SIF Certification Program

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1.   Introduction

1.1.   Overview

The objective of the Access 4 Learning (A4L) Community is to enable disparate vendor applications to exchange data without re-entry of data and to provide consistent data to all applications across a given zone – "enter once and use many times".

The Access 4 Learning (A4L) Community ("the Community") has established the SIF Certification Program to help ensure that data is successfully transferred between applications and that the transferred data successfully resides in both sharing applications.

This document defines the policies that govern the operation of the SIF Certification Program. These policies define what can be certified, what it means to be certified, and the process for achieving and maintaining certification.

This **SIF Certification Program Policy** document is to be made available to the A4L Staff, the A4L Community Board of Directors and the International Technical Board. These A4L Boards serve to govern A4L operations in all A4L localities, including North America, the United Kingdom and Australia.

This **SIF Certification Program Policy** document defines a certified product as one that meets the applicable conformance requirements and has been certified as conformant through the SIF Certification Program as maintained by A4L Staff. As a condition of participation in the Certification Program, the applicant must warrant and represent that the product (vendor and agent / adapter application of data object transmission for SIF implementations) meets the applicable conformance requirements, which includes conformance to the applicable SIF Implementation Specification(s) as interpreted by the Community from time to time, and a passing result from a currently authorized version of the applicable test suite(s).

This **SIF Certification Program Policy** in conjunction with the appropriate certification agreement and A4L Trademark License Agreement constitutes the set of requirements and obligations for achieving certification.

From time to time, the Community will issue new versions of its specification(s). Correspondingly, new versions of the SIF Certification Program will be made available to provide certification procedures against new specification releases. It should be noted, however, that there may be fixes to current specification releases that may require re-certification by Solution Providers for compliance to application or agent certification.

The SIF Certification Program is a voluntary program; participation is at the Solution Provider's option.

1.2.   Abbreviations and Acronyms

CA	Certification Authority
CSD	Certification System Deficiency
INT	Interpretation
PR	Problem Report
QA	Quality Assurance
TSD	Test Suite Deficiency
TSMA	Test Suite Maintenance Authority
ZIS	Zone Integration Server

1.3.   Definitions

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Agent (General Connector / adapter)	The software component that ties a product to any SIF zone and, or links from the zone back to the subscriber.
Applicant	The Solution Provider (i.e. vendor member) who is in the process of having a product certified.
Certification Agreement	The agreement between the applicant and the Certification Authority, which contains the legal commitment by the applicant to the conditions of the Certification Program.
Certification Authority	The Access 4 Learning (A4L) Community is officially sanctioned as the Certification Authority.
Certification Authority Help Desk	More than one A4L Community staff member who has been tasked with responding to certification needs and opportunities.
Certification Register	A web-based record of all certified products, which is maintained by the Certification Authority.
Certification System Deficiency	An agreed error in the certification system, which is inhibiting the certification process.
Certified Product	A product or service that has successfully completed the certification process and for which the Solution Provider has been notified in writing by the Certification Authority that

	certification has been achieved for such product or service.
Conformance Requirements	A definition of what mandatory and optional behavior a product must implement in order to be considered conformant.
Conformance Statement	A declaration by the Solution Provider describing how the product meets the conformance requirements, including which optional features are supported. It also identifies the precise environment and software configuration in which conformance was tested.
Interpretation	Decision made by the Access 4 Learning (A4L) Community that elaborates or refines the meaning of a SIF Specification or a standard or specification referenced by a SIF Specification.
Object/Entity	A fundamental component of the SIF data model certification is being sought for.
OEMed product	A piece of application software that is similar to another except for its branding and provider.
Problem Report	A question of clarification, intent or correctness of the specification(s), test suites or certification system, which, if accepted by the Access 4 Learning (A4L) Community, will be resolved into an Interpretation, Test Suite Deficiency or Certification System Deficiency respectively.
Product Standard	The document in which conformance requirements are specified for a particular type of product, and against which products or services may be certified in the program. There will be one Product Standard for each type of product to be certified.
Re-Badged Product	A piece of application software that is similar to another except for its branding.
Reference Test Environment	The environment in which conformance was validated, which includes the identity of the version of the product or service that was tested and the release of the test suite used for conformance testing.
Registration Form	A form completed by the applicant to register a particular product for certification. The form contains information on the applicant and the product or service to be certified.

SIF Certification Logo	A4L Community's certification logo or other marks as designated from time to time by the Community.
SIF-Enabled	This term is used in this document to describe a product that is not yet certified. It should not be used outside the Community in place of SIF-Uncertified.
Solution Provider	A product vendor who is interested in, applying for certification in, or has certified a product in the SIF Certification Program. During the period in which a Solution Provider is going through the certification process to get a product certified, the Solution Provider is referred to as an applicant.
Specification Authority	A4L Community, which is responsible for developing, maintaining and interpreting the specification(s).
Test Result	The test harness output and associated analysis report. The output is a log of network events, which is parsed to determine if the claimed SIF Object support is present and conformant, to the extent that can be determined by means of network observation, thereby producing a "pass" or "non-pass" result for each claim.
Test Suite	A test harness authorized by A4L Community for use in testing within the SIF Certification Program. A test suite in this context is comprised of an interworking harness, network event logging, and associated analysis tools.
Test Suite Deficiency	An agreed error in a test suite, which is causing it to produce an incorrect result code that impacts certification.
Test Suite Maintenance Authority	The organization(s) sanctioned by A4L Community to maintain the test suites.
Trademark License Agreement	The agreement between the Solution Provider and the A4L Community, which contains the legal commitment by the Solution Provider to the conditions for use of the SIF Certification Logo.
Zone Integration Server (ZIS) / Middleware / Broker	The software that connects agents together for a specific data scope.

