2 SOAP Web Services

Introduction

Welcome to the OpenClinica SOAP Web Services Guide. Newcomers to OpenClinica SOAP Web Services should read the overview provided below, and then refer to the documentation for the specific web service(s) of interest.

The OpenClinica SOAP API is part of the OpenClinica-ws package and require installation separate from the standard OpenClinica-web deployment (unlike REST web services which are part of OpenClinica-web). See 'Using OpenClinica Web Services' for more info.

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2.1 Using OpenClinica Web Services

Installation

To use OpenClinica Web Services, they must first be installed. Follow the instructions in the installation guide in your OpenClinica download, or contact your OpenClinica Enterprise support representative.

The OpenClinica Web Services module is deployed on Apache Tomcat as a separate "war" (web application archive) from the main OpenClinica application. A typical OpenClinica Web Services installation is as follows: the 2 directories ("OpenClinica" for 3.1.x-web and "OpenClinica-ws" for 3.1.x-ws) are present in the tomcat/webapps with the same db connection parameters (db=openclinica and clinica user).

In this configuration, you can access the usual web interface through https://yourDomain.com/OpenClinica, and access the web services by SOAP requests using https://yourDomain.com/OpenClinica-ws. When you verify (as it is explained in the documentation) your -ws installation by loading https://yourDomain.com/OpenClinica-ws in your browser, it is only for confirming the application is deployed and can connect to the database. It will return a login page with an empty rss feed, but you cannot access the web application through this login page.

You can then begin to work on SOAP requests, authenticating with the login and the password of a user with the option "Authorize SOAP web services in this account" ticked.

Dates

All date values in OpenClinica Web Services should use the (ISO 8601) YYYY-MM-DD format.

OpenClinica SOAP Web Services Security

OpenClinica Web services use the same security infrastructure as the OpenClinica web application. A valid username and password are required, and the roles/permissions for that account will apply. Passwords should not be added in plain-text, they must be hashed using SHA-1 before being

To authenticate with OpenClinica SOAP Web services:

- Make sure the user account is authorized to use web services (this authorization is granted in User Account setup).
- Hash the password using the SHA-1 algorithm (google for a 'SHA-1 hash generator' if you don't know what this is).
- Modify the "<soapenv:Header/>" line in the SOAP XML request with the following. Provide the user name in clear text and the hashed password string in the appropriate fields.

```
<soapenv:Header>
<wsse:Security soapenv:mustUnderstand="1"
xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurit
y-secext-1.0.xsd">
<wsse:UsernameToken wsu:Id="UsernameToken-27777511"
xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity
-utility-1.0.xsd">
<wsse:Username>username</wsse:Username>
<wsse:Password
type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-username-token-
profile-1.0#PasswordText">
SHA1-password</wsse:Password>
</wsse:UsernameToken>
</wsse:Security>
</soapenv:Header>
```

Spring XwsSecurityInterceptor is used to secure OpenClinica Web Services. For more information on Spring XwsSecurity go to:

http://static.springsource.org/spring-ws/sites/1.5/reference/html/security.html

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2.2 StudySubject Web Service

This service provides API methods for manipulating subjects in OpenClinica. The WSDL file associated with this service can be found here: http://${your instance}/OpenClinica-

ws/ws/studySubject/v1/studySubjectWsdl.wsdl.

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2.2.1 create (Creates a new studySubject)

Create Method generates a new Study Subject.

Usage

Creates a study subjects in a target study/site. Required and optional fields will be determined by the configuration of the study and site the subject is being created in.

SOAP XML Request and Response Template

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://openclinica.org/ws/studySubject/v1"
xmlns:bean="http://openclinica.org/ws/beans">
${insert header}
<soapenv:Body>
<v1:createRequest>
<!--1 or more repetitions:-->
<v1:studySubject>
<bean:label>?</bean:label>
<!--Optional:-->
<bean:secondaryLabel>?</bean:secondaryLabel>
<bean:enrollmentDate>?</bean:enrollmentDate>
<bean:subject>
<!--Optional:-->
<bean:uniqueIdentifier>?</bean:uniqueIdentifier>
<!--Optional:-->
<bean:gender>?</bean:gender>
<!--You have a CHOICE of the next 2 items at this level-->
<bean:dateOfBirth>?</bean:dateOfBirth>
<bean:yearOfBirth>?</bean:yearOfBirth>
</bean:subject>
<bean:studyRef>
<bean:identifier>?</bean:identifier>
<!--Optional:-->
<bean:siteRef>
<bean:identifier>?</bean:identifier>
</bean:siteRef>
```

