SIDES
NASWA State Information Data Exchange System
In Partnership with USDOL

DEVELOPER GUIDE

PART A – INTRODUCTION

This is a redacted version of the SIDES Developer Guide. For development, log into the Members Site and obtain the latest version

Version: 6.0

January 19, 2022

Date	Version	Description	Author
8/20/2010	1.0	Version 1.0	SIDES Team
9/27/2010	1.1	Updated: Part C – Development Steps. Added discussion on Combined.xsd to document. See Sections 3.3, 3.3.1.4, and 4.6.1. Enhanced the description of a GUID. See Section 4.2.2. Enhanced discussion on certification test data files to indicate that connectors may need to edit certification test data files. See Section 8.1.1.1.1.	SIDES Team
12/09/2010	1.2	Updated: Part C – Development Steps. Under section 9.1, Common Mistakes, two new sections were added. Section 9.1.7 clarifies the interpretation of numeric fields used to store money values. Section 9.1.8 provides guidance on populating the StateEmployerAccountNbr field so employers and TPAs can use this data to look up employer information in their automated systems.	SIDES Team
4/7/2011	2.0	Added Earnings	SIDES Team

Date	Version	Description	Author
		Verification requirements, modified requirements specific to their exchange, added CCB#9 (C-2.3.3.1-4, 2.3.3.1-5, and 2.3.3.1-6, added model connector.	
5/20/2011	2.1	Updated Part C. Added Employer Model Connector; Jax-WS Model Connector and .Net Model Connector; Corrected SOAP header information relating to the Earnings Verification exchange	SIDES Team
11/18/2011	2.2	Updated Part B. Added section C-2.10 E-Response and added in the requirement to specify the size of the E-Response custom logo to C-2.10.1. Identified requirements met through the use of the SIDES Model Connector.	SIDES Team
5/2/2012	3	Updated for Monetary & Potential Charges format and reorganized the guide to split part C into parts C and D.	SIDES Team
9/29/2012	3.1	Removed references to SEW and changed to E-Response Added functionality to bundle requests/responses and added associated business rules	SIDES Team

Date	Version	Description	Author
10/21/2012	3.2	**REDACTED**	SIDES Team
7/18/13	3.3	Removed support of BRPT as a separate tool because of its incorporation into the Model Connector Change to Part – B of Developer Guide: Added date business rules to Earnings Verification and Monetary & Potential Charges exchanges. Deprecated Business Rule 511 due to SIDES Operations Committee's decision to make Response Due Date required	SIDES Team
11/14/13	3.4	Change to Part – B of Developer Guide: ensure the separation information error codes are consistent with production software. Corrected business rules 114 and 123.	SIDES Team
3/14/14	3.5	Change to Part – B of Developer Guide: Added Determinations and Decisions Request and Response XSD rules and business rules error codes.	SIDES Team
9/25/14	3.6	REDACTED	SIDES Team

Date	Version	Description	Author
11/17/14	3.7	REDACTED	SIDES Team
08/26/2016	3.8	Release 2 of EV Standard Format and added missing BRPT code to table in section 2.1 (Part D of the Developer Guide)	SIDES TEAM
09/28/2016	3.9	Added Benefit Charges	SIDES Team
02/14/2017	4.0	SIDES Logo Updated	SIDES Team
02/20/2019	5.0	Updated for the new release of MPC	SIDES Team
07/05/2019	5.1	Added a new response business rule to Benefit Changes	SIDES Team
07/10/2019	5.2	Added ADF Error Codes	SIDES Team
9/30/2019	5.3	Added additional ADF Error Codes 1216, 1217, 1218 and changed 'Advance Fact Finding' to 'Additional Fact-Finding.' Note that changes to Error Codes for BC and ADF are highlighted in yellow.	SIDES Team
12/10/2019	5.4	Added missed ADF Response error code 1122. Made language for business rules 1122, 1123, and 1124 consistent business rule documentation.	SIDES Team
12/31/2019	5.5	Added BC Business Rule 1038	SIDES Team

