UI SIDES

UNEMPLOYMENT INSURANCE
SEPARATION INFORMATION DATA EXCHANGE SYSTEM

Revised

Concept of Operations

September 10, 2007

1 PROJECT BACKGROUND

In 2004 the Information Technology Support Center (ITSC) undertook a project to evaluate the various questions and approaches to separation information data collection instruments that state Unemployment Insurance (UI) agencies use to obtain the needed information from employers and Third Party Administrators (TPAs)[1].

In 2005 an effort was launched to develop and test a standardize format for separation requests to large multi-state employers and TPAs. A number of states, large employers, and TPAs have been involved in the project. States who have been involved are Colorado, Georgia, Idaho, Wisconsin, Michigan, Ohio, Indiana, Maryland, New Hampshire, Oklahoma, Utah, and Virginia. Multi-state employers and TPAs involved include TALX, ADP-Diamond Bar, JC Penny, Kelly Services, CVS and General Motors/EDS.

In September 2006, six state UI agencies (CO, GA, ID, OH, UT, & WI) interested in building on the establishment of a standardized approach to collecting UI separation information from large multi-state employers and TPAs met to formulate plans to develop a UI SIDES system and implement it along with a reasonable number of employers and/or TPAs. Five of the states have formed a group to develop and implement the standard specification based on the format developed for the "Low Tech Test" and a web service-based electronic exchange of separation information with a group of multi-state employers/TPAs. Once developed, implemented, and tested, participation the UI SIDES system would be expanded to include additional states, employers, and TPAs that want to participate.

[1] Third Party Administrators are those organizations that provide information and management services for employers in the area of unemployment insurance. TPAs typically support those client companies by handling the multiple aspects of information flow required when the client company has discharged an employee, and that employee has filed an unemployment insurance claim with their state UI agency

2 THE UI SIDES CONCEPT

Unemployment Insurance Separation and Information Data Exchange System (UI SIDES), is a web services based system that enables the communications and transmission of UI separation information requests from UI agencies to multi-state employers and/or Third Party Administrators (TPAs) as well as the replies containing the requested separation information.

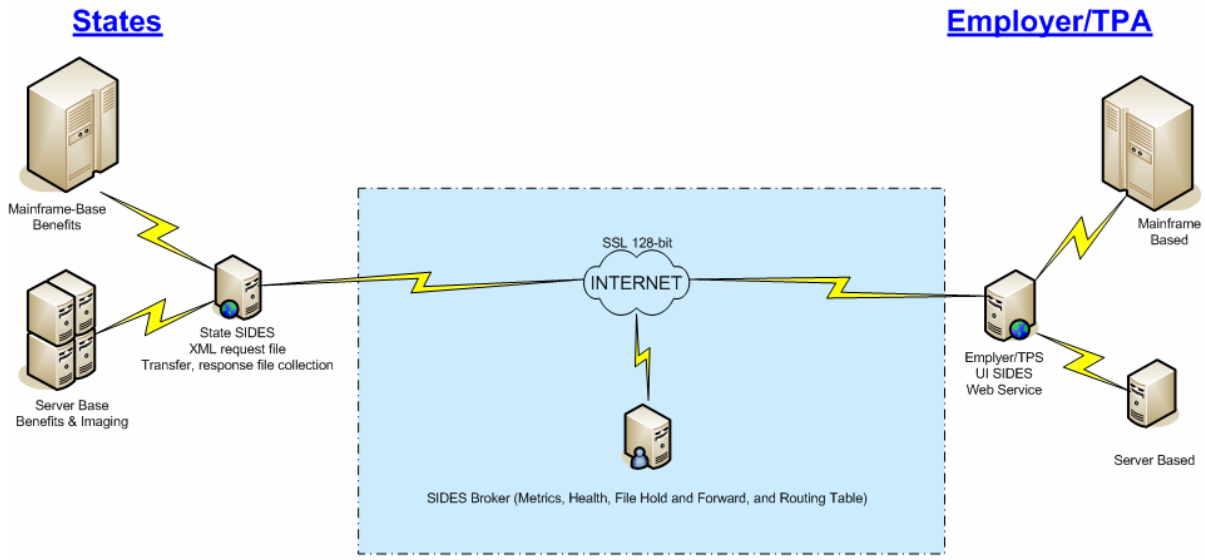
State UI agencies, multi-state employers, and TPAs have concluded that there are mutual benefits if the electronic exchange of separation information following an employee departure from work and a resultant UI claim filing could be launched and managed electronically and automatically through a standardized transmission process. That process would include a common standardized and well understood set of request and response data elements. The benefits of developing a standard set of data descriptions is that all participating UI agencies, employers and TPAs would know ahead of time the exact information that will be necessary. The exact formats and edit controls for this information would also be known by all involved and can improve the completeness as well as the quality of the exchange. Everyone would be able to prepare ahead of time by knowing what data to collect, store, and manage in anticipation of state UI agency requests. With such a standard for the data itself, there could be additional benefits to having a standard design and protocol for the transmission of data request and data responses.

