

OSID V3 Specifications cataloging package

Version Draft 3

This specifications represent a draft for OSID V3 interface definitions. These definitions may change at any time.

Last Modified: 27 October 2008

prepared by: Tom Coppeto OnTapSolutions

Copyright © 2008 Massachusetts Institute of Technology



| | OSID License |
|-----------|---|
| | |
| Copyright | Copyright © 2008 Massachusetts Institute of Technology. All Rights Reserved. |
| | This Work is being provided by the copyright holder(s) subject to the following license. By obtaining, using and/or copying this Work, you agree that you have read, understand, and will comply with the following terms and conditions. |
| License | This Work and the information contained herein is provided on an ""AS IS"" basis. The Massachusetts Institute of Technology, the Open Knowledge Initiative, and THE AUTHORS DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE WORK OR THE USE OR OTHER DEALINGS IN THE WORK. |
| | Permission to use, copy and distribute unmodified versions of this Work, for any purpose, without fee or royalty is hereby granted, provided that you include the above copyright notice and the terms of this license on ALL copies of the Work or portions thereof. |
| | You may nodify or create Derivatives of this Work only for your internal purposes. You shall not distribute or transfer any such Derivative of this Work to any location or to any third party. For the purposes of this license, Derivative shall mean any derivative of the Work as defined in the United States Copyright Act of 1976, such as a translation or modification. |
| | The export of software employing encryption technology may require a specific license from the United States Government. It is the responsibility of any person or organization comtemplating export to obtain such a license before exporting this Work. |



Package Description osid.cataloging package

Interfaces osid.cataloging.CatalogingProfile

osid.cataloging.CatalogingManager

osid.cataloging.CatalogingProfileManager

osid.cataloging.CatalogSession

osid.cataloging.CatalogAssignmentSession

osid. cataloging. Catalog Assignment Notification Session

osid.cataloging.CatalogLookupSession osid.cataloging.CatalogSearchSession osid.cataloging.CatalogAdminSession osid.cataloging.CatalogNotificationSession osid.cataloging.CatalogHierarchySession

osid.cataloging.CatalogHierarchyDesignSession

osid.cataloging.Catalog

osid.cataloging.CatalogRecord osid.cataloging.CatalogQuery

osid.cataloging.CatalogQueryRecord

osid.cataloging.CatalogForm

osid.cataloging.CatalogFormRecord osid.cataloging.CatalogSearch

osid.cataloging.CatalogSearchRecord

osid.cataloging.CatalogSearchResults

osid.cataloging.CatalogSearchResultsRecord

osid.cataloging.CatalogReceiver osid.cataloging.CatalogList

osid.cataloging.CatalogEntryReceiver



| Package | osid.cataloging |
|-------------|---|
| Title | Cataloging Open Service Interface Definitions |
| Version | 3.0.0 |
| | The Cataloging OSID provides a means for organizing objects into catalogs. An object is represented by an OSID Id. Catalogs can be used for OsidObjects using their Ids or consumer objects whose identifiers are exprsssed via an Id. |
| Description | Catalogs can be organized into hierarchies for federation. A catalog that is a parent of another catalog includes the lds of its children. The Cataloging OSID provides the core definition for the catalogging functions used throughout the OSIDs and aids in the adaptability of cataloging structures. |



| | T. | |
|-------------|--|---|
| Interface | osid.cataloging | g.CatalogingProfile |
| Implements | osid.OsidProfile | |
| Description | The cataloging profile describes the interoperability among cataloging services. | |
| Method | suppo | rtsCatalog |
| Description | Tests for the availability of a cataloging service re | trieving Id to Catalog mappings. |
| Return | boolean | true if cataloging is available, false otherwise |
| Compliance | mandatory | This method must be implemented. |
| Method | supportsCat | alogAssignment |
| Description | Tests for the availability of a cataloging service for | |
| Return | boolean | true if catalog assignment is available, false otherwise |
| Compliance | mandatory | This method must be implemented. |
| Method | | ssignmentNotification |
| Description | Tests for the availability of a cataloging notification | |
| · | | true if catalog assignment notification is available, |
| Return | boolean | false otherwise |
| Compliance | mandatory | This method must be implemented. |
| Method | supportsO | CatalogLookup |
| Description | Tests for the availability of a catalog lookup service | |
| Return | boolean | true if catalog lookup is available, false otherwise |
| Compliance | mandatory | This method must be implemented. |
| Method | | CatalogSearch |
| Description | Tests for the availability of a catalog search service | |
| Return | boolean | true if catalog search is available, false otherwise |
| Compliance | mandatory | This method must be implemented. |
| Method | | CatalogAdmin |
| Description | | n service for the addition and deletion of catalogs. |
| Return | boolean | true if catalog administration is available, false otherwise |
| Compliance | mandatory | This method must be implemented. |
| Method | | alogNotification |
| Description | Tests for the availability of a catalog notification se | ervice. |
| Return | boolean | true if catalog notification is available, false otherwise |
| Compliance | mandatory | This method must be implemented. |
| Method | | talogHierarchy |
| Description | Tests for the availability of a catalog hierarchy trav | |
| Return | boolean | true if catalog hierarchy traversal is available, false otherwise |
| Compliance | mandatory | This method must be implemented. |
| Method | | ogHierarchyDesign |
| Description | Tests for the availability of a catalog hierarchy des | |
| Return | boolean | true if catalog hierarchy design is available, false otherwise |
| Compliance | mandatory | This method must be implemented in all providers. |
| Method | | onHierarchySequencing |
| Description | Tests if the configuration hierarchy supports node | |
| Return | boolean | true if configuration hierarchy node sequencing is supported, false otherwise |
| | | |
| Compliance | mandatory | This method must be implemented. |



| Method | | getCatalo | gRecordTypes |
|-------------|--|----------------------------|--|
| Description | Gets the supported Catalog record types. | | |
| Return | osid.type.TypeList | | a list containing the supported Catalog record types |
| Compliance | mandatory | | This method must be implemented. |
| Method | | supportsCat | alogRecordType |
| Description | Tests if the given Catal | og record type is supporte | ed. |
| Parameters | osid.type.Type | catalogRecordType | a Type indicating a Catalog record type |
| Return | boolean | | true if the given Type is supported, false otherwise |
| Compliance | mandatory | | This method must be implemented. |
| Method | getCatalogSearchRecordTypes | | archRecordTypes |
| Description | Gets the supported cat | alog search reciord types. | |
| Return | osid.type.TypeList | | a list containing the supported search record types |
| Compliance | mandatory | | This method must be implemented. |
| Method | | supportsCatalog | gSearchRecordType |
| Description | Tests if the given catalo | g search record type is su | pported. |
| Parameters | osid.type.Type | catalogSearchRecordType | a Type indicating a catalog search record type |
| Return | boolean | | true if the given Type is supported, false otherwise |
| Compliance | mandatory | | This method must be implemented. |