2.   Certification Process

This section provides an overview of the certification process and the parties involved. The parties involved in the certification process are the Applicant – a Solution Provider, who is a member in good standing and who is in the process of having a product certified; and the Certification Authority (A4L Community) - the organization that manages the day-to-day operations of the Certification Program.

The typical certification process sequence is offered in the following page of this document:
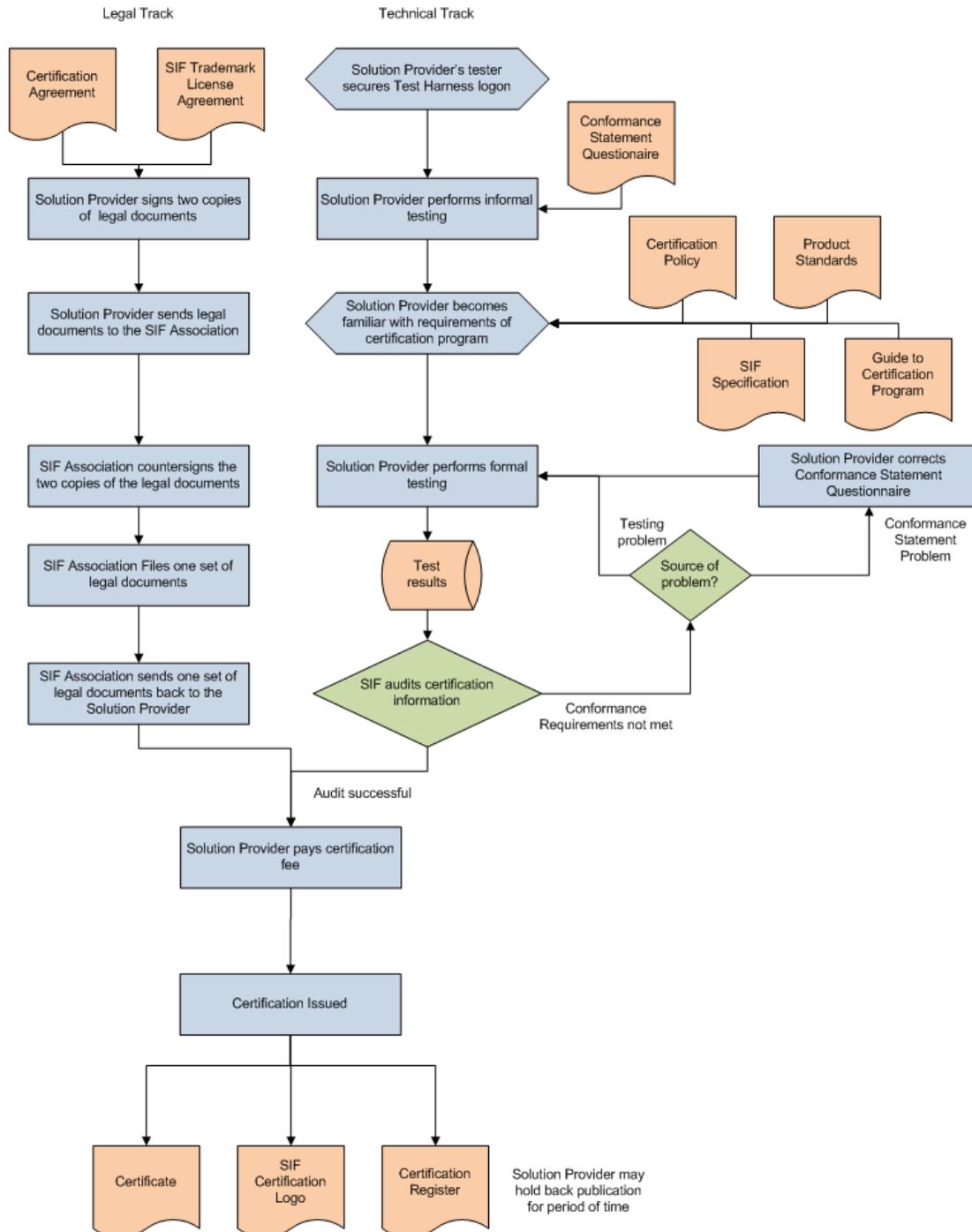
SIF Association doing business as Access 4 Learning (A4L) Community

2.1.   Preparation for Certification - Development & QA testing and introduction to the Certification Program

The purpose of a Certification Program is to encourage and facilitate the development and market availability of products that meet the requirements of the specification(s), and that collectively provide an attractive target for application writers. There is little point in running a formal test and Certification Program that fails products. Test suites have a dual role in this context: first, they can help developers and QA teams to ensure the product meets the specification(s) and, second, they are used to ensure that only eligible products are marketed as conformant.

The applicant (Solution Provider/vendor) should perform internal development and QA testing, along with any additional verification methods the applicant deems appropriate, to help validate that the product correctly implements the specification(s). All A4L Community members may use a development release of the conformance test suite to help perform this validation.

In addition, the applicant must become familiar with the Certification Program and the requirements for certification. All information and documents related to the SIF Certification Program are available on the certification web site. The applicant should review the SIF Certification Guide and Test Harness Manual to the relevant SIF Certification Program.