The benefits of such electronic data exchanges could be enhanced and managed most efficiently if an actual system was established that efficiently automates the transmission of data exchanges between the state UI agencies and the employers/TPAs. The collective system of software/hardware is known as UI SIDES.

Figure 1 below provides a high level view of the Web Service SIDES architecture, and the associated functions that are envisioned to be initially performed within the web service itself. States will transmit the standard XML separation request to employers/TPA's via the SIDES Broker, which provides the specific Internet location of the appropriate Employer's/TPA's web service and delivers the request to the Employer's/TPA's web service. The Employer/TPA will return their standardized XML-based separation response via their web service to SIDES Broker, where the targeted state will collect the response. All XML request and response files will be validated at the State Employer's/TPA's endpoints to ensure high integrity of the data being transmitted.

Figure 1. SIDES Web Services High Level Architectural view

Web Service



This drawing is a general conceptual view of a proposed system and is not intended to be a complete and detailed technically accurate system diagram.

UI FUTURE/POTENTIAL Web Service Functions

Variety of file formats accepted and transformed to XML format
Web Interface
Charges
Non-Monetary Determinations
Filing/Determination of Appeals
Tax/Wage Info

Core Functions:

- Parse and Validate XML Files, including Attachments
- Perform Message Audit (Acknowledgements to endpoints and hosts and Resends)
- Lookup Destination Web Service Address in Routing Table
- Collect Metrics Data
- Authenticate Request and Messages
- Reports
- Update and Maintain Web Service Address Routing Table
- Secure and Encrypt messages
- View and Calculate Metrics

2.1 Benefits of UI SIDES Participation to Employer/TPA and States

As a result of the Low Tech Test employers and TPAs felt that there could be a reduction in staff time required to obtain the necessary information through use of the standardized automated exchange of UI separation data. However, the operational cost savings of UI SIDES is not the only motivation for the development of the data exchange and the agreements to electronically share data using those standards. As important, or even more so, are the advantages that such an agreement and standard system can make in the timing of the data movement and the value that have more time to acquire and utilize the data can bring to both the agency-side and the employer-side partners. By having the mutually agreed to data prepared and presented on a timely basis to the UI agency, it is possible for UI benefits adjudication staff to use the information to make a timely and accurate decision on the eligibility for UI benefits for UI claimants with just the data supplied. The "Low Tech Test" results indicated that by using the standard format, employers/TPAs were able to supply more complete information in the initial reply and make time consuming and costly follow-up calls by the UI agency unnecessary for a high percentage of states.

Benefits of UI SIDES include:

1. Standard Separation Request formats from participating States.
    a. Standard questions across all participating State Workforce Agencies make it easier to anticipate needed information prepare replies and train staff to prepare replies
    b. Allows for automation of separation information and responses for some or all requests.
    c. Easier to train staff to properly reply.