```
</bean:studyRef>
</v1:studySubject>
</v1:createRequest>
</soapenv:Body>
</soapenv:Envelope>
```

```
<SOAP-ENV:Envelope xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/">
<SOAP-ENV:Header/>
<SOAP-ENV:Body>
<createResponse>
<result>success</result>
<label>?</label>
</createResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Parameters

Request Parameters

Parameter	UI	Domain	DB	Validations	Datatypes	Examples	Required
label	Study Subject ID	StudySubjectBean:label	study_subject:label	- cannot be longer than 30 characters	String	<label>SSID001</label> Note: The OID of the study subject is truncated if the label contains 9 or more characters. For example, if you create a subject with a Study Subject ID # ALC5000001 --> the Study Subject OID saved in the database is: SS_ALC50000 instead of SS_ALC5000001 If there is another study subject containing the same first 8 characters as the first study subject,the second study subject will have the same OID as the first study subject with an appended 4 randomly assigned digits to ensure uniqueness. For example, if after you submitted a request to create a Study subject of ALC5000001, you submit a request to create a Study Subject ID # ALC5000002, the Study Subject OID saved in the database is: SS_ALC50000_5363 instead of SS_ALC5000002	Y - if "Study Parameter Configuration - Generate the Study Subject ID" is set to *Manual Entry*. N - if "Study Parameter Configuration - Generate the Study Subject ID" is set to *Auto-generated and Editable* or *Auto-generated and Non-editable*.
secondaryLabel	Secondary ID	StudySubjectBean:secondaryLabel	study_subject:secondary_label	- cannot be longer than 30 characters	String	<secondaryLabel>?</secondaryLabel>	N
enrollmentDate	Date of Enrollment	StudySubjectBean:enrollmentDate	study_subject:enrollment_date	- should be a valid date in the ISO 8601 format - date should be in the past	Date	<enrollmentDate>2008-12-12</enrollmentDate>	Y
subject:uniqueIdentifier	Person ID	SubjectBean:uniqueIdentifier	subject:unique_identifier	- cannot be longer than 255 characters	String	<uniqueIdentifier>PID001</uniqueIdentifier>	Y - if "Study Parameter Configuration - Person ID Required" is set to *Required*. N - if "Study Parameter Configuration - Person ID Required" is set to *Optional* or *Not Used*.

Parameter	UI	Domain	DB	Validations	Datatypes	Examples	Required
subject:gender	Sex	SubjectBean:gender	subject:gender	- should be 'm' or 'f'	char	<gender>m<gender>	Y - if "Study Parameter Configuration - Sex Required" is set to *Yes*. N - if "Study Parameter Configuration - Sex Required" is set to *No*.
subject:dateOfBirth	Date of Birth	SubjectBean:dateOfBirth	subject:date_of_birth	- should be a valid date in the ISO 8601 format	Date	<dateOfBirth>2008-12-12</dateOfBirth>	Y - if "Study Parameter Configuration - Collect Subject Date of Birth" is set to *Yes*. N - if "Study Parameter Configuration - Collect Subject Date of Birth" is set to *Not Used or Only Year of Birth*.
subject:yearOfBirth	Date of Birth	SubjectBean:dateOfBirth	subject:date_of_birth	- should be a valid year	Date	<yearOfBirth>2008</yearOfBirth>	Y - if "Study Parameter Configuration - Collect Subject Date of Birth" is set to *Only Year of Birth*. N - if "Study Parameter Configuration - Collect Subject Date of Birth" is set to *Not Used* or *Yes*.
studyRef:identifier	Unique Protocol ID	StudyBean:identifier	study:unique_identifier	- should be a valid study identifier	String	<identifier>StudyA</identifier>	Y
siteRef:identifier	Unique Protocol ID	StudyBean:identifier	study:unique_identifier	- should be a valid site identifier	String	<identifier>SiteA</identifier>	N

Response Parameters

Parameter	UI	Domain	DB	Result on success	Result on fail
label	Study Subject ID	StudySubjectBean:label	study_subject:label	<label>SSID001</label>	<label/>
result	n/a	n/a	n/a	<result>Success</result>	<result>Fail</result>
warning	n/a	n/a	n/a	n/a	n/a
error	n/a	n/a	n/a	n/a	<error>An error message indicating reason of failure</error>

2.2.2 listAllByStudy (List studySubjects in a study)

Lists studySubjects in a study regardless of its state (i.e It also includes a removed studySubject in a study).

