Iowa Workforce Development

# Efiling Service

**Technical Documentation** 

Version 3.0.4 9-25-2023

# Table of Contents

Getting Started	3
What is Efiling?	3
Basic Exchange of SOAP Messages	4
Anatomy of a SOAP Request	4
SOAP Envelope	4
SOAP Body	5
Types of Requests	5
Anatomy of a SOAP Response	6
Types of Responses	6
mplementation Process	7
System Requirements	7
Implementation Environments	7
ntegration Overview	8
The Integration Process	8
SOAP Endpoints	8
SOAP Wsdl	8
Testing Cycle Overview	9
Testing Mode	9
SOAP Endpoints	9
Going Live1	.0
SOAP Endpoints1	.0
API Reference1	.1
Efiling vs Acknowledgement1	.1
Efiling service1	.1
Efiling service details1	.1
Efiling Error Codes and Messages1	.2
Sample Efiling service responses1	.4
Acknowledgement service1	.5
Acknowledgement Errors and Warnings1	.6
Sample Acknowledgement service responses1	.8
Data Types – Efiling schema1	.9

## **Revision History**

Version	Author	Status	Date of Version	Notes
3.0.0	IWD	Published	March 29, 2021	
3.0.1	IWD	Published	October 5, 2021	<ul> <li>Updated Production Web service Urls</li> </ul>
3.0.2	IWD	Published	March 31, 2022	<ul> <li>Added error code 005 to 'Efiling Error Codes and Messages' (Page 12)</li> <li>Modified error message of error code 103 in 'Acknowledgement Errors' (Page 15)</li> <li>Corrected typo in description of ContributionDue and SurchargeDue (Page 29)</li> <li>Removed "New Business Validation" section (Page 11)</li> <li>Added error codes 007,009,010 to "Efiling Error Codes and Messages" (Page 12)</li> <li>Added error code 107 to "Acknowledgement Errors and Warnings" (Page 16)</li> </ul>
3.0.3	IWD	Published	May 10, 2022	<ul> <li>Added error code 108 to "Acknowledgement Errors and Warnings" (Page 16)</li> <li>Modified error message of error code 103 in 'Acknowledgement Errors' (Page 16)</li> </ul>
3.0.4	IWD	Published	September 25, 2023	<ul> <li>Added error code 992 to "Efiling Error Codes and Messages" (Page 13)</li> </ul>

# Getting Started

This chapter introduces the Efiling service.

# What is Efiling?

Efiling is a service using which employers or agents can submit the Iowa Quarterly Contribution & Payroll report through SOAP (Simple Object Access Protocol), based on the schema approved under TIGERS FSET Version 2.1.

Efiling service provides two web services:

- 1. Efiling Web Service: It can be used to submit wage reports. Each request would consist of one employer's wage report.
- 2. Acknowledgement Web Service: It can be used to check for the processing status of a report that has already been submitted.

Note: In the rest of the document, these services are collectively referred to as "Efiling/Acknowledgement web services". When they need to be referred separately, it has been done so.

End users integrate their application with Efiling using a SOAP interface over an HTTPS connection.

SOAP defines the format of standard XML messages that are used to communicate among systems. Because the XML message format is standardized, SOAP can be used to communicate among multiple computer architectures, languages, and operating systems. The Efiling/Acknowledgement API supports document-style SOAP 1.1.

HTTPS is a protocol used for communication between web browsers and web sites. It works in the same manner as HTTP, except it provides security and privacy through the use of encryption.

# Basic Exchange of SOAP Messages

The SOAP messages your application sends to the web services are called request messages; the messages that it returns are called response messages. The basic exchange of these request and response messages requires the interaction of two components:

• Client Application (SOAP Client): This is your company's application. The client application creates an XML document containing a SOAP request message.

• Efiling or Acknowledgement Web Service (SOAP Server): This is the IWD-hosted web service that provides the Efiling/Acknowledgement functionality. Efiling/Acknowledgement listens for SOAP messages, and distributes and interprets SOAP documents.

The client application sends a SOAP request to the Efiling/Acknowledgement service over HTTPS. Upon receiving the request, Efiling/Acknowledgement application processes it and returns a SOAP response with the appropriate status.

# Anatomy of a SOAP Request

A SOAP request is an XML data structure sent to a web service in the form of a document.

A SOAP request sent to the Efiling/Acknowledgement service consists of two main sections: Envelope and Body.

SOAP requests may also include a Header, but one is not required with messages sent to Efiling/Acknowledgement services.

## SOAP Envelope

This section identifies the namespaces that are used by the rest of the message. All requests to Efiling/Acknowledgement service must list these namespaces in the message envelope:

#### SOAP Envelope namespace

xmlns:soapenv=http://schemas.xmlsoap.org/soap/envelope/

Additional namespaces identifying the request data are defined in the envelope of the message. They are mentioned below.

#### Efiling Data Types

xmlns:v3=http://www.iowaworkforce.gov/SecureFile/v3/

#### FSET Data Types

xmlns:efil=http://www.irs.gov/efile

#### Acknowledgement Data Types

xmlns:v3=http://www.iowaworkforce.gov/UITAXAckService/v3/

The following is an example of SOAP message Envelope:

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://www.iowaworkforce.gov/SecureFile/v3/" xmlns:efil="http://www.irs.gov/efile">

..... header and body go here. Header will anyway be empty.....

</soapenv:Envelope>

#### SOAP Body

SOAP Body contains the main payload of the message. It identifies the operation that the application wants the Efiling/Acknowledgement service to perform, and includes multiple XML elements that send the necessary operation parameters.

The following code is an example of a SOAP Body:

<soapenv:Body>

<v3:ProcessWagesRequest>

<efil:Transmission>

.....

.....

</efil:Transmission>

</v3:ProcessWagesRequest>

</soapenv:Body>

#### Note:

Along with the technical documentation, IWD would send a compressed file that contains the WSDLs, XML Schema Definition (XSD) files and sample request/response xmls for reference. Please unzip/extract the file to access its contents. Sample file are referred in this document as "Sample file - <File Name>".

