South Carolina Automobile Liability Insurance Reporting (SC ALIR) System

SC Online Insurance Verification (OLV) Guide

Version 1.1

April 1, 2010

1.   Introduction

The South Carolina (SC) Department of Motor Vehicles (DMV) has implemented the South Carolina Automobile Liability Insurance Reporting (SC ALIR) System that collects automobile liability insurance information from insurers that are licensed to provide automobile liability insurance in the state. The DMV cross-references the collected information to South Carolina driver and vehicle data to identify registered vehicles that do not meet the minimum automotive liability insurance requirements of the state.

The DMV is supplementing the file reporting process with an **Online Insurance Verification (OLV) program**. Online Insurance Verification allows the DMV to use Web Services hosted by insurance companies to verify insurance. The SC OLV tool is based upon the model developed by the Insurance Industry Committee on Motor Vehicle Administration (IICMVA).

The purpose of this guide is to provide technical information that insurance companies will need to host Web Services compatible with SC OLV. This Guide assumes that insurance companies are knowledgeable about Web Services technology and the IICMVA Online Insurance Verification model. Details of the IICMVA model are available at http://www.iicmva.com/IICMVAPublications.html. If insurance companies need further information regarding the SC OLV program, they should send an email to sc-alir-help@scdmv.net.

2.   Web Services Requirements

This section describes the basic requirements of Web Services hosted by participating insurance companies.

- Each insurance company will be responsible for maintaining a Web service for online insurance verification
    - This Web service will provide a Standard External interface.
    - This Web service will use SOAP 1.1 message structure.
    - The Web Service will use one of the following insurance industry approved XML schemas
        - ANSI ASC X12 Insurance Committee's XML Schema for On-line Insurance Verification.
        - ACORD XML for P&C/Surety.
    - The Insurance Company's Web Service must comply with one of the WSDLs published by IICMVA. The WSDLs are available at http://www.iicmva.com/IICMVAPublications.html.

- The Web Services will be able to verify coverage for vehicles registered in South Carolina
    - Insurance companies should have their complete South Carolina policy data available through Web Services
    - Insurance companies are encouraged to provide national data. However this is not a requirement.

- The Web service must be secure.

- o The message will be encrypted using Secured Service Layer (SSL).
- o Insurance companies will use SSL3.0 to authenticate requesting party
- o SC DMV will maintain two Class 3 X.509 certificates – one for the Test environment and another for the Production environment. The Web Service will authenticate SC DMV using these certificates.

3.   Data Elements

3.1   Request for Verification

The following data elements are always included in the Verification Request sent to the insurance company Web Service by the SC OLV client.

Element Name	Data Type	Description
Policy Key	String	Insurance Policy Number
VIN	String	Vehicle Identification Number
NAIC	String	National Association of Insurance Commissioners (NAIC) code
Requested Date	Date	Date for which coverage should be verified
Tracking Number	String	SC DMV Tracking Number
Organization Name	String	Value will be "SCDMV"

Other data elements such as Vehicle Make, Model, and Year may be included in the Verification Request. However, the insurance company can ignore these data elements.

3.2   Verification Response

The following data elements must be returned in the Verification Response.

Element Name	Data Type	Description
Response Code	String	Value of "Confirmed" or "Unconfirmed"
NAIC	String	National Association of Insurance Commissioners (NAIC) code
Verification Date	Date	Date for which coverage was verified
Policy State	String	The State where the coverage is provided
Unique Key	String	Insurance Policy Number

In addition to the above elements, it is highly recommended that insurance companies return the **Unconfirmed Reason Code**. Although this is not currently required by the standards, it will help the DMV determine the reason for an Unconfirmed response, especially when the Insurance Company Web Service is unavailable.

The following is the current set of valid values for the Unconfirmed Reason Codes. This list may be modified based on future updates to ANSI/ACORD standards.

Original Unconfirmed Reason Codes from ANSI Schema

Unconfirmed Reason Code	Meaning
1	Incorrect Data Format

Unconfirmed Reason Code	Meaning
2	Missing Unique Key
3	Missing NAIC code
4	Missing VIN
5	Missing Verification Date
6	Unauthorized Requestor
7	System Cannot Locate Unique Key (Policy) Information
8	System Found Unique Key (Policy) - No Coverage on Date Requested
9	System Found Unique Key (Policy) - VIN Cannot Be Verified
10	System Found VIN - Unique Key (Policy) Cannot Be Verified
12	System Unavailable

Newer Unconfirmed Reason Codes from ANSI Schema 00200706 and later

Unconfirmed Reason Code	Meaning
IDF	Incorrect Data Format
SYSU	System Unavailable
UREQ	Unauthorized Requestor
NAIC1	NAIC Code Not Submitted
NAIC2	System Cannot Locate NAIC
PKEY1	Policy Key Not Submitted
PKEY2	System Cannot Locate Policy Key Information
PKEY3	System Found Policy Key - Coverage on Verification Date Cannot Be Confirmed
PKEY4	System Found Policy Key - VIN Cannot Be Verified
POL1	System Cannot Locate Policy Information - Manual Search in Progress
VDT1	Coverage on Verification Date Cannot Be Confirmed
VDT2	Verification Date Not Submitted
VIN1	System Cannot Locate VIN
VIN2	System Found VIN - Coverage on Verification Date Cannot Be Confirmed
VIN3	System Found VIN - Policy Key Cannot Be Verified
VIN4	VIN Not Submitted

4.   Testing and Approval Process

The following steps will be used to test and add Insurance Company to the SC OLV program.

o   Insurance Companies will send an email to the SC ALIR Help Desk (sc-alir-help@scdmv.net) initiating the testing process. The email should include the following information:
- NAIC Number(s) and Insurance Company name(s)
- Contact Name and Phone Number
- URLs of the Test and Production Web Services
- Location of the WSDL file (or specify theIICMVA published . WSDL that the Web Service will comply with)
- Specification whether Unconfirmed Reason Codes will be returned.
- Specification whether VIN only verification will be done by returning Unconfirmed Reason Code 10 or VIN3.

