Portfolio

February 25, 2005

OSPI

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Section 1: Scope

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Summary

The Open Source Portfolio Initiative (OSPI) is a community of individuals and organizations collaborating on the development of the leading non-proprietary, open source electronic portfolio software available.

Objectives[JF1]

The objectives of the OSPI are a direct response to the needs of the academic community in providing education tools geared toward supporting the individual, rather than the institution. While targeting support for the individual as the primary objective, the framework around which the individual must be supported is suggested, and in some cases dictated, by academic institutions.

The objectives listed below describe what the OSPI hopes to achieve in response to the needs of both the individual and academic institution.

- Establish an environment that allows an individual to present and reflect upon original, authored work in a manner that is readily accessed and easy to use.

- Allow authors to customize the look and feel of presentation of authored work.

- Protect the intellectual and personal property rights of individuals who present work through the environment.

- Provide quality information about learning outcomes and rubrics to individual portfolio owners, course instructors, degree program administrators, and institutional administrators.

- Provide access at the institutional, departmental level, and course level to assessment data crucial to evaluating the strengths and weaknesses of efforts to promote learning and to participation in credentialing and accreditation processes.

- Provide information to learners and teachers seeking to understand the learning process.

- Provide a valuable tool in faculty and staff development, as well as hiring, promotion, and tenure.

- Offer default structures based on best practices for gathering content, managing workflow, and presenting content for a variety of professional uses.

- Enable collaboration and exchange of ideas between members of a portfolio community in response to presentation of work.

- Provide for seamless lateral movement of content between institutional departments, as a transition between roles within an institution, and in moving between institutions.

- Provide an environment built in accordance with national and international standards.

- Interoperate with human resource, student information, course management, learning management, and other solutions.

- Provide an environment built for students to display their work to potential employers.[JF2]

Roles

Within the portfolio application individuals are assigned roles, which determine the types of functions and tasks that can be accessed. In general, when working within a role, the responsibilities of the role dictate tasks made available to the individual.

The following is a list of roles that an individual may play within the portfolio application. A description is provided for each role that summarizes what the individual can access within the portfolio application based upon the functions and tasks the role can access.

Portfolio Author[JF3]..........A portfolio author is responsible for managing the storage of objects within the portfolio application. In addition to adding and removing objects within the collection, the portfolio author is also responsible for the accuracy of all information gathered that describes each object, as well as copyright compliance. This includes accurate representation of object authenticity. The author is also responsible for the accuracy of any responses provided in the completion of forms. An author also may provide access to portfolio objects within a collection and must manage the process of sharing the objects with others.

Portfolio Guest ....A portfolio guest is responsible for providing feedback to a portfolio owner regarding objects the owner presents in a portfolio design. A portfolio guest that has been granted access to a portfolio design or portfolio object should provide constructive feedback in a respectful manner. Guests can be registered and required to login. Unregistered users are considered anonymous. [JF4]

Workgroup [JF5]Coordinator   A workgroup coordinator is responsible for managing the storage of objects provided for use by a workgroup. Where appropriate, the workgroup coordinator must provide proper acknowledgment and show copyright approval when using materials not authored by the coordinator. The workgroup coordinator is also responsible for managing template objects, such as forms and designs, intended to gather information from workgroup participants. When creating objects for use within a workgroup, the coordinator must manage access to objects that are shared. The workgroup coordinator may need to assist in managing participant's objects that have been locked due to activities completed within the workgroup.

Evaluator[JF6]....................An evaluator is responsible for assessment of portfolio designs and portfolio objects presented by a portfolio author. As an evaluator, an individual must be informed of the assessment criteria and the objectives used by the academic program to which the portfolio author has responded. An evaluator should provide constructive feedback, as well as guidance to the portfolio author in accordance with guidelines established for the academic program. There are reviewer who comment and provide guidance (formative) and evaluators who have bearing on academic progress (summative).

Academic Administrator .....An academic administrator is responsible for providing guidance and resources to workgroup coordinators and evaluators. The academic administrator creates and maintains forms, designs and reports that reside in shared libraries. An academic administrator is also responsible for the storage and maintenance of any reports that have been generated and stored for administrative review.

System [JF7]Administrator. An OSP administrator is responsible for the maintenance and integrity of the OSP implementation at the institution. This includes assisting each of the portfolio roles when determining appropriate application settings for general use of the portfolio application, performing required backup and maintenance of the portfolio components, and communicating with the OSP community at large to report problems, provide recommendations and assist in developing solutions with regard to the portfolio application.