| Interface | osid.cataloging.CatalogingManager | | |
|---|--|---|--|
| Implements | osid.OsidManager | | |
| Implements | osid.cataloging.CatalogingProfile | | |
| | The cataloging manager provides access to cataloging sessions and provides interoperability tests for various aspects of this service. The sessions included in this manager are: | | |
| | CatalogSession: a session to lookup mappings | s to catalogs | |
| | CatalogAssignmentSession: a session to ma | nage Id to Catalog mappings | |
| | CatalogAssignmentNotificationSession: a s | ession to receive notification of changed mappings | |
| | CatalogLookupSession: a session to retrieve | catalog objects | |
| Description | CatalogSearchSession: a session to search for | or catalogs | |
| | CatalogAdminSession: a session to create, up | pdate and delete catalogs | |
| | CatalogNotificationSession: a session to receive | eive notifications for changes in catalogs | |
| | CatalogHierarchyTraversalSession: a session | on to traverse hierarchies of catalogs | |
| | CatalogHierarchyDesignSession: a session | to manage hierarchues of catalogs | |
| | The cataloging manager also provides a profile to | or determing the supported search types supported by | |
| | this service. | | |
| Method | | alogSession | |
| Description | Gets the cataloging session for retrieving mapping | | |
| Return | osid.cataloging.CatalogSession | a CatalogSession | |
| Errors | OPERATION_FAILED | unable to complete request | |
| | UNIMPLEMENTED | supportsCatalog() is false | |
| Compliance | optional | This method must be implemented if | |
| Method | a chCatalo a Ac | supportsCatalog() is true. | |
| Description | Gets the cataloging session for adding and remov | signmentSession | |
| Return | osid.cataloging.CatalogAssignmentSession | | |
| | OPERATION FAILED | unable to complete request | |
| Errors | UNIMPLEMENTED | · · · · · · · · · · · · · · · · · · · | |
| | | TSUDDOMSCALAIOGASSIGNMENTO IS TAISE | |
| 0 | | supportsCatalogAssignment() is false This method must be implemented if | |
| Compliance | optional | | |
| Compliance Method | optional | This method must be implemented if supportsCatalogAssignment() is true. | |
| | optional | This method must be implemented if supportsCatalogAssignment() is true. | |
| Method Description Parameters | optional getCatalogAssignm Gets the notification session for subscribing to choosid.cataloging.CatalogEntryReceiver receiver | This method must be implemented if supportsCatalogAssignment() is true. nentNotificationSession anges to catalogs. the notification callback | |
| Method Description | getCatalogAssignm Gets the notification session for subscribing to chosid.cataloging.CatalogEntryReceiver receiver osid.cataloging.CatalogNotificationSession | This method must be implemented if supportsCatalogAssignment() is true. nentNotificationSession anges to catalogs. the notification callback a CatalogAssignmentNotificationSession | |
| Method Description Parameters | getCatalogAssignm Gets the notification session for subscribing to chosid.cataloging.CatalogEntryReceiver receiver osid.cataloging.CatalogNotificationSession NULL_ARGUMENT | This method must be implemented if supportsCatalogAssignment() is true. nentNotificationSession anges to catalogs. the notification callback a CatalogAssignmentNotificationSession receiver is null | |
| Method Description Parameters Return | getCatalogAssignm Gets the notification session for subscribing to chosid.cataloging.CatalogEntryReceiver receiver osid.cataloging.CatalogNotificationSession | This method must be implemented if supportsCatalogAssignment() is true. nentNotificationSession anges to catalogs. the notification callback a CatalogAssignmentNotificationSession receiver is null unable to complete request | |
| Method Description Parameters | getCatalogAssignm Gets the notification session for subscribing to chosid.cataloging.CatalogEntryReceiver receiver osid.cataloging.CatalogNotificationSession NULL_ARGUMENT OPERATION_FAILED | This method must be implemented if supportsCatalogAssignment() is true. nentNotificationSession anges to catalogs. the notification callback a CatalogAssignmentNotificationSession receiver is null unable to complete request supportsCatalogAssignmentNotification() is | |
| Method Description Parameters Return | getCatalogAssignm Gets the notification session for subscribing to chosid.cataloging.CatalogEntryReceiver receiver osid.cataloging.CatalogNotificationSession NULL_ARGUMENT | This method must be implemented if supportsCatalogAssignment() is true. nentNotificationSession anges to catalogs. the notification callback a CatalogAssignmentNotificationSession receiver is null unable to complete request supportsCatalogAssignmentNotification() is false | |
| Method Description Parameters Return Errors | getCatalogAssignm Gets the notification session for subscribing to chosid.cataloging.CatalogEntryReceiver receiver osid.cataloging.CatalogNotificationSession NULL_ARGUMENT OPERATION_FAILED UNIMPLEMENTED | This method must be implemented if supportsCatalogAssignment() is true. nentNotificationSession anges to catalogs. the notification callback a CatalogAssignmentNotificationSession receiver is null unable to complete request supportsCatalogAssignmentNotification() is false This method must be implemented if | |
| Method Description Parameters Return | getCatalogAssignm Gets the notification session for subscribing to chosid.cataloging.CatalogEntryReceiver receiver osid.cataloging.CatalogNotificationSession NULL_ARGUMENT OPERATION_FAILED | This method must be implemented if supportsCatalogAssignment() is true. nentNotificationSession anges to catalogs. the notification callback a CatalogAssignmentNotificationSession receiver is null unable to complete request supportsCatalogAssignmentNotification() is false This method must be implemented if supportsCatalogAssignmentNotification() is | |
| Method Description Parameters Return Errors Compliance | getCatalogAssignm Gets the notification session for subscribing to chosid.cataloging.CatalogEntryReceiver receiver osid.cataloging.CatalogNotificationSession NULL_ARGUMENT OPERATION_FAILED UNIMPLEMENTED optional | This method must be implemented if supportsCatalogAssignment() is true. nentNotificationSession anges to catalogs. the notification callback a CatalogAssignmentNotificationSession receiver is null unable to complete request supportsCatalogAssignmentNotification() is false This method must be implemented if supportsCatalogAssignmentNotification() is true. | |
| Method Description Parameters Return Errors Compliance | getCatalogAssignm Gets the notification session for subscribing to chosid.cataloging.CatalogEntryReceiver receiver osid.cataloging.CatalogNotificationSession NULL_ARGUMENT OPERATION_FAILED UNIMPLEMENTED optional | This method must be implemented if supportsCatalogAssignment() is true. nentNotificationSession anges to catalogs. the notification callback a CatalogAssignmentNotificationSession receiver is null unable to complete request supportsCatalogAssignmentNotification() is false This method must be implemented if supportsCatalogAssignmentNotification() is | |
| Method Description Parameters Return Errors Compliance Method Description | getCatalogAssignm Gets the notification session for subscribing to chosid.cataloging.CatalogEntryReceiver receiver osid.cataloging.CatalogNotificationSession NULL_ARGUMENT OPERATION_FAILED UNIMPLEMENTED optional getCatalog Gets the catalog lookup session. | This method must be implemented if supportsCatalogAssignment() is true. nentNotificationSession anges to catalogs. the notification callback a CatalogAssignmentNotificationSession receiver is null unable to complete request supportsCatalogAssignmentNotification() is false This method must be implemented if supportsCatalogAssignmentNotification() is true. LookupSession | |
| Method Description Parameters Return Errors Compliance Method Description Return | getCatalogAssignm Gets the notification session for subscribing to chosid.cataloging.CatalogEntryReceiver receiver osid.cataloging.CatalogNotificationSession NULL_ARGUMENT OPERATION_FAILED UNIMPLEMENTED optional getCatalog Gets the catalog lookup session. osid.cataloging.CatalogLookupSession | This method must be implemented if supportsCatalogAssignment() is true. nentNotificationSession anges to catalogs. the notification callback a CatalogAssignmentNotificationSession receiver is null unable to complete request supportsCatalogAssignmentNotification() is false This method must be implemented if supportsCatalogAssignmentNotification() is true. LookupSession a CatalogLookupSession | |
| Method Description Parameters Return Errors Compliance Method Description | getCatalogAssignm Gets the notification session for subscribing to chosid.cataloging.CatalogEntryReceiver receiver osid.cataloging.CatalogNotificationSession NULL_ARGUMENT OPERATION_FAILED UNIMPLEMENTED optional getCatalog Gets the catalog lookup session. | This method must be implemented if supportsCatalogAssignment() is true. mentNotificationSession anges to catalogs. the notification callback a CatalogAssignmentNotificationSession receiver is null unable to complete request supportsCatalogAssignmentNotification() is false This method must be implemented if supportsCatalogAssignmentNotification() is true. LookupSession a CatalogLookupSession unable to complete request | |
| Method Description Parameters Return Errors Compliance Method Description Return | getCatalogAssignm Gets the notification session for subscribing to chosid.cataloging.CatalogEntryReceiver receiver re | This method must be implemented if supportsCatalogAssignment() is true. nentNotificationSession anges to catalogs. the notification callback a CatalogAssignmentNotificationSession receiver is null unable to complete request supportsCatalogAssignmentNotification() is false This method must be implemented if supportsCatalogAssignmentNotification() is true. LookupSession a CatalogLookupSession | |



| Method | getCatalogSearchSession | |
|-------------|--|---|
| Description | Gets the catalog search session. | |
| Return | osid.cataloging.CatalogSearchSession | a CatalogSearchSession |
| Errors | OPERATION_FAILED | unable to complete request |
| EIIOIS | UNIMPLEMENTED | supportsCatalogSearch() is false |
| | | This method must be implemented if |
| Compliance | optional | supportsCatalogSearch() is true. |
| Method | getCatalog | AdminSession |
| Description | Gets the catalog administrative session for creating | ng, updating and deleting catalogs. |
| Return | osid.cataloging.CatalogAdminSession | a CatalogAdminSession |
| Errors | OPERATION_FAILED | unable to complete request |
| Errors | UNIMPLEMENTED | supportsCatalogAdmin() is false |
| Campliance | antional | This method must be implemented if |
| Compliance | optional | supportsCatalogAdmin() is true. |
| Method | getCatalogNo | otificationSession |
| Description | Gets the notification session for subscribing to cha | |
| Parameters | osid.cataloging.CatalogReceiver receiver | the notification callback |
| Return | osid.cataloging.CatalogNotificationSession | a CatalogNotificationSession |
| | NULL_ARGUMENT | receiver is null |
| Errors | OPERATION_FAILED | unable to complete request |
| | UNIMPLEMENTED | supportsCatalogNotification() is false |
| Compliance | optional | This method must be implemented if |
| • | Орстопат | supportsCatalogNotification() is true. |
| Method | | ierarchySession |
| Description | Gets the catalog hierarchy traversal session. | |
| Return | osid.cataloging.CatalogHierarchySession | a CatalogHierarchySession |
| Errors | OPERATION_FAILED | unable to complete request |
| LITOIS | UNIMPLEMENTED | supportsCatalogHierarchy() is false |
| Compliance | optional | This method must be implemented if |
| Compliance | • | supportsCatalogHierarchy() is true. |
| Method | getCatalogHiera | archyDesignSession |
| Description | Gets the catalog hierarchy design session. | |
| Return | osid.cataloging.CatalogHierarchyDesignSession | a CatalogHierarchyDesignSession |
| Errors | OPERATION_FAILED | unable to complete request |
| LIIOIS | UNIMPLEMENTED | supportsCatalogHierarchyDesign() is false |
| Compliance | antional | This method must be implemented if |
| Compliance | optional | supportsCatalogHierarchyDesign() is true. |



| Interface | osid.cataloging.Cat | talogingProxyManager | |
|-------------|--|---|--|
| Implements | osid.OsidProxyManager | | |
| Implemente | osid.cataloging.CatalogingProfile | | |
| | various aspects of this service. Methods in this mobject for the purposes of proxy authentication. | oging sessions and provides interoperability tests for nanager support the passing of an Authentication | |
| | • CatalogSession: a session to lookup mappings | • | |
| | CatalogAssignmentSession: a session to ma | | |
| | | ession to receive notification of changed mappings | |
| Description | CatalogLookupSession: a session to retrieve | • • | |
| · | CatalogSearchSession: a session to search for | - | |
| | • CatalogAdminSession: a session to create, սլ | · · · · · · · · · · · · · · · · · · · | |
| | CatalogNotificationSession: a session to rece | · · · · · · · · · · · · · · · · · · · | |
| | CatalogHierarchyTraversalSession: a session | | |
| | CatalogHierarchyDesignSession: a session to manage hierarchues of catalogs | | |
| | | | |
| | The cataloging manager also provides a profile for determing the supported search types sup | | |
| | this service. | | |
| Method | | logSession | |
| Description | Gets the catalog session for retrieving Id to Cata | | |
| Parameters | osid.authentication.Authentication authentication | proxy authentication | |
| Return | osid.cataloging.CatalogSession | a CatalogSession | |
| | NULL_ARGUMENT | authentication is null | |
| _ | OPERATION_FAILED | unable to complete request | |
| Errors | PERMISSION_DENIED | authentication is invalid | |
| | UNIMPLEMENTED | supportsCatalog() is false | |
| | UNSUPPORTED | the authentication service is not supported | |
| Compliance | optional | This method must be implemented if | |
| • | · | supportsCatalog() is true. | |
| Method | | signmentSession | |
| Description | Gets the catalog session for mapping Ids to Cata osid.authentication.Authentication authentication | | |
| Parameters | | proxy authentication | |
| Return | osid.cataloging.CatalogAssignmentSession | a CatalogAssignmentSession | |
| | NULL_ARGUMENT | authentication is null | |
| Euro vo | OPERATION_FAILED | unable to complete request | |
| Errors | PERMISSION_DENIED | authentication is invalid | |
| | UNIMPLEMENTED | supportsCatalogAssignment() is false | |
| | UNSUPPORTED | the authentication service is not supported | |
| Compliance | optional | This method must be implemented if | |
| | • | supportsCatalogAssignment() is true. | |