2. Cost savings.
    a. Reduced staff requirements for handling requests, including the number of UI agency “call backs” to the employer/TPA
    b. Reduced postage and handling costs.
    c. Easier/better control & management of separation information request workload.
    d. Improves employer timeliness and reduces late charges
    e. Improves accuracy of information and reduces improper benefit payments
3. Electronic request and reply.
    a. Allows more time to obtain information needed by eliminating mail time.
    b. Confirmation of receipt.
    c. Resend capability
    d. Handles attachments
    e. Edit checks and validation of replies for completeness.
4. Standardized Web Service Application
    a. Each Employer/TPA receives common Web Service Application from SIDES Consortium
    b. Assistance on install, deployment, and testing of Employer/TPA Web Service

The States will also benefit significantly:

1. Improved timeliness by obtaining employer separation information faster
2. Improved quality because of standardized questions and in some cases a more detailed request for separation information
3. Reduced costs currently involved with exchanging data
4. Improved completeness and accuracy of information and reducing the number of improper benefit payments and appeals reversals
5. Dramatically reducing the number of "call backs" to the employer for clarification and additional information, saving staff resources
6. Reduced the amount of time spent on fact-finding interviews as the detailed employer information is submitted electronically.

2.2 Participation Criteria for UI SIDES – Employers and TPAs

To participate an employer and/or TPA must be committed to:

1. Having their part of UI SIDES ready for production by March 2008.
2. Sign a UI SIDES Participation Agreement with NASWA accepting the SIDES standards (e.g., standardized separation response), operational requirements & procedural rules .
3. Agree to establish a single point of electronic exchange per employer (Federal Employer Identification Number).
4. Have a UI workload with the states of CO, WI, OH, UT, & GA (Initial partners - other states and employers to be added after March 2008 launch).

2.2 UI SIDES TECHNICAL APPROACH

State Technical Requirements to participate in UI SIDES include:

1. Secure access to the UI SIDES Broker using certificate-based authentication
2. For a State, ability to consume the standard Separation Information Response (including attachments; RTF, PDF, TXT, TIFF, CSV formats) sent from an Employer/TPA. For Employer/TPA, ability to consume the standard Request for Separation Information, XML file format (including attachments) sent from a state UI agency or.
3. For a State, ability to generate XML file request (including attachments), that meets the UI SIDES standard format. For Employers/TPA's, ability to generate XML file response (including attachments), that meets the UI SIDES standard format
4. Generate and send health, file transmit/receipt acknowledgement, and metrics information to the Broker using XML-based messaging
5. For States, collect XML-based responses from the Broker
6. For Employers/TPA's, Transmit and consume XML-based responses in either real-time or batch modes
7. Delivery of the XML-provided data to the organization's users, as applicable

In addition, the SIDES system in anticipated to be a near 24/7 system, with high availability (> 99.9% on a monthly basis).

2.3 STANDARD DATA ELEMENTS AND XML FORMAT

One of the achievements to date on the SIDES project is the generation of a standard set of separation request and response data elements. The process was extensive and involved considerable dialogue and compromise and included participation from the states, multi-state employers, and TPAs. During late summer and fall of 2005, through a series of teleconferences and a two-day in-person meeting in Washington, DC during August 2005, a working draft data set was produced. It was slightly modified through user comments until October, 2005.

In preparation for the Low Tech Test, which was conducted by four states and five employers and TPAs and initiated in the fall of 2005 and completed in the first three months of 2006, a revised data list was produced. This list had all the same data elements as the earlier list but was reformatted to allow it to be used for actual data entry during the Low Tech Test. During the preparation of the Low Tech Test materials and procedures, it was necessary to modify and augment the data elements in the earlier October 2005 data specification.

During the Low Tech Test data collection and analysis, several more changes that could significantly improve the results of the Low Tech Test were discovered. These changes are now reflected in the data element specification. Also, as a result of a number of discussions between the consortium states subsequent to the Low Tech Test, further refinements have

been included, with the focus on streamlining the specification without sacrificing the necessary data content. This specification is readily available by any interested party.