2.2.   Conformance Statement

The applicant must produce a Conformance Statement to describe the product and the way in which it meets the conformance requirements. The Conformance Statement contains information about the product (e.g. version, operating environment), which options the applicant claims the product supports, and other related information. It will also contain any test suite related information necessary to set up and configure the test suites. The Conformance Statement is produced by completing the applicable Conformance Statement Questionnaire. The Conformance Statement form and Conformance Statement Questionnaire form are both located on the Certification section of the A4L Community Site.

2.3.   Register for certification

Registering a product for certification requires the applicant to demonstrate that the product to be certified meets the applicable conformance requirements.

The applicant will submit the completed A4L License Trademark Agreement, and Certification Agreement, to the Certification Authority.

The A4L License Trademark Agreement form and Certification Agreement form are accessible through the SIF Certification Site. The certification agreement is the legal contract between the applicant and the Certification Authority for the certification service and defines the terms under which the service will be provided.

The Certification Authority will review the registration package within 3 business days of receipt to ensure that it is complete and correct. If there is an error in the registration package, the applicant will be informed. Any problems must be corrected by the Applicant with the re-submission of the registration package before the certification process can continue.

2.4.   Formal Testing

The applicants will "self-test" the product with a currently authorized version of the applicable test suite, configured using information in the Conformance Statement. The test suites are hosted on the Community's IT systems and are accessed over the Internet.

Once the applicant is satisfied with the test suite results, the applicant will select the option within the test suite to submit the results to the Certification Authority for audit. The test suite will then send the test results and Conformance Statement to the Certification Authority. It may take up to 3 or more business days for the Certification Authority to generate a receipt for these results.

2.5.   Audit

The Certification Authority will perform an audit of all certification-related information within 6 or more business days after acknowledging reception of the formal test results. The Certification Authority will check to ensure the submitted certification information demonstrates that the product passed the formal testing process and meets the applicable conformance requirements.

As part of the audit process, the test suite results will be examined by the CA. Each test suite will produce a test report summarizing the results of the testing. For a registration for

certification to succeed, the test report must contain only *Pass* results. *Non-pass* results may be resolved to *Pass* by the correct reference to Problem Reports that have resulted in agreed interpretations of the specification, Test Suite Deficiencies, or Certification System Deficiencies.

Where applicable, the audit will also ensure that appropriate network events have taken place to indicate that the claimed object/data service support is present in the product under test.

At the conclusion of a successful audit of the test results, the Solution provider will pay the predetermined Certification Fee to the Certification Authority.

2.6.   SIF Certification Logo

If the applicant has not previously completed a A4L Trademark License Agreement for use of the SIF Certification Logo, it must be completed at this time. The certification web site will provide information on how to obtain and complete the Trademark License Agreement.

2.7.   Notification and publication of certification

The Certification Authority will notify the applicant in writing of the audit result.

If the result is success and there is a A4L Trademark License Agreement in place, the Certification Authority will issue a certificate to the applicant and enter the product into the register of certified products. At this point, the applicant may now use the SIF Certification Logo in connection with the certified product, according to the terms defined in the Trademark License Agreement.

Applicants have the option to keep certification confidential for a defined period of time, as described in Section 11.3. During this period, the product will not be included in the Certification Register and the supplier may not use the SIF Certification Logo with the certified product.

If the audit indicates that the conformance requirements have not been met, the Certification Authority will reject the registration and report to the applicant the discrepancies with the conformance requirements. The applicant may then undertake corrective action and re-apply.

3.   Conformance

3.1.   Conformance Release

From time to time, the Community will issue new versions of its specification(s). These specifications and the associated Product Standards will be collected together into consistent sets to aid certification. Such a set is called a *Conformance Release*.

Certification is made available for particular versions of the SIF Specification(s), specifically, those versions that are included in a Conformance Release. Products are certified for a particular Conformance Release. Certification may be available for multiple Conformance Releases simultaneously.

3.2.   Product Standard

A Product Standard is a precisely defined and documented set of functionalities against which products may be certified. The Product Standard is the document in which the conformance requirements are specified.

For the SIF Certification Program, one of the conformance requirements is conformance to the applicable SIF Implementation Specification(s), including all Interpretations that have been granted by the Community.

Each Product Standard document includes a description of the nature and purpose of the Product Standard, the label to be used in connection with the SIF Certification Logo, detailed technical conformance requirements, specific testing requirements that must be satisfactorily completed, and a summary of the migration issues to the current Product Standard from previous versions of the Product Standard.

3.3.   Conformance Statement

A Conformance Statement is the documented set of claims describing precisely the way in which the product meets the conformance requirements, including which optional features are supported. It provides a precise identification of the certified product and the environment in which conformance is guaranteed. It, also, includes details on the specific configuration used to validate conformance in sufficient detail to enable the results of any applicable tests to be reproduced.

A Conformance Statement is produced by completing the relevant Conformance Statement Questionnaire. Conformance Statements are submitted to the Certification Authority as

part of the certification process. It is the responsibility of the Solution Provider to ensure that the information supplied in the Conformance Statement is correct and complete. The Conformance Statement will be included in the Certification Register entry for the product once it is certified.

Solution Providers must ensure that the Conformance Statement of a certified product is kept accurate and up-to-date. Changes to the Conformance Statement of a certified product may only be made by the Certification Authority. If the Solution Provider wishes to change administrative details such as contact names, addresses, etc., the Certification Authority will make these changes upon request. Any other change, such as to a product name or one affecting the conformance of the certified product, is subject to the requirements set forth in Section 7, "Certification Requirements for modifications of a Certified Product" .