## Types of Requests

#### Efiling Web Service Request:

Sample file - Efiling SOAP request.xml

#### Acknowledgement Web Service Request:

Sample file - Acknowledgement SOAP request.xml

# Anatomy of a SOAP Response

A SOAP response is an XML document returned from a web service to the SOAP client. The SOAP response document that the Efiling/Acknowledgement service returns is structured like the request except that the Body contains the transaction result.

# Types of Responses

#### Efiling service

Sample file - Efiling SOAP response.xml

#### Acknowledgement service

Sample file - Acknowledgement SOAP response.xml

# **Implementation Process**

The client would integrate their application with Efiling/Acknowledgement using a web services application programming interface.

# System Requirements

Your client application (SOAP client) must support the following:

- Document-style SOAP 1.1
- WS-I Basic Profile Version 1.1 compliant services

Since the Efiling/Acknowledgement application program interface (API) runs as a web service, there is nothing that you need to install related to the Efiling/Acknowledgement API. The only software you need to install to use the API is the software for the integrated development environment that you use to write or modify your application.

For example, if you plan to write your client application in Java, you need to install Java and also a

SOAP 1.1 compatible toolkit.

# **Implementation Environments**

Efiling provides two separate IWD-hosted implementation environments:

#### Staging:

This environment allows you to test a new integration or test changes to an existing integration. The staging environment is fully functional and is an exact replica of the production environment, allowing you to test all features of your application before going into production.

#### Production:

This environment is used when you "go live" with your integration.

# Integration Overview

This chapter provides information needed to integrate your client application with the Efiling/Acknowledgement web service.

# The Integration Process

When building an application to interface with the Efiling/Acknowledgement web service, you must connect with the Efiling service's WSDL (web services definition language) using the tools that are available with your software development environment. A WSDL is a document written in XML that describes a web service. It provides all the information that a SOAP client needs to interface with the service, including the location of the web service (known as the end point) and a description of the operations supported by the service.

Your development environment includes a SOAP toolkit. The toolkit can interpret the WSDL to generate code for building SOAP request messages that Efiling/Acknowledgement web service can understand, and consuming SOAP response messages that Efiling/Acknowledgement web service sends to your client application.

#### Connecting to the Efiling/Acknowledgement Web Service

All communication between your application and the Efiling/Acknowledgement web service must use the HTTPS protocol. HTTPS is a secure version of HTTP. It works in the same manner as HTTP, except it provides security and privacy through the use of encryption using SSL (secure sockets layer) connection.

# **SOAP Endpoints**

The Efiling/Acknowledgement WSDL identifies the SOAP endpoint of the web service. The end point is the URL to which your client application needs to connect. The following identifies the end point for each environment and type of authentication.

#### Staging

Efiling service - https://test.myiowaui.org/EfilingWebservice/services/SecureFileSOAP/v3

Acknowledgement service - https://test.myiowaui.org/EfilingWebservice/services/UITAXAckServiceSOAP/v3

#### Production

Efiling service - https://www.myiowaui.org/EfilingWebservice/services/SecureFileSOAP/v3

Acknowledgement service - https://www.myiowaui.org/EfilingWebservice/services/UITAXAckServiceSOAP/v3

## SOAP Wsdl

Wsdl and schemas for Efiling and Acknowledgement services are present in the zip file provided by IWD. Please unzip/extract the files to use them in client software. Please note that the endpoints in the wsdl need to be replaced with what is present in the document depending on the environment.

# Testing Cycle Overview

This chapter provides guidelines to integrate with the IWD staging environment and test the client application.

# **Testing Mode**

In testing mode, Efiling fully processes the requests and allows you to test your application.

#### **Testing Mode Values**

In testing mode, the element "ProcessType" in the request should have a value of "T".

# **SOAP Endpoints**

#### Staging

Efiling service - https://test.myiowaui.org/EfilingWebservice/services/SecureFileSOAP/v3

Acknowledgement service - https://test.myiowaui.org/EfilingWebservice/services/UITAXAckServiceSOAP/v3

# Going Live

This chapter provides guidelines to deploy your application in the production environment. This stage is often referred to as going live.

#### **Connecting with the Production Environment**

After all desired changes are implemented and tested, you are ready to go live with your application. When you are ready to go live, you need to connect with the production environment rather than the staging environment using the endpoints for production environment.

#### Live Mode Values

To send a request in live mode, the element "ProcessType" in the request should have a value of "P".

## **SOAP Endpoints**

#### Production

Efiling service - https://www.myiowaui.org/EfilingWebservice/services/SecureFileSOAP/v3

Acknowledgement service - https://www.myiowaui.org/EfilingWebservice/services/UITAXAckServiceSOAP/v3

# **API Reference**

# Efiling vs Acknowledgement

Efiling web service's function is to do schema validation on the submitted payload and some very basic business validations. A validation failure results in a response with an error code and an error message while a successful submission is indicated by a response containing a success confirmation together with a unique request ID (called Transmission ID) for the submitted payload. Further extensive business processing of the payload is done by a batch process.

Acknowledgement web service is used to check for the processing status of the submitted payload.

## Efiling service

#### Efiling service details

When there are one or more schema validation failures, they are caught by SOAP payload validating interceptor and returned as SOAP fault. The error message is auto-generated by the Java XML Validation API. Business validation is not executed.

When schema validation passes but one or more business validations fail, the response again contains a failure status and a list of error codes and error messages, but this time, there is a specific error code and message for each specific failure. <u>Here is the complete list</u>. The response also contains a Transmission ID, which uniquely identifies the submitted payload, but unlike with a successful upload, the Transmission ID in this case is only meant to help IWD trace the reason for the failure of a particular payload so that it can assist an employer or agent with correcting that error. The payload is not processed any further and hence the Transmission ID must not be used to inquire the report processing status.

If all schema and business validations pass, the payload is considered to be successfully uploaded. The response contains a success status and a Transmission ID (as discussed above), but in this case, the Transmission ID can be used to inquire the report processing status by calling Acknowledgement service.