Usage

Lists study subjects that are a part of an OpenClinica study or site.

SOAP XML Request and Response Template

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://openclinica.org/ws/studySubject/v1"
xmlns:bean="http://openclinica.org/ws/beans">
${insert header}
<soapenv:Body>
<v1:listAllByStudyRequest>
<bean:studyRef>
<bean:identifier>?</bean:identifier>
<!--Optional:
<bean:siteRef>
<bean:identifier>?</bean:identifier>
</bean:siteRef>--!>
</bean:studyRef>
</v1:listAllByStudyRequest>
</soapenv:Body>
</soapenv:Envelope>

<SOAP-ENV:Envelope xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/">
<SOAP-ENV:Header/>
<SOAP-ENV:Body>
<ns4:listAllByStudyResponse
xmlns:ns4="http://openclinica.org/ws/studySubject/v1"
xmlns:ns2="http://openclinica.org/ws/beans"
xmlns:ns3="http://openclinica.org/ws/crf/v1">
<ns4:result>Success</ns4:result>
<ns4:studySubjects>
<ns2:studySubject>
<ns2:label>label</ns2:label>
<ns2:secondaryLabel/>
<ns2:enrollmentDate>2010-03-31</ns2:enrollmentDate>
<ns2:subject>
<ns2:uniqueIdentifier/>
<ns2:gender>m</ns2:gender>
</ns2:subject>
<ns2:events>
<ns2:event>
<ns2:location>Boston</ns2:location>
<ns2:startDate>2010-03-31</ns2:startDate>
<ns2:startTime>00:00:00</ns2:startTime>
</ns2:event>
</ns2:events>
</ns2:studySubject>
</ns4:studySubjects>
</ns4:listAllByStudyResponse>
</SOAP-ENV:Body>
```

