

Documentation:

Infostructurebase web services

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Infostructurebase web services

This document contains the documentation for the public Infostructurebase web services. A valid Infostructurebase user account is required for accessing the web services. The use of the web services are governed by the terms described in the Infostructurebase “Terms of use” (<http://isb.oio.dk/info/termsfuse>).

Security

To invoke web services on the infostructurebase, the user first needs to create a user account, if the user does not already have an account.

The new web services in the Infostructurebase, requires the use of WS-Security when accessing the web services.

The when invoking one of the web services in the Infostructurebase, the client must sign the request using a WS-Security UsernameToken, where the password is supplied in clear text. The client application must then encrypt the UsernameToken part of the SOAP header using the public key from the Infostructurebase server certificate.

Examples:

```
Username: OIO\MyUserName  
Password: MySecretPassword
```

C# code for signing and encrypting (using WSE 2.0 Sp 1):

```
UsernameToken userToken = new UsernameToken("OIO\MyUserName",  
"MySecretPassword", PasswordOption.SendPlainText);  
  
// Get the server certificate  
SecurityManager securityManager = new SecurityManager();  
X509SecurityToken serverToken = securityManager.GetServerToken(  
_serverCertSubject );  
  
// Create an instance of the Web service proxy  
MyWebService serviceProxy = new MyWebService ();  
  
// Add signature element to a security section on the request to sign request  
serviceProxy.RequestSoapContext.Security.Tokens.Add( userToken );  
serviceProxy.RequestSoapContext.Security.Elements.Add( new MessageSignature(  
userToken ) );  
  
// Add security element to encrypt the data  
serviceProxy.RequestSoapContext.Security.Elements.Add(new  
EncryptedData(serverToken, "#" + userToken.Id));  
  
// Invoke the web service  
serviceProxy.MethodX()
```

Error handling

Calls to web services may return an error code and error message. All errors are SOAP faults, which consist of an *XML qualified name* (namespace + element name) representing the error code.

Web services may return the following error types:

Error code	Comment
<i>NotAuthorized</i>	Occurs when a web service is called by a client with insufficient rights to perform a certain action.
<i>InvalidParametersFormat</i>	Occurs if the parameters of a web service call are in an illegal format (e.g. a GUID with the wrong number of digits).
<i>NoObject</i>	Occurs if data requested by a web service call does not exist in the database.
<i>ServerFaultCode</i>	Indicates an unspecified server error.

A set of error codes is listed for each web service operation except for the *ServerFaultCode*, which may be returned by any web service.

Web services

The Infostructurebase provides a number of web services with core functionality from the Infostructurebase. This web services enable users to create their own tools for using the Infostructurebase.

DocumentManager

The DocumentManager web service is used for accessing the documents found in the Infostructurebase repository.

Service endpoint: <http://isb.oio.dk/oioservice/service/public/2/documentmanager.asmx>

Operation Name	Description	I/O	Parameter	Description
SaveDocument	Creates or updates a document in the repository. SOAP faults: <i>InvalidParametersFormat</i> <i>NotAuthorized</i>	Input	DocumentNamespace	The namespace of the document
			DocumentName	The name of the document
			DocumentBytes	The document in base64 encoding
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
GetDocumentByUrl	Returns a repository document specified by the user. SOAP faults: <i>NoObject</i> <i>InvalidParametersFormat</i>	Input	Url	The repository URL of the document requested (i.e. starting with http://rep.oio.dk/)
		Output	DocumentNamespace	The namespace of the document
			DocumentName	The name of the document
			DocumentBytes	The returned document in base64 encoding.
GetDocument	Returns a repository document specified by the user.	Input	ObjectID	The ID (in the format of a GUID) of the document to get.
		Output	DocumentUrl	The repository URL of the document , to which the requested document is attached. (i.e. starting with http://rep.oio.dk/)
			AttachedDocumentName	The file name of the attached document
			AttachedDocumentBytes	The returned document in base64 encoding.