Interactions

As a result of supporting assigned functions and completing associated tasks, an individual communicates with others within the role she is playing. The interactions between the roles provide a perspective of how the roles work together and what information is exchanged as each role supports assigned responsibilities.
The following diagram shows the major interactions between roles and the information each interaction provides.
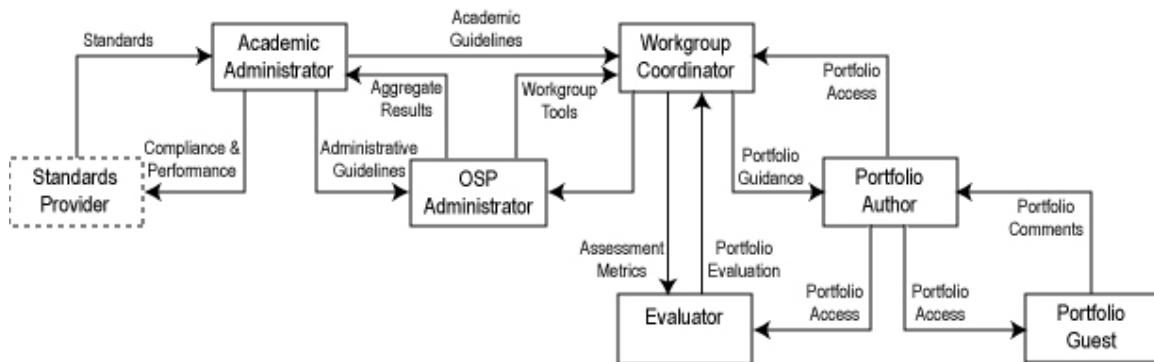
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Section 2: Functional Requirements

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Collection Functional Requirements

C001	A user can add objects to the General Collection.
C002	A user can remove objects from the General Collection.
C003	A user can create a Named Collection.
C004	A user can include a subset of objects from a General Collection in a Named Collection.
C005	A user can add objects to a Named Collection.
C006	A user can remove objects from a Named Collection.
C007	A user can modify the content of an object in a Collection.
C008	A user can share the content of a Collection.
C009	A user can share an object in a Collection.
C010	A user can lock an object in a Collection.
C011	A user can lock the content of a Collection.
C012	A user can archive an object in a Collection.
C013	A user can archive a Collection.
C014	A user can organize objects within a Collection by grouping, filtering and sequencing.
C015	A user can modify the information that describes the object (i.e. properties, metadata, associations).
C016	A user can preview the content of an object in a Collection.

Forms Functional Requirements

F001	A user can create a form through the form builder.
F002	A user can save created forms to personal, CIG, institutional and/or OSP libraries.
F003	A user can submit forms for publication in OSP through a defined process.
F004	A user enters information to create structured artifacts into their portfolios through elements displayed in the personal worksite and those displayed in the CIG worksite.
F005	A user can associate one or more structured artifacts.
F006	A user can submit a newly created form for inclusion in the OSP code base.

Design Functional Requirements

D001	A user can design a Named Collection.

D002   A user can design an artifact.

D003   A user can enter and format text and graphics with a WYSIWYG editor.

D004   A user can enter links to another object.

D005   A user can include and style the contents of an object.

D006   A user can move the contents of an editable region to another editable region.

D007   A user can modify the existing design of an object.

D008   A user can add layouts as files.

D009   A user can add styles as files.

D010   A user can add templates as files in a well documented XML format.

Analysis Functional Requirements

A001   A user can choose to allow or not allow the institution and/or CIGs to which they belong to harvest data from objects they contribute to CIG scaffolding, compositions, and reports.

A002   A user can choose to allow or not allow the institution and/or CIGs to which they belong to harvest data from their repositories.

A003   A user can choose to allow or not allow other CIGs to harvest data from objects CIG members contribute to CIG scaffolding, compositions, and reports.

A004   A user can choose to allow or not allow other CIGs to harvest data from objects in the CIG repository.

A005   A user can be guided through the reporting process.

A006   A user can be guided in setting up CIG query definitions and CIG report compositions to share with CIG members.

A007   A user can be notified of his intellectual property rights in relation to institutional policies for harvesting data.

A008   A user can be notified of permissions their institution allows them to set in relation to institutional harvesting of data.

A009   A user can be assisted in selecting a query definition from a CIG repository and/or creating an ad hoc query.

A010   A user can be assisted in creating an archive report and/or a dynamic report from a set of query results and a report composition.

A011   A user can select or create a report composition.

A012   A user can create and save archive reports and dynamic reports.

A013   A user can share reports with other portfolio owners or CIGs, the institution, and selected email addresses outside of the institution.

A014   A user can store reports in the repository.

A015   A user can associate related reports.

A016   A user can export harvested objects, extracted data, and archive reports to applications outside the system.

A017   A user can query her portfolio collection.

A018   A user can query her CIG Matrix cells.

A019   A user can identify and query the matrix cells of the CIGs she owns.

A020   A user can query the collections of all portfolio owners in an institution.

A021   A user can query the matrix cells of all worksites within an institution.

A022   A user can identify and query cells from matrices of selected portfolio owners.

A023   A user can identify and query selected individual portfolio collections.

A024   A user can identify and query cells from the matrices of selected CIGs and selected portfolio owners within those CIGs.

A025   A user can select and query all or some of the cells from selected CIG matrices.

