%	51755	28996	4	500	22255
Job 17/05/16 16:32:24	admin	2016-05-17 16:32:43	6s	done	100%	20	2	18	0	0
Job 17/05/16 16:14:03	admin	2016-05-17 16:14:21	1m 37s	done	100%	100	100	0	0	0
Job 17/05/16 16:01:28	admin	2016-05-17 16:01:46	13s	done	100%	50	10	40	0	0
Job 17/05/16 15:51:39	admin	2016-05-17 15:51:57	19s	done	100%	100	10	90	0	0

1-20 of 47 

Show More

## Status

- done (46)
- waiting to start (0)
- failed (1)
- running (0)

## Creators

- admin (47)

## Dates

From date - To date

## Actions

START NEW PROCESS 

---

### AIP Virus check

Scans Information Package(s) for malicious software using the Antivirus application ClamAV. Clam AntiVirus (ClamAV) is a free and open-source, cross-platform antivirus software toolkit able to detect many types of malicious software, including viruses. If malicious software is detected a report will be generated and a PREMIS event will record this occurrence.

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### AIP metadata validation

Checks if the descriptive and preservation metadata included in the Information Package is present, and if it is valid according to the XML Schemas installed in the repository. A validation report is generated indicating which AIPs have valid and invalid metadata.

---

### AIP fixity information computation

Computes file fixity information (also known as checksum) for all data files within an AIP and stores this information in PREMIS objects within the corresponding AIP. This task uses SHA-256 as the default checksum algorithm, however, other algorithms can be configured in "roda-core.properties". File fixity is the property of a digital file being fixed, or unchanged. "AIP corruption risk assessment" is the process of validating that a file has not changed or been altered from a previous state. In order to validate the fixity of an AIP or file, fixity information has to be generated beforehand.

---

### AIP file format identification (Siegfried)

Identifies the file format and version of data files included in Information Packages using the Siegfried tool (a signature-based file format identification tool that supports PRONOM identifiers and Mimetypes). The task updates PREMIS objects metadata in the Information Package to store the results of format identification. A PREMIS event is also recorded after the task is run.

---

### Feature extraction

Extraction of technical metadata using Apache Tika

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### Full-text extraction

Extraction of full-text using Apache Tika

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### Verify producer authorization

Checks if the producer has enough permissions to place the AIP under the desired node in the classification scheme

---

### Auto accept

Adds information package to the inventory without any human appraisal. After this point, the responsibility for the digital content's preservation is passed on to the repository.

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### AIP remote replication

Copies AIPs and all its files to a secondary RODA instance for redundancy purposes (e.g. Active-passive high-availability architecture). This task makes use of "rsync" to synchronize AIP folders between two servers (storage level replication) and calls the secondary API to re-index the replicated AIPs (index level replication). The task can only be used if the appropriate configuration settings are defined in the "roda-core.properties".

---

## Ingest finished notification

Send a notification after finishing the ingest process to one or more e-mail addresses (comma separated)

# Search

Users are capable of finding Archival Information Packages (AIP), Representations and Files by making use of the discovery services available in this page. The discovery services are divided by resource type and use different properties to support its discovery and location. For example, AIPs can be found by searching on descriptive metadata (multiple schemas are supported per AIP). Representations can be found by ID, type, size, and number of files. Files can be found using technical attributes such as mimetype, PRONOM identifier, size, etc.

**Intellectual entities** ▼ Search... ^ 🔍

Original reference		✕
Title		✕
Description		✕
Scope and content		✕
Origination		✕
Date	2008-04-01   2016-06-20 ✕	