GetAttached Document	Returns a document which has been attached to another document. SOAP faults: <i>NotAuthorized</i> <i>InvalidParametersFormat</i> <i>NoObject</i>	Input	Url	The repository URL of the attached document requested (i.e. starting with http://rep.oio.dk/ and with the string ".attach." in the filename.
		Output	DocumentUrl	The repository URL of the document , to which the requested document is attached. (i.e. starting with http://rep.oio.dk/)
			AttachedDocumentName	The file name of the attached document
			AttachedDocumentBytes	The returned document in base64 encoding.
SaveAttached Document	Uploads and associates a document with an existing repository document. SOAP faults: <i>NotAuthorized</i> <i>InvalidParametersFormat</i> <i>NoObject</i>	Input	DocumentUrl	Url of the existing repository document, to which this attachment will be associated.
			AttachedDocumentName	The filename of the attached document.
			AttachedDocumentBytes	The document in base64 encoding.
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
GetAttached DocumentList	Returns a list of attached documents for a specific repository document. SOAP faults: <i>NoObject</i>	Input	Url	The Url of the repository document, to which a list of attached documents is requested.
		Output	A list of <i>AttachedDocumentURL</i>	A list of repository Url's to the attached documents.
DeleteDocument	The DeleteDocument operation allows the owner of a document to delete the document from the repository, if the document does not have any dependent documents. SOAP faults: <i>NotAuthorized</i> <i>InvalidParametersFormat</i> <i>NoObject</i>	Input	ObjectID	The ID (in the format of a GUID) of the object to be deleted.
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
DeleteDocument	The DeleteDocument operation allows the owner of a document to delete the document from the repository, if the document does not have any dependent	Input	Url	The Url of the repository document, to be deleted

	documents. SOAP faults: <i>NotAuthorized</i> <i>InvalidParametersFormat</i> <i>NoObject</i>			
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
SetMetadata	Updates or creates metadata for a specific repository document. SOAP faults: <i>NotAuthorized</i> <i>InvalidParametersFormat</i> <i>NoObject</i>	Input	DocumentUrl	Url of the repository document, to which metadata is added or updated.
			Metadata	A metadata structure which will be added to the repository document, or replace an existing metadata structure. See the WSDL or metadata Schema for detailed information on this structure.
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
GetMetadata	Returns a metadata structure for a specific repository document. SOAP faults: <i>InvalidParametersFormat</i> <i>NoObject</i>	Input	DocumentUrl	Url of the repository document, to which metadata is added or updated.
		Output	Metadata	The metadata structure associated with the above repository document. See the WSDL or metadata Schema for detailed information on this structure.
GetDocumentInfoByUrl	Returns an information structure representing the following information: <ul style="list-style-type: none"> • File and contact info • Document classification • Metadata • Dependencies • Review request information SOAP faults: <i>InvalidParametersFormat</i> <i>NoObject</i>	Input	DocumentURL	Url of the repository document for which information is requested.
		Output	DocumentInformation	The document information structure. See WSDL or the DocumentInformation Schema for detailed information on specific fields and structure.
GetDocumentInfo	Returns an information structure representing the following information: <ul style="list-style-type: none"> • File and contact info • Document classification • Metadata 	Input	ObjectID	The ID (in the format of a GUID) of the document for which information is requested..

	<ul style="list-style-type: none"> • Dependencies • Review request information <p>SOAP faults: <i>InvalidParametersFormat</i> <i>NoObject</i></p>			
		Output	DocumentInformation	The document information structure. See WSDL or the DocumentInformation Schema for detailed information on specific fields and structure.

NamespaceManager

The NamespaceManager web service is used for managing namespaces created in the Infostructurebase repository.