- o Once the SC DMV receives the above email, it will arrange a teleconference to exchange any other relevant information. After the teleconference, SC DMV will send the following to the insurance company.
    - The test SC OLV SSL certificate
    - The IP address of the test OLV client.

- o Once the insurance company has added the test SC OLV SSL certificate to its server and made any necessary changes to its network to allow SC OLV client to access the Web Service, the testing process will begin. The testing will be done in the following phases.
    - Connectivity testing via Ping to make sure that SC OLV client can access the Web Service
    - Basic format testing to make sure that SC OLV client receives at least an Unconfirmed Response.
    - Response Code value testing to make sure that the correct response values are being received by SC OLV client. The insurance company will have to send a set of test cases for this phase of testing. We recommend having at least 5 Confirmed responses and at least one test case for each Unconfirmed Reason Code.
    - Volume and Response Time Testing. This phase will evaluate the response times of the insurance company web services.

- o Once the above tests are successful, the SC DMV will send the Production SC OLV IP address and SSL certificate to the insurance company. After the company has added these to their production system, a simple verification test will be performed. Once this test is successful, the insurance company will be moved to Production for SC OLV.

Glossary

Open Standards

- *Extensible Markup Language (XML)* is a flexible way to describe data and the format of that data over the Internet. XML allows systems designers to create their own customized tags, enabling the definition, transmission, validation, and interpretation of data between applications and organizations. For online insurance verification, the data exchanged in the coverage confirmation request and response would be "tagged" in XML. Sometimes developers refer to this data as the *"XML payload message."*

    XML schemas for online insurance verification have been independently developed by the *American National Standards Institute (ANSI)* and the *Association for Cooperative Operations Research and Development (ACORD).*

- *Simple Object Access Protocol (SOAP)* is used to transfer XML payload messages or data. SOAP allows programs running in the same or different operating systems to communicate with each other using a variety of Internet protocols such as Simple Mail Transfer Protocol (SMTP), Multipurpose Internet Mail Extensions (MIME) and *Hypertext Transfer Protocol (HTTP).* SOAP messages are independent of any operating system or protocol. This guide will focus on HTTP.

    Specifically, SOAP is a lightweight XML-based messaging protocol used to encode the information in Web service request and response messages before sending them over a network. Simply put, SOAP serves as the envelope that wraps around the XML payload message, and it glues together different computing systems so companies can interact with each other. Some refer to it as the SOAP *"wrapper."*

Web Services Description Language (WSDL) is an XML-based language used to describe a Web service's capabilities as collections of communication endpoints capable of exchanging messages.

In other words, WSDL describes the business services offered by an application service provider and the way other businesses can electronically access those services.

- ***Universal Description, Discovery, and Integration (UDDI)*** is an XML-based, distributed directory that enables businesses to list themselves on the Internet and discover each other, similar to a traditional phone book's yellow and white pages. WSDL is the means used to identify services in the UDDI registry. UDDI is used for listing what services are available.

- ***The World Wide Web Consortium (W3C)*** is an international consortium of companies involved with the Internet to develop open standards so that the Web evolves in a single direction rather than being splintered among competing factions.

Internet

- ***Transmission Control Protocol/Internet Protocol (TCP/IP)*** is the basic two-layer suite of communication protocols, ***or rules***, used to connect hosts on the Internet.

The TCP layer breaks down a message file into smaller units of data called a ***packet*** and transmits that packet over the Internet to another TCP layer. The receiving TCP layer reorganizes the data into the original message file.

The IP layer serves a postal function as it ensures the packet reaches the correct address or destination on the Internet. This destination is sometimes referred to as the ***IP address***.

- ***Hypertext Transfer Protocol (HTTP)*** is the set of rules that define how messages are formatted and transmitted over the Internet. HTTP defines what actions should be taken by Web servers and browsers in response to various commands. HTTP runs on top of the TCP/IP suite of protocols.

Security

- ***Secured Sockets Layer/Transport Level Security (SSL/TLS***) uses certificates to authenticate the identity of the endpoints, or ***"sockets,"*** of a trusted session or message transmission (i.e.; ***transport level authentication***). TLS is derived from SSL and has succeeded SSL as the protocol for managing the security of a message over the Internet.

SSL and TLS are integrated into most Web browsers and servers, but they are not interoperable. However, a message sent with TLS can be handled by a Web browser or server that uses SSL, but not TLS.
SSL/TLS runs between the HTTP and TCP/IP layers.

South Carolina

SC ALIR stands for South Carolina Automobile Liability Insurance Reporting System. It is the system used to identify uninsured vehicles and take appropriate suspension action in the state of South Carolina.

SC OLV stands for the South Carolina Online Insurance Verification program. This is the part of the SC ALIR system that uses Web Services hosted by insurance companies to verify automobile insurance coverage.