Another project decision is to transmit the separation data using the eXtensible Markup Language (XML) format. XML format allows the definition and transmission of data in a common and standard format that can be universally well understood.

3 SIDES WEB SERVICES

Through a collaborative process started in the Summer of 2006 and culminating in meeting in September in Denver, the consortium states discussed and selected among a various options a web service approach to electronically transmit and receive XML-based separation request and response files (and attachments) between themselves (and future SWA's) and large multi-state employers and TPA's[2].

The Web Service will be a fairly lightweight application, with the following benefits provided:

- Pure XML-based service

[2] An FTP transfer approach was considered, and while having benefits (e.g., easy to maintain and secure at the client-side), the need for a central FTP "Post-Office" and its burdens regarding directory structure maintenance, coordination of file naming/directory/attachment handling, disaster recovery as well as limitations in handling acknowledgements, resends, and metrics eliminated this approach.

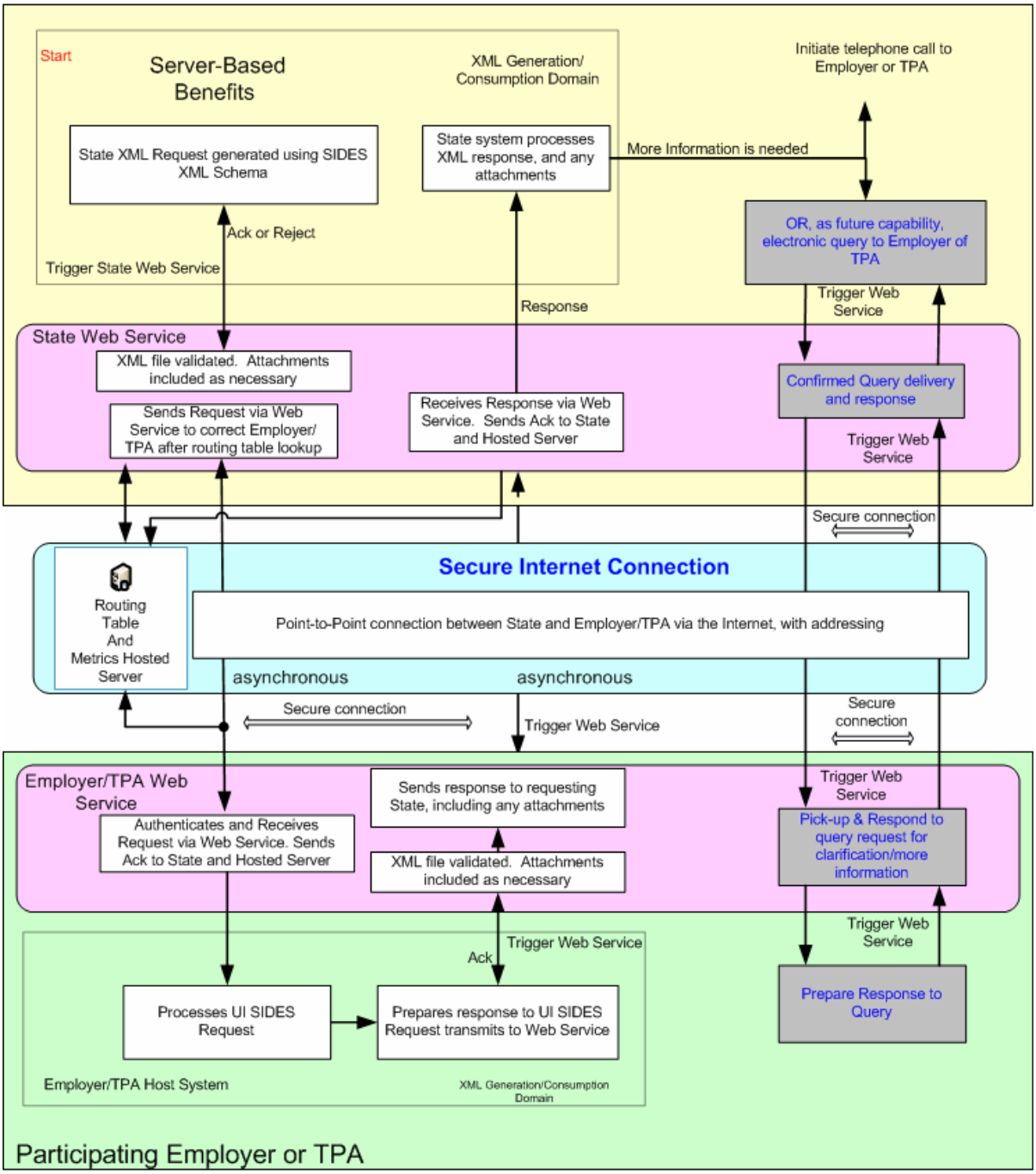
A Web Site approach was also considered. While having its benefits, the manual file upload and download process and impacts of web site and secure access administration clearly outweighed the advantages of such an approach. Further, a user interface can be added to the UI State Web Service in the future on an as needed basis.