Service endpoint: <http://isb.oio.dk/oioservice/service/public/2/namespacemanager.asmx>

Operation Name	Description	I/O	Parameter	Description
CreateNamespace	Creates the specified namespace in the repository, if the user has sufficient rights. SOAP faults: <i>InvalidParametersFormat</i> <i>NotAuthorized</i>	Input	NamespaceUrl	The Url of the namespace to be created. The namespace must start with "http://rep.oio.dk/".
			Organisation	The name of the organisation that owns this namespace
			Description	A human readable description of the namespace
			Domain	The domain of the namespace
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
DeleteNamespace	Deletes the specified namespace in the repository, if a) the user has sufficient rights, b) the namespace exists, and c) there are no documents or sub-namespaces in the specified namespace. SOAP faults: <i>NotAuthorized</i> <i>NoObject</i> <i>InvalidParametersFormat</i>	Input	DocumentNamespace	The namespace to be deleted. The namespace must start with "http://rep.oio.dk/". Only the last folder of the path is deleted.
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
GetNamespaceInfo	Returns namespace information such as contact information, associated organization etc. SOAP faults: <i>InvalidParametersFormat</i> <i>NoObject</i>	Input	Namespace	The namespace for which information is requested. Must start with <i>http://rep.oio.dk/</i>
		Output	Description	Description of the namespace
			cvr:LegalUnitName	The name of the organization responsible for the namespace
			xkom:EmailAddressIdentifier	Contact e-mail for the namespace
			DomainName	An associated domain of the namespace, e.g. the domain of the organization.

			Description	Description of the namespace
			cvr:LegalUnitName	Name of the organization responsible for this namespace
			xkom:EmailAddressIdentifier	Contact e-mail for the namespace
			ParentNamespace	The parent namespace of the current namespace
			DomainName	An associated domain of the namespace, e.g. the domain of the organization

TaxonomyManager

The taxonomy manager allows the user to browse the taxonomies found in the infostructurebase via the web service.

Service endpoint: <http://isb.oio.dk/oioservice/service/public/2/taxonomymanager.asmx>

<i>Operation Name</i>	<i>Description</i>	<i>I/O</i>	<i>Parameter</i>	<i>Description</i>
GetRootTaxonomies	Returns a list of the roots of the taxonomies for a specific language. SOAP faults: <i>InvalidParametersFormat</i>	Input	TaxonomyLanguage	The language of the root nodes. Valid values are "en" and "da".
			Output (List)	TaxonomyID
		Name		The name of the taxonomy
		Description		The description of the taxonomy
GetTaxonomyNodes	Returns a list of all child nodes (taxonomies) of a specific node (taxonomy). SOAP faults: <i>NoObject</i> <i>InvalidParametersFormat</i>	Input	TaxonomyID	ID of the taxonomy (in GUID format)
			Output (List)	TaxonomyID
		Name		The name of the taxonomy
		Description		The description of the taxonomy
		NumberOfDocuments		The number of documents belonging to this taxonomy

SearchManager

The SearchManager web service can be used for searching the documents stored in the Infostructurebase repository.

Service endpoint: <http://isb.oio.dk/oioservice/service/public/2/searchmanager.asmx>

Operation Name	Description	I/O	Parameter	Description
SimpleSearch	Performs a simple search in the repository documents. Returns a list of document references. SOAP faults: <i>InvalidParametersFormat</i>	Input	SearchText	Free text search field. Searches document title, description, namespace, filename, and keywords.
			Output (List)	Title
		Description		Description of the document
		DocumentID		Unique ID of the document (in GUID format).
		DocumentURL	Repository Url of the document (starting with http://rep.oio.dk/).	
AdvancedSearch	Performs an advanced search in the repository documents. Returns a list of document references. SOAP faults: <i>InvalidParametersFormat</i>	Input	Title	Document title to match
			Label	Document label to match
			Version	Document version to match. Format is <i>minor.major.revision</i> , e.g. "1.1.14".
			DocumentIdentifier	Searches userdefined document identifiers.
			KeyWords	Searches document keywords
			Description	Document description to match
			ObjectTerm	Object term for XML type/element to match
			PropertyTerm	Property term for XML type/element to match
			RepresentationTerm	Representation term for XML type/element to match
			Filename	Document filename to match
			Namespace	Document namespace to match
			LastUpdate	Documents updated before this date are discarded in the search.
			LastUpdateSpecified	Indicates if <i>LastUpdate</i> is used in the search.
			TaxonomyIdentifier	Document taxonomy identifier to match. This is specified as a GUID.
			StatusSearch DEPREC?	DEPRECATED? ??
ClassificationIdentifier (list)	Matches documents with a set of specific taxonomy classification ID's (int).			

