Use Cases for OAIS-IF



|  |
| --- |
| **Summary**  |
| Number  | UC-1  |
| Name  | Data search and access |
| Context  |  |
| Sub-Use Cases  | * Search for information
* Get information from the OAIS
 |
| Overview  | Consumer wants to find and obtain some digitally encoded information to use. |
| Actors  | * Consumer
* OAIS-IF system
 |
| **Description**  |
| Preconditions  | * The OAIS repositories have been indexed in some way to allow search in a consistent way across multiple archives
* OAIS implements the OAIS-IF
 |
| Trigger  | Consumer wants to find, access and use information |
| Successful outcome  | Consumer obtains the information required |
| Steps  | 1. Consumer inputs search criteria and identifies repositories which contain required information
2. Consumer chooses one (or more repositories) and queries what is available.
	1. The user may need to log in to see what s/he is allowed to access
3. The consumer then obtains the information from the repository
	1. The Consumer may simply get the whole AIP or
	2. The Consumer may get a piece of information created by the repository suitably processing its holdings
 |
| Exceptions  | * No suitable information is available
 |
| Alternative Use case |  |

|  |
| --- |
| **Summary**  |
| Number  | UC 1.1 |
| Name  | Search for information |
| Context  | Consumer has a description of the information required |
| Sub-Use Cases  |  |
| Overview  |  |
| Actors  | * Consumer
* OAIS-IF repositories
 |
|  |
| Preconditions  | * Repositories are indexed in a consistent way so that search can provide results
 |
| Trigger  |  |
| Successful outcome  | Consumer gets identifiers for suitable repositories. An identifier allows the Consumer to communicate with the repository e.g. could be a URI |
| Steps  | 1. The Consumer can search an index of multiple repositories
2. The Consumer identifies a potential source of the information required
 |
| Exceptions  | * No appropriate information is available
 |
| Alternative Use case | 1. The Consumer may need to be authorised to even perform a search
2. Alternatively the user may only have access to a single repository
3. Alternatively the index may be much more detailed to allow the Consumer to be directed to some very specific products, exposing the specificities of each repository.
 |

|  |
| --- |
| **Summary**  |
| Number  | UC 1.2 |
| Name  | Get information from OAIS  |
| Context  | The Consumer has obtained an identifier for the repository |
| Sub-Use Cases  | * Consumer has to obtain authorisation to access the information required
* Get one or more AIP(s)
* Get component of one or more AIP
 |
| Overview  | The Consumer wants to obtain information from a repository |
| Actors  | * Consumer
* OAIS-IF repositories
 |
|  |
| Preconditions  | * Repository implements the OAIS-IF
 |
| Trigger  | * Consumer requests information
 |
| Successful outcome  | * Consumer receives the information requested
 |
| Steps  | 1. User uses “identifier” for repository to search and select specific information to obtain an object identifier
2. The Consumer requests the object or part of an object
3. The Consumer receives the object requested
 |
| Exceptions  |  |
| Alternative Use case | 1. The Consumer may request special processing on the object before it is sent e.g. subsetting of the data
 |

|  |
| --- |
| **Summary**  |
| Number  | UC 1.2.3 |
| Name  | Check users authorisation |
| Context  |  |
| Sub-Use Cases  |  |
| Overview  | What the user can access or even know that something exists, may depend upon the users authorisation |
| Actors  | * Consumer
* OAIS-IF repository
 |
|  |
| Preconditions  | * User has a login recognised by the repository, or other authentication mechanism.
 |
| Trigger  | The Consumer wants to perform some action which requires authorisation, such as search or get. |
| Successful outcome  | Consumer is authorised to perform the action |
| Steps  | 1. Consumer requests authentication
2. The user provides the appropriate username/password or private key etc
 |
| Exceptions  | 1. The Consumer fails to provide appropriate credentials to be authenticated
2. The Consumer is authenticated but is not authorised to perform the action
 |
| Alternative Use case |  |

|  |
| --- |
| **Summary**  |
| Number  | UC-1.2.1 |
| Name  | Get an AIP |
| Context  | The Consumer has the object identifier for an AIP |
| Sub-Use Cases  |  |
| Overview  | The Consumer has identified the information wanted, and wishes to get a copy of the whole AIP which contains the information. |
| Actors  | * Consumer
* OAIS-IF repository
 |
|  |
| Preconditions  | * The Consumer has the required authorisation (which include “no authorisation required” i.e. open access)
 |
| Trigger  |  |
| Successful outcome  | The Consumer receives the AIP requested. This may consist of a ZIP file with all the components of the AIP or a manifest with object identifiers for the components of the AIP. |
| Steps  | 1. The object identifier is confirmed as pointing to an AIP rather than any other object
2. The Data Object of the AIP is retrieved
3. The Packaging Information of the AIP (i.e. the Representation Information associated with the Data Object) is retrieved.
4. The Package Description Information is retrieved
 |
| Exceptions  |  |
| Alternative Use case |  |

|  |
| --- |
| **Summary**  |
| Number  | UC-1.2.1.1 |
| Name  | Obtain a component of an AIP |
| Context  | The Consumer has the object identifier for an AIP but only wants a component. |
| Sub-Use Cases  |  |
| Overview  | The Consumer does not want the whole AIP but instead wants a part of the information |
| Actors  | * Consumer
* OAIS-IF repository
 |
|  |
| Preconditions  | The Consumer has the identifier of an AIP |
| Trigger  |  |
| Successful outcome  | The Consumer received the information required |
| Steps  | 1. The Consumer uses the identifier for the AIP to obtain object identifiers for the components of the AIP
2. The Consumer uses that identifier to obtain identifiers for any components of that component for example if the original AIP is an AIC then identifiers for the component AIPs can be obtained and then identifiers for the components of those AIPs can be obtained, and so on.
 |
| Exceptions  |  |
| Alternative Use case |  |

|  |
| --- |
| **Summary**  |
| Number  | UC-1.2.1.2 |
| Name  | Make an AIP ready for transfer |
| Context  |  |
| Sub-Use Cases  |  |
| Overview  | The AIP is a logical package. For example there may be a Manifest file which points to the various components.IF the pointers are usable from outside the OAIS THEN sending the Manifest is enough because the user can then gather all the information that makes up the AIPELSE if the pointers are not used usable outside the OAIS then the OAIS must ensure all the components are available, for example create a ZIP file with all the components |
| Actors  | * Consumer
* OAIS-IF repository
 |
|  |
| Preconditions  |  |
| Trigger  |  |
| Successful outcome  |  |
| Steps  | 1. The OAIS uses the object identifier that has been used to obtain local identifiers for the various components of the AIP
2. It constructs the object to be transferred e.g.
	1. Extracting the components from internal storage such as a database or filestore
	2. Some components may have sub-components such as individual events relevant to Provenance
 |
| Exceptions  |  |
| Alternative Use case |  |

|  |
| --- |
| **Summary** TEMPLATE |
| Number  | UC-x.x.x |
| Name  |  |
| Context  |  |
| Sub-Use Cases  |  |
| Overview  |  |
| Actors  |  |
|  |
| Preconditions  |  |
| Trigger  |  |
| Successful outcome  |  |
| Steps  |  |
| Exceptions  |  |
| Alternative Use case |  |