- Fully automated and real-time capable
- Potential to distribute bandwidth/load across a day
- Compatible with any infrastructure
- Capable of performance metrics
- Capable of real-time system health monitoring
- Model transformation code available for use by any SWA
- Model transformation code available for use by any Employers/TPAs
- Foundation for future data exchanges between States and Employers/TPAs

Figure 2 shows a typical flow for the SIDES Web Service implementation. The details of this flow are provided below.

Figure 2. SIDES Web Service Flow

Advanced Technology States - Web Service



Gray Blocks and Blue Text are potential future capabilities

1. A state places an XML separation request file, per the standard SIDES specification, generated from their host system (or their host system plus some transformation technology) to the common SIDES Web Service that is hosted locally. Attachments are supported as well in SIDES.
2. The SIDES Web Service validates the XML file, and rejects any errors as part of exception processing. (No files, generated by either States or Employers/TPAs, will be transported in SIDES unless it passes validation.)
3. A central routing table will then be accessed by the state's web service to direct the request to the correct employer/TPA. The table will include the salient attributes of the employer (e.g., name, address, FEIN) and their web service Universal Resource Identifier (URI) or target namespace for addressability purposes.
4. The employer's/TPA's SIDES web service container is listening for requests 24/7.
5. The employer's/TPA's web service listener component accepts the separation request and processes the SOAP header[3].
6. The employer's/TPA's SIDES web service provides an Acknowledgement (Ack) to the sending State's Web Service, and the central SIDES server so metrics can be generated for SIDES transactions. If the transmitting State's SIDES web service does not receive an Ack, it will resend the file a specified number of times until Ack is received. The SIDES Web Service sends the Ack to the state's host system.
7. The employer's/TPA's service code will parse the state's XML-based separation request and process it using their own Host systems.
8. The employer's/TPA's then generates its separation response file and triggers the SIDES web service they are locally hosting, and then transmits the separation response in the XML SIDES Schema to the requesting state's web service if it passes validation. (Again, the SIDES web service will not accept an XML file in the wrong structure.)
9. The employer/TPA may also add an attachment(s) to the separation response. The XML schema accommodates up to ten (10) attachments, and various attachment formats

[3] Authentication is needed, using likely the SOAP header to pass credentials. Further, encryption of sensitive parts of the SOAP message will also need to be considered.

10. The state's web service container is listening for requests 24/7. The state's web service listener component accepts requests and parses the SOAP header. The state's listener sends the request to the SIDES service code.
11. The receiving state's service code will automatically acknowledge receipt of the separation response to the transmitting employer's/TPA's SIDES web service, and the central SIDES server. The employer's/TPA's web service will resend the separation response if an acknowledgement is not received.
12. The state then consumes the XML-based separation response file.