3.4.   Scope of Certification

In the SIF Certification Program, the scope of the certified product is defined by the Solution Provider and captured in the Conformance Statement. This includes, but is not limited to:

- the identifier by which the product or service is known in the market,
- The product version(s) for which conformance is claimed and guaranteed (where applicable),
- the objects and corresponding elements supported,
- the software environment and hardware platform in which conformance is guaranteed (where applicable),
- the reference test environment – this is the environment in which conformance was validated, and includes the identity of the version of the product or service that was tested and the release of the test suite used for conformance testing.

The product version may be a single version (e.g. 2.4) or a set of releases (e.g. 2.x, where x is a variable and this represents 2.1 through 2.9 as well as the 3.x set of releases). Object and element support must be specified with respect to various attributes such as provide, request, generate, process, etc. The operational environment (software environment and hardware platform) may be specified as an individual software environment and/or hardware platform or a binary compatible family of environments. The reference test environment must provide sufficient information to enable the test results to be reproduced.

4.   Licensing the certification trademark for certified products

4.1.   Award of the certification trademark

The SIF Certification Logo may be applied to products that meet the SIF Conformance Requirements, once the Certification Authority has provided written notice that certification has been achieved.

The SIF Certification Logo may only be used on or in relation to certified products. It may not be used with products that have not completed the certification process, or that have been withdrawn from the certification process.

Each version of the Certification Program or profile (i.e. Universal State Data Profile) will use a different label on the SIF Certification Logo to indicate to which version of the specification the product conforms. A Certified Product may only use the SIF Certification Logo with a version or profile label that corresponds to the version(s) of the program in which the product has been certified.

Award of the SIF Certification Logo is not an endorsement of any product.

4.2.   Licensing the certification trademark

In order to use the SIF Certification Logo, the applicant will be required to sign a SIF Trademark License Agreement with the Community. This license agreement is the legal contract governing how the SIF Certification Logo may be used and defines the rights and obligations of the licensee. The Community will monitor the use of the SIF Certification Logo in accordance with the SIF Policing Policy.

The license agreement includes a warranty of conformance. This requires the licensee to agree to the policies expressed in this document and to publicly "warrant and represent" that each certified product meets the applicable conformance requirements. The conformance requirements include conformance to the applicable SIF Implementation Specification(s) as interpreted by the Community from time to time and a passing result from a current version of the SIF-approved conformance test suite(s). A buyer therefore has a guarantee that the product conforms to the specification and will continue to do so.

4.3.   Use of the certification trademark

The Solution Provider is required to ensure that the certified product continues to conform to the applicable SIF Implementation Specification(s), including all Interpretations that have been granted by the Community.

If the Solution Provider becomes aware of a non-conformance, through any means, the warranty of conformance requires that a fix be made available to all customers. Fixes may be made available through a mechanism determined by the Solution Provider, for example, by means of a patch or maintenance update. This also applies to fixes required to implement interpretations of the specification(s).

The Certification Authority has the right to audit the Solution Provider's claims of conformance and adherence to the requirements of this policy and the license agreement. Buyers and prospective buyers of a certified product who discover a non- conformance in the certified product may report such non-conformance to the Certification Authority via the certification web site.

The Certification Authority may at any time request Solution Providers to provide the Certification Authority with any information reasonably related to their certified products' conformance with the applicable SIF Implementation Specification(s). If the Solution Provider fails to provide such information within 45 days of the request, then the Certification Authority may remove the product from the Certification Register, in which case the product ceases to be a certified product and may no longer use the SIF Certification Logo in relation to the certified product.

If a certified product is found by any means to be no longer conformant with the applicable conformance requirements, or fails to work with other vendors, end users, or A4L staff in the "spirit and intent of interoperability," the Certification Authority will notify the Solution Provider of such certified product who shall:

a) Within 90 days rectify the non-conformity and satisfy the Certification Authority of the efficacy of the rectification; or

b) Within 90 days satisfy the Certification Authority that the certified product is conformant; or

c) Within 90 days cease use of the SIF Certification Logo in relation to the certified product, in which case the product ceases to be a certified product; or

d) Within 45 days invoke the appeals process as described in Section 10.

If option d) is selected, the Solution Provider will have 45 days from the completion of the appeals process to implement the decision or cease use of the SIF Certification Logo in relation to the certified product.

If the Solution Provider fails to take one of the above actions within 90 days, the product will cease to be a certified product.

4.4.   Removal of the certification trademark

If a product ceases to be a certified product, any and all rights the Solution Provider has to use the SIF Certification Logo on or in relation to that product cease immediately, such as the failure of the Solution Provider to renew certification. The Solution Provider at its expense shall remove the SIF Certification Logo from all subsequent production of that certified product and from all sales literature and other materials. The Certification Authority may inspect any such certified product, sales literature or other materials to ensure adequate removal of the SIF Certification Logo.

Once the SIF Certification Logo has been removed, any future use of the SIF Certification Logo in relation to that product will require full re-certification.

Failure to adhere to these provisions will be a breach of the license agreement and shall result in its termination.

5. Certification Register

5.1. Inclusion in register

The Certification Register is a web-based record of all certified products and is maintained by the Certification Authority. The register contains the name of the Solution Provider, name of the product, and the Conformance Statement for the product.