```
</SOAP-ENV:Envelope>
```

Parameters

Request Parameters

Parameter	UI	Domain	DB	Validations	Datatypes	Examples	Required
studyRef:identifier	Unique Protocol ID	StudyBean:identifier	study:unique_identifier	N/A	String	<identifier>study identifier</identifier>	Y
siteRef:identifier	Unique Protocol ID	StudyBean:identifier	study:unique_identifier	N/A	String	<identifier>site identifier</identifier>	N

Response Parameters

Parameter	UI	Domain	DB	Result on success	Result on fail
result	n/a	n/a	n/a	<result>Success</result>	<result>Fail</result>
warning	n/a	n/a	n/a	<warning>A warning message</warning>	n/a
error	n/a	n/a	n/a	n/a	<error>An error message indicating reason of failure</error>
studySubject:label	StudySubject ID	StudySubjectBean:label	study_subject:label	<label>label</label>	n/a
studySubject:secondaryLabel	Secondary ID	StudySubjectBean:secondaryLabel	study_subject:secondary_label	<secondaryLabel/> or <secondaryLabel>label</secondaryLabel>	n/a
subject:uniqueIdentifier	Person ID	SubjectBean:uniqueIdentifier	subject:unique_identifier	<uniqueIdentifier/> or <uniqueIdentifier>uId</uniqueIdentifier>	n/a
subject:gender	Sex	SubjectBean:gender	subject:gender	<gender>m</gender> or <gender>f</gender>	n/a
subject:dateOfBirth	Date of Birth	SubjectBean:dateOfBirth	subject:date_of_birth	<dateOfBirth>2008-12-12</dateOfBirth>	n/a
subject:yearOfBirth	Date of Birth	SubjectBean:dateOfBirth	subject:date_of_birth	<yearOfBirth>2008</yearOfBirth>	n/a
event:location	Location	StudyEvent:location	study_event:location	<location>Boston</location>	n/a
event:startDate	Start Date/Time	StudyEvent:dateStarted	study_event:date_start	<startDate>2010-08-16</startDate>	n/a
event:startTime	Start Date/Time	StudyEvent:dateStarted	study_event:date_start	<startTime>12:00:00</startTime>	n/a
event:endDate	End Date/Time	StudyEvent:dateEnded	study_event:date_end	<endDate>2010-08-16</endDate>	n/a
event:endTime	End Date/Time	StudyEvent:dateEnded	study_event:date_ended	<endTime>15:00:00</endTime>	n/a

2.2.3 isStudySubject (Queries OpenClinica if studySubject exists in a Study)

Queries OpenClinica if Study Subject exists.

Usage

Queries OpenClinica if a study subjects is assigned to a target study/site. Study Subject is looked up by Label (aka Study Subject ID) only.
If only the Study ID is provided (and not the Site ID), the web service will check for the Study Subject across all sites in the study and, if found, return a result of 'Success'. If a Site Identifier is also provided the scope of the query will be limited to subjects in that study and site.

SOAP XML Request and Response Template

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://openclinica.org/ws/studySubject/v1"
xmlns:bean="http://openclinica.org/ws/beans">
${insert header}
 <soapenv:Body>
<v1:isStudySubjectRequest>
<v1:studySubject>
<bean:label>?</bean:label>
<!--Lines selected in grey can be deleted from envelope. This
information is NOT used by WS-->
 <!--Optional:-->
 <bean:secondaryLabel>?</bean:secondaryLabel>
 <bean:enrollmentDate>?</bean:enrollmentDate>
 <bean:subject>
 <!--Optional:-->
 <bean:uniqueIdentifier>?</bean:uniqueIdentifier>
 <!--Optional:-->
 <bean:gender>?</bean:gender>
 <!--You have a CHOICE of the next 2 items at this level-->
 <bean:dateOfBirth>?</bean:dateOfBirth>
 <bean:yearOfBirth>?</bean:yearOfBirth>
 </bean:subject>
<bean:studyRef>
<bean:identifier>?</bean:identifier>
<!--Optional:-->
<bean:siteRef>
<bean:identifier>?</bean:identifier>
</bean:siteRef>
</bean:studyRef>
</v1:studySubject>
</v1:isStudySubjectRequest>
</soapenv:Body>
</soapenv:Envelope>
```

```
<SOAP-ENV:Envelope xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/">
<SOAP-ENV:Header/>
<SOAP-ENV:Body>
<createResponse>
<result>success</result>
<label>?</label>
</createResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Parameters

Request Parameters

Parameter	UI	Domain	DB	Validations	Datatypes	Examples	Required
label	Study Subject ID	StudySubjectBean:label	study_subject:label	- cannot be longer than 30 characters	String	<label>Sub A 101</label>	Y
studyRef:identifier	Unique Protocol ID	StudyBean:identifier	study:unique_identifier	- should be a valid study identifier	String	<identifier>StudyA</identifier>	Y
siteRef:identifier	Unique Protocol ID	StudyBean:identifier	study:unique_identifier	- should be a valid site identifier	String	<identifier>SiteA</identifier>	N

Response Parameters

Parameter	UI	Domain	DB	Result on success	Result on fail
studySubject:oc_oid	Study Subject OID	studySubjectOID	study_subject:oc_oid	<label>SSID001</label>	<label/>
result	n/a	n/a	n/a	<result>Success</result>	<result>Fail</result>
warning	n/a	n/a	n/a	n/a	n/a
error	n/a	n/a	n/a	n/a	<error>An error message indicating reason of failure</error>

2.3 Event Web Service

This service provides API methods for manipulating study events in OpenClinica. The WSDL file associated with this service could be found here: http://${your instance}/OpenClinica-ws/ws/event/v1/eventWsdl.wsdl.