# Efiling Error Codes and Messages

Error Code	Element in Error	Error Message
000	StateEINValue	The payload has data for multiple employers.
000	TypeStateEIN	The payload has data for multiple TypeStateEINs which do not match.
000	TIN	The payload has data for multiple ITINs which do not match.
000	StateCode	The payload has data for multiple states which do not match.
000	Taxyear	The payload has data for multiple Years.
000	Quarter	The payload has data for multiple Quarters.
002	ContentLocation	Required attribute content location is invalid
003	EFIN	The originator EFIN is not valid
004	TypeStateEIN	Type of state employer identification number is invalid.
005	StateEINValue	The value of the state employer identification number is invalid.
006	StateEINExtension	The value of the sub-account number is invalid. ReturnData Document Count: <index element="" elements="" enclosing="" in="" list="" of="" returndata="" the=""></index>
007	Report Quarter	Report quarter is empty
009	NumberOfEmployees or Month1Employees or Month2Employees or Month3Employees	Information about total/monthly employee count has not been submitted. The report is not yet submitted.
010	StateEINExtension	The value of the sub-account number is duplicated. ReturnData Document Count: <index element="" elements="" enclosing="" in="" list="" of="" returndata="" the=""></index>
016	Taxyear	The tax year is null or invalid. It must not contain timezone qualifiers or be negative.
102	Taxyear & Quarter	Future quarter/year is submitted.
111	EFIN & ContentLocation	There is already a record for the given EFIN and content Location. Please modify your content Location.
112	EFIN & ContentLocation	You have exceeded the maximum number of submissions based on the EFIN and Content Location for today. Please modify your Content Location or wait until a future date.
777	ProcessType (Test environment)	Process Type P is invalid.
777	ProcessType (Prod environment)	Process Type T is invalid.
990	StateReturn nodes	ReturnData count and StateReturn count don't match.
991	StateUI nodes	ReturnData count and StateUI count don't match.

992	SSN	The value of SSN field is invalid. It cannot be all zeros.
994	ReturnHeader nodes	ReturnData count and ReturnHeader count don't match.
999	Zip Code	The value of zip code is invalid. It cannot have more than 9 digits.

## Sample Efiling service responses

#### Successful payload upload:

Sample file - Efiling Response - Success.xml

#### Schema validation failure (when ETIN and Content Location are not in the correct format):

Sample file - Efiling Response - Schema validation failure.xml

#### Schema validation failure (when the order of ReturnSigner and Contact is reversed):

Sample file - Efiling Response - Schema validation failure for wrong order.xml

Note: If you look at the schema ReturnHeaderState.xsd, the elements ReturnSigner, Contact, ThirdPartyAuthorization, TaxType, TaxTypeCode, PaymentIncludedElect, AuthorizationToDiscussWithPreparerElect, SupplementalReturnElect and AckAddress must appear in the same order. So if a SOAP request has Contact before ReturnSigner, you will see the above error.

#### **Business validation failure:**

Sample file - Efiling Response - Business validation failure.xml

# Acknowledgement service

#### Acknowledgement service Details

The response contains the acknowledgement details of a previously submitted Iowa Quarterly Contribution & Payroll report. If you are an existing consumer of this service, the difference is that the response will now have the payload as a complex element having every field in a separate child element instead of the payload being an xml string within CDATA.

OriginId, which is present only if there is no schema validation or system error, is the same as ContentLocation. TransmissionStatus is a field that is always present in the response and tells the status of the report processing. It can have one of the following four values:

1. I – In Process (Payload submitted successfully through Efiling web service but not yet processed by the backend batch job)

- 2. INVA Invalid (No record exists for the given request parameters or a system error has occurred)
- 3. A Accepted
- 4. R Rejected

The response may additionally contain error and warning codes and messages representing business error and warnings. There can also be errors representing user or system errors. Below is the complete list of all errors and warnings.

# Acknowledgement Errors and Warnings

Acknowledgment Errors

	_		
Error ID	Error Code	Element in Error	Error Message
001	000	EFIN & ContentLocation	No Request found with Parameters passed.
001	009	System error	Unable to return the requested data at this time. Please try again later or call 1-888-848-7442.
	005	StateEINValue	The value of the state employer identification number is invalid.
	005	StateEINValue	The account set up is incomplete. (This is used when account number is partially set up, but not complete.)
	006	StateEINExtension	The value of the sub-account number is invalid. ReturnData DocumentCount: <document count=""></document>
	008	Account Number (StateEINValue ) & FEIN (TINTypeValue)	Account Number and FEIN do not match.
	101	Already submitted report	Quarter/year that is being submitted already has a status of submitted on My lowa UI.
	103	Wage Line	Payload contains at least one wage line with no SSN and no First/Last Name.
	104	UITotalWages	Total Wages for the reporting unit <reporting id="" unit=""> are greater than 0.00, but no wage lines are submitted.</reporting>
	105	Wage Line	Payload contains at least one wage line with an invalid SSN.
	106	Duplicate SSN	Payload contains two wage lines with the same SSN for the reporting unit.
	107	Year quarter for which the report was submitted is prior to effective date	Report quarter and year is prior to account effective date. If total wages are zero, there is no need to file a quarterly report. If total wages are greater than zero, contact Iowa Workforce to correct account effective date.
	108	Out of State Wage Line	Payload contains at least one out of state wage line with no SSN, First Name or Last Name.
	647	Duplicate Report Submission	The report for this Account, Year and Quarter has already been submitted.
	648	Reporting Units Information	Information for all the reporting units has not been submitted. The report is not yet submitted
	649	Previous Quarters not submitted	Reports for all the previous quarters have not been submitted. The report is not yet submitted. (This only applies to active employers).
	650	Non-Active Account with 0.00 Total Wages	Account is inactive. If total wages are zero, there is no need to file a quarterly reports. If total wages become greater than zero, a paper report must be submitted.

Acknowledgement Warnings

Warning ID	Warning Code	Element in Error	Warning Message
	651	Total Taxable Wages from Wage Detail	Reported Total Taxable Wages of XXXX do not match calculated Total Taxable Wages of YYYY.