| Method | getCatalogAssignmentNotificationSession | | |
|--------------------------------------|--|--|--|
| Description | Gets the catalog session for mapping Ids to Catalogs. | | |
| | osid.cataloging.CatalogEntryReceiver receiver | the notification callback | |
| Parameters | osid.authentication.Authentication authentication | proxy authentication | |
| Return | osid.cataloging.CatalogAssignmentNotificationSession | a CatalogAssignmentNotificationSession | |
| | NULL_ARGUMENT | receiver or authentication is null | |
| | OPERATION_FAILED | unable to complete request | |
| Errors | PERMISSION DENIED | authentication is invalid | |
| | UNIMPLEMENTED | supportsCatalogAssignmentNotification() is | |
| | UNSUPPORTED | the authentication service is not supported | |
| | | This method must be implemented if | |
| Compliance | optional | supportsCatalogAssignmentNotification() is | |
| | | true. | |
| Method | netCatalon | LookupSession | |
| Description | Gets the catalog lookup session. | <u> соокироеззіон</u> | |
| Parameters | osid.authentication.Authentication authentication | proxy authentication | |
| Return | osid.cataloging.CatalogLookupSession | a CatalogLookupSession | |
| | NULL ARGUMENT | authentication is null | |
| | OPERATION_FAILED | unable to complete request | |
| Errors | PERMISSION DENIED | authentication is invalid | |
| | UNIMPLEMENTED | supportsCatalogLookup() is false | |
| | UNSUPPORTED | the authentication service is not supported | |
| | | This method must be implemented if | |
| Compliance | optional | supportsCatalogLookup() is true. | |
| Method | getCatalog | SearchSession | |
| Description | Gets the catalog search session. | | |
| Parameters | osid.authentication.Authentication authentication | proxy authentication | |
| Return | osid.cataloging.CatalogSearchSession | a CatalogSearchSession | |
| | NULL_ARGUMENT | authentication is null | |
| | OPERATION_FAILED | unable to complete request | |
| Errors | PERMISSION_DENIED | authentication is invalid | |
| | UNIMPLEMENTED | supportsCatalogSearch() is false | |
| | UNSUPPORTED | the authentication service is not supported | |
| | ONSOFFORTED | fine authentication service is not supported | |
| 0 | | This method must be implemented if | |
| Compliance | optional | | |
| Compliance Method | optional | This method must be implemented if supportsCatalogSearch() is true. | |
| • | optional | This method must be implemented if supportsCatalogSearch() is true. AdminSession | |
| Method | optional getCatalog Gets the catalog administrative session for creating | This method must be implemented if supportsCatalogSearch() is true. AdminSession ng, updating and deleting catalogs. | |
| Method Description | optional getCatalog | This method must be implemented if supportsCatalogSearch() is true. AdminSession | |
| Method Description Parameters | optional getCatalog Gets the catalog administrative session for creating osid.authentication.Authentication authentication | This method must be implemented if supportsCatalogSearch() is true. AdminSession | |
| Method Description Parameters | getCatalog Gets the catalog administrative session for creatinosid.authentication.Authentication osid.cataloging.CatalogAdminSession | This method must be implemented if supportsCatalogSearch() is true. AdminSession ng, updating and deleting catalogs. proxy authentication a CatalogAdminSession | |
| Method Description Parameters | getCatalog Gets the catalog administrative session for creating osid.authentication.Authentication osid.cataloging.CatalogAdminSession NULL_ARGUMENT | This method must be implemented if supportsCatalogSearch() is true. AdminSession In g, updating and deleting catalogs. In proxy authentication In a CatalogAdminSession In authentication is null | |
| Method Description Parameters Return | getCatalog Gets the catalog administrative session for creatin osid.authentication.Authentication osid.cataloging.CatalogAdminSession NULL_ARGUMENT OPERATION_FAILED | This method must be implemented if supportsCatalogSearch() is true. AdminSession ag, updating and deleting catalogs. proxy authentication a CatalogAdminSession authentication is null unable to complete request authentication is invalid supportsCatalogAdmin() is false | |
| Method Description Parameters Return | getCatalog Gets the catalog administrative session for creatin osid.authentication.Authentication osid.cataloging.CatalogAdminSession NULL_ARGUMENT OPERATION_FAILED PERMISSION_DENIED | This method must be implemented if supportsCatalogSearch() is true. AdminSession ag, updating and deleting catalogs. proxy authentication a CatalogAdminSession authentication is null unable to complete request authentication is invalid supportsCatalogAdmin() is false the authentication service is not supported | |
| Method Description Parameters Return | getCatalog Gets the catalog administrative session for creatin osid.authentication.Authentication osid.cataloging.CatalogAdminSession NULL_ARGUMENT OPERATION_FAILED PERMISSION_DENIED UNIMPLEMENTED | This method must be implemented if supportsCatalogSearch() is true. AdminSession ag, updating and deleting catalogs. proxy authentication a CatalogAdminSession authentication is null unable to complete request authentication is invalid | |



| Method | getCatalogNotificationSession | | |
|-------------|---|---|--|
| Description | Gets the notification session for subscribing to changes to catalogs. | | |
| Parameters | osid.cataloging.CatalogReceiver receiver | the notification callback | |
| Parameters | osid.authentication.Authentication authentication | proxy authentication | |
| Return | osid.cataloging.CatalogNotificationSession | a CatalogNotificationSession | |
| | NULL_ARGUMENT | receiver or authentication is null | |
| | OPERATION_FAILED | unable to complete request | |
| Errors | PERMISSION_DENIED | authentication is invalid | |
| | UNIMPLEMENTED | supportsCatalogNotification() is false | |
| | UNSUPPORTED | the authentication service is not supported | |
| Compliance | antional | This method must be implemented if | |
| Compliance | optional | supportsCatalogNotification() is true. | |
| Method | getCatalogH | ierarchySession | |
| Description | Gets the catalog hierarchy traversal session. | | |
| Parameters | osid.authentication.Authentication authentication | proxy authentication | |
| Return | osid.cataloging.CatalogHierarchySession | a CatalogHierarchySession | |
| | NULL_ARGUMENT | authentication is null | |
| | OPERATION_FAILED | unable to complete request | |
| Errors | PERMISSION_DENIED | authentication is invalid | |
| | UNIMPLEMENTED | supportsCatalogHierarchy() is false | |
| | UNSUPPORTED | the authentication service is not supported | |
| Compliance | optional | This method must be implemented if | |
| Compliance | Орстопат | supportsCatalogHierarchy() is true. | |
| Method | | archyDesignSession | |
| Description | Gets the catalog hierarchy design session. | | |
| Parameters | osid.authentication.Authentication authentication | proxy authentication | |
| Return | osid.cataloging.CatalogHierarchyDesignSession | a CatalogHierarchyDesignSession | |
| | NULL_ARGUMENT | authentication is null | |
| | OPERATION_FAILED | unable to complete request | |
| Errors | PERMISSION_DENIED | authentication is invalid | |
| | UNIMPLEMENTED | supportsCatalogHierarchyDesign() is false | |
| | UNSUPPORTED | the authentication service is not supported | |
| Compliance | antional | This method must be implemented if | |
| Compliance | optional | supportsCatalogHierarchyDesign() is true. | |



| Interface | osid.catalogir | ıg.CatalogSession | |
|------------------------|--|--|--|
| Implements | losid.OsidSession | <u></u> | |
| implements | | d to Catalog mappings. An Id may appear in multiple | |
| | Catalogs. Each Catalog may have its own author | | |
| | Catalogs. Lacif Catalog may have its own admit | onzations as to who is allowed to look at it. | |
| | This lookup session defines several views: | | |
| | | | |
| | • federated view: entries are accessible from the | specified Catalog and any descedant dictionaries in | |
| | the Catalog hierarchy | | |
| Description | • isolated view: entries are accessible from the sp | ecified Catalog only | |
| Description | comparative view: elements may be silently omitted or re-ordered | | |
| | • plenary view: provides a complete result set or i | s an error condition | |
| | | | |
| | | or most applications as it permits operation even if | |
| | · · · · · · · · · · · · · · · · · · · | ample, a hierarchy output can be plugged into a lookup | |
| | | y, but it may not be necessary to break execution if a | |
| | | er, some administrative applications may need to know | |
| Mothod | | nd may sacrifice some interoperability for the sake of | |
| Method | The returns from the lookup methods may omit or | r translate elements based on this session, such as | |
| Description | ' ' | is used when greater interoperability is desired at the | |
| 2 ccci ipiioii | expense of precision. | is used when greater intersperasinty to desired at the | |
| Compliance | mandatory | This method is must be implemented. | |
| Method | usePlena | ryCatalogView | |
| B d. P | | desired. Methods will return what is requested or | |
| Description | | precision is desired at the expense of interoperability. | |
| Compliance | mandatory | This method is must be implemented. | |
| Method | useFederat | tedCatalogView | |
| Description | Federates the view for methods in this session. A | federated view will include entries from descendant | |
| | catalogs in the catalog hierarchy. | 1 | |
| Compliance | mandatory | This method is must be implemented. | |
| Method | | edCatalogView | |
| Description | Isolates the view for methods in this session. An isolated view restricts lookups to the specified catalog | | |
| Compliance | only. mandatory | This method is must be implemented. | |
| Method | | supMappings | |
| Metriod | | talog mappings. A return of true does not guarantee | |
| | successful authorization. A return of false indicates that it is known lookup methods in this session will | | |
| Description | result in a PERMISSION_DENIED. This is intended as a hint to an application that may opt not to offer | | |
| | lookup operations to unauthorized users. | , , | |
| Return | boolean | false if looking up mappings is not authorized, true | |
| | | otherwise | |
| Compliance | mandatory | This method must be implemented. | |
| Method | | ByCatalog | |
| Description Parameters | Gets the list of Ids map to a Catalog. | la catalog Id | |
| Return | osid.id.Id catalogId csid.id.IdList | a catalog Id | |
| netuiii | | list of Ids mapped the given catalogId | |
| | NOT_FOUND NULL_ARGUMENT | catalogId is not found catalogId is null | |
| Errors | OPERATION_FAILED | unable to complete request | |
| | PERMISSION_DENIED | authorization failure | |
| Compliance | mandatory | This method must be implemented. | |
| Compilation | Internation y | The metrica made so implemented. | |



| Method | getIdsByCatalogs | | |
|-------------|--|--|--|
| Description | Gets the list of Ids map to a lst of Catalogs. | | |
| Parameters | osid.id.IdList catalogIdList | an Id | |
| Return | osid.id.IdList | list of catalogs containing the given Id | |
| | NULL_ARGUMENT | idList is null | |
| Errors | OPERATION_FAILED | unable to complete request | |
| | PERMISSION_DENIED | authorization failure | |
| Compliance | mandatory | This method must be implemented. | |
| Method | getCat | alogIdsById | |
| Description | Gets the Catalog Ids mapped to an Id. | | |
| Parameters | osid.id.Id id | an Id | |
| Return | osid.id.IdList | list of catalogs Ids containing the given Id | |
| | NULL_ARGUMENT | id is null | |
| Errors | OPERATION_FAILED | unable to complete request | |
| | PERMISSION_DENIED | authorization failure | |
| Compliance | mandatory | This method must be implemented. | |
| Method | getCa | talogsById | |
| Description | Gets the Catalogs mapped to an Id. | | |
| Parameters | osid.id.Id id | an Id | |
| Return | osid.cataloging.CatalogList | list of catalogs containing the given Id | |
| | NULL_ARGUMENT | id is null | |
| Errors | OPERATION_FAILED | unable to complete request | |
| | PERMISSION_DENIED | authorization failure | |
| Compliance | mandatory | This method must be implemented. | |



| Interfere | | acid catalogina | · Catalag Agaign mont Sagaign |
|--------------|---|----------------------------|--|
| Interface | | osiu.cataloging | g.CatalogAssignmentSession |
| Implements | osid.OsidSession | | |
| | This session provides methods to assign OSID Ids to Catalogs. An Id may appear in multiple | | |
| Description | Catalogs and removing the last reference to an Id is the equivalent of deleting it. Each Catalog have its own authorizations as to who is allowed to operate on it. | | |
| | | | |
| Method | | ca | nAssignCatalogs |
| | Tests if this user can perform alter Id/Catalog mappings. A return of true does not guarantee | | |
| Description | | | ndicates that it is known mapping methods in this session will |
| 200011711011 | | | s intended as a hint to an application that may opt not to offer |
| | lookup operations to u | <u>unauthorized users.</u> | T _a . |
| Return | boolean | | false if mapping is not authorized, true otherwise |
| Compliance | mandatory | | This method must be implemented. |
| Method | | | assignId |
| Description | Adds an Id to a Cata | | |
| Parameters | osid.id.Id | id | an Id |
| | osid.id.Id | catalogId | the Id of the Catalog |
| | NOT_FOUND | | id or catalogId not found |
| Errors | NULL_ARGUMENT | | id or catalogId is null |
| EIIOIS | OPERATION_FAILE | D | unable to complete request |
| | PERMISSION_DEN | IED | authorization failure |
| Compliance | mandatory | | This method must be implemented. |
| Method | | | reassignId |
| Description | Moves an Id to a Catalog. | | |
| Parameters | osid.id.Id | id | an Id |
| | osid.id.Id | catalogId | the Id of the Catalog |
| | NOT_FOUND | | id or catalogId not found |
| Errors | NULL_ARGUMENT | | id or catalogId is null |
| | OPERATION_FAILED | | unable to complete request |
| | PERMISSION_DEN | <u>IED</u> | authorization failure |
| Compliance | mandatory | | This method must be implemented. |
| Method | D | . Catalan | unassignId |
| Description | Removes an Id from | | laus Tal |
| Parameters | osid.id.Id osid.id.Id | id catalogId | an Id the Id of the Catalog |
| | NOT FOUND | Catalogiu | id or catalogId not found |
| | NULL ARGUMENT | | id or catalogId not found |
| Errors | OPERATION FAILE | <u> </u> | unable to complete request |
| | PERMISSION DEN | | authorization failure |
| Compliance | _ | ILU | This method must be implemented. |
| Compliance | mandatory This method must be implemented. | | |