A026   A user can select and query any or all artifact types from his collections, including structured artifacts and uploaded files.

A027   A user can select and query any or all artifacts, reflections, and assessments associated with specified matrix cells from his CIG.

A028   A user can select and query any or all artifact types from any or all individual portfolio owner collections, including structured artifacts and uploaded files.

A029   A user can select and query any or all artifacts, reflections, and assessments associated with specified matrix cells from any or all CIGs within the institution.

A030   A user can search collections.

A031   A user can search matrix cells.

A032   A user can save query results.

A033   A user can apply usage reports available in OSP 1.5 to archive reports.

A034   A user can apply usage reports available in OSP 1.5 to dynamic query reports.

A035   A user can apply descriptive statistics to assessments contained within archive or dynamic query reports.

A036   A user can apply descriptive statistics to assessments contained within dynamic query reports.

A037   A user can open structured artifacts, uploaded files, reflections, and assessments from the query report.

A038   A user can save structured artifacts, uploaded files, reflections, and assessments from the query report.

A039   A user can export separately structured artifacts, uploaded files, reflections, and assessments from the query report.

A040   A user can print structured artifacts, uploaded files, reflections, and assessments from the query report.

A041   A user can export archive query reports from the portfolio to another application.

A042   A user can share archive and dynamic query reports.

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Section 3: Specifications

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Collection Specifications

C001 A user can add objects to the General Collection.
- Addition of an artifact to the general collection does not require the owner to determine the physical location of the artifact within the storage space.
- By default, the name of the artifact is determined by the application file name, less any file suffix that may exist.
- Optionally, a more meaningful name for the artifact may be entered in place of the application file name.
- Each object name must be unique within the general collection; each application file name must be unique within the general collection.
- For each artifact, a brief text description of the object to clarify its content and/or purpose.
- If versioning capabilities are provided in the collection, multiple artifact name instances can exist and multiple application file name instances can exist provided each instance must have a unique version number.

> *Use Case:*
> Sally wants to add a new document to her General Collection. She logs on to the system and opens her General Collection. She uses the add function to move her document from her computer to the portfolio application. The document is added to her General Collection.

C002 A user can remove objects from the General Collection.
- Removal of an object retains a reference to the object in an application generated named collection.
- Removal of an object from the general collection removes the object from the list presented.
- Removal of an object from the general collection can not occur if the object is referenced by a form, design or workgroup.
- Objects within the application generated collection may be recovered and returned to the general collection.
- Objects within the application generated collection are removed from the collection and deleted from the underlying file system after a period of calendar days determined by the application administrator.
- Objects within the application generated collection may be immediately removed by the owner if explicitly requested.

> *Use Case:*
> Dan would like to remove an old file from his General Collection. He logs on to the system and opens his General Collection. Dan selects the file he wishes to remove and uses the remove function. He receives a warning from the system asking if he is certain that he wants to remove the file. He responds affirmatively and the file is removed.

C003 A user can create a Named Collection.
- Named collections can be created based upon explicit named collection need (e.g., portfolio preparation).
- Named collections can be generated based upon usage of an object (e.g. within a portfolio, within a CIG).
- Named collections can be generated based upon application type (e.g. Word documents, Flash sequences).

- Named collections can be generated based on access frequency (e.g., Past Week, Month).

    Use Case:
    Joanna determines that she needs to create a Named Collection to organize objects from her General Collection for her past semester. Joanna logs into the system and opens the General Collection. She uses the add collection function to create a new Named Collection and gives the Named Collection an appropriate title.

C004 A user can include a subset of objects from a General Collection in a Named Collection.
- Object selection can be completed via individual selection (e.g., click, drag & drop).
- Object selection can be completed via group selection (e.g. ctrl-click, shift-click, drag & drop).

    Use Case:
    Joaquin would like to select a set of artifacts to add to a named collection. He browses his repository and selects an artifact and drags it into a previously created named collection. He also selects several artifacts simultaneously and drags them into the named collection.

C005 A user can add objects to a Named Collection.
- An object is added following the same guidelines as adding to the General Collection.
- An object that is added directly to a Named Collection is also added to the General Collection.

    Use Case:
    Marta has created a Named Collection and would like to add a document. She logs into the system and opens the Named Collection. She uses the add function to move her document from her computer to the portfolio application. The document is added to her Named Collection and to her General Collection.

C006 A user can remove objects from a Named Collection.
- An object is removed using the same guidelines as removing from the general collection.
- An object that is removed from a Named Collection is still included in the General Collection and any other Named Collections in which the object is a member.

    Use Case:
    Eddie wants to remove a file from a Named Collection. He logs on to the system and opens his Named Collection. Dan selects the file he wishes to remove and uses the remove function. He receives a warning from the system asking if he is certain that he wants to remove the file. He responds affirmatively and the file is removed from his Named Collection, but remains in his General Collection.