# Sample Acknowledgement service responses

#### SOAP fault response (when Content Location contains more than 29 digits):

Sample file - Acknowledgement Response - Schema validation failure.xml

#### User error:

Sample file - Acknowledgement Response - User error.xml

Note: This error is thrown if user tries to fetch data that doesn't exist.

#### **Business error:**

Sample file - Acknowledgement Response - Business validation failure.xml

#### **Business warning:**

Sample file - Acknowledgement Response - Business validation warning.xml

# Data Types – Efiling schema

Column	Description
Name	Specifies the name of the XML element/ attribute. An attribute will be explicitly denoted as so.
Туре	Specifies the name of the data type.
Description	
Required	<ul> <li>Specifies whether the parameter is required (Yes/No) and how many times it can be included in a message:</li> <li>1: Mandatory; must be included once.</li> <li>1 or more: Mandatory; must be included at least once.</li> <li>0 or 1: Optional; can be included once.</li> <li>0 or more: Optional; can be included once or more times.</li> </ul>

#### Root element - Transmission

Name	Туре	Description	Required
Transmission	Transmission	Integrated Transmission schema for	Yes
Header	<u>HeaderType</u>	inclusion in SOAP body	1
OriginHeaders	<b>OriginHeaders</b>	Contains the PINRegistrationOriginHeader	Yes
		or contains the ReturnOriginHeader	1 or more
ReturnData	<u>ReturnData</u>	State Return Contents, beginning with	Yes
		Content Location which contains the	1 or more
		Business Tracking Number or BTN -	
		consisting of the six <u>character</u> EFIN, seven	
		character Julian date, and seven character	
		unique return identifier	

#### TransmissionHeaderType

Name	Туре	Description	Required
Jurisdiction	xsd:string		Yes
			1
TransmissionId	<u>IdType</u>	Use a unique, for you and your system, value	Yes
		that will identify the transmission	1
Timestamp	xsd:dateTime	The time stamp at the time of transmission	Yes
			1
Transmitter	Transmitter		Yes
			1
ProcessType	xsd:string	Possible values – {T, P}	Yes
		T stands for Test and	1
		P stands for Production	
Transmission	Transmission	A list of the origin headers in the transmission	No
Manifest	Manifest	_	0 or 1

# IdType

Base Type	Pattern	Description
xsd:string	[A-Za-z0-9:.\-]{1,30}	A <u>timestamp</u> may be used as an ID as long as it is unique within its parent element. Up to 4-decimal fractional digits may be used for the second in a <u>timestamp</u> to increase its uniqueness. Legal Characters: A-Z, a-z, 0-9, colon, period and hyphen. Length – 1-30

#### Transmitter

Name	Туре	Description	Required
ETIN	<u>ETINType</u>	The ETIN of the transmitter	Yes
			1

#### ETINType

Base Type	Pattern	Description
xsd:string	[0-9]{5}	Type for Electronic Transmitter Identification No 5 digits

#### TransmissionManifest

Note: There is a choice between OriginHeaderReference and SelfFilingManifest below, i.e. a TransmissionManifest element can only have either of the following child elements at once but having either of them is a must, which means that you cannot have an empty TransmissionFest.

Name	Туре	Description	Required
OriginHeader	OriginHeader	Tier 3: This is used by Transmitters who are	Yes
Reference	Reference	transmitting this payload for Agents <u>aka</u> Originators.	1 or more
SelfFiling	SelfFiling	Tier 1 and 2: This is used by Transmitters who	Yes
Manifest	Manifest	are the Agent's or a Single Employer.	1
originHeader	xsd:positive	The number of origin headers in this	Yes
Count - attribute	Integer	transmission	

#### OriginHeaderReference

Name	Туре	Description	Required
originId - attribute	<u>ldType</u>	The value of the originId attribute must match the OriginId of this origin. Must be unique within the transmission. Use a unique, for you and your system, value that will identify the grouping of items batched under the Origin.	Yes

#### SelfFilingManifest

Name	Туре	Description	Required
ItemReference	ItemReference		Yes
			1 or more
ItemCount - attribute	xsd:positiveInteger		Yes

#### ItemReference

Name	Туре	Description	Required
ContentLocation - attribute	Base type - xsd:anyURI	A combination element consisting of the following information:	Yes
	Pattern - [A-Za-z0-9:.\-]{1,30}	o 4 digit Business Transaction Number (BTN)	
		o 8 digit UI Account Number (UI_ACCT#)	
		<ul> <li>o 8 digit date formatted as:</li> <li>4 digit year</li> </ul>	
		<ul> <li>2 digit month</li> <li>2 digit day</li> </ul>	
		o 9 digit unique return identifier	
		UI_ACCT# – An eight digit account number assigned by IWD (beginning with	
		00)	

#### OriginHeaders

Note: There is a choice between PINRegistrationOriginHeader and ReturnOriginHeader below, i.e. an OriginHeaders element can only have either of the following child elements at once but having either of them is a must, which means that you cannot have an empty OriginHeaders.

Name	Туре	Description	Required
PINRegistration	<b>PINRegistration</b>	Indicates PIN registration(s) are	Yes
OriginHeader	OriginHeaderType	transmitted.	1 or more
ReturnOrigin	ReturnOrigin	Indicates return origin header(s) are	Yes
Header	<u>HeaderType</u>	transmitted.	1 or more

#### PINRegistrationOriginHeaderType

Base Type: OriginHeaderType

Additional elements below:

Name	Туре	Description	Required
Originator	PINRegistrationOriginator		Yes
			1

#### OriginHeaderType

Name	Туре	Description	Required
OriginId	<u>IdType</u>	Must be unique within the transmission	Yes
		payload	1
Timestamp	xsd:dateTime	The time stamp at the time the origin was	Yes
		created	1
OriginManifest	OriginManifest		Yes
Ŭ			1

#### OriginManifest

Name	Туре	Description	Required
ItemReference	ItemReference		Yes
			1 or more
itemCount - attribute	xsd:positiveInteger	The number of items in this	Yes
		origin	

#### PINRegistrationOriginator

Name	Туре	Description	Required	
EFIN	<u>EFINType</u>		Yes	
			1	
Type	<b>OriginatorType</b>		Yes	
			1	

