



Access 4 Learning
Community

Powered by:  **SIF**

Simple. Secure. Scalable. Standard.

Test Harness User Manual - SIF 3 Enabled Applications



www.A4L.org

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Introduction

The Certification Process

The Access 4 Learning (A4L) Community, formerly the SIF Association, has developed a ***SIF Certification*** process to ensure that a vendor's application of a data object transmission through the SIF infrastructure is compliant with the implementation of the application through the interoperability standards as established by the A4L Community within the SIF Specification.

The A4L Community enforces the SIF Certification procedure in order that educational agencies/end users can access disparate vendor applications in order to exchange data, without the consumer re-entering data multiple times, thereby, resulting in the provision of secure and consistent information throughout the environment of the end user.

The A4L Community established the SIF Certification Program to help ensure that data is successfully transferred between applications and that the transferred data successfully resides in all sharing applications, by using an open, community developed data standard – the SIF Specification.

Minimal Infrastructure is the basis of all SIF 3 solutions. Utilizing just the synchronous infrastructure, utility, and data services necessary to enable interoperability, it is a fast and easy way to produce a SIF 3 enabled application that will work well today (even with SIF 3 enterprise solutions) and shall within this structure continue to grow into a scalable product for future applications.

The Certification Testing Procedure

This ***"Test Harness Manual"*** serves to define how to test a SIF 3 product. The Manual provides information on the methodology for testing a SIF 3 product to obtain Certification for the vendor applying for Certification.

The Manual contains sections that provide guidance to the vendor in understanding the procedures for implementing the Conformance Statement Questionnaire (CSQ)¹ process followed by the implementation of a test harness in order to meet the certification

¹ <https://www.a4l.org/page/GlossaryAL>

requirements. Each of the following sections includes terminology definitions as well as screen shots taken directly from the SIF 3 Test Harness.

For additional help or for more understanding of test harness procedures please go to the following links:

Start: <https://www.a4l.org/page/TestSuites>

Example CSQ Editor:

https://testharness.a4l.org/SIFController/CSQ/3.0/Editor?TestSuite=NA_3_1_I-1

Example Test Suite Start:

https://testharness.a4l.org/SIFController/CreateSession?TestSuite=NA_3_1_I-1

For obtaining additional help and/or understanding of the entire Certification process, please go to this link [SIF 3 Certification Guide](#).

Creating a CSQ

In order to know which capabilities to scrutinize for your software and which features to promote for your product, you must first formally claim what optional SIF components you support.



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SIF North America 3.1 with Minimal Infrastructure

Welcome! Minimal Infrastructure is the basis of all SIF 3 solutions. Utilizing just the synchronous infrastructure, utility, and data services necessary to enable interoperability, it is a fast and easy way to produce a SIF 3 enabled application that will work well today (even with SIF 3 enterprise solutions) and is itself to grow into a scalable product for tomorrow. This Test Suite utilizes the North America data model.

Existing SIF 3 CSQ:

No file selected.

In order to create a new CSQ simply press "NEXT."

Certification Authority Data

This page collects the basics about: you, your company, and your product. Similar to what you would see on a box or in an app. store. This information will appear as entered here on your final certificate & CSQ.


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Certification Authority Data

Testing Suite Name:	SIF North America 3.1 with Minimal Infrastructure
Testing Suite Version:	NA_3_1_I-1
Locale Release:	3.1
Infrastructure Product:	☐
Application Product:	☒
Organization:	Access 4 Learning
Producer:	John W. Lovell
Product Name:	Demonstration Consumer
Product Version:	1.*
Product Vendor:	Access 4 Learning
Adaptor Name:	
Adaptor Version:	
Adaptor Vendor:	
Product Version Tested:	
Adaptor Version Tested:	
Operating System:	OS X 10.10.5
Software Components:	Java 7
Spring 3
JRuby
eXist
Hardware Environment:	2.7 GHz Intel Core i7
16 GB RAM
Minimal System Requirements:	