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Not valid unless obtained from the OpenClinica document management system on the day of use.

2.3.1 schedule (Schedules an event)

Schedule an event

Usage

Schedules a single study subject event (visit) in an OpenClinica Study.

NOTE: the scheduleEvent WSDL states that more than one event can be scheduled at a time, however the application will only schedule one event per request. See 13008 for further information.

SOAP XML Request and Response Template

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://openclinica.org/ws/event/v1"
xmlns:bean="http://openclinica.org/ws/beans">
${insert header}
<soapenv:Body>
<v1:scheduleRequest>

<v1:event>
<bean:studySubjectRef>
<bean:label>?</bean:label>
</bean:studySubjectRef>
<bean:studyRef>
<bean:identifier>?</bean:identifier>
<!--Optional:-->
<bean:siteRef>
<bean:identifier>?</bean:identifier>
</bean:siteRef>
</bean:studyRef>
<bean:eventDefinitionOID>?</bean:eventDefinitionOID>
<bean:location>?</bean:location>
<bean:startDate>?</bean:startDate>
<!--Optional:-->
<bean:startTime>?</bean:startTime>
<!--Optional:-->
<bean:endDate>?</bean:endDate>
<!--Optional:-->
<bean:endTime>?</bean:endTime>
</v1:event>
</v1:scheduleRequest>
</soapenv:Body>
</soapenv:Envelope>
```

```
<SOAP-ENV:Envelope xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/">
<SOAP-ENV:Header/>
<SOAP-ENV:Body>
<scheduleResponse>
```

```
<result>success</result>
<eventDefinitionOID>SE_TEST</eventDefinitionOID>
<studySubjectOID>SS_PERSON</studySubjectOID>
<studyEventOrdinal>1</studyEventOrdinal>
</scheduleResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Parameters

Request Parameters

Element	UI	Domain	DB	Validations	Datatypes	Examples	Required
studySubjectRef:label	Study Subject ID	StudySubjectBean:label	study_subject:label	- should be a valid study subject ID	String	<label>SSID001</label>	Y
eventDefinitionOID	OID (Manage All Event Definitions Screen)	StudyEventDefinitionBean:oid	study_event_definition: oc_oid	- should be a valid event definition OID	String	<eventDefinitionOID>OC_OID</eventDefinitionOID>	Y
location	Location (Schedule Study Event Screen)	StudyEventBean:location	study_event:location	n/a	String	<location>Waltham</location>	Y
startDate	Start Date/Time (Schedule Study Event Screen)	StudyEventBean:dateStarted	study_event:date_start	- should be a valid date in the ISO 8601 format	Date	<startDate>2008-12-12</startDate>	Y
startTime	Start Date/Time (Schedule Study Event Screen)	StudyEventBean:dateStarted	study_event:date_start	- should be a valid time in the ISO 8601 format	Date	<startTime>12:00</startTime>	N
endDate	End Date/Time (Schedule Study Event Screen)	StudyEventBean:dateEnded	study_event:date_end	- should be a valid date in the ISO 8601 format	Date	<endDate>2008-12-12</endDate>	N
endTime	End Date/Time (Schedule Study Event Screen)	StudyEventBean:dateEnded	study_event:date_end	- should be a valid time in the ISO 8601 format	Date	<endTime>15:00</endTime>	N
studyRef:identifier	Unique Protocol ID	StudyBean:identifier	study:unique_identifier	- should be a valid study identifier	String	<identifier>StudyA</identifier>	Y
siteRef:identifier	Unique Protocol ID	StudyBean:identifier	study:unique_identifier	- should be a valid site identifier	String	<identifier>SiteA</identifier>	N

Response Parameters

Parameter	UI	Domain	DB	Result on success	Result on fail
eventDefinitionOID	OID (Manage All Event Definitions Screen)	StudyEventDefinitionBean:oid	study_event_definition: oc_oid	<eventDefinitionOID>SE_TEST</eventDefinitionOID>	n/a
studySubjectOID	OID (Subject Matrix)	StudySubjectBean:oid	study_subject:oc_oid	<studySubjectOID>SS_OID</studySubjectOID>	n/a

Parameter	UI	Domain	DB	Result on success	Result on fail
studyEventOrdinal	Event (Occurrence Number) - (View Subject Screen	StudyEventBean:ordinal	study_event:sample_ordinal	<studyEventOrdinal>1</studyEventOrdinal>	n/a
result	n/a	n/a	n/a	<result>Success</result>	<result>Fail</result>
warning	n/a	n/a	n/a		n/a
error	n/a	n/a	n/a	n/a	<error>An error message indicating reason of failure</error>

2.4 Data Web Service

This service provides API methods for manipulating CRF item data in OpenClinica. The WSDL file associated with this service could be found here: http://host:8080/OpenClinica/ws/data/v1/dataWsdl.wsdl .

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Not valid unless obtained from the OpenClinica document management system on the day of use.

2.4.1 Import

Usage

This web service inserts CRF item data. The data supplied to the method should be in CDISC ODM XML format.

Starting with OpenClinica release 3.6, the **UpsertOn** tag and **OpenClinica:Status** clause are available. Details are provided in CDISC ODM XML format

Starting with OpenClinica release 3.1.3 if you have Rules attached to your CRF, you can run them when uploading data from web services by turning on ImportDataEntry flag in rules definition. For example, in order to enable a discrepancy note rule action executed on import the rule should have ImportDataEntry flag set to true:

```
<?xml version="1.0" encoding="UTF-8"?>

<RuleImport>

   <RuleAssignment>

      <Target>I_RULES_WEIGHT</Target>

      <RuleRef OID="RU2">

         <DiscrepancyNoteAction IfExpressionEvaluates="false">
```

```
            <Run AdministrativeDataEntry="true"
               InitialDataEntry="true" DoubleDataEntry="true"
               ImportDataEntry="true" Batch="false"/>
            <Message>This is a discrepancy note test</Message>
          </DiscrepancyNoteAction>
        </RuleRef>
    </RuleAssignment>
    <RuleDef OID="RU2" Name="Blank exam date">
        <Description>CRF can not be blank.</Description>
        <Expression>I_RULES_HEIGHT eq "100"</Expression>
    </RuleDef>
</RuleImport>
```

SOAP XML Request and Response Template

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://openclinica.org/ws/data/v1"
xmlns:OpenClinica="http://www.openclinica.org/ns/odm_ext_v130/v3.1"
>
<soapenv:Header>
<wsse:Security soapenv:mustUnderstand="1"
xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss
-wssecurity-secext-1.0.xsd">
<wsse:UsernameToken wsu:Id="UsernameToken-27777511"
xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-utility-1.0.xsd">
 <wsse:Username>user</wsse:Username>
 <wsse:Password
Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-usern
ame-token-profile-1.0#PasswordText">password</wsse:Password>
 </wsse:UsernameToken>
 </wsse:Security>
</soapenv:Header>
 <soapenv:Body>
 <v1:importRequest>
<odm><![CDATA[
<ODM ....
```

```
 .....
 </ODM>]]>
 </odm>
 </v1:importRequest>
</soapenv:Body>
</soapenv:Envelope>
```

```
<SOAP-ENV:Envelope xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/">
<SOAP-ENV:Header/>
<SOAP-ENV:Body>

 .....
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Parameters

Request Parameters

Parameter	UI	Domain	DB	Validations	Datatypes	Examples	Required
studyRef:identifier	Unique Protocol ID	StudyBean:identifier	study:unique_identifier	N/A	String	<identifier>study identifier</identifier>	Y
siteRef:identifier	Unique Protocol ID	StudyBean:identifier	study:unique_identifier	N/A	String	<identifier>site identifier</identifier>	N

Response Parameters

Parameter	UI	Domain	DB	Result on success	Result on fail
result	n/a	n/a	n/a	<result>Success</result>	<result>Fail</result>
warning	n/a	n/a	n/a	<warning>A warning message</warning>	n/a
error	n/a	n/a	n/a	n/a	<error>An error message indicating reason of failure</error>

2.5 Study Web Service

This service provides API methods for manipulating studies in OpenClinica. The WSDL file associated with this service could be found here: http://host:8080/OpenClinica/ws/study/v1/studyWsdl.wsdl

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Not valid unless obtained from the OpenClinica document management system on the day of use.

2.5.1 getMetadata (Returns study metadata)

Returns the study metadata. The roles associated with the user running this webservice will determine wether the study metadata is displayed.

Usage

Returns the study metadata for the requested study in OpenClinica. It will contain information like the Study Name, Unique Protocol ID, and Study OID.

SOAP XML Request and Response Template

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://openclinica.org/ws/study/v1"
xmlns:bean="http://openclinica.org/ws/beans">
<soapenv:Header>
<wsse:Security soapenv:mustUnderstand="1"
xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss
-wssecurity-secext-1.0.xsd">
<wsse:UsernameToken wsu:Id="UsernameToken-27777511"
xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-utility-1.0.xsd">
<wsse:Username>user</wsse:Username>
<wsse:Password
Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-usern
ame-token-profile-1.0#PasswordText">password</wsse:Password>
</wsse:UsernameToken>
</wsse:Security>
</soapenv:Header>
<soapenv:Body>
<v1:getMetadataRequest>
<v1:studyMetadata>
<bean:studyRef>
<bean:identifier>identifier</bean:identifier>
</bean:studyRef>
</v1:studyMetadata>
</v1:getMetadataRequest>
</soapenv:Body>
</soapenv:Envelope>
```

```
<SOAP-ENV:Envelope xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/">
<SOAP-ENV:Header/>
<SOAP-ENV:Body>
<createResponse xmlns="http://openclinica.org/ws/study/v1">
<result>Success</result>
<odm><![CDATA[<Study OID="S_DEFAULTS1">
<GlobalVariables>