#### EFINType

Base Type	Pattern	Description
xsd:string	[0-9]{6}	Type for Electronic Filing Identification No 6 digits

#### OriginatorType

Base Type	Possible Values	Description
xsd:string	{ERO, OnlineFiler, ReportingAgent, IRSAgent, FinancialAgent,	The type of originator
	LargeTaxPayer}	

#### ReturnOriginHeaderType

#### Base Type: OriginHeaderType

#### Additional elements below:

Name	Туре	Description	Required
Originator	<u>ReturnOriginator</u>		Yes
ReportingAgent Signature	ReportingAgent Signature	Use only if you are approved b the IRS to sign for all the Retur referenced by this ReturnOriginHeader Manifest.	
ISPNumber	<u>SBINType</u>		No 0 or 1

#### ReturnOriginator

Note: There is a choice between AgentIdentifier and EFIN-Type below, i.e. a ReturnOriginator can either have an AgentIdentifier or a combination of EFIN and Type at once, but not all three of them together. EFIN and Type always have to exist together. Also, these are required elements which means that you cannot have an empty element of type ReturnOriginator.

Name	Туре	Description	Required
AgentIdentifier	xsd:string	Max length = 8	Yes 1
EFIN	<u>EFINType</u>		Yes 1
Туре	<u>OriginatorType</u>		Yes 1

#### ReportingAgentSignature

Name	Туре	Description	Required	
PIN	PINTypeState		Yes	
			1	

#### PINTypeState

Base Type	Description
xsd:string	Type for Reporting Agent PIN. State issued PIN - 15 alphameric maximum. No special characters
SBINType	

Base Type	Pattern	Description
xsd:string	[A-Z0-9]{6}	Type for Service Bureau Identification No 6 uppercase alphanumeric
		characters

#### ReturnData

#### Base Type - <u>ItemType</u>

Name	Туре	Description	Required
ReturnHeader	<u>ReturnHeader</u>	FSET Schema - Return header schema for a	No
State	<u>State</u>	state return	0 or 1
StateReturn	<u>StateReturn</u>	FSET Employer's Quarterly State Tax Return	Yes 1
StatePayment	StatePayment	FSET Employer's Quarterly State Tax Return. <b>Note</b> : This is a deprecated field. Please don't send!	No 0 or 1
documentCount - attribute	xsd:positive Integer	The number of return documents in the return	Yes

Name	Туре	Description	Required
ContentLocation	<u>IdType</u>	A combination element consisting of the following information: o 4 digit Business Transaction Number (BTN) o 8 digit UI Account Number (UL_ACCT#) o 8 digit date formatted as: • 4 digit year • 2 digit month • 2 digit day o 9 digit unique return identifier UL_ACCT# - An eight digit account number assigned by IWD (beginning with 00)	No 0 or 1

#### ReturnHeaderState

Base Type - <u>ReturnHeaderStateType</u>

Name	Туре	Description	Required
documentId - attribute	<u>IdType</u>	Must be unique within the return	Yes

#### ReturnHeaderStateType

Description: Content model for ReturnHeader94x

Note: There is a choice between BusinessNameControl and CheckDigit fields below, i.e. there can be only either of these fields present at once. Also, these are optional fields, hence it is possible for an element of type ReturnHeaderStateType to have neither of these fields.

#### Base Type: ReturnHeaderType

Name	Туре	Description	Required
Softwareld	<u>SoftwareIdType</u>	The Software ID - 8 digits	No 0 or 1
ReturnType	xsd:string values – { StateUI, StateWH,	StateUI, StateWithholding, StateAnnual, StateCombined, StatePayment	Yes 1
	StateAnnual, StateCombined, StatePayment}		
Form	xsd:string	ID of tax form for this filing type	No 0 or 1
FilingAction	FilingAction		Yes 1
TIN	<u>TINType</u>	Either Federal Employer Identification Number or Social Security Number	Yes 1
OtherTIN	<u>OtherTINType</u>	Other Federal Employer Identification Number or Social Security Number	No 0 or more
StateEIN	<u>StateEINType</u>	Defines a state account number type	No 0 or more
FIPSCode	xsd:string max length = 2	FIPS code of state receiving return	No 0 or 1
StateCode	<u>StateType</u>	Standard abbreviation of state receiving return	No 0 or 1
EmployerHealth-InsuranceCode	xsd:string	Employer health insurance code	No 0 or 1
BusinessNameControl	BusinessName ControlType	Used for a Name Control	No 0 or 1
CheckDigit	<u>CheckDigitType</u>	2 <u>uppercase</u> characters	No 0 or 1
BusinessAddress	BusinessAddressType		No 0 or 1
DeliveryAddress	BusinessAddressType		No 0 or 1
LocationAddress	BusinessAddressType		No 0 or 1

AckAddress	EmailAddressType	Email address where <u>acknowledgements</u> will be sent	No 0 or 1
SupplementalReturn Elect	CheckboxType		No 0 or 1
AuthorizationTo Discuss-WithPreparerElect	CheckboxType		No 0 or 1
PaymentIncluded Elect	CheckboxType		No 0 or 1
TaxTypeCode	xsd:string	FTA 5-digit Tax type codes are preferred	No 0 or 1
ТахТуре	TaxType	Tax type family	No 0 or 1
ThirdParty Authorization	ThirdParty Authorization		No 0 or 1
Contact	Contact		No 0 or 1
ReturnSigner	<u>ReturnSigner</u>		No 0 or 1
Preparer	<u>Preparer</u>		No 0 or 1
OfficerCode	xsd:string		No 0 or 1
HouseholdEmployer Elect	<u>CheckboxType</u>		No 0 or 1
AddressChangeElect	<u>CheckboxType</u>		No 0 or 1
DoingBusinessAs	BusinessAddressType		No 0 or 1