| Interface | osid.cataloging.Catalo | gAssignmentNotificationSession | |
|-------------|---|---|--|
| Implements | osid.OsidSession | | |
| Description | This session defines methods to receive notifications on adds/changes to a catalog assignment. This session is intended for consumers needing to synchronize their state with this service without the use of polling. Notifications are cancelled when this session is closed. Notifications are triggered with changes to assignments of Ids to this catalog. For notifications of changes to the Catalog object use CatalogNotificationSession. | | |
| Method | | | |
| Description | canRegisterForCatalogEntryNotifications Tests if this user can register for Catalog entry notifications. A return of true does not guarantee successful authorization. A return of false indicates that it is known all methods in this session will result in a PERMISSION_DENIED. This is intended as a hint to an application that may opt not to offer notification operations. | | |
| Return | boolean | false if notification methods are not authorized, true otherwise | |
| Compliance | mandatory | This method must be implemented. | |
| Method | | eratedCatalogView | |
| Description | Federates the view for methods in this session. A federated view will include entries from parent catalogs in the catalog hierarchy. | | |
| Compliance | mandatory This method is must be implemented. | | |
| Method | useIsolatedCatalogView | | |
| Description | Isolates the view for methods in this session. An isolated view restricts notifications for entries to this catalog only. | | |
| Compliance | mandatory This method is must be implemented. | | |
| Method | registerForNewCatalogEntries | | |
| Description | Register for notifications of new catalogs. Catwhen a new Catalog entry is created. | talogEntryReceiver.newCatalogEntry() is invoked | |
| Parameters | osid.id.Id catalogId | the Id of the Catalog node to monitor | |
| Errors | NOT_FOUND NULL_ARGUMENT OPERATION_FAILED PERMISSION_DENIED | a catalog node was not found identified by the given Id catalogId is null unable to complete request authorization failure | |
| Compliance | mandatory | This method must be implemented. | |
| Method | registerForDeletedCatalogEntries | | |
| Description | Registers for notification of deleted catalogs entries. CatalogEntryReceiver.deletedCatalogEntry() is invoked when a catalog entry is deleted. | | |
| Parameters | osid.id.Id catalogId | the Id of the Catalog node to monitor | |
| Errors | NOT_FOUND NULL_ARGUMENT | a catalog node was not found identified by the given Id catalogId is null | |
| | OPERATION_FAILED PERMISSION_DENIED | unable to complete request authorization failure | |
| Compliance | mandatory | This method must be implemented. | |



| Interface | osid.cataloging.C | atalogLookupSession | |
|-------------|--|--|--|
| Implements | osid.OsidSession | | |
| | OSID Ids. | | |
| | This session defines views that offer differing behaviors when retrieving multiple objects. | | |
| Description | comparative view: elements may be silently omi plenary view: provides a complete set or is an e | | |
| | Generally, the comparative view should be used for most applications as it permits operation even if there is data that cannot be accessed. For example, a browsing application may only need to examine the Catalogs it can access, without breaking execution. However, an assessment may only be useful if all Catalogs referenced by it are available, and a test-taking applicationmay sacrifice some | | |
| Mathaal | interoperability for the sake of precision | | |
| Method | CanLool | return of true does not quarantee successful | |
| Description | Tests if this user can perform Catalog lookups. A return of true does not guarantee successful authorization. A return of false indicates that it is known all methods in this session will result in a PERMISSION_DENIED. This is intended as a hint to an application that may opt not to offer lookup operations to unauthorized users. | | |
| Return | boolean false if lookup methods are not authorized, true otherwise | | |
| Compliance | mandatory This method must be implemented. | | |
| Method | useComparativeCatalogView | | |
| Description | The returns from the lookup methods may omit or translate elements based on this session, such as authorization, and not result in an error. This view is used when greater interoperability is desired at the expense of precision. | | |
| Compliance | mandatory | This method is must be implemented. | |
| Method | | ryCatalogView | |
| Description | | d. Methods will return what is requested or result in an | |
| Compliance | mandatory | This method is must be implemented. | |
| Method | getCatalog | | |
| Description | Gets the Catalog specified by its Id. In plenary mode, the exact Id is found or a NOT_FOUND results. Otherwise, the returned Catalog may have a different Id than requested, such as the case where a duplicate Id was assigned to a Catalog and retained for compatibility. | | |
| Parameters | osid.id.Id catalogId Id of the Catalog | | |
| Return | osid.cataloging.Catalog | the catalog | |
| | NOT_FOUND | catalogId not found | |
| Errors | NULL_ARGUMENT | catalogId is null | |
| EHUIS | OPERATION_FAILED | unable to complete request | |
| | PERMISSION_DENIED | authorization failure | |
| Compliance | mandatory | This method is must be implemented. | |



| Open Knowledge Initiative Method | gotCat | ologoPyTdo | |
|-----------------------------------|--|--|--|
| | | alogsByIds | |
| | | List. In plenary mode, the returned list contains all of | |
| Describiion | the catalogs specified in the Id list, in the order of the list, including duplicates, or an erro Id in the supplied list is not found or inaccessible. Otherwise, inaccessible Catalogs may | | |
| | from the list and may present the elements in any | · · · · · · · · · · · · · · · · · · · | |
| | <u> </u> | | |
| | osid.id.IdList catalogIdList | the list of Ids to rerieve | |
| Return | osid.cataloging.CatalogList | the returned Catalog list | |
| | NOT_FOUND | an Id was not found | |
| Errors | NULL_ARGUMENT | catalogIdList is null | |
| | OPERATION_FAILED | unable to complete request | |
| | PERMISSION_DENIED | authorization failure | |
| | mandatory | This method must be implemented. | |
| Method | | sByGenusType | |
| | | atalog genus Type which does not include catalogs of | |
| Description | 19 7. | plenary mode, the returned list contains all known | |
| | catalogs or an error results. Otherwise, the return | , , , | |
| | accessible through this session. In both cases, the order of the set is not specified. | | |
| Parameters | osid.type.Type catalogGenusType | a catalog genus type | |
| Return | osid.cataloging.CatalogList the returned Catalog list | | |
| - | NULL_ARGUMENT | catalogGenusType is null | |
| Errors | OPERATION_FAILED | unable to complete request authorization failure | |
| | PERMISSION_DENIED | | |
| | mandatory | This method must be implemented. | |
| Method | | ParentGenusType | |
| | Gets a CatalogList corresponding to the given catalog genus Type and include any additional catalogs with genus types derived from the specified Type. In plenary mode, the returned list contains all known | | |
| Description | | | |
| | catalogs or an error results. Otherwise, the returned list may contain only those catalogs that are accessible through this session. In both cases, the order of the set is not specified. | | |
| Parameters | osid.type.Type catalogGenusType | a catalog genus type | |
| Return | osid.cataloging.CatalogList | the returned Catalog list | |
| | NULL ARGUMENT | catalogGenusType is null | |
| Errors | OPERATION FAILED | unable to complete request | |
| | PERMISSION DENIED | authorization failure | |
| | mandatory | This method must be implemented. | |
| Method | getCatalogsByRecordType | | |
| | Gets a CatalogList containing the given subject record Type. In plenary mode, the returned list | | |
| Description | contains all known subjects or an error results. Otherwise, the returned list may contain only those | | |
| | · · · · · · · · · · · · · · · · · · · | In both cases, the order of the set is not specified. | |
| Parameters | osid.type.Type catalogRecordType | a catalog interface type | |
| Return | osid.cataloging.CatalogList | the returned Catalog list | |
| | NULL_ARGUMENT | catalogInterfaceType is null | |
| Errors | OPERATION FAILED | unable to complete request | |
| | PERMISSION_DENIED | authorization failure | |
| | (I EIN IISSION_BENIED | | |



| Method | getCatalogs | | |
|-------------|---|----------------------------------|--|
| | Gets all Catalogs. In plenary mode, the returned list contains all known catalogs or an error results. | | |
| Description | Otherwise, the returned list may contain only those catalogs that are accessible through this session. In | | |
| | both cases, the order of the set is not specified. | | |
| Return | osid.cataloging.CatalogList | a list of Catalogs | |
| Errors | OPERATION_FAILED | unable to complete request | |
| Effors | PERMISSION_DENIED | authorization failure | |
| Compliance | mandatory | This method must be implemented. | |



| Interface | osid.cataloging.0 | CatalogSearchSession | |
|-------------|--|--|--|
| Implements | osid.OsidSession | | |
| | This session provides methods for searching Catalog objects. The search query is constructed using the CatalogQuery interface. The catalog interface Type also specifies the interface for the catalog query. | | |
| Description | getCatalogsByQuery() is the basic search method and returns a list of Catalog elements. A more advanced search may be performed with getCatalogsBySearch(). It accepts a CatalogSearch interface in addition to the query interface for the purpose of specifying additional options affecting the entire search, such as ordering. getCatalogsBySearch() returns a CatalogSearchResults interface that can be used to access the resulting CatalogList or be used to perform a search within the result set through CatalogSearch. Catalogs may have a record query interface indicated by their respective record interface types. The record query interface is accessed via the CatalogQuery. | | |
| Method | canSea | rchCatalogs | |
| Description | Tests if this user can perform Catalog searches. A return of true does not guarantee successful authorization. A return of false indicates that it is known all methods in this session will result in a PERMISSION_DENIED. This is intended as a hint to an application that may opt not to offer search operations to unauthorized users. | | |
| Return | boolean false if search methods are not authorized, true otherwise | | |
| Compliance | mandatory This method must be implemented. | | |
| Method | getCatalogQuery | | |
| Description | Gets a catalog query interface. The returned que | ry will not have an extension query. | |
| Return | osid.cataloging.CatalogQuery | the catalog query | |
| Compliance | mandatory | This method must be implemented. | |
| Method | getCata | logsByQuery | |
| Description | Gets a list of Catalogs matching the given searc | h interface. | |
| Parameters | osid.cataloging.CatalogQuery catalogQuery | the search query | |
| Return | osid.cataloging.CatalogList | the returned CatalogList | |
| | NULL_ARGUMENT | catalogQuery is null | |
| Errors | OPERATION_FAILED | unable to complete request | |
| 2.10.0 | PERMISSION_DENIED authorization failure | | |
| | UNSUPPORTED catalogQuery is not of this service | | |
| Compliance | mandatory This method must be implemented. | | |
| Method | | getCatalogSearch | |
| | | ery only makes available the core CatalogSearch | |
| Description | interface and does not support additional interface should be used if additional interface types are re | e types. getCatalogSearchForInterfaceType() equired. | |
| Return | osid.cataloging.CatalogSearch the catalog search interface | | |
| Compliance | mandatory | This method must be implemented. | |