C007 A user can modify the content of an object in a Collection.
- If the object is a completed form, the object content can be modified within the portfolio environment through the form template used to enter the content.
- If the object is an application file, the content must be modified using the application (or compatible helper application) in which the attached application file was created.
- If the content of an object is modified the modified object may replace the current object.
- If the content of an object is modified the modified object may be added as a new version or the current object.
- If the content of an object is locked the owner may only add a new version of the object.

Use Case:
Mindy has a completed Microsoft Word document in a collection. She needs to make a modification to this document. Using Microsoft Word, Mindy makes the modification to the original document on her computer. She then logs on to the portfolio application and opens the collection where the current document resides. Using the modify function, Mindy uploads the modified file which overwrites the existing file in her collection.

C008   A user can share the content of a Collection.
- Any collection of objects may be shared.
- A shared collection may be associated with a design.
- Access to a shared collection is assigned at a collection level (each set of shared permissions is captured per collection).

Use Case:
Al wants to share a collection with other students in his club. He logs into the system and opens his collection. Using the permissions function he sets the permissions for his collection to allow the other club members the appropriate sharing privileges.

C009   A user can share an object in a Collection.
- Any individual object in any collection may be shared.
- A shared object may be associated with a design.
- Access to a shared object is maintained at a collection level (each set of shared permissions is captured per collection).

Use Case:
Chantal wishes to share a file from her collection with other students in her class. She logs into the system, opens her collection and finds the file to be shared. Using the permissions function she sets the permissions for the file to allow the other students the appropriate sharing privileges.

C010   A user can lock an object in a Collection.
- Any individual object in any collection may be locked.
- Access to a locked object is limited to read-only capabilities.
- Locked objects can be copied/duplicated and saved as a new object, or new version of the locked object.
- Locked objects can only be unlocked through the mechanism that initiated the lock (i.e., application, owner).

Use Case:
Jarred has a file that is very important that he keep and would like to lock within a collection. He logs into the system and opens the collection where the file resides. He selects the file and uses the lock function to lock the file.

C011   A user can lock the content of a Collection.
- Any collection of objects may be locked.
- Access to a locked collection is limited to read-only capabilities.
- Locked collections can be copied/duplicated and saved as a new collection or new version of the collection.
- Locked collections can only be unlocked through the mechanism that initiated the lock (i.e., application, owner).

Lynn has created a named collection that she would like to lock. She logs into the system. She selects the named collection and uses the lock function to lock the collection.

C012   A user can archive an object in a Collection.
- Any individual object in any collection may be archived.
- Access to an archived object is limited to read-only capabilities.
- Archived objects are portable and can be imported by any application that recognizes the archival format.
- Archived objects can be restored through the mechanism that initiated the archival (i.e., application, owner).

Use Case:
Cory wants to archive a file from a collection. He logs into the system and opens the collection where the file resides. He selects the file and uses the archive function to archive his file.

C013   A user can archive a Collection.
- Any collection of objects may be archived.
- Access to an archived collection is limited to read-only capabilities.
- Archived collections are portable and can be imported by any application that recognizes the archival format.
- Archived collections can only be restored through the mechanism that initiated the archival (i.e., application, owner).

Use Case:
Vicky wants to archive a named collection. She logs into the system and finds the collection to be archived. She selects the named collection and uses the archive function to archive her collection.

C014   A user can organize objects within a Collection by grouping, filtering and sequencing.
- Grouping of objects can be removed, resulting in a single alphabetical list of objects.
- Grouping of objects can be changed to reflect groupings based upon other characteristics that are common across a set of objects.

Use Case:
Jerry would like to organize the files in his collection. He logs into the system and opens his collection. Using the move function he organizes the files in to a way that is more meaningful to him.

C015   A user can modify the information that describes the object (i.e. properties, metadata, associations).
- Any object information that is not generated by the application can be modified by the owner.
- Object associations may be added to the object properties (i.e., associate a reflection with an application file).
- When object properties are modified, the owner has the option of creating a new version of the object.

- An association may be added as needed by the author, providing the type of association is within the scope of the application.

  Use Case:
  Alisa needs to change the metadata that is associated with a file in a collection. She logs into the system and opens the collection where the file resides. Using the property function she edits the metadata and saves the information.

C016 A user can preview the content of an object in a Collection.
- If the content of the object can be displayed using a helper application then the owner can preview the object in conjunction with the descriptive information.
- If the content of the object cannot be previewed in the current environment then the owner is given instructions for viewing the object in its native application.

  Use Case:
  Greg needs to view an image he has in a collection. He logs into the system and opens the collection where the image resides. When he clicks on the filename the image displays in his browser window.

Forms Specifications

F001 A user can create a form through the form builder.
- Forms can be built in both the Personal and CIG Worksites.
- Users can either select an existing form to modify or create a new one from scratch.
- The user is prompted to identify the type of form to create.
- Each type of form has different properties from which to select:
  - Title
  - Supporting text
  - Tips
  - Properties (owner, expiration date, search words, etc)
  - Format/Design

F002 A user can save created forms to personal, CIG, institutional and/or OSP libraries.