#### ReturnHeaderType

Name	Туре	Description	Required
Electronic	<u>Electronic</u>	The party whose date determines	No
Postmark	Postmark	whether the return is timely filed.	0 or 1
TaxPeriod	xsd:date		No
BeginDate			0 or 1
TaxPeriod	xsd:date		No
EndDate			0 or 1
DisasterRelief	LineExplanation		No
	Type		0 or 1
ISPNumber	SBINType		No
			0 or 1
PreparerFirm	<b>BusinessAddress</b>		No
	<u>Type</u>		0 or 1
Quarter	QuarterType	Quarter Number: 1,2,3,4	No
			0 or 1
ReturnQuarter	QuarterType	Quarter Number: 1,2,3,4	No
			0 or 1
DueDate	xsd:date		No
			0 or 1
DateReceived	xsd:date		No
			0 or 1
Taxyear	xsd:gYear	4-digit year	No
			0 or 1

#### ElectronicPostmark

Base Type - xsd:dateTime

Name	Туре	Values	Required
DateSupplier - attribute	xsd:string	{ Originator, Transmitter }	Yes
			1

#### LineExplanantionType

Base Type	Pattern	Max length	Description
xsd:string	Legal Characters: printable characters from ! to ~ plus symbols from ¡ to ¿ plus Spanish characters and single space. Illegal Character: leading space, trailing space, adjacent spaces.	100	A one-line explanation field that allows up to 100 characters.

#### BusinessAddressType

Description: Base type for all business addresses.

Name	Туре	Description	Required
BusinessName	String256Type	Enter business name	No 0 - 2
AddressLine	String256Type	Enter business street address	No 0 - 3
City	String256Type	Enter business city	No 0 or 1
StateOr Province	String256Type	Enter business state or province abbreviation	No 0 or 1
ZipCode	<u>ZIPCodeType</u>	Enter business <u>zip</u> code	No 0 or 1
PhoneNumber	<u>PhoneNumberType</u>		No 0 or 1
TIN	<u>TINType</u>	Either Federal Employer Identification Number or Social Security Number	No 0 or 1

#### ZIPCodeType

Base Type	Pattern	Description
xsd:string	[0-9]{5}(([0-9]{4}))([0-9]{7}))?	ZIP Code - 5 digits plus optional 4 or 7 digits

#### PhoneNumberType

Base Type	Pattern	Description
xsd:string	[0-9]{10}	Used for a phone no 10 digits

#### TINType

#### Description: Defines the primary TIN used

Name	Туре	Pattern/Values	Description	Required
TypeTIN	xsd:string	{FEIN, SSN}	Defines the Federal Taxpayer	Yes
			Identification Number Type	1
TINType	xsd:string	[0-9]{9}	Either Federal Employer	Yes
Value	Ŭ		Identification Number or Social	1
			Security Number	

# QuarterType

Base Type	Pattern	Description	
xsd:string	[1-4]{1}	The number of the quarter: 1,2,3,4	

#### SoftwareIdType

Base Type	Pattern	Description
xsd:string	[0-9]{8}	The Software ID - 8 digits

#### FilingAction

Name	Туре	Values	Required
Action	xsd:string	{ Original, Amended, Supplemental}	Yes 1
Reason	<u>String256Type</u>		No 0 or 1

#### OtherTINType

# Description - Defines Other TINs used

Name	Туре	Description	Required
OtherTypeTIN	xsd:string	Defines the Federal Taxpayer Identification Number Type	Yes 1
	values – { Previous TIN, Parent TIN, Other}		
OtherTINType Value	xsd:string	Either Federal Employer Identification Number or Social Security Number	Yes 1
	[0-9]{9}		

#### StateEINType

Name	Туре	Description	Required
TypeStateEIN	xsd:string	Defines the State Employer Identification Number	Yes
		Туре.	1
		Values – { WithholdingAccountNo, UIAccountNo,	
		StateControlNo, EFileAccountNo, EFTAccountNo,	
		StateRegistrationNo, StateAccountID,	
		CentralRegistrationNumber	
StateEINValue	xsd:string	Defines the State Employer Identification Number	Yes
		Note: For IWD, this is an 8 digit number. If	1
		employer account number is less than 8 digits,	
		then it should be left padded with zeroes.	
StateEIN	xsd:string	Sub-account numbers to identify multiple locations	Yes
Extension		and subsidiaries (plant identifier for reporting)	1 or more

# StateType

Description - State abbreviations, a.k.a. state codes

Type - xsd:string

Value	Name
AL	Alabama
AK	Alaska
AS	American <u>Samoa</u>
AZ	Arizona
AR	Arkansas
CA	California
CO	Colorado
CT	Connecticut
DE	Delaware
DC	District of Columbia
FM	Federated States of Micronesia
FL	Florida
GA	Georgia
GU	Guam
HI	Hawaii
ID	Idaho
IL	Illinois

IN	Indiana
IA III	lowa
KS	Kansas
KY	Kentucky
LA	Louisiana
ME	Maine
МН	Marshall Islands
MD	Maryland
MA	Massachusetts
MI	Michigan
MN	Minnesota
MS	<u>Mississippi</u>
МО	<u>Missouri</u>
MT	Montana
NE	Nebraska
NV	<u>Nevada</u>
NH	New <u>Hampshire</u>
NJ	New Jersey
NM	New Mexico
NY	New York
NC	North Carolina
ND	North <u>Dakota</u>
MP	North Mariana Islands
ОН	Ohio
ОК	Oklahoma
OR	Oregon
PW	Palau
PA	Pennsylvania
PR	Puerto Rico
RI	Rhode Island
SC	South Carolina
SD	South Dakota
TN	Tennessee
TX	Texas
UT	Utah
VT	Vermont
VI	Virgin Islands
VA	Virginia
WA	Washington
WV	West Virginia
WI	Wisconsin
WY	Wyoming
AA	Armed Forces the Americas
AA	Armed Forces Europe
AE AP	
Ar	Armed Forces Pacific

#### BusinessNameControlType

Туре	Pattern	Description
xsd:string	([A-Z0-9\-] &){1,4}	Legal Characters: A-Z, 0-9, hyphen and ampersand. Illegal
		Character: spaces and symbols.

# CheckDigitType

Туре	Pattern	Description
xsd:string	[A-Z]{2}	Used for a Check Digit field. 2 uppercase characters.