[ADD SEARCH FIELD](#) 🔍 [SEARCH](#) 🔍

<input type="checkbox"/>	Level	Title	Dates
<input type="checkbox"/>	fonds	andré	2016-05-19
<input type="checkbox"/>	fonds	Archeevo_Import	2016-05-18
<input type="checkbox"/>	item		2016-05-11 to 2016-05-11
<input type="checkbox"/>	fonds	Archeevo fonds	2016-05-09
<input type="checkbox"/>	item	jsa_2013_fernandez_agroecology_and_agrifood_movements_in_the_us.pdf	2016-02-17
<input type="checkbox"/>	item	jsa_2013_fernandez_agroecology_and_agrifood_movements_in_the_us.pdf	2016-02-17
<input type="checkbox"/>	item	jsa_2013_fernandez_agroecology_and_agrifood_movements_in_the_us.pdf	2016-02-17
<input type="checkbox"/>	DC	CABIMENTO 150 E 151 REQUISIÇÃO EXTERNA 2196 E 2198 PETRÓLEOS DE PORTU GAL-PETROGAL, SA FACTURA 2232585764 OPF 4027 - PETRÓLEOS DE PORTUGAL - PETROGAL SA	2015-07-02 to 2015-07-14
<input type="checkbox"/>	DC	CABIMENTO 150 E 151 REQUISIÇÃO EXTERNA 2196 E 2198 PETRÓLEOS DE PORTU GAL-PETROGAL, SA FACTURA 2232584918 OPF 4027 - PETRÓLEOS DE PORTUGAL - PETROGAL SA	2015-07-02 to 2015-07-14
<input type="checkbox"/>	DC	CABIMENTO 1686 REQUISIÇÃO EXTERNA 2714 E 2715 LEASE PLAN FACTURA 12/1 03679 OPF 3746 - LEASEPLAN PORTUGAL LDA	2015-07-02 to 2015-07-02
<input type="checkbox"/>	DC	CABIMENTO 159 REQUISIÇÃO EXTERNA 2003, 2391, 2390, 2528 E 2751 BE WAT ER CONSUMO DE MAIO OPF3738, 3739, 3740 E 3741 - BE WATER, S.A.	2015-07-01 to 2015-07-02
<input type="checkbox"/>	DC	CABIMENTO 19 REQUISIÇÃO EXTERNA 61 ENERTECNICA - ASSISTENCIA E INSTAL AÇOES TERMICAS, LDA FACTURA 9/2015 OPF 2320/2015 -	2015-01-06 to 2015-04-27
<input type="checkbox"/>	DC	CABIMENTO2405 ESTORNO 36REQUISIÇÃO EXTERNA 476 ECOBIZ, LDAFACTURA 84 OPF 1688 -	2015-01-06 to 2015-03-30
<input type="checkbox"/>	DC	CABIMENTO 11 REQUISIÇÃO EXTERNA 62 FERNANDO CARLOS FRADINHO GASPARGAS FACTURA 82/2015A OPF 1673/2015 -	2015-01-06 to 2015-03-27
<input type="checkbox"/>	DC	CABIMENTO 3 E 779 REQUISIÇÃO EXTERNA 6 E 1162 NORTEL SUL - COMERCIO D E EQUIPAMENTOS HOTELEIROS, LDA FACTURAS 15100104, 15100100 OPF 1617/2015 -	2015-01-06 to 2015-03-27

## Description levels

- D (36978)
- DC (1023)
- F (13)
- SC (3)
- SF (1)
- SR (37)
- SSR (2)
- UI (1263)
- fonds (7)
- item (108)
- otherlevel (100)
- series (1)

## Representations


- without files (28509)
- with files (11035)

## Actions

[START NEW PROCESS](#) 🔍

# CABIMENTO 150 E 151 REQUISIÇÃO EXTERNA 2196 E 2198 PETRÓLEOS DE PORTU GAL-PETROGAL, SA FACTURA 2232585764 OPF 4027 - PETRÓLEOS DE PORTUGAL - PETROGAL SA

332F7092-ca15-4cf7-9fa2-976fcd795700

 CABIMENTO 150 E 151 REQUISIÇÃO EXTERNA 2196 E 2198 PETRÓLEOS DE PORTU GAL-PETROGAL, SA FACTURA 2232585764 OPF 4027 - PETRÓLEOS DE PORTUGAL - PETROGAL SA

[Key-Value](#) 



Custom1

Português

AcqInfo

Processo migrado do edoclink

LangMaterial

,languages\_Português,

DescRules

ISAD(g)

OriginalsLoc

<https://edoc.cm-mafra.pt/edoc/Process.aspx?processKey=100876>

CompleteUnitId

PT/AMM/CMMFR/10-1/37/(2015)1641

Username

lurdes

level

DC

dateInitial

2015-07-02

RepositoryCode

AMM


CountryCode

PT

Creator

edoclink

Representations

ORIGINAL (MIXED) 

Archival package

NEW 

MOVE 


PERMISSIONS 

REMOVE 

Preservation

START NEW PROCESS 

EVENTS 

RISKS 

Download

ARCHIVAL PACKAGE 

SCHEMAS 



## 🕒 Preservation events

📄 Obrigação de Pedro Lourenço, morador em Machico, ilha da Madeira, por vinte alqueires de trigo das ilhas, pelos quais pagará \$533 e 2 ceitis.