Terminology

Infrastructure Product:	Infrastructure Product: A piece or modular part of software which treats the data model generically so that it may be used to build or configured to create other software.
Application Product:	The end-tool with which the adaptor interacts to add, modify, delete or retrieve data. This could be a database or other data managing program.
Producer:	The individual responsible for the quality of the Adaptor being certified. This should match the account used during formal testing.
Adaptor:	The liaison between an application and the SIF wire. An adaptor is responsible for sending messages and receiving messages.
Software Components:	Key software pieces, other than the operation system, that impact how the software functions.
Minimal System Requirements:	If the environment for which you wish to claim and guarantee conformance is not identical to the environment in which conformance was validated.

Implementation Dependent Behaviour

This section collects information around likely optional infrastructure features that your product leverages to enhance the interoperability experience.



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Implementation Dependent Behavior

Supports HTTP:	☐
Supports Basic Authentication:	☒
Supports HMAC256 Authentication:	☒
Validates Incoming:	☐
Validates Outgoing:	☐
Retry On Transport Error:	☒
Supports Multiple Connections:	☐
Supports Long Polling:	☐
Supports "Wake Up" Polling:	☐
Consumer Makes Multiple Object Requests:	☐
Supports Multiple Data Zones:	☐
Supports Multiple Contexts:	☐
Supports Query Intention:	☐
Supports Paged Batch Query:	☐
Supports Navigation ID:	☒

If HMAC256 Authentication is checked (currently required for certification) then HMAC256 Authentication is passed when the server accepts such credentials.

Terminology

HTTP	Capable of supporting SIF REST service without TLS trust and encryption.
Basic Authentication:	Encodes the application key and access token to allow access to SIF services.
HMAC256 Authentication:	Encodes the application key, access token, and timestamp to generate a mutating token to allow access to SIF services.
Validate:	Uses XML Schema to ensure bad payloads are not processed or sent.
Long Polling:	Both client and server wait a negotiated amount time before giving up on a message becoming available.
Wake Up Polling:	The Environment Provider sends a "wake up" message to the Consumer when a new message is ready.
Multiple Objects:	Responses and Events with multiple objects of the same type in a single message.
Data Zone:	A logical collection of Applications, Adaptors, and an Environment Provider that exchange information with each other.
Context:	Optional Data Model-specific metadata that may accompany a Consumer Request as a way of further scoping and restricting the possible Provider.
Query Intention:	A "hint" to the Service Provider that maintaining a data set and the last record returned to the current query (and supplying a Navigation ID) would be advantageous.
Paged Batch Query:	Indicates that the requested data from all objects satisfying the Query parameters is to be returned by the Service Provider as a series of delayed (asynchronous) Response messages.
Navigation ID:	Allows the Service Provider to reuse the Query results for an individual Consumer even where multiple Consumers are changing the underlying data.

Extra Information

This section collects the highest-level view of what services your products provide.



Extra Information

Provides Environment:	☐
Routes Messages:	☐
Provides Objects:	☐
Provides ServicePaths:	☐
Provides XQueries:	☐
Supports Provisioning:	☐
Supports Queues:	☐

If 'Provides Environment' is checked, the URL given at the time of test session creation will be used as the environments service URL, otherwise it will be used as the URL for the data provider.

Terminology

Provides Environment:	Implementing a set of Infrastructure Services which taken together, comprise the Environments Provider interface.
Routes Messages:	Securely and reliably connects N Service Consumers to a dynamically changing list of M Service Providers through a centrally secure, separate and discrete Message Broker.
Provides ServicePaths:	The product services indirect queries for objects, through specifying an object in the URL and returning related objects of the specified type.
Supports Provisioning:	Supporting requests for greater access rights.
Supports Queues:	Indicates an Environment Provider supports delayed requests and events.

Utilities

This section collects information on your products support for the Utilities Services. The goal of the Utility Services is to help deliver quality control and automatic configuration. Utility Services, while defined by the Infrastructure, use the same API rules as used for the data model.



