

IUCS LEADER Interface Guide

Web Services to Send Forms to LEADER

Developer Guide & Reference

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Revision History

Version	Date	By	Description
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1 Introduction

The Illinois Uniform Configuration Service (IUCS) is a state-wide data management and configuration service that provides standardized list management and configuration options for any application that could benefit from communication with the Illinois Circuit Clerks court management systems, or state reporting agencies such as the Secretary of State.

The LEADER application is offered through the IUCS platform to allow law enforcement agencies to submit citations and other court-filed documents to the Circuit Clerks, as well as providing a pass-through service to deposit other forms into the Statewide Data Repository.

All forms documented here that submitted through LEADER will be added to the Statewide Citation Repository.

This document should be used along with a data matrix that defines what the data elements are, and their attributes.

These web service interfaces have been designed to be as generic as possible. Individual circuit clerk case management systems will have specific requirements for electronically transmitting citations to their jurisdictions.

2 Web Service Connection Details

The following sections provide the information necessary for a Web Service client to call the IUCS LEADER Web Services to send information.

2.1 Authentication

Each application that calls the web services will receive a unique set of authentication credentials. IUCS will verify the credentials, and reject the call if they are invalid.

When you begin testing your application, you will receive this information to allow you to access the test environment.

2.2 Test Environment Parameters

Notice the endpoint for the TEST environment is **IUCSTEST**.

Test WSDL URL: <https://iucstest.illinoiscourtservices.net/IUCSTEST/services/configurator.wsdl>

IMPORTANT NOTE: When you instantiate the web service object (service name "IUCSService"), the URL returned is not correct. It will return "http://172.30.5.222:8082/IUCS/services" or similar so please override that value to the following:

<https://iucstest.illinoiscourtservices.net/IUCSTEST/services>

Also note, if you are using Visual Studio, you can modify the app.config parameters for the Web Service Reference:

```
<endpoint address=" https://iucstest.illinoiscourtservices.net/IUCSTEST/services"
binding="basicHttpBinding"
bindingConfiguration="IUCSSoap11" contract="ServiceReference1.IUCS"
name="IUCSSoap11" />
```

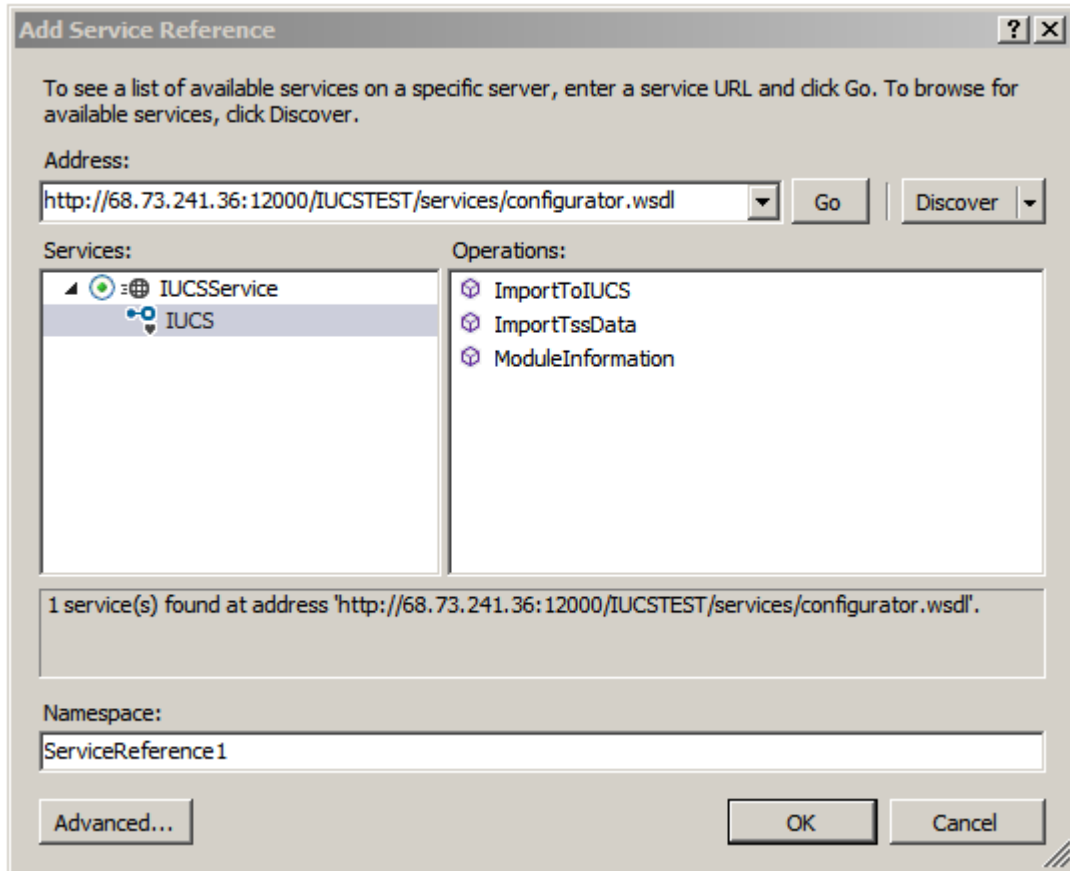
2.3 Production Environment Parameters

Production WSDL URL: <https://iucsjob.illinoiscourtservices.net/IUCS/services/configurator.wsdl>

End Point: <https://iucsjob.illinoiscourtservices.net/IUCS/services>

2.4 WSDL Reference

In the IUCS environment, the LEADER web services are published under the operation ImportToIUCS. The ModuleInformation operation is used for obtaining IUCS list files, and the ImportTSSData is not yet in service.