			Title	Title of the document
		Output (List)	Description	Description of the document
			DocumentID	Unique ID of the document (in GUID format).
			DocumentURL	Repository Url of the document (starting with http://rep.oio.dk/).
			ClassificationIdentifier	A list of classification ID's to search for
GetDocument ByClassification	Returns a hierarchical list of documents matching a specific set of classifications. See WSDL for details on the structure of the returned XML. SOAP faults: <i>InvalidParametersFormat</i>	Input (List)	ClassificationIdentifier	List of classification identifiers used in this search
		Output (Hierarchical list)	ClassificationName	List of classification names used in this search.
			Path	Path fragment of a namespace.
			Filename	Filename of a document matching the specified classifications.
			<i>Void</i>	
GetClassifications	Returns a list of all valid classification identifiers and names. SOAP faults:	Input	ClassificationIdentifier	The Id of the classification (integer)
		Output (List)	ClassificationName	The name of the classification
			ClassificationLongName	A longer name of the classification
			ClassificationDescription	Description of the classification

SubscriptionManager

The SubscriptionManager web services enables the user to add and delete document and namespace subscriptions from there user profile.

Service endpoint:

<http://isb.oio.dk/oioservice/service/public/2/subscriptionmanager.asmx>

Operation Name	Description	I/O	Parameter	Description
AddDocument Subscription	Subscribes to document changes. The user will receive a notification, if either the document itself or (optionally) documents which it depends on are changed. SOAP faults: <i>InvalidParametersFormat</i> <i>NoObject</i>	Input	DocumentURL	Url of the repository document to subscribe to. Must start with <i>http://rep.oio.dk/</i>
			SubscriptionTypeIdentifier	Type of subscription. Valid values are: 0 : Subscribe to document only 1 : Subscribe to document and documents which this document depends on.
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
AddNamespace Subscription	Subscribes to namespace changes, e.g. when documents are added to the namespace. SOAP faults: <i>NoObject</i> <i>InvalidParametersFormat</i>	Input	Namespace	The repository namespace to subscribe to. Must start with <i>http://rep.oio.dk/</i>
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
DeleteDocument Subscription	Removes a subscription to a repository document. SOAP faults: <i>NoObject</i> <i>InvalidParametersFormat</i>	Input	DocumentUrl	The repository document for which to remove a subscription. Must start with <i>http://rep.oio.dk/</i>
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
DeleteNamespace Subscription	Removes a subscription to a repository namespace. SOAP faults: <i>NoObject</i> <i>InvalidParametersFormat</i>	Input	Namespace	The repository namespace for which to remove a subscription. Must start with <i>http://rep.oio.dk/</i>
			<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.

ReviewRequestManager

The ReviewRequestManager web service is used for creating review requests in the Infostructurebase repository.