| Method | getCatalogsSearchOrder | | |
|-------------|--|---------------|--|
| Description | Gets a subject search order interface. The CatalogSearchOrder is supplied to a CatalogSearch to specify the ordering of results. | | |
| Return | osid.cataloging.CatalogSearchOrder | | the catalog search order interface |
| Compliance | mandatory | | This method must be implemented. |
| Method | getCatalogsBySearch | | alogsBySearch |
| Description | Gets the search results matching the given search | | arch interface. |
| Parameters | osid.cataloging.CatalogQuery | catalogQuery | the search query |
| Parameters | osid.cataloging.CatalogSearch | catalogSearch | the search interface |
| Return | osid.cataloging.CatalogSearchResults | | the search results |
| | NULL_ARGUMENT | | catalogQuery or catalogSearch is null |
| | OPERATION_FAILED | | unable to complete request |
| Errors | PERMISSION_DENIED | | authorization failure |
| | UNSUPPORTED | | catalogQuery or catalogSearch is not of this |
| | | | service |
| Compliance | mandatory | | This method must be implemented. |



| Interface | osid.cataloging.C | CatalogAdminSession |
|-------------|--|---|
| Implements | osid.OsidSession | |
| Description | This session creates and removes catalogs. The data for create and update is provided by the consumer via the form object. | |
| Method | canCre | ateCatalogs |
| Description | Tests if this user can create Catalogs. A return of true does not guarantee successful authorization. A return of false indicates that it is known creating a Catalog will result in a PERMISSION_DENIED. This is intended as a hint to an application that may not wish to offer create operations to unauthorized users. | |
| Return | boolean | false if Catalog creation is not authorized, true otherwise |
| Compliance | mandatory | This method must be implemented. |
| Method | canCreateCatal | ogWithRecordTypes |
| Description | Tests if this user can create a single Catalog using the desired record interface types. While CatalogingManager.getCatalogRecordTypes() can be used to examine which record interfaces are supported, this method tests which record(s) are required for creating a specific Catalog. Providing an empty array tests if a Catalog can be created with no records. | |
| Parameters | osid.type.Type[] catalogRecordTypes | array of types |
| Return | boolean | true if Catalog creation using the specified record Types is supported, false otherwise |
| Errors | NULL ARGUMENT | catalogRecordTypes is null |
| Compliance | mandatory This method must be implemented. | |
| Method | getCatalogFormForCreate | |
| Description | Gets the catalog form for creating new catalogs. A new form should be requested for each create transaction. | |
| Return | osid.cataloging.CatalogForm the catalog form | |
| Compliance | mandatory | This method must be implemented. |
| Method | createCatalog | |
| Description | Creates a new Catalog. | |
| Parameters | osid.cataloging.CatalogForm catalogForm | the forms for this Catalog |
| Return | osid.cataloging.Catalog | the new Catalog |
| | ALREADY_EXISTS | attempt at duplicating a property the underlying system is enforcing to be unique |
| - | INVALID_ARGUMENT | one or more of the form elements is invalid |
| Errors | NULL_ARGUMENT | catalogForm is null unable to complete request |
| | OPERATION_FAILED | authorization failure |
| | PERMISSION_DENIED authorization failure UNSUPPORTED catalogForm is not of this service | |
| Compliance | mandatory | This method must be implemented. |
| Method | | |
| Description | CanUpdateCatalogs Tests if this user can update Catalogs. A return of true does not guarantee successful authorization. A return of false indicates that it is known updating a Catalog will result in a PERMISSION_DENIED. This is intended as a hint to an application that may not wish to offer update operations to unauthorized users. | |
| Return | boolean | false if Catalog modification is not authorized, true otherwise |
| Compliance | mandatory | This method must be implemented. |



| Method | canUpdateCatalog | | |
|----------------|---|--------------------------|---|
| | Tests if this user can update a specified Catalog. A return of true does not guarantee successful | | |
| | authorization. A return of false indicates that it is known updating the Catalog will result in a PERMISSION_DENIED. This is intended as a hint to an application that may not wish to offer update operations to unauthorized users. | | |
| Description | | | |
| | | | |
| Parameters | osid.id.Id | catalogId | the Id of the Catalog |
| Datama | | , , | false if catalog modification is not authorized, true |
| Return | boolean | | otherwise |
| Errors | | | catalogId is null |
| Compliance | mandatory | | This method must be implemented. |
| Provider Notes | _ | ound, then it is accept | able to return false to indicate the lack of an update |
| | available. | | |
| Method | | | ogFormForUpdate |
| Description | Gets the catalog form for update transaction. | or updating an existing | catalog. A new catalog form should be requested for each |
| Parameters | osid.id.Id | catalogId | the Id of the Catalog |
| Return | osid.cataloging.Catal | ogForm | the catalog form |
| Errors | NULL_ARGUMENT | | catalogId is null |
| Compliance | mandatory | | This method must be implemented. |
| Method | updateCatalog | | dateCatalog |
| Description | Updates an existing catalog. | | |
| Parameters | osid.id.Id | catalogId | the Id of the Catalog |
| T didilictors | osid.cataloging.CatalogForm | catalogForm | the form containing the elements to be updated |
| | INVALID_ARGUMENT | | the form contains an invalid value |
| | NOT_FOUND | | catalogId is not found |
| Errors | NULL_ARGUMENT | | catalogId or catalogForm is null |
| | OPERATION_FAILED | | unable to complete request |
| | PERMISSION_DENIE | D | authorization failure |
| 0 " | UNSUPPORTED | | catalogForm is not supported |
| Compliance | mandatory This method must be implemented. | | |
| Method | canDeleteCatalogs Tests if this user can delete Catalogs. A return of true does not guarantee successful authorization. A | | |
| | | _ | |
| Description | | | ng a Catalog will result in a PERMISSION_DENIED. |
| | | nt to an application tha | t may not wish to offer delete operations to unauthorized |
| | users. | | false if Catalog deletion is not authorized, true |
| Return | boolean | | otherwise |
| Compliance | mandatory | | This method must be implemented. |
| Method | canDeleteCatalog | | |
| | Tests if this user can de | | og. A return of true does not guarantee successful |
| | authorization. A return of false indicates that it is known deleting the Catalog will result in a | | |
| Description | PERMISSION_DENIED. This is intended as a hint to an application that may not wish to offer del | | |
| | operations to unauthorized users. | | |
| Parameters | osid.id.Id | catalogId | the Id of the Catalog |
| Return | | | false if deletion of this Catalog is not authorized, |
| | boolean | | true otherwise |
| Errors | NULL_ARGUMENT | | catalogId is null |
| Compliance | mandatory | | This method must be implemented. |
| Provider Notes | _ | ound, then it is accept | able to return false to indicate the lack of an delete |
| | available. | | |



| Method | deleteCatalog | | |
|-------------|--|-----------|--|
| Description | Deletes a Catalog. | | |
| Parameters | osid.id.Id catalogId | | the Id of the Catalog to remove |
| | NOT_FOUND | | catalogId not found |
| Errors | NULL_ARGUMENT | | catalogId is null |
| EIIOIS | OPERATION_FAILED | | unable to complete request |
| | PERMISSION_DENIED | | authorization failure |
| Compliance | mandatory | | This method must be implemented. |
| Method | addIdToCatalog | | |
| Description | Adds an Id to a Catalog for the purpose of creat | | ng compatibility. The primary Id of the Catalog is |
| Description | determined by the provider. The new Id performs | | as an alias to the primary Id. |
| Parameters | osid.id.Id | catalogId | the Id of a Catalog |
| Parameters | osid.id.Id | aliasId | the alias Id |
| | ALREADY_EXISTS | | aliasId is already assigned |
| | NOT_FOUND | | catalogId not found |
| Errors | OPERATION_FAILED I | | catalogId or aliasId is null |
| | | | unable to complete request |
| | | | authorization failure |
| Compliance | mandatory | · | This method must be implemented. |



