TRAFFIC VIOLATOR COURSE COMPLETION (TVCC) SERVICE CLIENT INTEGRATION GUIDE

Version 0.8

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REVISION HISTORY

Name	Date	Reason For Changes	Version
Aravindan Ramanujam	09/16/2011	Initial Draft	0.1
Aravindan Ramanujam	10/14/2011	1. Modified the response to the Add Course Completion Operation 2. Added the following operations • Get New Course Completions	0.2
Aravindan Ramanujam	12/5/2011	Modified the following based on the review of the document • Added County Code list in the Appendix 5.1 • In section 3.1.2, changed the userId description from TVS to court • Added Data Format column to the response element description table in sections 3.1.1 & 3.1.2 • Added a note to section 2.1.2 to specify that all the records that are returned would be marked as viewed	0.3
Aravindan Ramanujam	02/16/2012	Modified the following based on the changes that were made to the application • Updated the description for the following fields in section 3.1.1 o dateOfBirth o ccDate o modality o courtCd • Updated the length for the following fields in section 3.1.1 o refNbr from 25 to 20 o classCity from 25 to 28 • Updated the Error messages section 4 • Updated the SOAP Examples in the sections 3.1.1, 3.2.2 & 3.2.3	0.4
Aravindan Ramanujam	3/6/2012	Updated the ccSeqNbr field length from 5 to 10 digits Updated Http to Https Updated the return parameters for the add course completion.	0.5
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1 INTRODUCTION TO TVCC SERVICE

1.1 What Is TVCC Service?

TVCC service is a web service developed and hosted by DMV to manage the Traffic Violator Course Completions. Using this service the Traffic Violator Schools (TVSs) can add course completions. These course completions will be available to the corresponding courts a day after the completions are submitted. In order for a TVS to view the course completions added using the web service, they need to login to the TVCC Web application. The courts also have to login to the TVCC web application to view all the course completions sent to that court.

In order to access the web service, appropriate DMV security procedures must be followed. (**This is not covered in this document**)

1.2 TVCC Service Benefits

Some of the benefits available to you when using TVCC Service include:

- Reduces the work load of manually keying in each course completion.
- Minimizes the time taken to transmit the course completions.
- Eliminates manual typo errors by accessing the web service.

1.3 What Is In This Guide?

This guide contains details of TVCC Service operations available to use and how to use the TVCC Service WSDL document. The WSDL document is provided for integrators who want to communicate/interact with TVCC Service. At this time, this guide **does not** have the information about securing this web service. This document will be updated in the future as and when a decision is made by DMV on how to secure this web service.

1.4 Who Should Use This Guide?

This guide was written for application designers and developers of the Traffic Violator Schools who submit the course completion details to DMV on a day to day basis.

2 USING TVCC SERVICE

This section gives an overview of different TVCC service operations that can be used for adding course completion details.

2.1 About The TVCC Service Operations

Following are the TVCC Service operations.

- **Add Course Completion**
- **Get New Course Completions**

2.1.1 Add Course Completion

This operation has been designed to add a course completion of a traffic violator. The TVS can access the web service to add an individual course completion of a traffic violator. As a result, the TVCC Service sends back the sequence number and the course completion added timestamp.

If there are any validation errors, the TVCC service sends back a fault message with the error information.

If the course completion is not added due to an unexpected TVCC service error, a fault message with the error information is sent back as a response.

In order to submit multiple course completions, this operation can be accessed repeatedly in a loop.

2.1.2 Get New Course Completions

This operation has been designed to get the list of all new course completions when a court user or a court administrator requests for the new course completions available for that court. To access this operation the court user or the court administrator has to supply a valid user name and password. The TVCC service searches the database to find if there are any new completions available for that court. If there are any, it will send back the list of course completions to the caller. The TVCC Service also marks all the returned course completions as viewed.

If the TVCC service encounters an unexpected service error, a fault message with the error information is sent back as a response.

3 WSDL

This section describes the WSDL document (TvccServiceImplService.wsdl) that is provided with this version of TVCC Service.

The WSDL document is provided for integrators who want to communicate with the TVCC Service operations.

Knowledge of the following technologies is assumed:

- XML
- XML Schema
- SOAP
- WSDL
- HTTPS

3.1 SOAP Operations

3.1.1 Add Course Completion

SOAP Operation: addCourseCompletion

This operation shall be performed to add a course completion record.

Input SOAP XML Document: CourseCompletionAddRequest

The **addCourseCompletion** SOAP operation takes a **CourseCompletionAddRequest** document as input. This has the following properties.