2.5 Maximum Message Size

Methods to retrieve large violation lists may require the maximum message size to be increased in the HTTP binding. (In Visual Studio, this is also located in the app.config parameters.)

```
<basicHttpBinding>
  <binding name="IUCSSoap11" maxReceivedMessageSize ="2147483647" />
</basicHttpBinding>
```

2.6 Encoding

The data payloads are not encoded at this time.

2.7 Module Names

The module names identify the specific web service to provide the following functionality in sending and managing traffic stops, tickets, warnings and other forms issued to possible violators.

2.7.1 SendStop

SendStop is the module that is used to send one set of stop data to LEADER, contained in the Stop element. Each stop may have one or more forms contained within, but a single traffic stop only supports one filing jurisdiction, one violator, one vehicle, and one court appearance if applicable.

Each stop from an agency must have a unique stop identifier. If a stop from an agency is received with a duplicate stop identifier, LEADER will reject the submission. This is to prevent duplicate case creation at the circuit clerk.

With the exception of a TSS form or a Tow form, the entire stop must be complete before sending the stop to LEADER. Individual citation or warning forms cannot be added to existing stops once the stop has been submitted to LEADER. If a stop needs to be resubmitted or an individual form needs to be added to a stop, use ChangeStopOrFormStatus to void the entire stop, and then resubmit the entire (corrected) stop if necessary using a different stop identifier.

Once the court-filed forms within a stop have been transmitted to the circuit clerk, no changes can be made in LEADER.

The LEADER schema is an XSD document that describes the elements within the Stop construct.

2.7.2 ChangeStopOrFormStatus

Change Stop or Form Status is used to update the status on all forms within a stop or an individual form that have already been sent to LEADER using the “SendStop” service. There are three valid statuses: VALID (default), VOID or REMOVE. REMOVE is a status that indicates the form is still valid, but any form indicated as removed will not be eligible for being transmitted. These forms, for a variety of reasons, might be delivered on paper or through another mechanism to the filing jurisdiction. Setting them to REMOVE’d will remove them from the list of stops to transmit.

Any and all forms voided through this mechanism will also be voided in the Statewide Citation Repository. It is strongly advised that agencies also VOID warnings through this service so that the corresponding entry(s) in the Statewide Citation Repository is also voided.

This service provides two features:

Void or Remove all forms

If all forms within the stop need to be voided or removed from transmittal access, this web service can be called with just the stop identifier, and the StopStatusUpdate element in the StopMetaData section of the schema.

Void or Remove form by form

If individual forms need to be voided or removed from the stop, the web service also supports voiding by Form Number. The stop identifier is required, along with a list of form numbers and form status elements.

Need schema sample for this

2.7.3 AddTSSForm

This module has not been completed.

2.7.4 AddTowForm

This module has not been completed.

2.8 Response Codes

Response data will provide an XML construct with an embedded response message, such as:

```
<errored>NO</errored>
  <responseMessage>
    <responseCode>MSG01</responseCode>
    <responseMessage>Request is processed successfully.</responseMessage>
  </responseMessage>
```

ImportToIUCSResponse Parameters	Description	Data Type
errored	This parameter will contains the value ERROR or No. ERROR indicates the response contains an error; No indicates that request was processed successfully.	string
responseCode	This parameter will contain the success or error code. Please see the response code list.	string
responseMessage	This is the human readable explanation of the response code.	string

These are the possible response codes embedded in <ResponseCode>:

MSG01	Request is processed successfully.
MSG02	Request is partially processed
ERR01	Security violation. Client IP is not authenticated
ERR02	Request XML is not well formed.
ERR03	Module name is missing. Please correct XML and resend it again
ERR031	Module name is invalid. Please correct XML and resend it again
ERR04	Username and password is invalid. Please correct XML and resend it again
ERR05	Username is missing. Please correct XML and resend it again.