Once the Certification Authority is satisfied that the applicant's product meets the applicable conformance requirements, the Certification Authority will issue written notice to the applicant that the product is a certified product and enter the product in the Certification Register.

5.2. Removal from register

Only certified products are included in the Certification Register. If a product ceases to be certified, the Certification Authority will remove it from the register and all rights to use the SIF Certification Logo cease, as defined in Section 4.4.

A Solution Provider may at any time, without charge, request the Certification Authority to remove the Solution Provider's product from the Certification Register. Such product will then no longer be considered a certified product.

Provided that the Certification Authority has given the required notice of renewal, failure by the Solution Provider to renew the certification of a certified product by the renewal date shall be deemed to be a voluntary removal of that product from the Certification Register. Such product will then no longer be considered a certified product.

6. Testing

6.1. Test Suites

In the SIF Certification Program, there are two types of test suite releases, development and formal.

6.1.1. Development Releases

Development releases are used for pre-certification testing by the Solution Provider to ensure the product meets the conformance requirements and is ready to enter the certification process. They are designed to enable developers to perform development and QA testing of their product. Access to development releases is over the Internet on a system hosted by the Community. Development releases are derived from the formal test suite, though they may not be identical in coverage or functionality, and may use a different data set. Development releases may not be used for formal testing for certification.

6.1.2. Formal Releases for Certification

Formal releases are those approved by the Community as suitable for formal testing. For SIF Certification, applicants are required to validate their product or service using a current version of the SIF-approved test suites. The Certification Authority will maintain a list on the certification web site of the current version(s) of each test suite valid for use in formal testing. Formal testing is available as a hosted service, that is, it will be performed over the Internet using a formal release hosted by the Community.

From time to time, the Community will approve new formal releases for use in the program. The Community may introduce new test suites as replacements for existing suites or as part of a continuing policy of extending test suite coverage. Formal releases are categorized as either a maintenance release or enhancement release, depending on the nature of the changes in the test suites. Managed by the Certification Authority, all new releases of a test suite will undergo a beta testing process. Any faults identified during the beta test will be rectified prior to submitting the new release to the Community's test suite approval process. All new releases must be approved by the Community for use in the Program.

6.1.2.1. Maintenance Releases

Test suite maintenance releases will be created to address Interpretations or Test Suite Deficiencies. Maintenance releases will have a 2-week beta testing

period open to all A4L Community members. Upon acceptance by the Community, maintenance releases may be used for formal testing and will replace existing releases after a 3-month overlap period.

6.1.2.2.   *Enhancement Releases*

Test suite enhancement releases consist of enhancements to existing test suites (e.g., to include new functionality) or entirely new test suites. Enhancement releases will have a 3-month beta testing period open to all A4L Community members. Upon acceptance by the Community, enhancement releases may be used for formal testing and will replace existing releases after a 6-month overlap period.

6.2.   Test results

The Certification Authority will archive all test results provided to the Certification Authority for audit in conjunction with an application for a new certification or an update to an existing certification. The archives will be kept for 5 years to provide an auditable trail.

7.   Certification Requirements for modifications of a Certified Product

This section defines the requirements for maintaining certification when modifying a certified product during the term of certification and for achieving certification for a new product or service that is based on or derived from a certified product.

Any modifications to a certified product that change the scope, as defined in the Conformance Statement, will require re-testing of the modified product or service in order to maintain certification. The elements of scope are identified in Section 3.4. If a change to the certified product requires the Conformance Statement to be updated in any area except the reference test environment *(i.e. re-badged, OEM and TMLA),* the product must be re-tested. Changes to the reference test environment only require re-testing at the time of certification renewal.

Any changes that result in the creation of a new product will require a new certification. For example, any change that necessitates a new entry in the Certification Register constitutes a new product and will require a new certification. The Solution Provider must submit a new registration for certification and perform formal testing on the new product in order to achieve certification.

The following sections provide information to assist in meeting the requirements specified above. They detail the types of modifications that may be made to certified products, and any corresponding requirements for re-testing and/or re-certification.

7.1.   Product Updates

Modifications and upgrades of certified products may take place throughout the life of the product.

If the changes made are within the scope, as defined in the Conformance Statement, then there is no requirement to re-test or update the certification information.

If the changes are outside the scope of the certified product or require modification of the scope through an update to the Conformance Statement, then the Solution Provider is required to re-test and provide the information necessary to update the Conformance Statement to accurately represent the conformance claim. For clarification, such changes include, but are not limited to:

- Additions to or removal of object and/or element support or changes to the type of support provided

- Changes in the software environment for which support is claimed in the Conformance Statement

New product versions outside those defined in the Conformance Statement

	Test Requirement	Certification Requirement
No change to scope	None	None
Change to scope defined in Conformance Statement.	New Test Session	Conformance Statement update

If a new SIF Specification release modifies the scope of the certification, the Solution Provider is required to re-test the product and update the Conformance Statement of the certified product. The existing entry on the Certification Register will be updated to reflect the new release and the certification renewal date will be extended such that the certification is valid for 12 months from the date that certification is achieved for the new release.

7.2.   Reduced Feature Versions

A certified product is certified with a defined set of objects and elements that the Solution Provider claims the product or service supports. A reduced feature version occurs when a certified product is "re-packaged" and shipped as a new product with a reduced set of object and element support. The resultant product is a reduced feature version of the certified product and constitutes a new product with respect to testing and certification.

	Test Requirement	Certification Requirement
Reduced Feature Version	New Test Session	New certification

Because a reduced feature version constitutes a new product, the Solution Provider must submit a new registration for certification and perform formal testing for the reduced feature version.