▼ Date	Type	Detail	Outcome
2016-05-19 20:55:21	ingest end	The ingest process has ended.	success
2016-05-19 20:55:15	accession	Added package to the inventory. After this point, the responsibility for the digital content's preservation is passed on to the repository.	success
2016-05-19 20:55:08	authorization check	Producer permissions have been checked to ensure that he has sufficient authorization to store the AIP under the desired node of the classification scheme.	success
2016-05-19 20:55:02	format identification	Identified the object's file formats and versions using Siegfried.	success
2016-05-19 20:54:56	message digest calculation	Created base PREMIS objects with file original name and file fixity information (SHA-256).	success
2016-05-19 20:54:50	wellformedness check	Checked whether the descriptive metadata is included in the SIP and if this metadata is valid according to the established policy.	success
2016-05-19 20:54:33	wellformedness check	Checked that the received SIP is well formed, complete and that no unexpected files were included.	success
2016-05-19 20:54:33	unpacking	Extracted objects from package in E-ARK SIP format.	success
2016-05-19 20:54:16	ingest start	The ingest process has started.	success

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### Actions

DOWNLOAD 

BACK 

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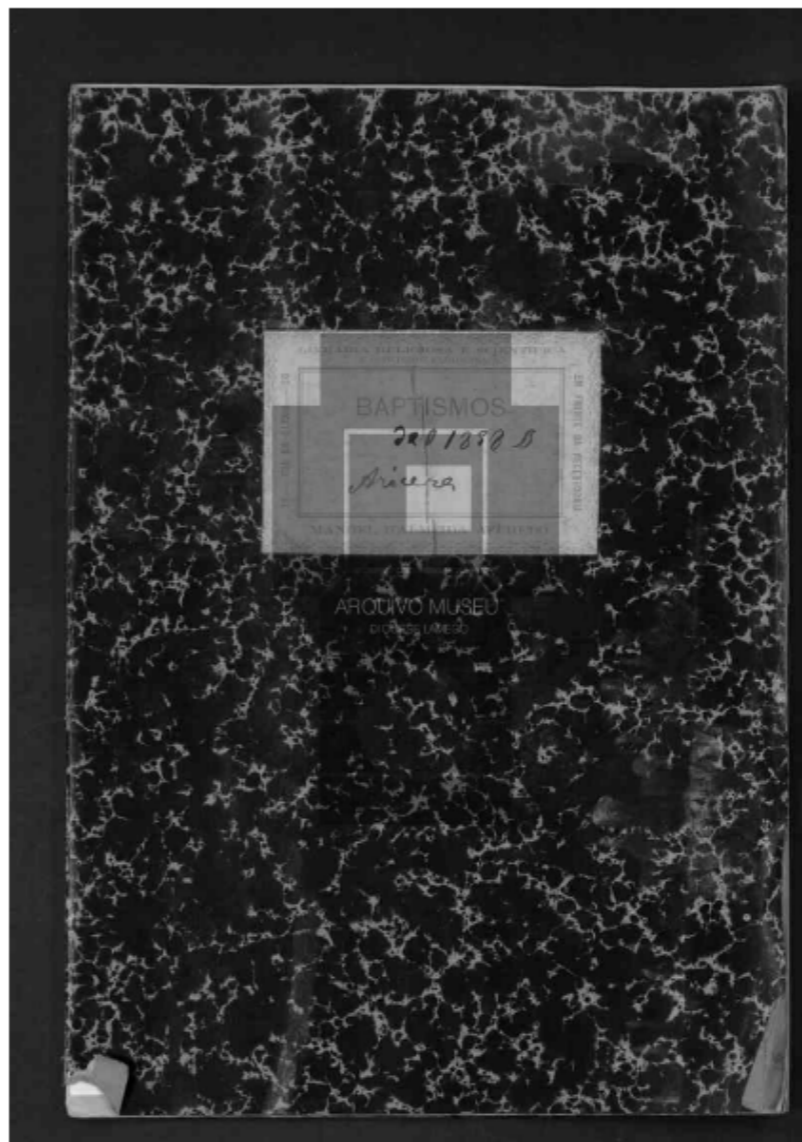
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Search files...