| Description This sess is intended Notification Notification Interest in the notification of the notificat | dSession sion defines methods to receive notification defines methods to receive notification defines methods to receive notifications are cancelled when this session is closured as a retriggered with changes to the Catans available from the notification session canRegisterForce is user can register for Catalog notification. A return of false indicates that it is known operations. | talog object itself. Adding and removing Ids result in a for catalog entries. CatalogNotifications tions. A return of true does not guarantee successful known all methods in this session will result in a fint to an application that may opt not to offer false if notification methods are not authorized, true otherwise This method must be implemented. | |
|--|--|---|--|
| Description This sess is intended Notification Notification Interest in Inter | consideration defines methods to receive notification defines methods to receive notification are cancelled when this session is closured as a retriggered with changes to the Catana available from the notification session canRegisterFormula user can register for Catalog notification. A return of false indicates that it is known operations. The construction of the catalog interest of the canal of the construction of the catalog in the catalog is created. | talog object itself. Adding and removing Ids result in for catalog entries. CatalogNotifications cions. A return of true does not guarantee successful anown all methods in this session will result in a cint to an application that may opt not to offer false if notification methods are not authorized, true otherwise This method must be implemented. | |
| Description Is intended Notification Not | ed for consumers needing to synchronize ons are cancelled when this session is closed as a retriggered with changes to the Catons available from the notification session canRegisterForm is user can register for Catalog notification. A return of false indicates that it is known operations. DENIED. This is intended as a homoperations. Ory registerForm of registerForm of the catalogs of the catalog of the catalogs. Catalogis created. | talog object itself. Adding and removing Ids result in for catalog entries. CatalogNotifications cions. A return of true does not guarantee successful anown all methods in this session will result in a cint to an application that may opt not to offer false if notification methods are not authorized, true otherwise This method must be implemented. | |
| Description Notification | cons are cancelled when this session is closed are triggered with changes to the Case available from the notification session canRegisterForth is user can register for Catalog notification. A return of false indicates that it is a SION_DENIED. This is intended as a hon operations. Ory registerForth for notifications of new catalogs. Catalogic created. | talog object itself. Adding and removing Ids result in for catalog entries. CatalogNotifications cions. A return of true does not guarantee successful known all methods in this session will result in a fint to an application that may opt not to offer false if notification methods are not authorized, true otherwise This method must be implemented. | |
| Notification not | cons are triggered with changes to the Casens available from the notification session canRegisterForce is user can register for Catalog notification. A return of false indicates that it is a SION_DENIED. This is intended as a hon operations. Ory registerForce for notifications of new catalogs. Catalogis created. | talog object itself. Adding and removing Ids result in a for catalog entries. CatalogNotifications tions. A return of true does not guarantee successful known all methods in this session will result in a fint to an application that may opt not to offer false if notification methods are not authorized, true otherwise This method must be implemented. | |
| Method Description Return Description Compliance Method Description Errors Compliance Method Description Compliance Method Register Catalog OPERAT PERMIS Compliance Method Registers specified node get node get Parameters Compliance More Parameters NULL_A OPERAT PERMIS Compliance Method Registers specified node get node get permise OPERAT PERMIS OPERAT PERMIS OPERAT PERMIS OPERAT PERMIS OPERAT PERMIS OPERAT OPERAT PERMIS OPERAT OPE | canRegisterForce is user can register for Catalog notification. A return of false indicates that it is known operations. Cory registerForce registerForce registerForce registerForce for notifications of new catalogs. Catalogis created. | for catalog entries. CatalogNotifications cions. A return of true does not guarantee successful known all methods in this session will result in a cint to an application that may opt not to offer false if notification methods are not authorized, true otherwise This method must be implemented. | |
| Method Description Return Description Compliance Method Description Errors Compliance Method Description Compliance Method Register Catalog OPERAT PERMIS Compliance Method Registers specified node get node get Parameters Compliance More Parameters NULL_A OPERAT PERMIS Compliance Method Registers specified node get node get permise OPERAT PERMIS OPERAT PERMIS OPERAT PERMIS OPERAT PERMIS OPERAT PERMIS OPERAT OPERAT PERMIS OPERAT OPE | canRegisterForce is user can register for Catalog notification. A return of false indicates that it is known operations. Cory registerForce registerForce registerForce registerForce for notifications of new catalogs. Catalogis created. | for catalog entries. CatalogNotifications cions. A return of true does not guarantee successful known all methods in this session will result in a cint to an application that may opt not to offer false if notification methods are not authorized, true otherwise This method must be implemented. | |
| Method Description Return Compliance Method Description Errors Compliance Method Description Compliance Method Register Catalog OPERAT PERMIS Compliance Method Registers specified node get Parameters NOT_FC NULL_A OPERAT PERMIS Compliance Method Registers specified node get Parameters Method Registers specified node get Permis Compliance Method Registers specified node get Permis Compliance Method Registers osid.id.1 | canRegisterForce is user can register for Catalog notificat ition. A return of false indicates that it is kersions. SION_DENIED. This is intended as a hear operations. Ory registerForce for notifications of new catalogs. Catalogis created. | CatalogNotifications ions. A return of true does not guarantee successful known all methods in this session will result in a int to an application that may opt not to offer false if notification methods are not authorized, true otherwise This method must be implemented. | |
| Description Return boolean Compliance mandat Method Description Errors OPERAT PERMIS Compliance mandat Method Register Catalog PERMIS Compliance mandat Method Registers specified node get Parameters osid.id.id.id.id.id.id.id.id.id.id.id.id.i | register For notifications of notifications user can register for Catalog notification. A return of false indicates that it is known operations. The register of the register of the register of the register of the register. The register of the register o | fions. A return of true does not guarantee successful known all methods in this session will result in a fint to an application that may opt not to offer false if notification methods are not authorized, true otherwise. This method must be implemented. | |
| Description Return Description Compliance Method Description Errors Compliance Method Description Compliance Method Description Compliance Method Description Registers specified node get Parameters NOT_FC Errors NULL_A OPERAT PERMIS Compliance Method Registers specified node get Parameters Method Registers specified node get OPERAT OPERAT PERMIS Compliance Method Registers specified node get osid.id.1 | tion. A return of false indicates that it is kently strength in SION_DENIED. This is intended as a horn operations. The strength is intended as a horn operations. | false if notification methods are not authorized, true otherwise This method must be implemented. | |
| Return boolean Compliance mandat Method Description Register Catalog Errors OPERAT PERMIS Compliance mandat Method Registers specified node get Parameters osid.id.] Compliance mandat NOT_FO NULL_A OPERAT PERMIS Compliance mandat Method Registers specified node get operation Registers operation OPERAT PERMIS Compliance mandat Method Registers operation OPERAT OPERAT OPERMIS Compliance mandat Method OPERAT OPERMIS OPERAT OPERMIS OPER | on operations. Ory registerForm for notifications of new catalogs. Catalogis created. | false if notification methods are not authorized, true otherwise This method must be implemented. ThewCatalogs | |
| Return boolean Compliance mandat Method Description Register Catalog OPERAT PERMIS Compliance mandat Method Registers specified node get Parameters osid.id.1 NOT_FC Errors NULL_A OPERAT PERMIS Compliance mandat Method Registers specified node get NOT_FC NULL_A OPERAT PERMIS Compliance mandat Method Registers specified node get OPERAT PERMIS Compliance mandat Method Registers specified node get opicial specified node get | on operations. Ory registerForm for notifications of new catalogs. Catalogis created. | false if notification methods are not authorized, true otherwise This method must be implemented. ThewCatalogs | |
| Compliance mandat Method Description Register Catalog Errors OPERAT PERMIS Compliance mandat Method Description Specified node get Parameters Osid.id.1 Compliance mandat NOT_FC Errors NULL_A OPERAT PERMIS Compliance mandat Method Registers specified node get operate specified mandat Method Registers operate specified mandat Method Registers operate specified specified node get operate specified node get | registerFo for notifications of new catalogs. Catalogis created. | otherwise This method must be implemented. ThewCatalogs | |
| Compliance mandat Method Description Errors Compliance mandat Method Description Permis Compliance mandat Method Registers specified node get Parameters NOT_FC NULL_A OPERAT PERMIS Compliance mandat Method Registers specified node get Parameters osid.id.1 Registers operation Registers operation Method Registers specified node get node get operation Registers specified node get operation Registers specified node get operation | registerFo for notifications of new catalogs. Catalogis created. | This method must be implemented. orNewCatalogs | |
| Method Description Errors OPERAT PERMIS Compliance Method Description Permis Registers specified node get node get Parameters NOT_FC NULL_A OPERAT PERMIS Compliance Method Registers specified node get specified node get node get operates Method Registers specified node get node get node get node get | registerFo for notifications of new catalogs. Catalogis created. | orNewCatalogs | |
| Description Errors OPERAT PERMIS Compliance mandat Method Description Parameters OSID NOT_FO Errors NULL_A OPERAT PERMIS Compliance mandat NOT_FO Errors NULL_A OPERAT PERMIS Compliance mandat Method Registers specified node get osid.id.1 | for notifications of new catalogs. Catalo is created. | | |
| Errors Compliance Method Description Permis Compliance Method Registers specified node get Parameters NOT_FC Errors NULL_A OPERAT PERMIS Compliance Method Registers specified node get Parameters OPERAT PERMIS Compliance Method Registers specified node get parameters Osid.id.1 | is created. | aPacaivar nawCatalog() is invoked when a naw | |
| Errors Compliance Method Description Parameters Compliance Parameters NOT_FO Errors NULL_A OPERAT PERMIS Compliance Method Registers specified node get Parameters osid.id.1 Registers permis compliance Method Registers specified node get parameters osid.id.1 | | giteceivei.newcatalog() is invoked when a new | |
| Compliance mandat Method Registers specified node get Parameters osid.id.J NOT_FC Errors NULL_A OPERAT PERMIS Compliance mandat Method Registers specified node get node get osid.id.J | ION_FAILED_ | | |
| Compliance mandat Method Registers specified node get osid.id.] Parameters osid.id.] NOT_FC Errors NULL_A OPERAT PERMIS Compliance mandat Method Registers specified node get node get osid.id.] | | unable to complete request | |
| Method Description specified node get on specified node get osid.id.] Parameters osid.id.] NOT_FC Errors NULL_A OPERAT PERMIS Compliance mandat Method Registers specified node get osid.id.] | SION_DENIED | authorization failure | |
| Description Specified node get osid.id.] Parameters Osid.id.] NOT_FC Errors NULL_A OPERAT PERMIS Compliance mandat Method Registers specified node get osid.id.] | | This method must be implemented. | |
| Description specified node get node get osid.id.] Parameters osid.id.] NOT_FC Errors NULL_A OPERAT PERMIS Compliance mandat Method Registers specified node get node get osid.id.] | registerForNewCatalogAncestors Degisters for notification of an undeted historyphy structure that introduces a new appeator of the | | |
| node get Parameters osid.id.] NOT_FC Errors NULL_A OPERAT PERMIS Compliance mandat Method Registers specified node get Parameters osid.id.] | Registers for notification of an updated hierarchy structure that introduces a new ancestor of the specified catalog. CatalogReceiver.newAncestorCatalog() is invoked when the specified cata node gets a new ancestor. | | |
| Parameters osid.id.1 NOT_FC Errors NULL_A OPERAT PERMIS Compliance mandat Method Registers specified node get Parameters osid.id.1 | | | |
| Errors NOT_FC NULL_A OPERAT PERMIS Compliance mandat Method Registers specified node get Parameters osid.id.1 | | the Id of the Catalog node to monitor | |
| Errors NULL_A OPERAT PERMIS Compliance mandat Method Registers specified node get Parameters osid.id.1 | | a catalog node was not found identified by the given | |
| OPERAT PERMIS Compliance mandat Method Registers specified node get Parameters osid.id.1 | UND | Id | |
| PERMIS Compliance mandat Method Registers specified node get Parameters osid.id.1 | RGUMENT | catalogId is null | |
| Compliance mandat Method Registers specified node get Parameters osid.id.1 | ION_FAILED | unable to complete request | |
| Method Registers specified node get Parameters osid.id.1 | SION_DENIED | authorization failure | |
| Description Registers specified node get Parameters osid.id.1 | ory | This method must be implemented. | |
| Description specified node get Parameters osid.id.1 | registerForNew | CatalogDescendants | |
| Parameters osid.id. | • | structure that introduces a new descendant of the | |
| Parameters osid.id.1 | | idantCatalog() is invoked when the specified catalog | |
| | node gets a new descendant. osid.id.Id catalogId the Id of the Catalog node to monitor | | |
| | d Icatalogid | a catalog node was not found identified by the given | |
| NOT_FC | | Id | |
| Errors NULL_A | | catalogId is null | |
| | | unable to complete request | |
| | UND | | |
| | UND RGUMENT ION_FAILED SION_DENIED | | |
| | UND RGUMENT ION_FAILED SION_DENIED Dry | | |
| Description | UND RGUMENT ION_FAILED SION_DENIED Dry registerFor | ChangedCatalogs | |
| ODEDAT | UND RGUMENT ION_FAILED SION_DENIED Dry registerForC s for notification of updated catalogs. Cat | ChangedCatalogs | |
| Frrors — | UND RGUMENT ION_FAILED SION_DENIED Dry registerForC s for notification of updated catalogs. Cat | ChangedCatalogs calogReceiver.changedCatalog() is invoked when a | |
| Compliance mandat | UND RGUMENT ION_FAILED SION_DENIED Dry registerForC s for notification of updated catalogs. Cat | hangedCatalogs | |
| Method Description Registers catalog is | UND RGUMENT | PERMISSION_DENIED authorization failure mandatory This method must be implemented. registerForChangedCatalogs Registers for notification of updated catalogs. CatalogReceiver.changedCatalog() is invoked when a catalog is changed. | |