F003 A user can submit forms for publication in OSP through a defined process.
- This process resides outside of the OSP portfolio instance and is managed by OSPI.
- IMS mapping is part of this submission process.

F004 **A user enters information to create structured artifacts into their portfolios through elements displayed in the personal worksite and those displayed in the CIG worksite.**

- User may navigate to Elements through the data tree or through the entry wizards (see description in requirements)
- There will be one data tree and zero to many entry wizards in the personal worksite. There may be zero or one data tree and zero to many entry wizards in each CIG worksite
- Elements can also be accessed through a "search" function which searches for element by key words
- The user enters text, uploaded files, links, associations, and properties into appropriate element fields
- Once entered, structured artifacts can be modified and/or deleted ("dynamic") unless they are designated as "static"
- Once an owner has been designated for a structured artifact, it appears in the owners' repository. There may be multiple owners and CIGs, Institutions, and OSP may be structured artifact owners.
- Comments, reflections, and evaluations are elements
- Structured artifacts may be text, URL links, or any file type. Versioning will be possible for uploaded files through collections.

F005 **A user can associate one or more structured artifacts.**

- An association is binding when a structured artifact is dependent on another structured artifact (like a comment about a portfolio presentation). Associations are directional between subject and object. That is, when a structure artifact is in a binding association, the object is deleted when the subject is deleted. Binding associations, however, do not imply that in every context (like another form template) the structured artifacts must appear together.
- An association is non-binding when a structured artifact is independent of another structured artifact to which it is connected. Such associations can be made with multiple structured artifacts (for example, an uploaded file can be attached to multiple elements). In a non-binding structured artifact, it is not deleted when its associated structured artifact is deleted.
- Multiple associations can be made between objects such that an object can be related to one or more other objects. These associations are not intrinsic properties of the elements; rather they are specific to context defined by an entry wizard, presentation, or report.

F006 **A user can submit a newly created form for inclusion in the OSP code base.**

Design Specifications

D001 **A user can design a Named Collection.**

- User must have edit permissions.

    Use Case:

Kurt wants to design a named collection. He logs into the system and opens the collection. Kurt accesses the design function and applies the design to the named collection.

D002 A user can design an artifact.
- User must have edit permissions.

    Use Case:
    Valerie wants to design a file in a collection. She logs into the system and opens the collection where the file resides. She selects the file and uses the design function to apply the desired design to the file.

D003 A user can enter and format text and graphics with a WYSIWYG editor.
- The WYSIWYG editor will provide placement within editable regions of a layout.

    Use Case:
    Michael wants to apply certain styles to the text in a design he would like to create. He logs into the system and accesses the design function. Using the WYSIWG editor he applies the styles to the necessary areas of his design.

D004 A user can enter links to another object.
- The link must link to an object which:
    - the user has view permissions.
    - is an external URL within an editable region.

    Use Case:
    Stella needs to add a link to a file in a collection. She logs into the system and accesses the item to which the item will be linked. Using the object picking function Stella selects the item to be linked.

D005 A user can include and style the contents of an object.
- User must have view permissions.
- The object must be included in the Named Collection being designed within an editable region.

    Use Case:
    Franklin wants to update one of his files. He has decided that he wants the styles to be different, so he logs into the system, opens an object in the named collection, and designs it.

D006 A user can move the contents of an editable region to another editable region.
- Method of moving contents will be one of two options:
    - Drag-and-drop interface
    - KEEP-style interface

    Use Case:
    Jake wants to update contents in a file. He logs into the system, opens his file, and selects the text he wants to move. Then he simply clicks on it and drags it to another editable region.

D007 A user can modify the existing design of an object.

- User must have edit permissions.

  Use Case:
  Markus decides he simply hates the current design in one of his files. Having editing permissions on his own files, he logs onto the system and updates the design of his file.

D008 A user can add layouts as files.
- The files must be in a well-documented XML format (using XSL, CSS, etc.).

  Use Case:
  Melinda wants to add a new layout to a document. She logs in, makes sure that the file is properly tagged, and adds a Cascading Style Sheet to the file. If she decides she wants to tweak her file, she can just update the CSS file.

D009 A user can add styles as files.
- The files must be in a well-documented XML format.

  Use Case:
  See D008

D010 A user can add templates.
- The files must be in a well-documented XML format.

  Use Case:
  See D008

Analysis Specifications

A001 A user can choose to allow or not allow the institution and/or CIGs to which they belong to harvest data from objects they contribute to CIG scaffolding, compositions, and reports.
- User must be a portfolio owner.
- Association functionality.

A002 A user can choose to allow or not allow the institution and/or CIGs to which they belong to harvest data from their repositories.
- User must be a portfolio owner.
- Association functionality.

A003 A user can choose to allow or not allow other CIGs to harvest data from objects CIG members contribute to CIG scaffolding, compositions, and reports.
- User must be a CIG owner.
- Association functionality.