Element	Description
lastName	Violator's Last Name • Required • Last Name and First Name together cannot exceed 125 characters
firstName	Violator's First Name • Optional • Last Name and First Name together cannot exceed 125 characters
dateOfBirth	Violator's Date of Birth • Required if Driver License Number is not present. • Must be a Date Time object. • Format: ccyy-mm-dd • Cannot be a future date.
dlNbr	Violator's Driver License Number • Required if Date of Birth is not present. • Must be 8 characters long and in the following format: 1st character Alpha followed by 7 Numeric digits
refNbr	Reference Number • Required • Maximum of 20 characters Alpha Numeric • Can be one of Citation / Docket / Ticket number

ccDate	Course Completion Date • Required • Must be a Date Time object. • Format: ccyy-mm-dd • Cannot be a future date.
modality	Modality • Required • Must have one of the following: “1C” for Classroom “3T” for Home Study “4T’ for Internet • The TVS must be licensed for the modality for which they are adding the course completion
classCity	Classroom City • Required if Modality is Classroom • Maximum of 28 characters • Alpha only
classCntyCd	Classroom County Code • Required if Modality is Classroom • Must be 2 digit numeric code for the county Refer to Appendix for a list of counties and corresponding county codes.
instructorName	Instructor Name • Required if Modality is Classroom • Maximum of 125 characters • Alpha only
instructorLicNbr	Instructor License Number • Required if Modality is Classroom • Must be 8 characters • Alphanumeric only
courtCd	Court Code • Required • Must be 5 digits Numeric • Refer to Help Manual for valid court codes
userID	User Id • This is the user id which would be created by a DMV administrator or a TVS administrator
password	Password • Password associated with the user id

Output SOAP XML Document: CourseCompletionAddResponse

The **addCourseCompletion** SOAP operation returns a **CourseCompletionAddResponse** document which contains the add course completion response.

Element	Description	Data Format
ccSeqNbr	Unique number to identify each Course Completion	Up to a 10 digit Numeric
ccStatCd	Course Completion status	“ACTIVE” would be the value in this field for submission of a course completion
ccSubTstamp	Course Completion added time stamp	ccyy-mm-dd hh:mm:ss example: 2012-06-07T08:56:43.201-07:00

SOAP Example

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ser="http://service.application.tvcc.dmv.ca.gov/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:addCourseCompletion>
      <arg0>
        <ccDate>2011-09-20</ccDate>
        <classCity>Folsom</classCity>
        <classCntyCd>34</classCntyCd>
        <courtCd>43648</courtCd>
        <dateOfBirth>1972-02-10</dateOfBirth>
        <dlNbr>A3249368</dlNbr>
        <firstName>Bill</firstName>
        <instructorLicNbr>R3428190</instructorLicNbr>
        <instructorName>Phil Evans</instructorName>
        <lastName>Norton</lastName>
        <modality>1C</modality>
        <refNbr>DJO8932</refNbr>
        <userDto>
          <password>********</password>
          <userId>someone@anytvs.com</userId>
        </userDto>
      </arg0>
    </ser:addCourseCompletion>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns2:addCourseCompletionResponse
xmlns:ns2="http://service.application.tvcc.dmv.ca.gov/"
xmlns:ns3="http://application.tvcc.dmv.ca.gov/">
      <return>
        <ccSeqNbr>2301</ccSeqNbr>
        <ccStatCd>Active</ccStatCd>
        <ccSubTstamp>2012-03-19T11:15:18.742-07:00</ccSubTstamp>
      </return>
    </ns2:addCourseCompletionResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

3.1.2 Get New Course Completion

SOAP Operation: getNewCourseCompletion

This operation shall be performed to get all new course completions for a court. The TVCC Service also marks all the returned course completions as viewed.

Input SOAP XML Document: GetNewCourseCompletionRecordsRequest

The **getNewCourseCompletion** SOAP operation takes a **GetNewCourseCompletionRecordsRequest** document as input. This has the following properties.

Element	Description
userID	User Id • This is the user id which would be created by a DMV administrator or a Court administrator
password	Password • Password associated with the user id

Output SOAP XML Document: GetNewCourseCompletionRecordsResponse

The **getNewCourseCompletion** SOAP operation returns a **GetNewCourseCompletionRecordsResponse** document which contains the get new course completion records response.

