



# DEVELOPER GUIDE

## PART A – INTRODUCTION

**Warning: This is a redacted version of the SIDES Developer Guide and is NOT the latest version. For development, log into the Members Site and obtain the latest version.**

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## Revision History

Date	Version	Description	Author
8/20/2010	1.0	Version 1.0	SIDES Team
9/27/2010	1.1	<p>Updated: Part C – Development Steps.</p> <p>Added discussion on Combined.xsd to document. See Sections 3.3, 3.3.1.4, and 4.6.1.</p> <p>Enhanced the description of a GUID. See Section 4.2.2.</p> <p>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.</p>	SIDES Team
12/09/2010	1.2	<p>Updated: Part C – Development Steps.</p> <p>Under section 9.1, Common Mistakes, two new sections were added.</p> <p>Section 9.1.7 clarifies the interpretation of numeric fields used to store money values.</p> <p>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.</p>	SIDES Team
4/7/2011	2.0	Added Earnings Verification requirements, modified requirements to be specific to their exchange, added requirements from CCB#9 (C-2.3.3.1-4, 2.3.3.1-5, and 2.3.3.1-6, added model connector.	SIDES Team
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

<b>Date</b>	<b>Version</b>	<b>Description</b>	<b>Author</b>
11/18/2011	2.2	Updated Part B.  Added section C-2.10 SEW and added in the requirement to specify the size of the SEW custom logo to C-2.10.1.  Identified requirements met through the use of the SIDES Model Connector.	SIDES Team
2/22/2017	2.3	Updated SIDES Logo	SIDES Team

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## 1 DOCUMENT PURPOSE AND ORGANIZATION

The comprehensive Developer Guide provides the information needed by a state, employer, or third-party administrator (TPA) 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 three parts: this document, Part A – Introduction, Part B – Connector Requirements, and Part C – Development Steps.

This introduction is intended to give you a high level overview and roadmap to the rest of the documentation and process. Part B details the important requirements that you must adhere to in order to successfully build the connector and connect to the **Central Broker**. Finally, the third piece, Part C, is a “how to” document that provides the steps you need to take to build the connector.

Benefits of following the Developer Guide package will be reduced ramp-up time for an organization’s development team and risk mitigation associated with interpretation of **SIDES** requirements such as business rules, exception processing, and error handling.

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

### IMPORTANT NOTES

**Upgrades:** Connector developers should also consider their upgrade path for the additional data formats (non-monetary determinations, benefit charges, and lower authority appeal decision information), that will be supported by future implementations of the **SIDES Central Broker**.

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**Certification:** Connector developers must work with the **SIDES** technical team to certify that their connector operates correctly with the **Central Broker**. In order to perform and pass the Connector Certification test, you must ensure that your connector software is developed with the capability to allow the injection of certification data.

The process changes required to facilitate the electronic exchange of separation data between state, employer, and TPA connectors via the **Central Broker** are not addressed in this package. Please refer to the **Implementation Guide** for more information on this topic.

**Introductory Guide**



**Implementation Guide**



**Developer Guide Package**

This Document and Parts B & C



## 2 KEY TERMS

### **Broker Administrator**

This title refers to the **SIDES** operational staff who monitor and maintain the **Central Broker**. Their tasks also include setting up new **SIDES** participants in the **Central Broker** as well as troubleshooting operational issues with existing **states**, **employers**, and **TPA** participants.

### **Connector Administrator**

This title refers to the **state**, **employer**, or **TPA** staff person who administers their respective organization's Connector. Managing access to the **SIDES** Administrative Web Site is one of the primary duties of the Connector Administrator. Other duties include reporting and setting active dates (availability), although the Connector Administrator has the discretion to determine who exactly will perform these different roles within his/her organization.

### **Connector / End Point**

These terms refer to the applications and computer hardware operated by an individual participating state, employer or TPA and serves as single secure point of contact between the specific participant and the **Central Broker**.

### **Command Center**

The group of technical staff who support and monitor the hour to hour operations of the **Central Broker** and **SEW**. This group of technical staff possess a variety of technical skill sets necessary to monitor the systems operation, carry out maintenance and correct problems that may arise with the proper operation and communication for the **Central Broker** and/or **SEW**.

### **Non participating employers or TPAs**

This is an employer or TPA that does not interface with the **Central Broker** via Web services. Non participating employers may be able to use the **SEW** if a **SEW** participating state invites the employer to exchange the data through the **SEW**.

### 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 found in Parts B and C.

#### 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: Preparing the Message

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, employers and TPAs are free to select their own 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
Redacted		

### 3.4 D – CONNECT WITH THE CENTRAL BROKER: Sending the Message

This section describes the final steps to establishing a connection and actually sending a message to the <b>Central Broker</b> .		
Major Concepts	Part B – Connector Requirements	Part C - Development Steps
<b>Sending a Message</b>	<b>C-2.4 – POST/PULL</b> <b>C-2.5 – MESSAGING</b> <b>C-2.6 – DATA TRANSPORT</b>	<b>6.1 – Sending a message</b>
<b>Acknowledgements</b>	<b>C-2.4.5 – Acknowledgement</b> <b>C-2.6.1 - Acknowledgements</b> <b>C-2.8 – BUSINESS RULES ERROR CODES</b>	<b>6.3 – Acknowledgements</b>
<b>Non-Broker Returns</b>	<b>C-2.6.2 – Non-Broker Returns</b>	<b>6.4 – Non-Broker Returns</b>

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

This section discusses testing the communication with **Central Broker** and the tools that are available to help you do this. The discussion includes common mistakes made by connectors when first attempting to communicate with the **Central Broker**.

Major Concepts	Part B – Connector Requirements	Part C - Development Steps
<b>Testing the Connector</b>	<b>SEE ENTIRE PART B – CONNECTOR REQUIREMENTS document</b>	<b>7 E – CONNECT WITH THE CENTRAL BROKER: TESTING THE CONNECTOR SOFTWARE</b>
<b>Emulators</b>		<b>7.2.1 – Emulators</b>
<b>Business Rules</b>	<b>C-2.8 – BUSINESS RULES ERROR CODES</b>	<b>7.2.2 – BRPT - Business Rule Process Tool</b>

**3.6 F – CONNECT WITH THE CENTRAL BROKER: Certifying the Connector Software**

This final section discusses the important issues associated with certification which must be passed before moving to the production environment is possible.

Major Concepts	Part B – Connector Requirements	Part C - Development Steps
Certification Information	C-2.1.2 – Conformance to Standards and Certification	8.1.1 – Certification Information
Certification Steps		8.1.1.1-8.1.1.4 – Certification Steps 1-4
Certificate Renewal		9.2.1 – Certificate Renewal

#### 4 OTHER IMPORTANT REFERENCE INFORMATION

This documentation and all other materials are maintained and readily available on the **SIDES** Web site. You should refer to this site for the most up-to-date documentation.

**SIDES Web Site**

<http://sides.itsc.org>

For business related **SIDES** items, contact the **SIDES** Director.

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