| Method | registerForChangedCatalog | | |
|-------------|---|-----------------------|---|
| Metriou | Pogistors for notification of | | |
| Description | Registers for notification of an updated catalog. CatalogReceiver.changedCatalog() is invoked when the specified catalog is changed. | | |
| Parameters | ' | ntalogId | the Id of the Catalog to monitor |
| | NOT FOUND | | a catalog was not found identified by the given Id |
| _ | NULL ARGUMENT | | catalogId is null |
| Errors | OPERATION FAILED | | unable to complete request |
| | PERMISSION DENIED | | authorization failure |
| Compliance | mandatory | | This method must be implemented. |
| Method | | registerFor | DeletedCatalogs |
| B | Registers for notification of | deleted catalogs. Cat | alogReceiver.deletedCatalog() is invoked when a |
| Description | catalog is deleted. | | |
| Errors | OPERATION_FAILED | | unable to complete request |
| Ellois | PERMISSION_DENIED | | authorization failure |
| Compliance | mandatory | | This method must be implemented. |
| Method | | | DeletedCatalog |
| Description | 1 9 | • | calogReceiver.deletedCatalog() is invoked when |
| | the specified catalog is del | | |
| Parameters | osid.id.Id ca | ntalogId | the Id of the Catalog to monitor |
| | NOT_FOUND | | a catalog was not found identified by the given Id |
| Errors | NULL_ARGUMENT | | catalogId is null |
| LITOIS | OPERATION_FAILED | | unable to complete request |
| | PERMISSION_DENIED | | authorization failure |
| Compliance | mandatory | | This method must be implemented. |
| Method | | registerForDele | edCatalogAncestors |
| | Registers for notification of an updated hierarchy structure that removes an ancestor of the specified catalog. CatalogReceiver.deletedAncestor() is invoked when the specified catalog node loses an | | |
| Description | | deletedAncestor() is | s invoked when the specified catalog node loses an |
| Parameters | ancestor. osid.id.Id ca | atalog I d | the Id of the Catalog node to monitor |
| Farameters | osia.ia.ia Ca | ntalogId | a catalog node was not found identified by the given |
| | NOT_FOUND | | Id |
| Errors | NULL_ARGUMENT | | catalogId is null |
| LITOIS | OPERATION FAILED | | unable to complete request |
| | PERMISSION DENIED | | authorization failure |
| Compliance | mandatory | | This method must be implemented. |
| Method | | registerForDelete | dCatalogDescendants |
| | Registers for notification of | | structure that removes a descendant of the specified |
| Description | · · · · · · · · · · · · · · · · · · · | | () is invoked when the specified catalog node loses a |
| • | descendant. | | ., |
| Parameters | osid.id.Id ca | ntalogId | the Id of the Catalog node to monitor |
| | NOT_FOUND | | a catalog node was not found identified by the given |
| | | | Id |
| Errors | NULL_ARGUMENT | | catalogId is null |
| | OPERATION_FAILED | | unable to complete request |
| | PERMISSION_DENIED | | authorization failure |
| Compliance | mandatory | | This method must be implemented. |



| Interface | osid.cataloging.CatalogHierarchySession | | |
|-------------|--|--|--|
| Implements | osid.hierarchy.HierarchyTraversalSession | | |
| | This session defines methods for traversing a hiercrhy of Catalog objects. Each node in the hierarchy is a unique Catalog. The hierarchy may be traversed recursively to establish the tree structure through getParents() and getChildren(). To relate these Ids to another OSID, getAncestors() and getDescendants() can be used for retrievals that can be used for bulk lookups in other OSIDs. Any Catalog available in the Catalog OSID is known to this hierarchy but does not appear in the hierarchy traversal until added as a root node or a child of another node. | | |
| Description | A user may not be authorized to traverse the entire hierarchy. Parts of the hierarchy may be made invisible through omission from the returns of getParents() or getChildren() in lieu of a PERMISSION_DENIED error that may disrupt the traversal through authorized pathways. | | |
| | This session defines views that offer differing behaviors when retrieving multiple objects. • comparative view: catalog elements may be silently omitted or re-ordered | | |
| Method | • nlenary view: provides a complete set or is an e | | |
| Description | The returns from the catalog methods may omit or translate elements based on this session, such as authorization, and not result in an error. This view is used when greater interoperability is desired at the | | |
| Compliance | expense of precision. mandatory This method is must be implemented. | | |
| Method | | | |
| Wethou | usePlenaryCatalogView A complete view of the Catalog returns is desired. Methods will return what is requested or result in an | | |
| Description | error. This view is used when greater precision is desired at the expense of interoperability. | | |
| Compliance | mandatory | This method is must be implemented. | |
| Method | getRootCatalogs | | |
| Description | Gets the root catalogs in the catalog hierarchy. A node with no parents is an orphan. While all catalog Ids are known to the hierarchy, an orphan does not appear in the hierarchy unless explicitly added as a root node or child of another node. | | |
| Return | osid.cataloging.CatalogList | the root catalogs | |
| Errors | OPERATION_FAILED PERMISSION DENIED | unable to complete request authorization failure | |
| Compliance | mandatory | This method is must be implemented. | |
| Method | getParentCatalogs | | |
| Description | Gets the parent catalogs of the given id. | | |
| Parameters | osid.id.Id catalogId | the Id of the Catalog to query | |
| Return | osid.cataloging.CatalogList | the parent catalogs of the id | |
| Errors | NOT_FOUND NULL_ARGUMENT OPERATION_FAILED PERMISSION_DENIED | a Catalog identified by Id is not found catalogId is null unable to complete request authorization failure | |
| Compliance | mandatory | This method must be implemented. | |



| Method | getAncestorCatalogs | | |
|-------------|---|-----------|--|
| Description | Gets the ancestor catalogs of the given id. | | |
| Description | osid.id.Id | catalogId | the Id of the Catalog to query |
| Parameters | cardinal | levels | the maximum number of levels to include. A value of 1 returns the same set as getParentCatalogs(). |
| Return | osid.cataloging.Catal | ogList | the ancestor catalogs of the id |
| | NOT_FOUND | | a Catalog identified by Id is not found |
| | NULL_ARGUMENT | | catalogId is null |
| Errors | OPERATION_FAILED | | unable to complete request |
| | PERMISSION_DENIE | D | authorization failure |
| Compliance | mandatory | | This method must be implemented. |
| Method | | getChi | ildCatalogs |
| Description | Gets the child catalogs of the given id. | | |
| Parameters | osid.id.Id | catalogId | the Id of the Catalog to query |
| Return | osid.cataloging.Catal | ogList | the child catalogs of the id |
| | NOT_FOUND | | a Catalog identified by Id is not found |
| Errors | NULL_ARGUMENT | | catalogId is null |
| LITOIS | OPERATION_FAILED | | unable to complete request |
| | PERMISSION_DENIED | | authorization failure |
| Compliance | mandatory | | This method must be implemented. |
| Method | | getDesce | ndantCatalogs |
| Description | Gets the descendant ca | | |
| | osid.id.Id | catalogId | the Id of the Catalog to query |
| Parameters | cardinal | levels | the maximum number of levels to include. A value of 1 returns the same set as getChildCatalogs(). |
| Return | osid.cataloging.CatalogList | | the decsendant catalogs of the id |
| | NOT_FOUND | | a Catalog identified by Id is not found |
| Errors | NULL_ARGUMENT | | catalogId is null |
| LIIUIS | OPERATION_FAILED | | unable to complete request |
| | PERMISSION_DENIED | | authorization failure |
| Compliance | mandatory | | This method must be implemented. |



| Interface | osid.cataloging.CatalogHierarchyDesignSession | |
|-------------|--|--|
| Implements | osid.hierarchy.HierarchyDesignSession | |
| | This session manages a hierarchy of catalogs. Catalogs may be organized into a hierarchy for | |
| Description | organizing or federating. A parent Catalog includes all of the lds of its children such that a single root | |
| | node contains all of the Ids of the federation. | |



| Interface | osid.cataloging.Catalog | | |
|-------------|--|---|--|
| Implements | osid.OsidCatalog | | |
| | A Catalog represents a collection of entries. Like any persisted references should use the Id. | e all OSID objects, a Catalog is identified by its Id and | |
| Description | getCatalogRecord() should be used to retrieve any record corresponding to arecord Type. The existence of the interface must not be assumed until requested at which point it is safe to cast into the interface indicated by the type. | | |
| | getCatalogInterface | | |
| Description | Gets the record corresponding to the given Catalog record Type. This method must be used to retrieve an object implementing the requested record interface along with all of its ancestor interfaces. The catalogRecordType may be the Type returned in getRecordTypes() or any of its parents in a Type hierarchy where hasRecordType(catalogRecordType) is true. | | |
| Parameters | osid.type.Type catalogRecordType | a type of the record to retrieve | |
| Return | osid.cataloging.CatalogRecord | the catalog record | |
| | NULL_ARGUMENT | catalogRecordType is null | |
| | OPERATION_FAILED unable to complete request | | |
| Errors | PERMISSION_DENIED | authorization failure occurred | |
| | UNSUPPORTED hasInterfaceType(catalogRecordType) is for | | |
| Compliance | mandatory | This method must be implemented. | |



| Interface | osid.cataloging.CatalogRecord | |
|-------------|---|----------------------------------|
| Implements | osid.OsidRecord | |
| Description | A record for a Catalog. The methods specified by the record type are available through the underlying object. | |
| | get | Catalog |
| Description | Gets the Catalog from which this record originated. | |
| Return | osid.cataloging.Catalog | the catalog |
| Compliance | mandatory | This method must be implemented. |



| Interface | osid.cataloging.CatalogQuery | | |
|-------------|---|--|---|
| Implements | osid.OsidCatalogQue | ry | |
| Description | | ce for searching catalogs. method produces a nest | Each method specifies an AND term while multiple ed OR. |
| Method | | m | atchId |
| Description | Matches an Id in this ca | atalog. Multiple Ids are tre | ated as a boolean OR. |
| | osid.id.Id | id | Id to match |
| Parameters | boolean | match | true if for a positive match, false for negative match |
| Errors | NULL_ARGUMENT | | id is null |
| Compliance | mandatory | | This method must be implemented. |
| Method | getCatalogQueryRecord | | |
| Description | Gets the record query interface corresponding to the given Catalog record Type. Multiple record retrievals produce a boolean OR term. | | the given Catalog record Type. Multiple record |
| Parameters | osid.type.Type | catalogRecordType | a catalog record type |
| Return | osid.cataloging.Catal | logQueryRecord | the catalog query record |
| | NULL_ARGUMENT | | catalogRecordType is null |
| | OPERATION_FAILED | | unable to complete request |
| Errors | PERMISSION_DENIE | D | authorization failure occurred |
| | UNSUPPORTED | | hasRecordType(catalogRecordType) is false |
| Compliance | mandatory | | This method must be implemented. |



| Interface | osid.cataloging.0 | CatalogQueryRecord |
|-------------|--|----------------------------------|
| Implements | osid.OsidRecord | |
| Description | A record for a CatalogQuery. The methods specified by the record type are available through the underlying object. | |
| | getCat | alogQuery |
| Description | Gets the CatalogQuery from which this record originated. | |
| Return | osid.cataloging.CatalogQuery | the catalog query |
| Compliance | mandatory | This method must be implemented. |



| Interface | osid.cataloging.CatalogForm | | |
|-------------|--|---|--|
| Implements | osid.OsidCatalogForm | | |
| Description | This is the form for creating and updating Catalogs. Like all OsidForm objects, various data elements may be set here for use in the create and update methods in the CatalogAdminSession. For each data element that may be set, metadata may be examined to provide display hints or data constraints. | | |
| Method | getCatalogFormRecord | | |
| Description | Gets the CatalogFormRecord interface corres | ponding to the given catalog record interface Type. | |
| Parameters | osid.type.Type catalogRecordType | a catalog record type | |
| Return | osid.cataloging.CatalogFormRecord | the record | |
| | NULL_ARGUMENT | catalogRecordType is null | |
| | OPERATION_FAILED | unable to complete request | |
| Errors | PERMISSION_DENIED | authorization failure occurred | |
| | UNSUPPORTED | hasRecordType(catalogRecordType) is false | |
| Compliance | mandatory | This method must be implemented. | |