Element	Description	Data Format
ccDate	Course Completion Date	ccyy-mm-dd
ccSeqNbr	Course Completion Sequence Number	10 digit Numeric
ccStatCd	Course Completion Status Code	“VIW” would the value in this field always
ccSubTstamp	Course Completion Submission Timestamp	ccyy-mm-dd hh:mm:ss example: 2012-01-05 14:49:20
ccSubUserId	Course Completion Submitted User Id	Maximum of 256 characters alphanumeric
courtCd	Court Code	5 digit Numeric
courtRejAdminId	Court Rejected Administrator Id	Maximum of 256 characters alphanumeric
courtRejTstamp	Court Rejected Timestamp	ccyy-mm-dd hh:mm:ss example: 2012-01-05 14:49:20
courtViewedTstamp	Court Viewed Timestamp	ccyy-mm-dd hh:mm:ss example: 2012-01-05 14:49:20
courtViewedUserId	Court Viewed User Id	Maximum of 256 characters alphanumeric
dateOfBirth	Date of Birth	ccyy-mm-dd
dlNbr	Driver License Number	8 characters alphanumeric
firstName	First Name	Last Name and First Name together will be max of 125 characters
lastName	Last Name	Last Name and First Name together will be max of 125 characters
refNbr	Reference Number	Maximum of 25 characters alphanumeric
rejComments	Rejected Comments	Maximum of 100 characters alphanumeric
tvsLicNum	TVS License Number	5 characters alphanumeric

tvsName	TVS Name	Maximum of 256 characters alphanumeric
tvsViewedTstamp	TVS Viewed Timestamp	ccyy-mm-dd hh:mm:ss example: 2012-01-05 14:49:20
tvsViewedUserId	TVS Viewed User Id	Maximum of 256 characters alphanumeric

SOAP Example

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ser="http://service.application.tvcc.dmv.ca.gov/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:getNewCourseCompletion>
      <arg0>
        <userDto>
          <password>********</password>
          <userId>anyone@somecourt.com</userId>
        </userDto>
      </arg0>
    </ser:getNewCourseCompletion>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns2:getNewCourseCompletionResponse
xmlns:ns2="http://service.application.tvcc.dmv.ca.gov/"
xmlns:ns3="http://application.tvcc.dmv.ca.gov/">
      <return>
        <courseCompletions>
          <ccDate>2012-05-01T00:00:00-07:00</ccDate>
          <ccSeqNbr>1234</ccSeqNbr>
          <ccStatCd>VIW</ccStatCd>
          <ccSubTstamp>2012-06-06T00:00:00-07:00</ccSubTstamp>
          <ccSubUserId>someone@anytvs.com</ccSubUserId>
          <courtCd>11111</courtCd>
          <courtRejAdminId/>
          <courtRejTstamp/>
          <courtViewedTstamp>2012-06-07T09:23:33-07:00</courtViewedTstamp>
          <courtViewedUserId>anyone@somecourt.com</courtViewedUserId>
          <dateOfBirth>1111-11-11T00:00:00-08:00</dateOfBirth>

          <dlNbr>D1234567</dlNbr>
          <firstName>Joe</firstName>
          <lastName>Public</lastName>
          <refNbr>AS34532</refNbr>
          <rejComments/>
          <tvsLicNum>E1234</tvsLicNum>
          <tvsName>Perfect Driving School</tvsName>
```

```
            <tvsViewedTstamp>1111-01-01T00:01:01-08:00</tvsViewedTstamp>

            <tvsViewedUserId/>
          </courseCompletions>

        </return>
      </ns2:getNewCourseCompletionResponse>
    </soapenv:Body>
</soapenv:Envelope>
```

3.2 SOAP Faults

3.2.1 Access Denied SOAP Fault

Access Denied SOAP Fault structure is passed back if the user is not authorized to access the TVCC web service.

For example, if the request is coming from an user belonging to a TVS with an invalid license or a court which is inactive, to access the TVCC web service, this fault information would be returned.

SOAP Fault XML Document: TvccAccessDeniedException

TVCC Service SOAP operations return **TvccAccessDeniedException** SOAP fault XML document in the event of access denied. This has the following properties.

Element	Description
messageId	Message identifier that represents the error that was encountered.
message	Text description of the error that was encountered.

See section 4 - "Error Messages" contains a list of error message identifiers and their descriptions.

SOAP Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <soapenv:Fault>
      <faultcode>soapenv:Server</faultcode>
      <faultstring>TVCC Access Denied.</faultstring>
      <detail>
        <ns3:TvccAccessDeniedException
xmlns:ns2="http://service.application.tvcc.dmv.ca.gov/"
xmlns:ns3="http://application.tvcc.dmv.ca.gov/">
          <message>TVCC Access Denied.</message>
          <messageId>1000090</messageId>
        </ns3:TvccAccessDeniedException>
      </detail>
    </soapenv:Fault>
  </soapenv:Body>
</soapenv:Envelope>
```

3.2.2 Service Failed SOAP Fault

Service Failed SOAP Fault structure is passed back if system error occurs on the server during a transaction.

For example, if TVCC Service is unable to process the request due to unavailability of resources this fault information would be returned.

SOAP Fault XML Document: TvccServiceException

TVCC Service SOAP operations return **TvccServiceException** SOAP fault XML document in the event of system error. This has the following properties.