Baptismos / Original (MIXED) / file\_12736.jpg



file\_12736.jpg



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Containers + NEW  FILTER BY All Recommended My Repos My Images

roda-2  
roda:latest

### Other Repositories

 keeps <b>roda</b> Repository of Authentic Digital Objects ♥ 2 ↓ 2K <span>...</span> <a href="#">CREATE</a>	 rodacom <b>nginx-proxy</b> No description. ♥ 0 ↓ 665 <span>...</span> <a href="#">CREATE</a>	 rodacom <b>docker-hub</b> Docker registry v2 ♥ 0 ↓ 111 <span>...</span> <a href="#">CREATE</a>
 pterodactyl <b>minecraft</b> Dockerfile for Minecraft using Pterodactyl and Wings. ♥ 0 ↓ 58 <span>...</span> <a href="#">CREATE</a>	 parkervcp <b>pterodactyl-panel</b> Build for the Pterodactyl control panel. ♥ 0 ↓ 28 <span>...</span> <a href="#">CREATE</a>	 roda <b>ubuntu-cp-generator</b> No description. ♥ 0 ↓ 28 <span>...</span> <a href="#">CREATE</a>
 roda <b>docker-what</b> No description. ♥ 0 ↓ 28 <span>...</span> <a href="#">CREATE</a>	 nokane <b>docker-what</b> No description. ♥ 0 ↓ 17 <span>...</span> <a href="#">CREATE</a>	 roda <b>ubuntu-cp-generator-0mq</b> Ubuntu image containing MySQL Server, CDO Server, CDO Client, CP Generator ♥ 0 ↓ 31 <span>...</span> <a href="#">CREATE</a>
 pterodactyl <b>scrappy-sftp</b> Scrappy SFTP setup modified for Pterodactyl Daemon usage. ♥ 0 ↓ 35 <span>...</span> <a href="#">CREATE</a>	 stefanprodan <b>jenkins</b> Continuous integration with disposable containers ♥ 1 ↓ 186 <span>...</span> <a href="#">CREATE</a>	 stefanprodan <b>dockerdash</b> Docker dashboard built with ASP.NET Core, Docker.DotNet, SignalR and Vuejs. ♥ 1 ↓ 107 <span>...</span> <a href="#">CREATE</a>
 hcorrada <b>introdatscidocker</b> No description. ♥ 0 ↓ 0 <span>...</span> <a href="#">CREATE</a>	 djocker <b>orodata</b> Data container for Oro Apps ♥ 0 ↓ 0 <span>...</span> <a href="#">CREATE</a>	 prodataninja <b>routeninja</b> Google OR-Tools ♥ 0 ↓ 0 <span>...</span> <a href="#">CREATE</a>

 DOCKER CLI ... 



[www.kitematic.com](http://www.kitematic.com)



LOGIN



Containers

+ NEW

roda

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roda-2  
roda:latest

Other Repositories

	keeps <b>roda</b> Repository of Authentic Digital Objects	♥ 2 ↓ 2K	...	CREATE
	rodacom <b>nginx-proxy</b> No description.	♥ 0 ↓ 665	...	CREATE
	rodacom <b>docker-hub</b> Docker registry v2	♥ 0 ↓ 111	...	CREATE
	pterodactyl <b>minecraft</b> Dockerfile for Minecraft using Pterodactyl and Wings.	♥ 0 ↓ 58	...	CREATE
	parkervcp <b>pterodactyl-panel</b> Build for the Pterodactyl control Panel	♥ 0 ↓ 31	...	CREATE
	roda <b>ubuntu-cp-generator</b> No description.	♥ 0 ↓ 28	...	CREATE
	roda <b>docker-whale</b> No description.	♥ 0 ↓ 28	...	CREATE
	nokane <b>rodandthumb</b> No description.	♥ 0 ↓ 17	...	CREATE
	roda <b>ubuntu-cp-generator-0mq</b> Ubuntu image containing MySQL Server, CDO Server, CDO Client, CP Generator	♥ 0 ↓ 31	...	CREATE
	pterodactyl <b>scrappy-sftp</b> Scrappy SFTP setup modified for Pterodactyl Daemon usage.	♥ 0 ↓ 35	...	CREATE
	stefanprodan <b>jenkins</b> Continuous integration with disposable containers	♥ 1 ↓ 186	...	CREATE
	stefanprodan <b>dockerdash</b> Docker dashboard built with ASP.NET Core, Docker.DotNet, SignalR and Vuejs.	♥ 1 ↓ 107	...	CREATE
	hcorrada <b>introdatscidocker</b> No description.			
	djocker <b>orodata</b> Data container for Oro Apps			
	prodataninja <b>routeninja</b> Google OR-Tools			