Service endpoint:

<http://isb.oio.dk/oioservice/service/public/2/reviewrequestmanager.asmx>

Operation Name	Description	I/O	Parameter	Description
CreateReview Request	Creates a new review request in the Infostructurebase SOAP faults: <i>InvalidParametersFormat</i> <i>NoObject</i> <i>NotAuthorized</i>	Input	<i>ReviewRequestName</i>	The name for the review request.
			<i>ProjectDescription</i>	A short description of the project
			<i>DeliveryDescription</i>	A short description of the schemas added to the review request.
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
AddDocument	Adds a reference to a document in the Infostructurebase to the specified review request. SOAP faults: <i>NoObject</i> <i>InvalidParametersFormat</i> <i>NotAuthorized</i>	Input	<i>ReviewRequest Identifier</i>	The id of the review request the document will be added to. (integer)
			<i>ObjectIdentifier</i>	The object id for the document in the Infostructurebase repository (format is GUID).
			<i>OIOClassification</i>	The OIO Classification that the user wants the document to be review as (Syntax or NDR2 or NDR3 or Core or Domain or Adopted).
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
AddDocument ByUrl	Adds a reference to a document in the Infostructurebase to the specified review request. SOAP faults: <i>NotAuthorized</i> <i>InvalidParametersFormat</i> <i>NoObject</i>	Input	<i>ReviewRequest Identifier</i>	The id of the review request the document will be added to. (integer)
			<i>ObjectUrl</i>	The full url for the document in the Infostructurebase repository e.g. http://rep.oio.dk/someschema.xsd .
			<i>OIOClassification</i>	The OIO Classification that the user wants the document to be review as (Syntax or NDR2 or NDR3 or Core or Domain or Adopted).
		Oouput	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
AddNamespace	Adds a reference to a Namespace in the Infostructurebase to the	Input	<i>ReviewRequest Identifier</i>	The id of the review request the namespace will be added to.

	specified review request. SOAP faults: <i>NotAuthorized</i> <i>InvalidParametersFormat</i> <i>NoObject</i>		<i>NamespaceUrl</i>	The full url for the namespace in the Infostructurebase repository e.g. http://rep.oio.dk/namespace/ .
			<i>OIOClassification</i>	The OIO Classification that the user wants the document to be review as (Syntax or NDR2 or NDR3 or Core or Domain or Adopted).
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
AddContact	Adds an Infostructurebase user as a contact person to the specified review request. SOAP faults: <i>NotAuthorized</i> <i>InvalidParametersFormat</i> <i>NoObject</i>	Input	<i>ReviewRequestIdentifier</i>	The id of the review request
			<i>UserName</i>	The ISB username of the user to add as a contact
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
AddReply	Attach a document to the specified review request, the document is NOT uploaded to the repository, only to the review request, this can be used for additional information regarding a review request. SOAP faults: <i>NotAuthorized</i> <i>InvalidParametersFormat</i> <i>NoObject</i>	Input	<i>ReviewRequestID</i>	The id of the review request
			<i>ReplyName</i>	A short logical name for the document
			<i>ReplyDescription</i>	A short description of the document content
			<i>ReplyFileName</i>	The name of the file
			<i>ReplyDocument</i>	The file in base64 binary encoding.
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
DeleteDocument	Deletes a reference to a document in the Infostructurebase from the specified review request. SOAP faults: <i>NotAuthorized</i> <i>InvalidParametersFormat</i> <i>NoObject</i>	Input	<i>ReviewRequestID</i>	The id of the review request
			<i>ObjectID</i>	The object id for the document in the Infostructurebase repository (format is GUID).
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
DeleteDocument	Deletes a reference to a document in the Infostructurebase from the specified review request. SOAP faults: <i>NotAuthorized</i> <i>InvalidParametersFormat</i> <i>NoObject</i>	Input	<i>ReviewRequestID</i>	The id of the review request
			<i>DocumentUrl</i>	The url for the Repository document, to delete from this reviewRequest. Must start with "http://rep.oio.dk/"
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
DeleteNamespace	Deletes a reference to a namespace in the	Input	<i>ReviewRequestID</i>	The id of the review request