Utilities

<http://www.sifassociation.org/infrastructure/3.0.1>

Name	Events	QUERY	CREATE	UPDATE	DELETE	SUBSCRIBE	PROVIDE	PUBLISH	ADMIN
alerts	☒	☐	☒	☐	☐	☐	☐	☐	☐
providers	☒	☐	☐	☐	☐	☐	☐	☐	☐
xquerys	☒	☐	☐	☐	☐	☐	☐	☐	☐
codeSets	☒	☐	☐	☐	☐	☐	☐	☐	☐
namespaces	☐	☐	☐	☐	☐	☐	☐	☐	☐
zones	☐	☐	☐	☐	☐	☐	☐	☐	☐

The checkmarks on this page directly control what supported utility related tests are run.

Currently Supported:

CREATE: An alert request to create a data object of this type will be tested.

PROVIDE: A create alert request is sent to the product being tested.

Notice: You can use the link at the top of the columns to invert the selection. This is useful when selecting all or nearly all options in a column.

Terminology

Query:	Application requests an object or objects of this type be returned.
Create:	Application requests an object or objects of this type are created.
Update:	Application requests an object or objects of this type are updated.
Delete:	Application requests an object or objects of this type are deleted.
Subscribe:	Application requests a subscription for events of this object type are created.
Provide:	The application services all (create, read, update, & delete) requests for this object type.
Publish:	The application creates and shares events for this object type.
Admin:	The application accesses this Service in non-standard ways.

Alerts

For each Utility Service supported by your product, element level details of that support are collected.



alerts

<http://www.sifassociation.org/infrastructure/3.0.1>

Name	Mandatory	Characteristics	PROCESSES	REQUIRES	SUPPLIES	WHERE	XQUERY	XPath
@id	☐		☐	☐	☐	☐	☐	/alerts/alert/@id
reporter	☒	M	☐	☐	☒	☐	☐	/alerts/alert/reporter
cause	☐	O	☐	☐	☐	☐	☐	/alerts/alert/cause
exchange	☒	M	☐	☐	☒	☐	☐	/alerts/alert/exchange
level	☒	M	☐	☐	☒	☐	☐	/alerts/alert/level
description	☐	O	☐	☐	☒	☐	☐	/alerts/alert/description
messageID	☐	C	☐	☐	☐	☐	☐	/alerts/alert/messageID
body	☐	O	☐	☐	☐	☐	☐	/alerts/alert/body
error	☐	O	☐	☐	☐	☐	☐	/alerts/alert/error
xpath	☐	O	☐	☐	☐	☐	☐	/alerts/alert/xpath
category	☐	MC	☐	☐	☐	☐	☐	/alerts/alert/category
code	☐	MC	☐	☐	☐	☐	☐	/alerts/alert/code
internal	☐	O	☐	☐	☐	☐	☐	/alerts/alert/internal

Terminology

Processes:	Whenever the application receives this field it commits it to its data store.
Requires:	If this field is not received, the business logic of the application fails.
Supplies:	When an object of this type is created, updated by replacement, provided, or published this field is present.
Where:	The application supports or utilizes this field in ad-hoc queries.
XQuery:	The application supports this field in advanced queries.

Objects

This section collects your products support for Object Collections. This provides those interested in your product with a high-level view of what data your product can actual exchange.



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Objects
<http://www.sifassociation.org/datamodel/na/3.1>

Name	Events	QUERY	CREATE	UPDATE	DELETE	SUBSCRIBE	PROVIDE	PUBLISH	ADMIN
achievementCEDSSs	☐	☐	☐	☐	☐	☐	☐	☐	☐
addresss	☒	☐	☐	☐	☐	☐	☐	☐	☐
aeProviders	☐	☐	☐	☐	☐	☐	☐	☐	☐
aeStaffs	☐	☐	☐	☐	☐	☐	☐	☐	☐
aeStudents	☐	☐	☐	☐	☐	☐	☐	☐	☐
applications	☒	☐	☐	☐	☐	☐	☐	☐	☐
assessmentAdministrations	☒	☐	☐	☐	☐	☐	☐	☐	☐

The checkmarks on this page directly control what supported data related tests are run.