## CheckboxType

Туре	Value	Description
xsd:string	X	Typically used by an optional <u>checkbox</u>

#### Preparer

Note: There is a choice between SSN and PTIN fields below, i.e. there can be only either of these fields at once. And since these are required fields, a Preparer element has to have either of these at any given time.

Name	Туре	Description	Required
Name	PersonNameType		No
			0 or 1
SSN	SSNType		Yes
			1
PTIN	<u>PTINType</u>		Yes
			1
Phone	<b>PhoneNumberType</b>		No
			0 or 1
EmailAddress	EmailAddressType		No
			0 or 1
SelfEmployedElect	CheckboxType		No
			0 or 1

#### PersonNameType

Туре	Pattern	Max length	Description
xsd:string	([A-Za-z0-9'\-] ?)*[A-Za-z0-9'\-]	35	Typically used for a person's name. Legal Characters: A-Z, a-z, 0-9, hyphen, apostrophe and single space. Illegal Character: leading space, trailing space, adjacent spaces, and other symbols.

#### SSNType

Туре	Pattern	Description
xsd:string	[0-9]{9}	Type for Social Security No 9 digits

#### PTINType

Туре	Pattern	Description
xsd:string	P[0-9]{8}	Type for Preparer Personal Identification No P followed by 8 digits

#### EmailAddressType

Туре	Pattern	Max length	Description
xsd:string	[A-Za-z0-9_\-\.]+@(([0- 9]][1-9][0-9]][2][0-4][0-9]][2][5][0- 5])\.){3}([0-9]][1-9][0-9]][2][0-4][0- 9]][2][5][0-5])	75	IPv4 Email Address. The User ID portion of the email address allows: A-Z, a-z, 0-9, underscore, hyphen and period.

#### ReturnSigner

Name	Туре	Description	Required
Name	PersonNameType		Yes 1
Title	<u>PersonTitleType</u>		No 0 or 1
Phone	<u>PhoneNumberType</u>		No 0 or 1
EmailAddress	<u>EmailAddressType</u>		No 0 or 1
Signature	<u>SignatureType</u>		Yes 1
DateSigned	xsd:date		Yes 1

#### PersonTitleType

Туре	Pattern	Max length	Description
xsd:string	([!-~] ?)*[!-~]	35	Legal Characters: printable characters from ! to ~ plus single space. Illegal Character: leading space, trailing space, adjacent spaces.

# SignatureType

Туре	Pattern	Description
xsd:string	[0-9]{10}	Used for a PIN signature

#### Contact

Name	Туре	Description	Required	
ContactName	<u>IndividualNameType</u>		Yes 1	
Phone	<u>PhoneNumberType</u>		No 0 or 1	
Fax	<u>PhoneNumberType</u>		No 0 or 1	
EmailAddress	EmailAddressType		No 0 or 1	

#### IndividualNameType

Description - Base type for individual contact information, including employees and employers

Name	Туре	Description	Required
Prefix	String256Type	Enter individual's prefix. For example: Mr.,	No
		Mrs., Ms., <u>Dr</u> .	0 or 1
Title	String256Type	Enter individual's title, or role	No
			0 or 1
FirstName	String256Type	Enter individual's first name	No
			0 or 1
MiddleName	String256Type		No
			0 or 1
LastName	String256Type	Enter individual's last name	No
			0 or 1
Suffix	String256Type	Enter individual's suffix. For example: Sr. Jr.	No
			0 or 1
FullName	String256Type	Enter individual's prefix, first name, last	No
		name and suffix	0 or 1
StreetAddress	String256Type	Enter individual's street address	No
			0 or 1
City	String256Type	Enter individual's city	No
			0 or 1
StateOr	xsd:string	Enter individual's state or province	No
Province	max length = 2		0 or 1
ZipCode	ZIPCodeType	Enter individual's zip code	No
			0 or 1
PhoneNumber	<b>PhoneNumberType</b>		No
			0 or 1

#### String256Type

Туре	Max length
xsd:string	256

#### ThirdPartyAuthorization

Name	Туре	Description	Required
AuthorizeThirdPartyElect	<u>CheckboxType</u>		Yes 1
DesigneeName	<u>PersonNameType</u>		Yes 1
DesigneePhone	<u>PhoneNumberType</u>		Yes 1
DPIN	DPINType		Yes 1

# DPINType

Туре	Pattern	Description
xsd:string	[A-Za-z0-9]{5}	Type for Third Party Designee Personal Identification No 5
		alphanumeric characters

#### ТахТуре

Туре	Values	Description
xsd:string	{ Employment, Sales, Corporate}	Tax type family

#### StateReturn

Name	Туре	Description	Required
StateUI	<u>StateUI</u>	State UI excluding supporting info	Yes
			1

#### StateUI

#### Base Type - StateUIType

Name	Туре	Description	Required
documentId - attribute	<u>IdType</u>	Must be unique within the return	Yes
documentType - attribute	xsd:string	IRS internal use only. To avoid error in the return, do not include the attribute name or	Yes
	Fixed value = Form	value.	
documentName - attribute	xsd:string	To avoid error in the return, do not include the attribute name or value.	Yes
	Fixed value = FSET StateUI		

#### StateUIType

Name	Туре	Description	Required
ReturnHeader	ReturnHeader	Optional Return Header	No
	<u>StateType</u>		0 or 1
FinalReturnElect	CheckboxType	Indicates this is a final return	No
			0 or 1
AmendedReturn	AmendedReturn	Indicates this is an amended return	No
Elect	<u>Elect</u>		0 or 1
DateFinalWages	xsd:date	Date final wages paid	No
Paid			0 or 1
SeasonalEmploye	CheckboxType	Indicates a seasonal employer	No
rElect			0 or 1
Reimbursablel	CheckboxType	Indicates a reimbursable employer	No
EmployerElect			0 or 1
WagePlan	xsd:string	Name of employer wage plan	No
-			0 or 1