7.3.   Renamed Products

If a certified product is to be renamed, with no other change to the scope defined in the Conformance Statement, the certification may be amended upon request to the

Certification Authority. The Certification Authority will change the product name on the Conformance Statement and in the Certification Register and issue a new certificate.

The Solution Provider will be required to affirm that there have been no material changes to the certified product.

	Test Requirement	Certification Requirement
Renamed Product	None	Conformance Statement update

7.4.   Re-badged or OEMed products

A re-badged or OEMed product is technically identical to a certified product. A Solution Provider who markets and delivers technically identical products must certify each product in order to represent each product as SIF Certified. Each product will then be listed in the Certification Register. If technically identical products are to be shipped by more than one Solution Provider, each Solution Provider will have to apply for certification, and commit to the warranty of conformance, in order to have their product listed in the Certification Register.

A re-badged or OEMed product[1] will not require re-testing, but reference must be provided to the test results of the previously certified product to which it is technically identical, with the agreement of the Solution Provider of the referenced certified product.

	Test Requirement	Certification Requirement
Re-badged or OEMed products	None	New certification

To add a new entry to the Certification Register for the re-badged or OEMed product, the Solution Provider must:

Submit a new registration for certification, indicating that the product is identical to an already certified product.

Submit a Conformance Statement that is technically identical to the certified product apart from the product name and vendor information, and reference the test results of the previously certified product.

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[1] *OEMed product definition: https://a4l.site-ym.com/page/GlossaryMZ#O*

Affirm that the Solution Provider of the referenced certified product has provided permission for its test results to be referenced for the re-badged or OEMed product.

If the audit result is a success, the Certification Authority will add a new entry to the Certification Register to reflect the re-badged or OEMed product and issue a new certificate.

7.5.   Product Suites

A product suite is a collection of products and/or services combined into a single offering. A Solution Provider produces a product suite in order to deliver an integrated solution to buyers. A product suite constitutes a new product and requires a new certification.

In order to certify a product suite, the Solution Provider must commit to the warranty of conformance for all products within the product suite, and each product within the product suite that is capable of being SIF-enabled must be SIF-enabled; that is, the product must communicate within a SIF Zone.

If the individual products and services within the product suite are independently certified and have not been modified, then the product suite will not require re- testing. However, reference must be provided to the test results of each of the previously certified products. In order to reference existing test results, the Solution Provider must affirm that the provider of each certified product has provided permission for their test results to be used for the certification of the product suite.

If any individual product or service has been modified in order to create the product suite, or if it is not a certified product, or if the provider of any product or service will not allow the use of existing test results, the integrator must perform a new test session on each such product or service.

	Test Requirement	Certification Requirement
Product Suite of certified products that have not been modified	None	New certification
Product Suite with non-certified products and/or modified products	New Test Session for each modified or non-certified product or service	New certification

7.6.   Profiles

A profile is a set of requirements published separately from (however related to) any SIF Implementation Specification or SIF published Product Standard.

	Test Requirement	Certification Requirement
Profile has been added to a certified product	New Test Session	Tied to existing or concurrent certification

Certification renewal of profiles is done at the same time as the related certification for the product. Therefore renewal does not incur an additional charge unless it indirectly causes retesting to be required.

7.7.   Integration Software

A group of SIF capable agents has arisen in the marketplace that is tied to a product that is more general in nature (not-specifically a piece of software designed for use in education). The makers of these software packages bring key software (such as database and directory servers) into the SIF arena while generally not being able to partner with the large companies that produce them, with a third party licensing agreement.

	Test Requirement	Certification Requirement
Integration Software has been modified	New Test Session	Conformance Statement update

These products may become SIF Certified by using an application that demonstrates both the agent's SIF abilities and its integration with the more general software. In addition to adhering to all terms of the TMLA that application must not itself be called an "agent" or use that term in its name, in order to be included in the register of SIF Certified Applications. However, if the agent is marketed separately from this application the Community is happy to link to the appropriate product page at the vendor's website.

7.8.   Other Variants

Except where specifically stated in this document, any other variant of a certified product constitutes a new product and will be subject to full testing and certification.

8. Renewal Process

8.1. Duration of Certification

Certification is valid for 12 months from the date at which the Certification Authority provides written notice to the Solution Provider that certification has been achieved, unless certification is subsequently terminated in accordance with Section 4 or Section 5 of this document.

The last day of this period is referred to as the renewal date and represents the date on which the certification will cease to be valid, unless the Solution Provider renews the certification in accordance with the procedures defined herein.

8.2. Renewal

The Solution Provider of a certified product is required to renew certification annually. The Certification Authority will notify the Solution Provider when renewal is due. Renewal reminders will be sent via email 60 days and 30 days prior to the renewal date.

The Solution Provider is required to ensure that the certified product continues to conform to the applicable conformance requirements. The current Conformance Statement for the certified product defines the scope of the certified product, and hence of the conformance guarantee.

If any of the changes listed below have occurred since the previous certification, the Solution Provider will be required to re-test the certified product in order to renew the certification. The changes that require re-testing include:

- Changes to any of the information contained in the Conformance Statement:
- Changes to the test suite
- New interpretations of the specification

Reference test environment[2] no longer available – the exact software configuration and product version must exist and be commercially available such that the reference test could be reproduced, otherwise the Solution Provide must re-test to generate a new reference test environment.