Currently:

QUERY: A paged multiple objects read request of this kind is scrutinized.

CREATE: A singular request to create a data object of this type will be criticized.

UPDATE: A singular request.

DELETE: A singular request to delete a data object of this type will be criticized.

PROVIDE: Support for all multiple and singular data operations of the indicated kind are scrutinized.

CREATE, UPDATE, and DELETE tests should be *passable* by using the collection form of these requests.

Full queue support (SUBSCRIBE and PUBLISH) needs to be completed and tests added.

Terminology

Query:	Application requests an object or objects of this type be returned.
Create:	Application requests an object or objects of this type are created.
Update:	Application requests an object or objects of this type are updated.
Delete:	Application requests an object or objects of this type are deleted.
Subscribe:	Application requests a subscription for events of this object type are created.
Provide:	The application services all (create, read, update, & delete) requests for this object type.
Publish:	The application creates and shares events for this object type.
Admin:	The application accesses this Service in non-standard ways.

K12 Students

Just like with the Utility Services, element level support for the Object Collections you support are collected. This is an example for *one* such object! Which Object Collections you are presented with will be based on the data model you are certifying to and the objects you selected above.



k12Students

<http://www.sifassociation.org/datamodel/na/3.1>

Name	Mandatory	Characteristics	PROCESSES	REQUIRES	SUPPLIES	WHERE	XQUERY
@refId	☒		☒	☐	☐	☐	☐
firstName	☐	O	☒	☐	☐	☐	☐
middleName	☐	O	☐	☐	☐	☐	☐
lastName	☐	O	☒	☐	☐	☐	☐
suffix	☐	O	☐	☐	☐	☐	☐
prefix	☐	O	☐	☐	☐	☐	☐
@otherNameType	☐	O	☐	☐	☐	☐	☐
studentId	☐	O	☒	☐	☐	☐	☐
studentIdSystem	☐	O	☐	☐	☐	☐	☐
socialSecurityNumber	☐	O	☐	☐	☐	☐	☐
idVerification	☐	O	☐	☐	☐	☐	☐
@addressType	☐	O	☐	☐	☐	☐	☐
line1	☐	O	☐	☐	☐	☐	☐
apartmentNumber	☐	O	☐	☐	☐	☐	☐

Terminology

Processes:	Whenever the application receives this field it commits it to its data store.
Requires:	If this field is not received, the business logic of the application fails.
Supplies:	When an object of this type is created, updated by replacement, provided, or published this field is present.
Where:	The application supports or utilizes this field in ad-hoc queries.
XQuery:	The application supports this field in advanced queries.



Download

[Download](#) your CSQ now!

Now apply the generated CSQ to the target Test Suite.

Test Session

This section starts the actual testing process. You will need your A4L Community Site login², your application's completed CSQ, and how your application is connected to the Internet in order to continue.



SIF North America 3.1 with Minimal Infrastructure

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E-mail:	username
Password:	
Consumer Name:	AdaptorSIF
Product CSQ:	Browse... No file selected.
Solution ID:	solutionId
Authentication Method:	BASIC
Initial Session Token:	changingToken
Consumer Secret:	consumerSecret
User Token:	userToken
Application Key:	applicationKey
Environment or Provider URL:	clientURL

² To obtain/reset your login credentials please refer to the *Using the A4L Community Site – Getting Started* document: https://www.a4l.org/resource/collection/5DC097A9-3797-4E88-8680-7DDB54F86107/GUIDE-Using_the_A4L_Community_Site-GETTING_STARTED.pdf

If no URL is given, the Test Harness will generate a URL to its environment's service for your software to register with. If you have selected to be an Environment Provider in your CSQ, you should provide the *full* URL to where the Test Harness should issue its "create environment." If you are testing a Service Provider, you should provide the URL to the root of your service for handling requests.