DOCKER CLI





LOGIN



Containers

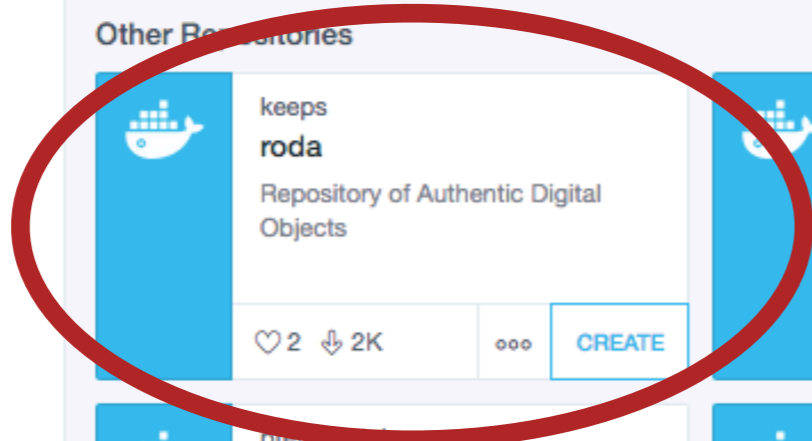
+ NEW

roda

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roda-2  
roda:latest

Other Repositories



 keeps  
**roda**  
Repository of Authentic Digital Objects

♡ 2 ↓ 2K ... [CREATE](#)

 rodacom  
**nginx-proxy**  
No description.


♡ 0 ↓ 665 ... [CREATE](#)

 rodacom  
**docker-hub**  
Docker registry v2

♡ 0 ↓ 111 ... [CREATE](#)

 pterodactyl  
**minecraft**  
Dockerfile for Minecraft using Pterodactyl and Wings.

♡ 0 ↓ 58 ... [CREATE](#)

 parkervcp  
**pterodactyl-panel**  
Build for the Pterodactyl control Panel


♡ 0 ↓ 31 ... [CREATE](#)

 roda  
**ubuntu-cp-generator**  
No description.

♡ 0 ↓ 28 ... [CREATE](#)

 roda  
**docker-whale**  
No description.

♡ 0 ↓ 28 ... [CREATE](#)

 nokane  
**rodandthumb**  
No description.

♡ 0 ↓ 17 ... [CREATE](#)

 roda  
**ubuntu-cp-generator-0mq**  
Ubuntu image containing MySQL Server, CDO Server, CDO Client, CP Generator


♡ 0 ↓ 31 ... [CREATE](#)

 pterodactyl  
**scrappy-sftp**  
Scrappy SFTP setup modified for Pterodactyl Daemon usage.


♡ 0 ↓ 35 ... [CREATE](#)


 stefanprodan  
**jenkins**  
Continuous integration with disposable containers


♡ 1 ↓ 186 ... [CREATE](#)

 stefanprodan  
**dockerdash**  
Docker dashboard built with ASP.NET Core, Docker.DotNet, SignalR and Vuejs.

♡ 1 ↓ 107 ... [CREATE](#)

 hcorrada  
**introdatscidocker**  
No description.

 djocker  
**orodata**  
Data container for Oro Apps

 prodataninja  
**routeninja**  
Google OR-Tools

 DOCKER CLI



Documentation and **source-code** published at  
[source.roda-community.org](https://source.roda-community.org)

# Questions?

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University of Minho  
[jcr@di.uminho.pt](mailto:jcr@di.uminho.pt)