A004 A user can choose to allow or not allow other CIGs to harvest data from objects in the CIG repository.
- User must be a CIG owner.

- Association functionality.

A005 A user can be guided through the reporting process.
- User must be a portfolio owner.
- Scaffolding functionality.

A006 A user can be guided in setting up CIG query definitions and CIG report compositions to share with CIG members.
- User must be a CIG owner.
- Scaffolding functionality.

A007 A user can be notified of his intellectual property rights in relation to institutional policies for harvesting data.
- User must be a portfolio owner.
- Scaffolding functionality

A008 A user can be notified of permissions their institution allows them to set in relation to institutional harvesting of data.
- User must be a portfolio owner.
- Scaffolding functionality.

A009 A user can be assisted in selecting a query definition from a CIG repository and/or creating an ad hoc query.
- User must be a portfolio owner.
- Scaffolding functionality.

A010 A user can be assisted in creating an archive report and/or a dynamic report from a set of query results and a report composition.
- User must be a portfolio owner.
- Scaffolding functionality.

A011 A user can select or create a report composition.
- Design functionality.

A012 A user can create and save archive reports and dynamic reports.
- Design functionality.

A013 A user can share reports with other portfolio owners or CIGs, the institution, and selected email addresses outside of the institution.
- Design functionality.

A014 A user can store reports in the repository.
- Organizing or collection functionality.

A015 A user can associate related reports.
- Organizing or collection functionality.

A016 A user can export harvested objects, extracted data, and archive reports to applications outside the system.
- Export functionality.

A017 A user can query a portfolio collection.
- The user must be the owner of the portfolio.

A018 A user can query CIG Matrix cells.
- The user must be the owner of the portfolio.

A019 A user can identify and query matrix cells.
- The user must be the owner of the CIG.

A020 A user can query the collections of all portfolio owners in an institution.
- The user must have proper permissions.

A021 A user can query the matrix cells of all worksites within an institution.
- The user must have proper permission.

A022 A user can identify and query cells from matrices of selected portfolio owners.
- The user must be the owner of a CIG.
- The query can be by means of:
  - Username
  - Date of username creation (within specified range of dates)
  - Collections size (within specified range of sizes)

A023 A user can identify and query selected individual portfolio collections.
- The user must have proper permissions.
- The query can be by means of:
  - Username
  - Date of username creation (within specified range of dates).

A024 A user can identify and query cells from the matrices of selected CIGs and selected portfolio owners within those CIGs.
- The user must have proper permissions.
- The query can be by means of:
  - Username
  - Date of username creation (within specified range of dates).

A025 A user can select and query all or some of the cells from selected CIG matrices.

- The user must be a CIG owner or have proper permissions.

A026 **A user can select and query any or all artifact types from a collection, including structured artifacts and uploaded files.**
- The user must be a portfolio owner.
- The structured artifacts are created from structured artifact definitions.

A027 **A user can select and query any or all artifacts, reflections, and assessments associated with specified matrix cells from a CIG.**
- The user must be a portfolio owner.
- Uploaded files are specified as the following:
    - Documents
    - Pictures
    - Audio
    - Video

A028 **A user can select and query any or all artifact types from any or all individual portfolio owner collections, including structured artifacts and uploaded files.**
- The user must have proper permissions.
- The structured artifacts are created from structured artifact definitions.
- Uploaded files are specified as the following:
    - Documents
    - Pictures
    - Audio
    - Video

A029 **A user can select and query any or all artifacts, reflections, and assessments associated with specified matrix cells from any or all CIGs within the institution.**
- The user must have proper permissions.

A030 **A user can search collections to which he has query access.**
- The user must be a portfolio owner, a CIG owner or have proper permissions.
- The search can be by means of keywords for the identification of:
    - Usernames
    - Structured artifact names
    - Filenames and descriptions (metatags)
    - Levels and criteria of matrix cells
    - Expectations within matrix cells

A031 **A user can search matrix cells to which he has query access.**
- The user must be a portfolio owner, a CIG owner or have proper permissions.
- The search can be by means of keywords for the identification of:
    - Usernames
    - Structured artifact names
    - Filenames and descriptions (metatags)
    - Levels and criteria of matrix cells
    - Expectations within matrix cells

A032 A user can save query results.
- Results will be accompanied by unlimited invitations for query modifications.
- Results can be saved as archive query reports.
    - Archive query reports:
        - are copies of dynamic query results that are locked.
        - may not be changed by individual portfolio owners.
        - continue to exist after individual portfolio owners delete the associated artifacts or are deleted as users.
- Results can be maintained on a continuous basis as dynamic query reports in the portfolio collections of the individual portfolio owners, CIG owners, and institutions submitting the query.