In order to test your broker, be sure to set up the Test Harnesses adaptor to be provider, consumer, and subscriber of all objects being tested (so it can scrutinize what you do with its various messages).

Terminology

E-mail/Password:	Your community site credentials.
Consumer Name:	What you can expect the consumer name to be (regardless of role).
Product CSQ:	The previously created Conformance Statement Questionnaire (CSQ) file that describes the product to be tested. The other fields here are relative to the role claimed in this document.
Solution ID:	The name of the solution (group of zones) in your product targeted by the Test Harness.
Authentication Method:	The standard utilized to process environment credentials.
Initial Session Token:	The user/service account portion of environment credentials. Often one-time-use and changed upon successful environment creation.
Consumer Secret:	The password/secret portion of the environment credentials.
User Token:	Verifiable user identity, in addition to the environment credentials.
Application Key:	Uniquely identifies the application being used.
Environment or Provider URL:	The URL the Test Harness should use to contact your product, if any.

Errors

If an anticipated user input error happens during Test Session creation, you will be presented with a message like this below:



A down stream error occurred, please check your parameters and try again.

Notice: Errors testing the SIF protocol and unexpected exceptions will look different.

Troubleshooting:

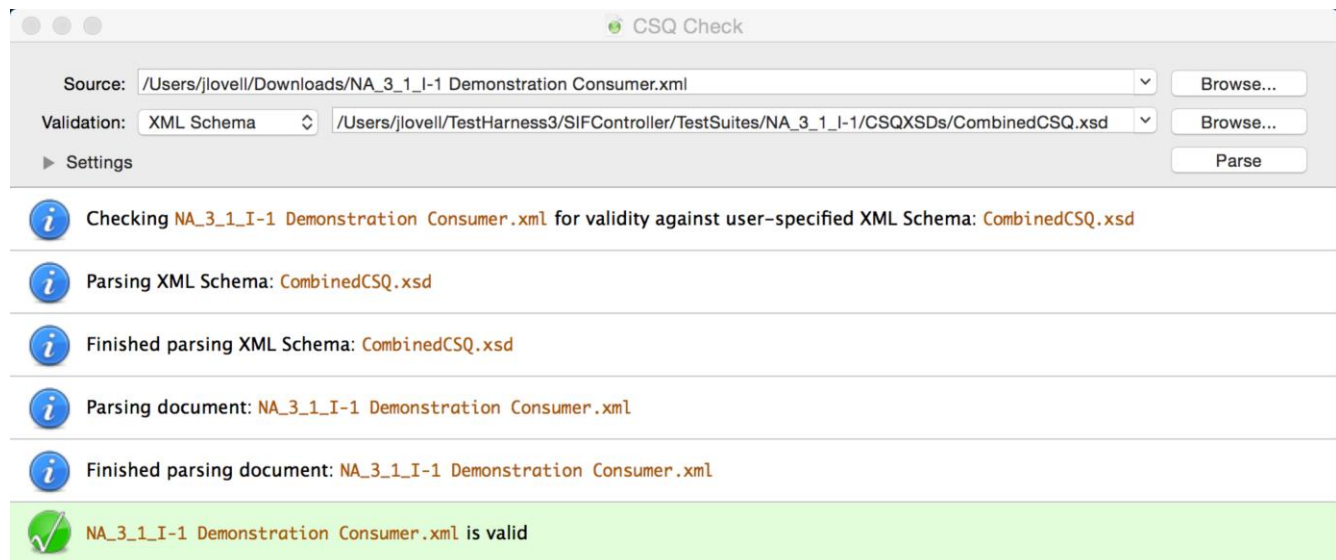
The most common place for users to become completely blocked is when creating a Test Session (and receiving an error like the above). To help overcome this, here are some steps to help eliminate or at least identify the cause of the problem.