<StudyName>Default Study</StudyName>
<StudyDescription>

</StudyDescription>
<ProtocolName>default-study</ProtocolName>
</GlobalVariables>
<MetaDataVersion>
<Protocol>
</Protocol>
</MetaDataVersion>
</Study>]]></odm>
</createResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Parameters

Request Parameters

Parameter	UI	Domain	DB	Validations	Datatypes	Examples	Required
studyRef:identifier	Unique Protocol ID	StudyBean:identifier	study:unique_identifier	N/A	String	<identifier>study identifier</identifier>	Y
siteRef:identifier	Unique Protocol ID	StudyBean:identifier	study:unique_identifier	N/A	String	<identifier>site identifier</identifier>	N

Response Parameters

Parameter	UI	Domain	DB	Result on success	Result on fail
result	n/a	n/a	n/a	<result>Success</result>	<result>Fail</result>
warning	n/a	n/a	n/a	<warning>A warning message</warning>	n/a
error	n/a	n/a	n/a	n/a	<error>An error message indicating reason of failure</error>

2.5.2 listAll (Lists studies)

Returns a list of studies/sites. The roles associated with the user running this webservice will determine which studies/sites are listed.

Usage

Returns a list of all the studies and sites that are part of your OpenClinica instance and accessible by the web services user. The system will not list studies and sites the user does not have access to.

SOAP XML Request and Response Template

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://openclinica.org/ws/study/v1">
<soapenv:Header>
<wsse:Security soapenv:mustUnderstand="1"
xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss
-wssecurity-secext-1.0.xsd">
<wsse:UsernameToken wsu:Id="UsernameToken-27777511"
xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-utility-1.0.xsd">
<wsse:Username>user</wsse:Username>
<wsse:Password
Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-usern
ame-token-profile-1.0#PasswordText">password</wsse:Password>
</wsse:UsernameToken>
</wsse:Security>
</soapenv:Header>
<soapenv:Body>
<v1:listAllRequest/>
</soapenv:Body>
</soapenv:Envelope>
```

```
<SOAP-ENV:Envelope xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/">
<SOAP-ENV:Header/>
<SOAP-ENV:Body>
<listAllResponse xmlns="http://openclinica.org/ws/study/v1">
<result>Success</result>
<studies>
<study>
<identifier>default-study</identifier>
```

```
<oid>S_DEFAULTS1</oid>
<name>Default Study</name>
</study>
<study>
<identifier>Study A</identifier>
<oid>S_STUDYA</oid>
<name>A new study</name>
<sites>
<site>
<identifier>Site A</identifier>
<oid>S_SITEA</oid>
<name>1 Site</name>
</site>
</sites>
</study>
</studies>
</listAllResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Parameters

Request Parameters

Not Available

Response Parameters

Parameter	UI	Domain	DB	Result on success	Result on fail
result	n/a	n/a	n/a	<result>Success</result>	<result>Fail</result>
warning	n/a	n/a	n/a	<warning>A warning message</warning>	n/a
error	n/a	n/a	n/a	n/a	<error>An error message indicating reason of failure</error>
study:identifier	Unique Protocol ID	StudyBean:identifier	study:unique_identifier	<identifier>default-study</identifier>	n/a
study:oid	OID	StudyBean:oid	study:oc_oid	<oid>S_STUDY</oid>	n/a
study:name	Name	StudyBean:name	study:name	<name>Default Study</name>	n/a
site:identifier	Unique Protocol ID	StudyBean:identifier	study:unique_identifier	<identifier>default-site</identifier>	n/a
site:oid	OID	StudyBean:name	study:oc_oid	<oid>S_SITE</oid>	n/a
site:name	Name	StudyBean:oid	study:name	<name>Default Site</name>	n/a

2.6 StudyEventDefinition Web Service

This service provides API methods for retrieving study event definitions for a study in OpenClinica.

The WSDL file associated with this service can be found here: ws/studyEventDefinition/v1/studyEventDefinitionWsdl.wsdl.

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2.6.1 listAll (Lists study event definitions in study)

Returns a list of study event definitions.

Usage

Returns a list of study event definitions and their properties for a single study in OpenClinica.

SOAP XML based Request and Response Template

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://openclinica.org/ws/studyEventDefinition/v1"
xmlns:bean="http://openclinica.org/ws/beans">
<soapenv:Header>
<wsse:Security soapenv:mustUnderstand="1"
xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss
-wssecurity-secext-1.0.xsd">
<wsse:UsernameToken wsu:Id="UsernameToken-27777511"
xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-utility-1.0.xsd">
<wsse:Username>user</wsse:Username>
<wsse:Password
Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-usern
ame-token-profile-1.0#PasswordText">password</wsse:Password>
</wsse:UsernameToken>
</wsse:Security>
</soapenv:Header>
<soapenv:Body>
<v1:listAllRequest>
<v1:studyEventDefinitionListAll>
<bean:studyRef>
<bean:identifier>PG33xyz</bean:identifier>
</bean:studyRef>
</v1:studyEventDefinitionListAll>
```

```
</v1:listAllRequest>
</soapenv:Body>
</soapenv:Envelope>
```

```
<SOAP-ENV:Envelope xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/">
<SOAP-ENV:Header/>
<SOAP-ENV:Body>
<listAllResponse
xmlns="http://openclinica.org/ws/studyEventDefinition/v1">
<result>Success</result>
<studyEventDefinitions>
<studyEventDefinition>
<oid>SE_INITIALV</oid>
<name>Initial Visit</name>
<eventDefinitionCrfs>
<eventDefinitionCrf>
<required>true</required>
<doubleDataEntry>false</doubleDataEntry>
<passwordRequired>false</passwordRequired>
<hideCrf>false</hideCrf>
<sourceDataVerificaiton>100% Required</sourceDataVerificaiton>
<crf>
<oid>F_DEMO</oid>
<name>Demographics-Dynamics</name>
</crf>
<defaultCrfVersion>
<oid>F_DEMO_1</oid>
<name>1</name>
</defaultCrfVersion>
</eventDefinitionCrf>
<eventDefinitionCrf>
<required>true</required>
<doubleDataEntry>false</doubleDataEntry>
<passwordRequired>false</passwordRequired>
<hideCrf>false</hideCrf>
<sourceDataVerificaiton>Not Required</sourceDataVerificaiton>
<crf>
<oid>F_GROU</oid>
<name>Groups_Adverse_Events</name>
</crf>
<defaultCrfVersion>
<oid>F_GROU_NONC</oid>
<name>Non-Cascade</name>
</defaultCrfVersion>
</eventDefinitionCrf>
</eventDefinitionCrfs>
```

```
</studyEventDefinition>
</studyEventDefinitions>
</listAllResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Parameters

Request Parameters

Parameter	UI	Domain	DB	Validations	Datatypes	Examples	Required
studyRef:identifier	Unique Protocol ID	StudyBean:identifier	study:unique_identifier	N/A	String	<identifier>study identifier</identifier>	Y
siteRef:identifier	Unique Protocol ID	StudyBean:identifier	study:unique_identifier	N/A	String	<identifier>site identifier</identifier>	N

Response Parameters

Parameter	UI	Domain	DB	Result on success	Result on fail
result	n/a	n/a	n/a	<result>Success</result>	<result>Fail</result>
warning	n/a	n/a	n/a	<warning>A warning message</warning>	n/a
error	n/a	n/a	n/a	n/a	<error>An error message indicating reason of failure</error>
studyEventDefinition:oid	OID	StudyEventDefinitionBean:oid	study_event_definition:oc_oid	<oid>SE_INITIALV</oid>	n/a
studyEventDefinition:name	Name	StudyEventDefinitionBean:name	study_event_definition:name	<name>S_STUDY</name>	n/a
eventDefinitionCrf:required	Required	EventDefinitionCRFBean:requiredCRF	event_definition_crf:required_crf	<required>true</required>	n/a
eventDefinitionCrf:doubleDataEntry	Double Data Entry	EventDefinitionCRFBean:doubleEntry	event_definition_crf:double_entry	<doubleDataEntry>false</doubleDataEntry>	n/a
eventDefinitionCrf:passwordRequired	Password Required	EventDefinitionCRFBean:electronicSignature	event_definition_crf:electronic_signature	<passwordRequired>false</passwordRequired>	n/a
eventDefinitionCrf:hideCrf	Hide CRF	EventDefinitionCRFBean:hideCrf	event_definition_crf:hide_crf	<hideCrf>false</hideCrf>	n/a
eventDefinitionCrf:sourceDataVerificaiton	Source Data Verification	EventDefinitionCRFBean:sourceDataVerification	event_definition_crf:source_data_verification_code	<sourceDataVerificaiton>100% Required</sourceDataVerificaiton>	n/a
crf:oid	OID	CRFBean:name	crf:name	<name>Demographics-Dynamics</name>	n/a
crf:name	Name	CRFBean:oid	crf:oc_oid	<oid>F_DEMO</oid>	n/a
defaultCrfVersion:oid	n/a	CRFVersionBean:oid	crf_version:oc_oid	<oid>F_DEMO</oid>	n/a
defaultCrfVersion:name	Default Version	CRFVersionBean:name	crf_version:name	<name>1</name>	n/a

2.7 Screencasts: Intro, Installation, and Usage Examples

About Web Service, and Installation

)

Usage Example: Create a Study Subject

)

Usage Example: List Study Subjects, If a Study Subject Exists, and Schedule Event

)

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