A033 A user can apply usage reports available in OSP 1.5 to archive reports.
- The user must be a portfolio owner, a CIG owner or have proper permissions.
- This includes:
    - Listing of users by:
        - Username
        - Email
        - Address
    - User Role
    - System storage
    - Detailed file summaries
    - File listing
    - Structured artifact listing
    - User file storage
- These reports may be saved along with the query report

A034 A user can apply usage reports available in OSP 1.5 to dynamic query reports.
- The user must be a portfolio owner, a CIG owner or have proper permissions.
- This includes:
    - Listing of users by:
        - Username
        - Email
        - Address
    - User Role
    - System storage
    - Detailed file summaries
    - File listing
    - Structured artifact listing
    - User file storage

A035 A user can apply descriptive statistics to assessments contained within archive query reports.
- The user must be a portfolio owner, CIG owner or have proper permissions.
- Statistics can be mean, median and/or mode.
- The descriptive statistics may be saved along with the query report.

A036 A user can apply descriptive statistics to assessments contained within dynamic query reports.

- The user must be a portfolio owner, CIG owner or have proper permissions.
- Statistics can be mean, median and/or mode.

A037 A user can open structured artifacts, uploaded files, reflections, and assessments from the query report.

A038 A user can save structured artifacts, uploaded files, reflections, and assessments from the query report.

A039 A user can export separately structured artifacts, uploaded files, reflections, and assessments from the query report.

A040 A user can print structured artifacts, uploaded files, reflections, and assessments from the query report.
- Dependent upon file type.

A041 A user can export archive query reports from the portfolio to another application.
- Includes associated and saved usage reports.
- Includes descriptive statistics.

A042 A user can share archive and dynamic query reports.
- By means of the Design Tool.
    - Design Tool will include options for styles and layouts specific to dynamic and archive reports.
    - The resulting report composition will allow those with whom it is shared to:
        - View usage reports
        - View assessment statistics
        - Open and/or save individual structured artifacts
        - View uploaded files
        - View reflections

Portfolio

Section 4: Glossary

OSPI

Glossary Terms and Definitions

Application File: An application file is any source file created outside of the portfolio environment that has been added to a collection for use in the portfolio environment.

Artifact: Any object created by the OSP application. This includes a completed form, reference to an external website, completed designs, forms, design template that is stored by a portfolio owner for use within the Portfolio environment. *In OSP 1.x, the equivalent to an artifact definition is an element. An instance of an artifact is equivalent to an artifact that uses a definition*

Archive: v - to create and store a read-only copy n - n - a collection of archived artifacts; an archived CIG, an archived portfolio, archived communication

Assessment: "the systematic basis for making inferences about the learning and development of students. More specifically, assessment is the process of defining, selecting, designing, collecting, analyzing, interpreting, and using information to increase students' learning and development" (T. Dary Erwin, Assessing Student Learning and Development, Jossey-Bass, 1991, see pp.14-19).
Additional definitions of assessment can be found at
http://www.aahe.org/assessment/assess_faq.htm#define.

Associations: A semantically-valuable relationship between two objects.   A relationship has a type, chosen from a vocabulary. For example, an artifact might be a "reflection on" a cell (within a matrix).

Authentication: The process by which an application verifies the identity of a user who wishes to access it.

Authorization: Determining what a user can do within the context of an application environment, including which functions and data are available to the user.

Cell: the intersection of two dimensions within a matrix.

Check List: A one-dimensional list of items or tasks used to provide guidance in completion of a guided process. A check list does not require the items or tasks be addressed in a specified order (see Ordered List).

Collection: A collection is a reference to a set of artifacts stored by an owner as a means of gathering artifacts for use within the Portfolio environment.   There are 2 types of collections: general and named. .   A general collection is a set of objects that is inclusive of all objects owned by a single portfolio owner. A named collection is a set of objects that is a subset of the entire collection.   It may be generated based on system settings or created through selection of objects by an owner.

Comment: Text written about something in a portfolio, usually by someone other than the portfolio's owner; An artifact with a "is a comment on" relationship to another object.

Common Interest Group (CIG): A workgroup that includes users who wish to collaborate around portfolio creation and use; *See Workgroup*. A container for a set of tools and permissions to facilitate this collaboration. *See Worksite*.

Definition: A specification of what types of data can be included in a type of artifact; an XSD for a type of artifact

Design: One of more pages (screen container) which has object (collection artifact) placeholders in combination with a layout and style.

Design Template: A pre-defined combination of layout, style and content elements provided to owners as a guide for creating a presentation. A set of files equivalent in function to a layout and style, but not necessarily decomposable into a layout and style.

Dimension: An ordered list of labels. For example, a dimension in a matrix might be a set of principles of undergraduate learning.

Element:. The fundamental structure of a form. It has a title, defined text fields, a layout, and metadata (permissions to edit, timestamp, and data source).

Expectation: An Objective to be met.

Folder: A folder is an interface element that references a collection. This presumes the interface

Form: 1. (conceptual) A collection of textual instructions and/or prompts provided to guide a person in the entry of data required for a specific context. 2. (technical) An artifact intended to function as a form.