Date	Version	Description	Author
1/27/2020	5.6	Corrected error message 317 to be Business Rule violation – EarningsVerificationWeekBeginDate (Date) must be at least 7 days prior to RequestDate and more recent than RequestDate minus 6 years. It was RequestDate minus 1 year.	SIDES Team
1/19/2022	6.0	Refreshed Parts A, B, C, D of the Developer Guide. Updated for 3/23/2022 SI update. Changed the PRR process from the Production Readiness Review to the Production Self-Certification Readiness Review.	SIDES Team

TABLE OF CONTENTS

1 DOCUMENT PURPOSE AND ORGANIZATION

The comprehensive Developer Guide provides the information needed by a state or integrated partner developer to build a client connector that successfully integrates and communicates with the State Information Data Exchange System (SIDES). The entire developer package consists of four parts: this document, Part A – Introduction, Part B – Connector Requirements, Part C – Development Steps, and Part D – Tools Guide.

This introduction is intended to provide a high-level overview and roadmap to the rest of the documentation and process. Part B details the important requirements that must be followed to build the Connector and connect to the Central Broker. Part C is a "how-to" document that provides the steps needed to build the Connector. Finally, Part D is a tools guide the SIDES team has available for Connectors.

Utilizing the Developer Guide package will help reduce ramp-up time for an organization's development team and mitigate risks associated with interpreting SIDES requirements such as business rules, exception processing, and error handling.

In addition to the software development required to connect to and exchange request and response messages with SIDES, state and integrated partner developers will also need to implement backend system processing and an interface to their backend system.

IMPORTANT NOTES

Upgrades: Connector developers should consider their upgrade path for the additional data formats that will be supported by future implementations of the SIDES Central Broker.

This package does not address the process changes required to facilitate the electronic exchange of data between state and integrated partners via the Central Broker. Please refer to the Implementation Guide for more information on this topic.

2 KEY TERMS

Broker Administrator

This title refers to the SIDES operational staff who monitor and maintain the Central Broker. Their tasks include setting up new SIDES participants in the Central Broker and troubleshooting operational issues.

Connector Administrator

This title refers to the state or integrated partner staff administering their respective organization's Connector. The Connector Administrator's primary duties are monitoring reports and resetting login credentials to the SIDES Administrative Web Site.

Connector / End Point

These terms refer to the applications and computer hardware operated by a participating state or integrated partner and serve as a single secure point of contact between the participant and the Central Broker.

Command Center

This term refers to the technical staff who support and monitor the hour-to-hour operations of the Central Broker and E-Response. This group possesses a variety of technical skill sets necessary to monitor the system's operation, carry out maintenance, and correct problems.

3   DEVELOPMENT ROADMAP

The table below lists the broad concepts and steps to build a Connector. The two columns on the right contain specific references to the associated requirements information in Parts B, C, and D.

3.1 A – COLLECT AND ARRANGE DATA

This section describes the predetermined data elements that you must gather and prepare.		
Major Concepts	Part B – Connector Requirements	Part C - Development Steps
Data Requirements	C-2.1 – GENERAL REQUIREMENTS	3.1 – Data Requirements
XML	C-2.3.2 – XML	3.2 – XML
XSD	C-2.7 – WSDLS AND XSD	3.3 – XSD
File Size	C-2.3 – FILES AND RECORDS	3.4 – FILE SIZE
Business Rules	C-2.8 – BUSINESS RULES ERROR CODES	3.5 – BUSINESS RULES

3.2 B – BUILD THE CONNECTOR: <u>Preparing the Message</u>

This section discusses the protocols involved in communication with SIDES. The discussion includes messaging flow, the messaging protocol, SOAP, and its constructs, including custom SOAP headers and the WSDL.