Element	Description
messageId	Message identifier that represents the error that was encountered.
message	Text description of the error that was encountered.

See section 4 - "Error Messages" contains a list of error message identifiers and their descriptions.

SOAP Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <soapenv:Fault>
      <faultcode>soapenv:Server</faultcode>
      <faultstring>TVCC Service Failed</faultstring>
      <detail>
        <ns2:return xmlns:ns2="http://service.application.tvcc.dmv.ca.gov/">
          <message>TVCC Service Failed</message>
          <messageId>1000100</messageId>
        </ns2:return>
      </detail>
    </soapenv:Fault>
  </soapenv:Body>
</soapenv:Envelope>
```

3.2.3 Validation Failed SOAP Fault

Validation Failed SOAP Fault structure is passed back if system encounters a validation error on the server during transaction processing.

For example, if DL Number in the TVCC Service add course completion operation request contains special characters.

SOAP Fault XML Document: TvccValidationFailedException

TVCC Service SOAP operations return **TvccValidationFailedException** SOAP fault XML document in the event of validation error. This has the following properties.

Element	Description
messageId	Message identifier that represents the error that was encountered.
Message	Text description of the error that was encountered.

See section 4 - "Error Messages" contains a list of error message identifiers and their descriptions.

SOAP Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <soapenv:Fault>
      <faultcode>soapenv:Server</faultcode>
      <faultstring>Invalid DL Number format. See Help Manual</faultstring>
      <detail>
        <ns2:return xmlns:ns2="http://service.application.tvcc.dmv.ca.gov/">
          <message>Invalid DL Number format. See Help Manual</message>
          <messageId>1000027</messageId>
        </ns2:return>
      </detail>
    </soapenv:Fault>
  </soapenv:Body>
</soapenv:Envelope>
```

4 ERROR MESSAGES

This section provides a list of TVCC error messages and its identifiers. The below list of error messages is not final. This will be updated in the future.

Error Message Identifier	Error Message
1000005	Not an active Court Code, please contact 916-657-7732.
1000006	This TVS license number is not active; please contact 916-229-3126.
1000009	User not authorized for this operation
1000010	Entity Status invalid
1000011	Modality required. See Help Manual.
1000012	City Name required. See Help Manual.
1000013	County Code required. See Help Manual.
1000014	Instructor Name required. See Help Manual.
1000015	Last Name required. See Help Manual.
1000016	Last Name & First Name together cannot exceed 125 characters. See Help Manual.
1000017	DL Number OR Date of Birth required. See Help Manual.
1000018	Reference Number required. See Help Manual.
1000019	Course Completion Date required. See Help Manual.
1000020	Court Code required. See Help Manual.
1000021	Not a valid Classroom City Name Format. See Help manual.
1000022	Not a valid Classroom County Code Format. See Help manual.
1000023	Not a valid Instructor Name Format. See Help manual.
1000024	Not a valid Instructor License Number Format. See Help manual.
1000025	Not a valid Last Name Format. See Help manual.
1000026	Not a valid First Name Format. See Help manual.
1000027	Not a valid DL/ID Number Format. See Help manual.
1000028	Not a valid Date of Birth Format. See Help manual.
1000029	Not a valid Reference Number format. See Help manual.
1000030	Not a valid Course Completion Date Format. See Help manual.
1000031	Not a valid Court Code Format. See Help manual.
1000032	Invalid Modality. Cannot add course completions. See help manual
1000033	Invalid Modality type. For valid modalities see help manual.
1000051	DL Number OR Reference Number required. See Help Manual.
1000999	Not a valid format. See Help Manual.
1000090	TVCC Access Denied.

1000100	TVCC Service Failed.

5 APPENDIX

5.1 County List & Corresponding Codes

01	Alameda
02	Alpine
03	Amador
04	Butte
05	Calaveras
06	Colusa
07	Contra Costa
08	Del Norte
09	El Dorado
10	Fresno
11	Glenn
12	Humboldt
13	Imperial
14	Inyo
15	Kern
16	Kings
17	Lake
18	Lassen
19	Los Angeles
20	Madera
21	Marin
22	Mariposa
23	Mendocino
24	Merced
25	Modoc
26	Mono
27	Monterey
28	Napa
29	Nevada
30	Orange
31	Placer
32	Plumas
33	Riverside
34	Sacramento
35	San Benito
36	San Bernardino
37	San Diego
38	San Francisco
39	San Joaquin
40	San Luis Obispo
41	San Mateo
42	Santa Barbara

43	Santa Clara
44	Santa Cruz
45	Shasta
46	Sierra
47	Siskiyou
48	Solano
49	Sonoma
50	Stanislaus
51	Sutter
52	Tehama
53	Trinity
54	Tulare
55	Tuolumne
56	Ventura
57	Yolo
58	Yuba