1. Check that your credentials are correct by using them to log into the community site.
 - a. <https://www.a4l.org/login.aspx>
 - b. For log in help, please review the *Using the A4L Community Site – Getting Started*³
2. Check that your CSQ is valid using the latest published XML Schemas.
 - a. <https://testharness.a4l.org/SIFController/CSQXSDs.zip>
 - b. You will need a tool in order to accomplish this (example below).
3. Check that all required (red) fields are supplied with values.
4. If your software serves as any kind of provider, check that you have included a URL.

³ To obtain/reset your login credentials please refer to the *Using the A4L Community Site – Getting Started* document: https://www.a4l.org/resource/collection/5DC097A9-3797-4E88-8680-7DDB54F86107/GUIDE-Using_the_A4L_Community_Site-GETTING_STARTED.pdf

Example CSQ Check

By checking your CSQ file against CombinedCSQ.xsd you can ensure the Test Harness is not rejecting it.



Asking for Help

If the above steps fail to uncover the problem, please contact:
TestResults@sifassociation.org

Individual Tests

Unlike with the previous Test Harness, tests are individually run and may be rerun.



MakesCreateEnvironmentRequest

Services a create environment request and looks for a successful return.

 Pending:

Notice: The name and description for each test is set by the test itself and can be expanded to include help without changing the Test Harness (as it is part of the soft coded Test Suite). *So, feel free to make suggestions!*

Logging

The Test Harness logs every SIF interaction, references each message so we can tie to a particular test, and empowers message bodies to be searched using XPath.

Logging

t: 

p: 

Category	Type	Time
SENT	201	2015-09-10T11:06:20.341-07:00
RECEIVED	POST	2015-09-10T11:06:20.197-07:00

/

Log Entry

By clicking on a log entry, you can see everything the test script can scrutinize.



Settings

http://localhost:8084/SIFConnector/AdaptorServer/86269b37-014f-1000-007f-14109fdcaf83/environments/environment
POST
Request Method: POST

HTTP Headers

host: localhost:8084
content-type: application/xml
content-length: 759
connection: keep-alive
accept: application/xml
user-agent: Rested/2009 CFNetwork/720.5.7 Darwin/14.5.0 (x86_64)
authorization: Basic dXNlcm5hbWU6cGFzc3dvcmQ=
accept-language: en-us
accept-encoding: gzip, deflate

Body

FORMATTED UNFORMATTED

```
<environment>
  <solutionId>testSolution</solutionId>
  <authenticationMethod>Basic</authenticationMethod>
```

Notes:

- Provides a detailed view of a single message.
- Useful when troubleshooting both sides of the wire.

Tests

An overview of your tests and their status are provided.

Tests

	Status	Name
	PENDING	MakesCreateEnvironmentRequest
	PENDING	MakesCreateUtility_alert_Request
	RUNNING	DemonstratesSIF_HMACSHA256
	RUNNING	DemonstratesHTTPS
	PENDING	MakesCreate_k12Student_Request
	PENDING	MakesUpdate_k12Student_Request
	PENDING	MakesDelete_k12Student_Request
	PENDING	MakesRead_k12Student_PagedRequest

Notes:

- Provides a summary of statuses for all tests in your Test Session.
- Allows for advanced testing by navigating between multiple tests via the provided hyperlinks.
- You should ensure you refresh the page to update all the test statuses

Current State

Always know what our side of the wire is thinking. This can come in really handy when configuring your software.