	length = 1		
NoPayrollElect	<u>CheckboxType</u>	Indicates no payroll this filing period	No 0 or 1
UITotalWages	DecimalNNType total digits	State quarterly unemployment insurance total wages	Yes 1
ExcessWages	= 15 <u>DecimalNNType</u> total digits = 15	Quarterly wages in excess of the state U.I. taxable wage base	No 0 or 1
UITaxableWages	DecimalNNType total digits = 15	State quarterly unemployment insurance total taxable wages	Yes 1
ContributionRate	Decimal3Type	The employer U.I. tax rate for this reporting period. Decimal point followed by 3 digits, e.g., 2.8% = .028	Yes 1
ContributionDue	DecimalNNType	U.I. taxes due. Quarterly state U.I. taxable wages times U.I. tax rate	Yes 1
	total digits = 10		
SurchargeRate	Decimal3Type	The employer U.I. tax <u>surcharge</u> rate for this reporting period. Decimal point followed by 3 digits, e.g., 2.8% = .028	No 0 or 1
SurchargeDue	<u>DecimalNNType</u> total digits = 10	U.I. tax <u>surcharge</u> due. Quarterly state U.I. taxable wages times U.I. tax <u>surcharge</u>	No 0 or 1
DIContribution Rate	<u>Decimal3Type</u>	Disability Insurance contribution rate	No 0 or 1
DIContributionDue	DecimalNNType total digits = 10	Disability Insurance contribution	No 0 or 1
VoluntaryDl ContributionDue	DecimalNNType total digits	Voluntary Disability Insurance contribution	No 0 or 1
TrainingFund Contribution	= 10 <u>DecimalNNType</u> total digits = 10	Training Fund contribution	No 0 or 1
TotalContingency AssessmentDue	DecimalNNType total digits		No 0 or 1
UIAmountPaid	= 10 <u>DecimalNNType</u> total digits = 15	UI Amount Paid	Yes 1
UIAmountDue PreviousPeriod	total digits = 15 <u>DecimalNNType</u> total digits = 15	UI Tax from previous quarter(s)	No 0 or 1
UlCredit PreviousPeriod	<u>DecimalNNType</u> total digits = 15	Credit from previous quarter(s)	No 0 or 1
UlInterest	DecimalNNType total digits	Interest	No 0 or 1
InterestPaid	= 14 <u>DecimalNNType</u> total digits	Interest paid	No 0 or 1
UIPenalty	= 14 <u>DecimalNNType</u>	Penalty	No 0 or 1
	total digits		

	= 14		
PenaltyPaid	<u>DecimalNNType</u> total digits = 14	Penalty paid	No 0 or 1
UITotalDue	DecimalNNType total digits = 15	Total Payment Due	Yes 1
CreditWeeks	DecimalNNType total digits = 15	Credit weeks. State defined.	No 0 or 1
PayRoll	<u>PayRollType</u>		No 0 or 1
NumberOfEmployees	xsd:non NegativeInteger total digits = 7	Number of <u>Employess</u> Worked this Quarter	No 0 or 1
Month1Employees	xsd:non NegativeInteger total digits = 7	Total number of employees covered by U.I. who worked or received pay for the pay period including the 12th day of the 1st month of the reporting period.	No 0 or 1
Month2Employees	xsd:non NegativeInteger total digits = 7	Total number of employees covered by U.I. who worked or received pay for the pay period including the 12th day of the 2nd month of the reporting period.	No 0 or 1
Month3Employees	xsd:non NegativeInteger total digits = 7	Total number of employees covered by U.I. who worked or received pay for the pay period including the 12th day of the 3rd month of the reporting period.	No 0 or 1
Payment	StatePaymentType	This is a deprecated field. Please don't send!	No 0 or 1

#### AmendedReturnElect

Base Type - CheckboxType

Name	Туре	Fixed Value	Required
documentReference - attribute	xsd:string	Amended Return Explanation	Yes

#### DecimalNNType

Туре	Fraction digits	Min. value	Description
xsd:decimal	2	0.00	2-digit decimal typically used by a non-negative
			decimal amount field

## Decimal3Type

Туре	Total digits	Fraction digits	Description
xsd:decimal	6	3	Base type for decimal 3

## PayRollType

Description - Base type for payroll listing

Name	Туре	Description	Required

Employee	<u>EmployeeType</u>		Yes 1 or more
EmployeeName Format	xsd:string	Employee name format. For example: full name	No 0 or 1

## EmployeeType

Description - Base type to record employee specific tax filing information

Name	Туре	Description	Required
SSN	<u>SSNType</u>	Enter employee social security number, no	Yes
	<u>Optional</u>	spaces or dashes. Or leave field as empty.	1
Employee	Individual	Contact information for the employee	Yes
	<u>NameType</u>		1
TotalWages	Decimal10Type	Enter total employee wages, tips and	No
		other compensation	0 or 1
TaxableWages	Decimal10Type	Total employee wages, tips and other	No
		compensation subject to tax	0 or 1
TaxWithheld	Decimal10Type	Employee taxes withheld	No
			0 or 1
Employee	Decimal10Type	Employee UI contribution	No
Contribution			0 or 1
TypeOf	xsd:string	Enter type of employment. For Example	No
Employment		full time, part time, seasonal.	0 or 1
TaxState	xsd:string	Enter state where tax is incurred	No
			0 or 1
OutOfState	<u>OutOfState</u>	Breakdown of wage information for	No
Wages	Wages	secondary state(s)	0 - 50

#### SSNTypeOptional

Туре	Pattern	Description
xsd:string	[0-9]{9}	Type for Social Security No 9 digits or it can be empty. No spaces allowed.
	Min length = $1$	

## Decimal10Type

Base Type	Total digits	Description
<u>DecimalType</u>	10	Base type for decimal 10

#### DecimalType

Туре	Fraction Digits	Description
xsd:decimal	2	2-digit decimal typically used by a decimal amount field

#### OutOfStateWages

Name	Туре	Description	Required
TotalWages	Decimal10Type	Enter Total employee wages, tips and	Yes
		other compensation	1
TaxableWages	Decimal10Type	Enter Taxable employee wages, tips	Yes
		and other compensation subject to tax	1
TaxState	xsd:string	Enter state where wages incurred	Yes
			1