| Interface | osid.cataloging.CatalogFormRecord | |
|-------------|---|----------------------------------|
| Implements | osid.OsidRecord | |
| Description | A record for a CatalogForm. The methods specified by the record type are available through the underlying object. | |
| | getCatalogForm | |
| Description | Gets the CatalogForm from which this record originated. | |
| Return | osid.cataloging.CatalogForm | the catalog form |
| Compliance | mandatory | This method must be implemented. |



| Interface | osid.cataloging.CatalogSearchOrder | | |
|-------------|--|----------|---|
| Implements | osid.OsidSearchOrder | | |
| Description | An interface for specifying the ordering of | earch re | esults. |
| Method | getCata | logSea | archOrderRecord |
| Description | Gets the catalog search order record corresponding to the given subject record Type. Multiple retrieva | | g to the given subject record Type. Multiple retrievals |
| | return the same underlying object. | | |
| Parameters | osid.type.Type catalogRecordTy | /pe a | a catalog record type |
| Return | osid.cataloging.CatalogSearchOrderR | ecord | the catalog search order record interface |
| | NULL_ARGUMENT | | catalogRecordType is null |
| | OPERATION_FAILED | ļ | unable to complete request |
| Errors | PERMISSION_DENIED | [; | authorization failure occurred |
| | UNSUPPORTED | | hasRecordType(catalogRecordType) is false |
| Compliance | mandatory | - 1- | This method must be implemented. |



| Interface | osid.cataloging.CatalogSearchOrderRecord | |
|-------------|--|----------------------------------|
| Implements | osid.OsidRecord | |
| Description | A record for a CatalogSearchOrder. The methods specified by the record type are available through the underlying object. | |
| | getCatalo | gSearchOrder |
| Description | Gets the CatalogSearchOrder from which this record originated. | |
| Return | osid.cataloging.CatalogSearchOrder | the catalog search order |
| Compliance | mandatory | This method must be implemented. |



| Interface | osid.cataloging.CatalogSearch | | |
|-------------|--|------------------------------|--|
| Implements | osid.OsidSearch | | |
| Description | The search interface for | governing the search que | ery for Catalogs. |
| Method | | searchWithi | nCatalogResults |
| Description | | g a previous search resul | t. |
| Parameters | osid.cataloging.CatalogSearchResults | results | results from a query |
| Errors | INVALID_ARGUMENT | | results is not valid |
| LIIOIS | NULL_ARGUMENT | | results is null |
| Compliance | mandatory | | This method must be implemented. |
| Method | | searchAn | nongCatalogs |
| Description | Execute this search amo | ong the given list of catalo | gs. |
| Parameters | osid.id.Id[] | catalogIds | list of catalogs |
| Errors | NULL_ARGUMENT | | catalogIds is null |
| Compliance | mandatory This method must be implemented. | | This method must be implemented. |
| Method | | orderCat | talogResults |
| Description | Specify an ordering to th | e search results. | _ |
| Parameters | osid.cataloging.CatalogSearchOrder | catalogSearchOrder | catalog search order |
| Errors | NULL ARGUMENT | | catalogSearchOrder is null |
| Errors | UNSUPPORTED | | catalogSearchOrder is not of this service |
| Compliance | mandatory | | This method must be implemented. |
| Method | | getCatalog | SearchRecord |
| Description | Gets the record correspond | onding to the given catalo | g search record Type. This method must be used to |
| Description | | | ord interface along with all of its ancestor interfaces. |
| Parameters | osid.type.Type | catalogSearchRecordType | a catalog search record type |
| Return | osid.cataloging.Cataloging | ogSearchRecord | the catalog search interface |
| | NULL_ARGUMENT | | catalogSearchRecordType is null |
| | OPERATION_FAILED | | unable to complete request |
| Errors | PERMISSION_DENIER |) | authorization failure occurred |
| | LINCUPPORTER | | hasSearchRecordType(catalogSearchRecordTyp |
| | UNSUPPORTED | | e) is false |
| Compliance | mandatory | | This method must be implemented. |



| Interface | osid.cataloging.CatalogSearchRecord | |
|-------------|---|----------------------------------|
| Implements | osid.OsidSearchRecord | |
| Description | A record for a CatalogSearch. The methods specified by the record type are available through the underlying object. | |
| | getCatalogSearch | |
| Description | Gets the CatalogSearch from which this record originated. | |
| Return | osid.cataloging.CatalogSearch | the catalog search |
| Compliance | mandatory | This method must be implemented. |



| Interface | osid.cataloging.CatalogSearchResults | | |
|-------------|---|--|--|
| Implements | osid.OsidSearchResults | | |
| Description | This interface provides a means to capture results of a search and is used as a vehicle to perform a search within a previous result set. | | |
| Method | getCatalogs | | |
| Description | Gets the catalog list resulting from the search. | | |
| Return | osid.cataloging.CatalogList | the catalogs list | |
| Compliance | mandatory | This method must be implemented. | |
| Method | getCatalogSearchResultsRecord | | |
| Description | Gets the record corresponding to the given catalog search record Type. This method must be used to | | |
| Description | retrieve an object implementing the requested record interface along with all of its ancestor interfaces. | | |
| Parameters | osid.type.Type catalogSearchRecordType | a catalog search record type | |
| Return | osid.cataloging.CatalogSearchResultsRecord | the catalog search interface | |
| | NULL_ARGUMENT | catalogSearchRecordType is null | |
| | OPERATION_FAILED | unable to complete request | |
| Errors | PERMISSION_DENIED | authorization failure occurred | |
| | LINCUPPOPTED | hasSearchRecordType(catalogSearchRecordTyp | |
| | UNSUPPORTED | e) is false | |
| Compliance | mandatory | This method must be implemented. | |



| Interface | osid.cataloging.CatalogSearchResultsRecord | |
|-------------|--|----------------------------------|
| Implements | osid.OsidSearchRecord | |
| Description | A record for a CatalogSearchResults. The methods specified by the record type are available through the underlying object. | |
| | getCatalogSearchResults | |
| Description | Gets the CatalogSearchResults from which this record originated. | |
| Return | osid.cataloging.CatalogSearchResults | the catalog search results |
| Compliance | mandatory | This method must be implemented. |



| Interface | osid.cataloging.CatalogReceiver | | | |
|----------------------|--|--|---|--|
| Implements | osid.OsidReceiver | | | |
| Description | The catalog receiver is the consumer supplied interface for receiving notifications pertaining to new, | | | |
| Description | updated or deleted Catalog objects. | | | |
| Method | | r | newCatalog | |
| Description | The callback for notifications of new catalogs. | | | |
| Parameters | osid.id.Id | catalogId | the Id of the new Catalog | |
| Compliance | mandatory | • | This method must be implemented. | |
| Method | | | AncestorCatalog | |
| Description | | ications of new ancestors | _ | |
| Parameters | osid.id.Id | catalogId | the Id of the registered Catalog | |
| | osid.id.Id | ancestorId | the Id of the new ancestor catalog | |
| Compliance | mandatory This method must be implemented. | | | |
| Method | | newDescendantCatalog | | |
| Description | | ications of new descenda | | |
| Parameters | osid.id.Id | catalogId | the Id of the registered Catalog | |
| 0 | osid.id.Id | descendantId | the Id of the new descendant catalog | |
| Compliance Method | mandatory | | This method must be implemented. | |
| | The callbook for motif | | angedCatalog | |
| Description | | ication of updated catalog | <u> </u> | |
| Parameters | osid.id.Id | catalogId | the Id of the updated Catalog | |
| Compliance Method | mandatory This method must be implemented. | | | |
| Description | deletedCatalog | | | |
| Parameters | the callback for notification of deleted catalogs. | | | |
| | osid.id.Id | catalogId | the Id of the deleted Catalog | |
| Compliance | mandatory | mandatory This method must be implemented. | | |
| Method Description | The callback for notif | ications of deleted ances | dAncestorCatalog | |
| Description | | | - | |
| Parameters | osid.id.Id osid.id.Id | catalogId ancestorId | the Id of the registered Catalog the Id of the removed ancestor catalog | |
| Compliance | | ancestoriu | This method must be implemented. | |
| Method | mandatory | dalatad | | |
| Description | deletedDescendantCatalog The callback for notifications of deleted descendants of a catalog. | | | |
| Description | | | | |
| Parameters | osid.id.Id osid.id.Id | catalogId descendantId | the Id of the registered Catalog the Id of the deleted descendant catalog | |
| Compliance | | juescendantid | | |
| Compliance | mandatory | | This method must be implemented. | |



| Interface | osid.cataloging.CatalogList | | |
|-------------|---|---|--|
| Implements | osid.OsidList | osid.OsidList | |
| | Like all OsidLists, CatalogList provides a means for accessing Catalog elements sequentially either one at a time or many at a time. Examples: while (cl.hasNext()) { Catalog catalog = al.getNextCatalog(); | | |
| Description | } | | |
| | or | | |
| | <pre>while (cl.hasNext()) { Catalog[] catalogs = cl.getNextCatalogs(cl.available()); }</pre> | | |
| Method | | etNextCatalog | |
| Description | Gets the next Catalog in this list. | | |
| Return | osid.cataloging.Catalog | the next Catalog in this list. The hasNext() method should be used to test that a next Catalog is available before calling this method. | |
| Гинана | ILLEGAL_STATE | no more elements available in this list | |
| Errors | OPERATION_FAILED | unable to complete request | |
| Compliance | mandatory | This method must be implemented. | |
| Method | ge | etNextCatalogs | |
| Description | Gets the next set of Catalog elements in this list which must be less than or equal to the number returned from available(). | | |
| Parameters | cardinal n | the number of Catalog elements requested which should be less than or equal to available() | |
| Return | osid.cataloging.Catalog[] | an array of Catalog elements. The length of the array is less than or equal to the number specified. | |
| Errors | ILLEGAL_STATE | no more elements available in this list | |
| Ellois | OPERATION_FAILED | unable to complete request | |
| Compliance | mandatory | This method must be implemented. | |



| Interface | osid.cataloging.CatalogEntryReceiver | | |
|-------------|--|---------------------|---|
| Implements | osid.OsidReceiver | | |
| Description | The catalog receiver is the consumer supplied interface for receiving notifications pertaining to new, updated or deleted Ids in Catalogs. | | |
| Method | newCatalogEntry | | |
| Description | The callback for notifications of new catalogs entries. | | |
| | osid.id.Id | registeredCatalogId | the Id of the registered Catalog |
| Parameters | osid.id.Id | catalogId | the Id of the Catalog that triggered this event. May be the same as the registered catalog or one of its descendants. |
| | osid.id.Id | entryId | the Id of the new entry |
| Compliance | mandatory | | This method must be implemented. |
| Method | deletedCatalogEntry | | |
| Description | the callback for notification of deleted catalog entries. | | |
| | osid.id.Id | registeredCatalogId | the Id of the registered Catalog |
| Parameters | osid.id.Id | catalogId | the Id of the Catalog that triggered this event. May be the same as the registered catalog or one of its descendants. |
| | osid.id.Id | entryId | the Id of the deleted entry |
| Compliance | mandatory | | This method must be implemented. |