Current State

```
connectorID: 86269b37-014f-1000-007f-14109fdcaf83
solutionID: testing
authenticationMethod: BASIC
initialToken: username
sessionToken: 862a25e8-014f-1000-007f-14109fdcaf83
consumerSecret: password
userToken:
applicationKey: DemonstrationConsumer
consumerName: AdaptorSIF
supportedInfrastructureVersion: 3.0.1
supportedDataModel: http://www.sifassociation.org/datamodel/na/3.1
transport: REST
vendorName: SIF Association
productName: SIF Testing Adaptor
productVersion: 20150831
iconUri: null
defaultZone: testSuiteZone
MaxPageSize: 10
InitialURL: http://localhost:8084/SIFConnector/AdaptorServer/86269b37-014f-1000-007f-14109fdcaf83/environments/environment
EnvironmentURL: http://localhost:8084/SIFConnector/AdaptorServer/86269b37-014f-1000-007f-14109fdcaf83/environments/86269b37-014f-1000-007f-14109fdcaf83
RequestsConnectorURL: http://localhost:8084/SIFConnector/AdaptorServer/86269b37-014f-1000-007f-14109fdcaf83/requests
ProvisionRequestsURL: http://localhost:8084/SIFConnector/AdaptorServer/86269b37-014f-1000-007f-14109fdcaf83/provision
QueuesURL: http://localhost:8084/SIFConnector/AdaptorServer/86269b37-014f-1000-007f-14109fdcaf83/queues
SubscriptionsURL: http://localhost:8084/SIFConnector/AdaptorServer/86269b37-014f-1000-007f-14109fdcaf83/subscriptions
EventsConnectorURL: http://localhost:8084/SIFConnector/AdaptorServer/86269b37-014f-1000-007f-14109fdcaf83/events
ProviderURL: http://localhost:8084/SIFConnector/AdaptorServer/86269b37-014f-1000-007f-14109fdcaf83/requests
```

Notes:

- Provides a summary of all connector settings.
- The initial URL is for a consumer to create an environment.
- You should ensure you refresh the page to update all the values.

Submission of Results



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Summary

Review and submit test results for certification.

Results (passed/total): 0/8

Notes:

- To certify please ensure you are passing all tests!
- Pressing submit will email the results directly to the SIF Certification Authority and reload the page, please only press once.
- Please see the below information before submitting your results.

CSQ

```
<CombinedCSQ xmlns="http://www.sifassociation.org/testharness/csq/3.1">
  <CertificationAuthorityData>
    <CSQ>
      <Name>SIF North America 3.1 Basic Infrastructure</Name>
      <Version>NA_3_1_I-1</Version>
      <SpecificationVersion>3.1</SpecificationVersion>
      <Type>Application</Type>
    </CSQ>
    <SubmitterInformation>
      <Organization>SIF Association</Organization>
      <Author>John W. Lovell</Author>
    </SubmitterInformation>
    <ProductInformation>
      <Product>
        <ApplicationName>Worthless Consumer</ApplicationName>
        <ApplicationVersion>1.*</ApplicationVersion>
        <ApplicationVendor>SIF Association</ApplicationVendor>
        <AgentName/>
        <AgentVersion/>
        <AgentVendor/>
      </Product>
    </ProductInformation>
    <TestingEnvironment>
      <TestingSuiteName>SIF North America 3.1 Basic Infrastructure Test Suite</TestingSuiteName>
      <TestingSuiteVersion>NA_3_1_I-1</TestingSuiteVersion>
      <SpecificationVersion>3.1</SpecificationVersion>
      <ApplicationReleaseIdentifier/>
      <AgentReleaseIdentifier/>
      <SoftwareTestingEnvironment1>OS X 10.9.4</SoftwareTestingEnvironment1>
      <SoftwareTestingEnvironment2>Java 7
        Spring 3
        JRuby
        eXist</SoftwareTestingEnvironment2>
      <HardwareTestingEnvironment>2.7 GHz Intel Core i7
        16 GB RAM
      </HardwareTestingEnvironment>
      <MaintenanceDate>2014-04-14-07:00</MaintenanceDate>
    </TestingEnvironment>
    <OperationalEnvironment/>
  </CertificationAuthorityData>
</CombinedCSQ>
```

Notes:

- Before submitting your CSQ for certification please ensure the ApplicationName and AgentName match what you want to appear on your SIF Certificate and on the SIF Certification Registry.
- This data will also be used to populate the A4L Vendor Marketplace⁴.