	Infostructurebase from the specified review request. SOAP faults: <i>NotAuthorized</i> <i>InvalidParametersFormat</i> <i>NoObject</i>		<i>NamespaceUrl</i>	The full url for the namespace in the Infostructurebase repository e.g. <i>http://rep.oio.dk/namespace/.</i>
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
DeleteContact	Deletes a reference to a contact person from the specified review request. SOAP faults: <i>NotAuthorized</i> <i>InvalidParametersFormat</i> <i>NoObject</i>	Input	<i>ReviewRequestID</i>	The id of the review request
			<i>UserName</i>	The ISB username of the user
		Output	<i>bool</i>	True if the method succeeds. Soap faults are returned if any problems arise.
SendRequest ToReview	When the review request is done, <i>SendRequestToReview</i> can be invoked to hand over the review request for processing. SOAP faults: <i>NotAuthorized</i> <i>InvalidParametersFormat</i> <i>NoObject</i>	Input	<i>ReviewRequestID</i>	The id of the review request to submit.
			Output	<i>bool</i>
GetReview Request	Returns the specified review request. See WSDL for structural details. SOAP faults: <i>NotAuthorized</i> <i>InvalidParametersFormat</i> <i>NoObject</i>	Input	<i>ReviewRequestID</i>	The id of the review request to get.
			Output	<i>Name</i>
		<i>CreatedDate</i>		Creation time of the review request
		<i>ProjectDescription</i>		Description of the project
		<i>DeliveryDescription</i>		Description of the delivery, e.g. structural overview, key files.
		<i>ReviewRequestStatus</i>		Status of the review request. Possible states: <i>Draft, Rejected, Pending, UnderConsideration, InPublicHearing, Closed.</i>
		<i>PersonGivenName (list of)</i>		First name of the review request contact person
		<i>PersonSurName (list of)</i>		Surname of the review request contact person
		<i>EmailAddressIdentifier (list of)</i>		E-mail of the review request contact person
		<i>ObjectIdentifier (list of)</i>		Object id of a document which is part of this review request
		<i>DocumentName (list of)</i>		Name of a document which is part of this review request
		<i>DocumentURL (list of)</i>		Url of a document which is part of this review request
		<i>NamespaceURL (list of)</i>	Url of a complete namespace which is part of this review request	
<i>ReviewRequest Reply.DocumentURL (list of)</i>	Document Url linking a hearing reply to a specific document			

			ReviewRequestReply.DocumentDescription (list of)	Text of a hearing reply concerning a specific document.
			ReviewRequestReply.CreatedDate (list of)	Date of a hearing reply
			ReviewRequestReply.ReviewReplyContact.PersonGivenName	First name of a contact person for a review request reply
			ReviewRequestReply.ReviewReplyContact.PersonSurname	Surname of a contact person for a review request reply
			ReviewRequestReply.ReviewReplyContact.EmailAddressIdentifier	E-mail address of a contact person for a review request reply
			ReviewRequestReplyID	An Integer that uniquely identifies this Review Request Reply.
AddDocumentCollection	Adds a list of documents to one specified ReviewRequest	Input	ReviewRequestID(int)	The ID of the ReviewRequest to add all the documents to
			DocumentUrl (list)	The Url of a document in the repository. Starting with http://rep.oio.dk/
			OIOClassification (list)	The OIO Classification that the user wants the document to be review as (Syntax or NDR2 or NDR3 or Core or Domain or Adopted).
		Output (List)	DocumentUrl	The Url of a document in the repository. Starting with http://rep.oio.dk/
		Added	A boolean value that is true if the document was added	
DeleteReply	Deletes the specified Reply, from the specified ReviewRequest	Input	ReviewRequestID	The ID of the ReviewRequest to delete from
			ReviewRequestReplyID (int)	The ID of the ReviewRequestReply to delete
		Output	bool	True if the ReviewRequestReply was deleted
GetReviewRequestStatus	Returns the status of the specified ReviewRequest	Input	ReviewRequestID(int)	The ID of the ReviewRequest to get the status from
		Output	ReviewRequestStatus	The status of the ReviewRequest(valid values are Draft, Rejected, UnderConstruction, InPublicHearing and Closed)