If a re-test is required, the Solution Provider must re-test with a currently authorized version of the applicable test suite; configured using information in the Conformance Statement; and, shall confirm to the certification process defined in Section 2. Once all

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[2] *Reference Test Environment definition: https://a4l.site-ym.com/page/GlossaryMZ#R*

requirements are met, the Certification Authority will renew certification for another term and inform the Solution Provider as to the granting of the renewal.

If a re-test is not required, the only requirement on the Solution Provider is to pay the certification renewal fee[3]. The Certification Authority will then issue another certificate indicating that the certification is valid for another year.

If the Solution Provider does not renew the certification by the renewal date, the Certification Authority will remove the certified product from the Certification Register. Such product will then no longer be considered a certified product.

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[3] *SIF Certification Fee Schedule: http://www.A4L.org/page/CertificationFees*

9.   Problem Reporting and Interpretations Process

9.1.   Overview

During the certification process or during the preparation phase, an applicant may encounter a problem that inhibits or will inhibit the certification effort. The applicant may file a Problem Report via the certification web site to obtain resolution to the issue.

The types of problems that may be found include:

- Errors or ambiguities in the specification(s) against which conformance is based, specifically, in the SIF Implementation Specification(s), or the underlying standards referenced by the SIF Implementation Specification(s),

- Errors in the test suite (s), specifically, in the SIF test suites, or other test suites referenced by the SIF Certification Program (if any),

- Errors in the certification system, specifically related to the application process, agreements and completion of Conformance Statements.

The Problem Report is used specifically for the types of errors listed above which are inhibiting the certification effort. For general questions on the certification process or other problems not covered above, please contact the Certification Authority's Help Desk (testresults@a4l.org). For questions on using the test suites, please contact the Test Suite Maintenance Authority.

9.2.   Problem Report Resolution Process

The Specification Authority is responsible for reviewing and providing a resolution to all Problem Reports. The key element of the review process is a deterministic timeline for a formal resolution to the Problem Report.

The Specification Authority will perform a preliminary review and provide an initial response to the applicant via the Certification Authority within 5 business days of the Problem Report submission. This stage allows simple problems to be dealt with expeditiously. A detailed review will be undertaken for issues that are more complicated or when the preliminary review does not resolve the issue. Final resolution will be provided within an additional 10 business days.

In most cases, 15 business days is sufficient to provide a final Problem Report resolution. However, in exceptional circumstances, final resolution may take longer. If possible, the

Problem Report will be addressed sufficiently within the 15 business days to allow the certification process to proceed pending final resolution.

The Certification Authority will notify the Supplier by the 15th day of the delay with the provision of a preliminary resolution, if available. In the event that resolution is not achievable within 30 days, the Specification Authority reserves the right to negotiate a mutual accommodation with the applicant. If the applicant is not satisfied with the final resolution, the applicant may invoke the appeals process.

The Problem Report resolution process will allow the applicant to remain anonymous, so pre-certification activity is kept entirely confidential. The anonymous review process requires that requests be filtered prior to distribution to the Certification Authority. Filtering will remove the product and applicant sections of the Problem Report, so these are the only sections that should contain company names, product names, or other confidential information.

Please note that if applicant-specific information is included in the sections reserved for the technical descriptions, filtering will not result in an anonymous request.

The Specification Authority is responsible for Problem Report resolution, though the Specification Authority will require an opinion from the Test Suite Maintenance Authority for issues related to the test suites and from the Certification Authority for issues related to the certification system. These opinions must be provided within 3 business days, in order for the Specification Authority to provide its preliminary response on time.

9.3. Resolution of Problem Reports

The possible outcomes for Problem Report resolution are:

- accepted as an error or ambiguity in the specifications (an Interpretation),

- accepted as an error in the test suites (a Test Suite Deficiency),

- accepted as an error in the certification system (Certification System Deficiency), or, rejected.

Interpretations, Test Suite Deficiencies, and Certification System Deficiencies will never cause previously certified products to be "un-certified", but can affect a certified product's continued conformance. Interpretations, Test Suite Deficiencies, and Certification System Deficiencies evolve the definition of conformance over time and certified products are always required to conform to the current definition of conformance. At the time of certification renewal, the Solution Provider will be required to demonstrate that the

certified product conforms to the applicable SIF Implementation specification(s), including all Interpretations that have been granted since the previous certification.

9.3.1. Interpretations

An Interpretation elaborates or refines the meaning of a specification, therefore clarifying an error or ambiguity in the specification. Interpretations apply to a specific version of a specification and are permanent against that version. They remain in force until the specification is updated, at which time, the elaboration or refined meaning should be incorporated into the updated version of the specification.

Interpretations always apply to a particular version of a SIF Implementation Specification.   Therefore, if a Problem Report submitted against a specification includes rationale that cites conflict with a previous or subsequent version of the specification, the Problem Report will be assessed without reference to such rationale. In particular, conflict with another version of the same SIF Implementation Specification does not in itself form grounds for granting an Interpretation.

Interpretations of SIF Implementation Specification(s) will never result in product behavior that was previously considered to be conformant being declared, subsequently, non- conformant, at a given revision level of the SIF Implementation Specification(s). Interpretations can only result in product behavior that was previously considered to be non-conformant being declared to be conformant.

The Community is responsible for deciding the meaning of conformance to normative referenced specifications in the SIF context, such as for HTTP or XML. Problem Reports regarding such underlying or referenced specifications in the context of SIF will be processed as normal. Problem Reports regarding underlying or referenced specifications in any other context will be rejected.