States and integrated partners are free to select their implementation technology for their Connector, so long as it conforms to all SIDES web service interfaces and protocols.

Major Concepts	Part B – Connector Requirements	Part C - Development Steps
Message Overview and Concepts	C-2.3 – FILES AND RECORDS C-2.4 – POST/PULL	4.2 – MESSAGING CONCEPTS
SOAP	C-2.5.2 – SOAP Message	4.3 – SOAP CUSTOMER HEADERS 4.4 – SOAP PAYLOAD 4.5 – SOAP ACTION
WSDL	C-2.7 – WSDLS AND XSD	4.6 – WSDL

3.3 C – BUILD THE CONNECTOR: Securing the Message

This section discusses the security implemented in communication with the Central Broker at the transport and messaging layers.		
Major Concepts	Part B – Connector Requirements	Part C - Development Steps
General Security Issues	C-2.2 – SECURITY	5 – BUILDING THE CONNECTOR: SECURING THE MESSAGE
Transport-Layer Security	C-2.2.1 – TRANSPORT-LAYER SECURITY	5.1 – TRANSPORT-LAYER SECURITY
Message-Layer Security	C-2.2.2-C-2.2.4 – MESSAGE-LAYER SECURITY	5.2-5.4 – MESSAGE-LAYER SECURITY
Application of Security to SOAP Message	C-2.5.3 – MESSAGE-LAYER SECURITY ORDER FOR THE SOAP MESSAGE	5.5 – APPLICATION OF SECURITY TO THE SOAP MESSAGE

3.4 D – CONNECT WITH THE CENTRAL BROKER: <u>Sending the Message</u>

This section describes the final steps to establish a connection and send a message to the Central Broker.		
Major Concepts	Part B – Connector Requirements	Part C - Development Steps
Sending a Message	C-2.4 – POST/PULL C-2.5 – MESSAGING C-2.6 – DATA TRANSPORT	6.1 – SENDING A MESSAGE
Acknowledgements	C-2.4.5 – ACKNOWLEDGEMENT C-2.6.1 - ACKNOWLEDGEMENTS C-2.8 – BUSINESS RULES ERROR CODES	6.3 – ACKNOWLEDGEMENTS
Non-Broker Returns	C-2.6.2 – NON-BROKER RETURNS	6.4 – NON-BROKER RETURNS

3.5 E – CONNECT WITH THE CENTRAL BROKER: Testing the Connector Software

This section discusses testing the communication with Central Broker and the available tools. The discussion includes common mistakes made by Connectors when communicating with the Central Broker.

Major Concepts	Part B – Connector Requirements	Part D – Tools Guide
Testing the Connector	SEE ENTIRE PART B – CONNECTOR REQUIREMENTS DOCUMENT	
Model Connectors		2.1 – MODEL CONNECTORS
Business Rules	C-2.8 – BUSINESS RULES ERROR CODES	

3.6 F – CONNECT WITH THE CENTRAL BROKER: Connector Self-Certification Readiness Review

	Major Concepts	Part B – Connector Requirements	Part C - Development Steps
This section discusses the important issues associated with the self-certification readiness review, which must be completed before moving to the production environment.			
	Production Self-Certification Readiness Review	C-2.1.2 – CONFORMANCE TO STANDARDS AND PRODUCTION READINESS REVIEW	8.1.1 – PRODUCTION READINESS INFORMATION
	Production Self-Certification Readiness Review Steps		8.1.1.1– PRODUCTION SELF CERTIFICATION -8.1.1.3 – READINESS STEPS 1-3
	Certificate Renewal		9.3.1 – CERTIFICATE RENEWAL

4   OTHER IMPORTANT REFERENCE INFORMATION

This documentation and all other materials are maintained and readily available on the SIDES website: https://info.uisides.org.

For business-related SIDES items, contact uisides@naswa.org.
For technical questions, contact sides-support@naswa.org.