Form Template: 1. (conceptual) A predefined, uncompleted form that includes textual instructions and/or prompts that indicate the types of data required, as well as the entry fields needed to record the data. 2. (technical) The definition of an artifact that functions as a form. Note: This one doesn't feel right to me as a direct replacement for a SAD. A structured artifact definition is not just a set of prompts; it's a definition of a data structure. In fact, it's more centrally the later than the former. A general collection is a set of objects that is inclusive of all objects owned by a single portfolio owner.

Global Actions: Actions that can be performed on objects in multiple contexts. For example, edit is a global action since an object may be edited using multiple tools.

Guidance: Information provided by a workgroup member to worksite members about formats and processes for portfolio. *See scaffolding*.

Interaction: The resulting action or outcome of a user or system agent performing an assigned function or completing associated tasks.

Interoperability: The ability of data, applications, and platforms to communicate with one another.

Layout: A layout defines the position of content presented within an individual page. It may include one or more object "placeholder" into which certain types of objects may be placed or data may be entered. A layout is similar to a slide design in PowerPoint.

Library: A collection of reusable objects that are shared as templates within an organization. Libraries may be made available by the OSP community, individual institutions, or departments and schools within an institution.

Level: A dimension that focuses on stages of competence, e.g. beginning, intermediate, and advanced, or developing, literate, and fluent.

Matrix: a multidimensional structure for assessment and other sorts of analysis. Matrixes define a data structure and may define a process. They have dimensions, such as criteria and levels that intersect in cells, to which workflows can be assigned.

Metadata: data about data; structured information about an object intended more to facilitate search than to communicate meaning directly

Object: Anything stored in the collection. This includes an artifact, application file, named collection, or portfolio; anything that can have a relationship with something else within OSP.

Object Placeholder: Is a designated area where an object may be inserted into a layout.

Owner: An owner is any individual that has been assigned a workspace within the portfolio environment for use in creation or a worksite (e.g., portfolio owner, CIG owner).

Page: A rendered design. *See design*

Permission: Authorization to perform an action with a tool in a context.

Portability: The ability to import and export an object between systems. In OSP 2, portability of portfolios will be supported through implementation of the IMS ePorfolio specification.

Portfolio: 1. (conceptual) A portfolio is a digital composition of evidence of learning, which usually includes evidence collected over time, on which the portfolio owner has reflected, designed for communication with an audience; 2. (technical) A portfolio is one or more compositions and all the other objects referenced in the composition.

Presentation:. A visual presentation of a selection of artifacts and/or elements. elements of this concept are disaggregated into portfolio, composition, design, organization, and style.

Presentation Template:. In OSP 1.5, the files that determine how artifacts are visually displayed, which are used in creating a presentation. In OSP 2.0, elements of this concept are disaggregated into design and style.

Privacy:

Query: A set of criteria for selecting objects and instructions for organizing the results. Executing a query produces a query result, which includes a point-in-time view of the state of the items involved in the query. A query may be run at any time and the results may be recorded (*see Report*).

Reflection: 1. n. An artifact that has a relationship to another object of type "reflects on." 2. n. An artifact containing information related to reflective learning, whether or not in an explicit relationship to other objects.

Reflection, guided: A guided process related to reflective learning.

Report: A report is a formatted set of data that provides information – in aggregation or detail – that may be distributed to an interested and authorized audience. In most cases a report is required to meet archival or other statutory obligations (e.g., accreditation, transcript). If the

results of a query are printed, or otherwise distributed outside of the portfolio environment, the results become a report.

Roles: A set of permissions that can be assigned to a user within a context.

Rubric: An n-dimensional table of definitions of performance indicators.

Scaffold: A mechanism that provides guidance.

Search: A query that produces a collection / list of objects.

Structured Artifact Definition: *Deprecated – see Form Template*

Style: Specifies colors, typography, and repeating elements for use in visually rendering an object within a layout. A style consists of three components: a color scheme, the colors to use for each type of contents and region of the layout; typography, the fonts to use for each type of contents and region of the layout; and repeating elements, elements and the format of elements that repeat across pages, such as logos, list and folder icons, and headers/footers.

Template: A reusable object that are shared in Libraries. Examples of templates are design and forms.

Tool: A unit of functionality that can be added to a worksite by its owner.

User: A user is an individual with an OSP account.

Vocabulary: A set of terms that control how certain attributes can be filled (e.g. a vocabulary may include a set of relationship types, and users may only be able to choose relationship types that are included in the vocabulary).

Workgroup: 1. (conceptual) A workgroup includes one or more people with a common objective whose activities are usually coordinated by a single member of the work group. Within the work group, the coordinator provides tools and guidance in the use of the tools such that participants in the work group activities can meet the group's goals. 2. (technical) The group of users who have permissions within a worksite.

Worksite: A general area in which a person may create and interact around a portfolio. The work space includes the tools necessary for working within the workgroup or portfolio, as well as guidance for use of those tools.