9.3.2. Test Suite Deficiency

A Test Suite Deficiency is an agreed error in a test suite. Test Suite Deficiencies apply to a specific version of a test suite and are permanent against that version. They remain in force until the test suite is updated, at which time, the error should be fixed in the test suite update. If the Test Suite Maintenance Authority should decide not to fix a Test Suite Deficiency in the updated test suite, the Test Suite Maintenance Authority will submit a new Problem Report and assign it as a Test Suite Deficiency against the new test suite version.

In all circumstances, the complete test suite or set of test suites must be run during a test session. The existence of any Test Suite Deficiency with respect to a test suite

does not absolve an applicant from running the test suite in question, or any part thereof. In the event the applicant fails to complete the test and the reason is due to the Specification Authority, the SA shall notify the applicant of the approval of the test for certification of the fix and call for a retest.

9.3.3. Certification System Deficiency

A Certification System Deficiency is an agreed error in the Certification System. The Certification System includes the certification documents, the workflow, and information systems provided to implement the certification process. Certification System Deficiencies apply to the version of the certification system or document in which they are found.

If the problem is blocking the certification effort, an update or workaround will be made to the certification system or document to enable certification to proceed. Otherwise, the problem will be fixed in a future update of the certification system and the Certification System Deficiency will remain in force until such update.

9.4. Problem Report Repository

The Certification Authority will maintain a web-based repository of all submitted Problem Reports. Access to this repository will be available to interested parties, such as A4L Community members, test suite licensees, and certification applicants. The publicly accessible information will contain the technical details such as the nature of the problem and its current status of resolution, but will not contain sections reserved for applicant and product details, thus maintaining the confidentiality of the applicant.

An applicant may cite an Interpretation, Test Suite Deficiency, or Certification System Deficiency to resolve discrepancies in test reports or to support their application for certification in any other way, irrespective of the origin of the Problem Report.

10. Appeals Process

Solution Providers may appeal decisions made by the Certification Authority. The occasions that may give rise to an appeal include, but are not limited to, the following: a) the Solution Provider disagrees with the CA resolution of a Problem Report, b) the Solution Provider disagrees with the Certification Authority's grounds for denying the award of certification, and/or c) The Solution Provider disagrees with a formal notification of the need to rectify the non-conformance of a certified product.

There are two levels of appeal: a Technical Review and a Board Review. Voting for the Technical Review and Board Review will be performed in accordance with the Community voting rules defined in the Access 4 Learning (A4L) Community Bylaws.

A Solution Provider wishing to dispute an A4L Community or Certification Authority decision may request a Technical Review by the Community. Technical Review requires the Community Technical Board to consider the matter and produce a response with a recorded vote according to A4L Community voting rules, within 30 calendar days of the request. The expert group (A4L Community Staff) may commission reports from independent experts, and may seek input from other committees within the Community as it sees fit. The Solution Provider may choose to be represented during the Technical Review meeting to present the technical case, but is not required to do so.

If the Solution Provider is not satisfied with the outcome of the Technical Review, the Solution Provider may invoke an appeal to the Community Board of Directors within 14 days of being notified in writing by the Certification Authority of the results of the Technical Review. The Solution Provider has the right of representation to make the technical case. The Community's Board of Directors may ask for technical reports from the relevant project teams.

The appeals process will be anonymous if the Solution Provider does not wish to be represented at the review meetings. In such case, the Certification Authority will remove the details of the Solution Provider and product from all information provided to the Community for the Technical Review and Board Review.

11. Confidentiality

11.1.   Confidentiality

All information relating to an applicant and the product to be certified will be held confidential during the certification process, that is, prior to the award of certification. This includes information related to the application, Conformance Statements, and Problem Reports.

Test results will always be confidential. Information regarding the results of using the test suite(s) shall not be disclosed in any publicly available document or to any third party by the Certification Authority, the applicant, or any test agency/organization acting on the applicant's behalf.

In addition, the Certification Authority will always hold confidential any information regarding unsuccessful applications for certification.

11.2.   Disclosure of Certification Information

Certification information is the fact that certification was achieved, the description of the certified product, and the Conformance Statement for the certified product. Any claims of conformance or information related to the certification process may only be made public after the Certification Authority has notified the applicant in writing that the product has passed the certification process.

The Certification Authority will make certification information publicly available by including it in the Certification Register available on the certification web site[4].

11.3   Optional Confidential Treatment of Certification Information Prior to Product Launch

Often, a Solution Provider will apply for and achieve certification prior to the product's launch in the marketplace. To enable a Solution Provider to keep such information confidential prior to product launch, the Solution Provider may request that the certification information be kept confidential for a maximum period of 120 days from the date of written notification by the Certification Authority that the product has achieved certification.

During this period, the Solution Provider may not publicly use the SIF Certification Logo or make any representation of conformance with the SIF Implementation Specification(s)

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[4] *SIF Certification Registry: https://a4l.site-ym.com/page/SIFCertRegistry*

without first informing the Certification Authority that the confidential period has expired or that the Solution Provider has decided to end the confidential period. In the event the Solution Provider wishes to keep the certification information for a product confidential permanently, the Solution Provider may request withdrawal and deletion of such information. Such product will then no longer be considered a certified product.

The certification information will cease to be held confidential upon the earlier of notice by the Solution Provider that the confidential period has expired or at the end of the 120 day period, provided that the Solution Provider has not requested withdrawal and deletion of such information.