⁴ A4L Vendor Marketplace: <https://marketplace.a4l.org/A4LDirectory/>

Tests

	Status	Name
	PENDING	MakesCreateEnvironmentRequest
	PENDING	MakesCreateUtility_alert_Request
	RUNNING	DemonstratesSIF_HMACSHA256
	RUNNING	DemonstratesHTTPS
	PENDING	MakesCreate_k12Student_Request
	PENDING	MakesUpdate_k12Student_Request
	PENDING	MakesDelete_k12Student_Request
	PENDING	MakesRead_k12Student_PagedRequest

Notes:

- To certify please ensure you are passing all tests!
- If you feel a test result is in error or a test is unfair please contact testresults@sifassociation.org with details so that it can be discussed further.
- To find out information about any of the above tests, please click on the hyperlink within the Test Harness.

Summary

```

<summary>
  <stats>
    <total>8</total>
    <pending>6</pending>
    <running>2</running>
    <passed>0</passed>
    <failed>0</failed>
    <info>0</info>
  </stats>
  <tests>
    <test>
      <status>PENDING</status>
      <name>MakesCreateEnvironmentRequest</name>
      <description>Services a create environment request and looks for a
successful return.</description>
      <errors/>
      <evidence/>
    </test>
    <test>
      <status>PENDING</status>
      <name>MakesCreateUtility_alert_Request</name>
      <description>Services a singular create alert request and looks for a
successful return.</description>
      <errors/>
      <evidence/>
    </test>
    <test>
      <status>RUNNING</status>
      <name>DemonstratesSIF_HMACSHA256</name>
      <description>Looks for signs of successful SIF_HMACSHA256 negotiation.
</description>
      <errors/>
      <evidence/>
    </test>
    <test>
      <status>RUNNING</status>
      <name>DemonstratesHTTPS</name>
      <description>Looks for signs of successful TLS negotiation.</description>
      <errors/>
      <evidence/>
    </test>
  </tests>
</summary>

```

Notes:

- These results will be sent unchanged to testresults@sifassociation.org.
- To certify please ensure you are passing all tests!
- If you feel there are any errors with your test results please contact testresults@sifassociation.org with details so that it can be discussed further.

FAQ Items

Q: *When running a test, I got an error, "Request resulting in x, y expected." However x & y are the same, what is wrong?*

A: This serves as a default catchall error for many of our tests. It usually works pretty well as if your software does something so unexpected the test logic doesn't catch it, the SIF service on the other side usually does. However, there have been cases where someone sends the wrong payload to an endpoint and the other side managed to process it anyway. Resulting in the test not being satisfied while everything appears to have gone right.

Q: *I have an exception in my browser involving localhost (127.0.0.1), what is going on?*

A: The Test Harness utilizes internal REST services. When these breaks, the Test Harness is designed to be loud about it. First, please retry whatever seems to have caused the exception! If that doesn't help, then please forward the exception on to: TestResults@sifassociation.org.

Known Issues

When creating a CSQ if a product supports either no objects or no utility services the root tag for this area is omitted, causing the Test Suite to reject your CSQ when you try to load it. Until this is resolved, staff can hand edit your CSQ so you can continue.

On the Test Session creation page there is a lot to get right. Currently there is no on page help. Additionally, if you get things wrong the resulting error page is generic. So you may have a bad username, password, CSQ, or simply left out a required field. To move forward and succeed takes perfection, feel free to ask staff for help.

When running a test you may experience a null pointer exception. These often occur when a test is expecting one thing but receives another. We are working to eliminate this lack of parameter checking. If you experience this kind of exception, please forward it to: TestResults@sifassociation.org

It has been reported that under certain circumstances, pressing next on the last test results in a blank web page rather than the submission page. However, going there directly, allows the users to submit their results. Until this can be addressed the following example is provided to help users who experience it work around this issue.

https://testharness.a4l.org/SIFController/SummarizeSession?TestSuite=NA_3_1_I-1

When looking through the CSQ after testing you may notice some entries where verified equals false, even though you have passed all your tests. This happens when your software initially failed and then passed a test. Until this is resolved, Certification Authority Staff will correct the results before publication.

Asking for Help

Send links to specific log entries along with the error text. If you must reference the session screen, for now please send a screen shot (not a link).

Contact: TestResults@sifassociation.org