ERR06	Password is missing. Please correct XML and resend it again.
ERR07	This module is not accesible for this user. Please correct XML and resend it again
ERR08	Sync date is not well formed, enter date in yyyy-mm-dd format. Please correct XML and resend it again
ERR09	Sync date is future date. Please correct XML and resend it again
ERR091	Sync date is missing. Please correct XML and resend it again.
ERR010	Parameter is not valid number. Please correct XML and resend it again.
ERR011	Parameter is not valid decimal. Please correct XML and resend it again.
ERR012	Parameter is not valid date. Enter date in yyyy-mm-dd format. Please correct XML and resend it again
ERR013	Parameter is not valid timestamp. Enter date in yyyy-mm-dd format. Please correct XML and resend it again.
ERR014	Parameter is not valid time. Enter date in yyyy-mm-dd format. Please correct XML and resend it again
ERR015	Parameter type is missing. Please correct XML and resend it again
ERR016	Parameter date is not a date. Please correct XML and resend it again
ERR017	Parameter is not valid boolean value. Please correct XML and resend it again.
ERR018	Data type is missing. Please correct it and resend again.
ERR019	Data type is XML or CSV. Please correct it and resend again.
ERR020	Data is missing. Please correct it and resend again.
ERR021	County is missing. Please correct it and resend again.

SSWS001	STOPID	StopID is required. Please check your Request and try again.
SSWS002	SOURCEAPPLICATION	SourceApplication is required. Please check your Request and try again.
SSWS003	COUNTYNAME	CountyName is required in FilingJurisdiction. Please check your Request and try again.
		CountyName is required in FormNumber (formNumber). Please check your Request and try again.
		CountyName is not valid. Please check your Request and try again.
SSWS004	OFFICERBADGENUMBER	OfficerBadgeNumber is required. Please check your Request and try again.
SSWS005	SURNAME	Surname is required. Please check your Request and try again.
SSWS006	SUBJECTSURNAME	SubjectSurName is required. Please check your Request and try again.
SSWS007	DATEOFCOURTAPPEARANCE	DateOfCourtAppearance is contains invalid Date format, Example of valid date format are 2015-09-22T15:00:34+02:00, 2015-02-22+01:00 and 2015-09-22. Please check your Request and try again.

SSWS008	TIMEOFCOURTAPPEARANCE	TimeOfCourtAppearance is contains invalid Date format, Example of valid date format are 2015-09-22T15:00:34+02:00, 2015-02-22+01:00 and 2015-09-22. Please check your Request and try again.
SSWS009	STOPSUBMITTEDTIMESTAMP	StopSubmittedTimestamp is contains invalid Date format, Example of valid date format are 2015-09-22T15:00:34+02:00, 2015-02-22+01:00 and 2015-09-22. Please check your Request and try again.
SSWS010	SUBJECTBIRTHDATE	SubjectBirthDate is contains invalid Date format, Example of valid date format are 2015-09-22T15:00:34+02:00, 2015-02-22+01:00 and 2015-09-22. Please check your Request and try again.
SSWS011	DRIVERSLICENSEEXPIRATIONDATE	DriversLicenseExpirationDate is contains invalid Date format, Example of valid date format are 2015-09-22T15:00:34+02:00, 2015-02-22+01:00 and 2015-09-22. Please check your Request and try again.
SSWS012	VEHICLEYEAR	VehicleYear is contains invalid decimal value. Please check your Request and try again.
SSWS013	FORMDOCUMENT_TYPE	FormDocumentType is required. Please check your Request and try again.
SSWS014	FORMNUMBER	FormNumber is required in FormType (formType). Please check your Request and try again.
SSWS015	ISSUEDATE	IssueDate is contains invalid Date format in FormNumber (formNumber). Please check your Request and try again.
SSWS016	INCIDENTOCCURREDDATETIME	IncidentOccurredDatetime is contains invalid Date format in FormNumber 3320, Example of valid date format are 2015-09-22T15:00:34+02:00, 2015-02-22+01:00 and 2015-09-22. Please check your Request and try again.
SSWS017	IUCSVIOLATIONKEY	IUCSViolationKey is required in FormNumber (formNumber). Please check your Request and try again.
SSWS018	VIOLATION_CODE	ViolationCode is required in FormNumber (formNumber).
SSWS019	VIOLATION_DESCRIPTION	ViolationDescription is required in FormNumber (formNumber). Please check your Request and try again.
SSWS020	CHARGEBONDAMOUNT	ChargeBondAmount is contains invalid decimal value in FormNumber (formNumber). Please check your Request and try again.
SSWS021	SPEEDACTUAL	SpeedActual is contains invalid decimal value in FormNumber (formNumber). Please check your Request and try again.
SSWS022	SPEEDPOSTED	SpeedPosted is contains invalid decimal value in

		FormNumber (formNumber). Please check your Request and try again.
SSWS023	AGENCYNAME_AGENCYMETADATA	AgencyName is required. Please check your Request and try again.
SSWS024	BOND	Bond is required in FormNumber (formNumber). Please check your Request and try again.
SSWS025	BONDSELECTED	BondSelected is required in FormNumber (formNumber). Please check your Request and try again.
SSWS026	BONDPOSTEDAMOUNT	BondPostedAmount is contains invalid decimal value in FormNumber (formNumber). Please check your Request and try again.
SSWS027	STOP	Stop tag should have namespace, Example of valid Stop tag namespace is xmlns=urn:Leader:xsd:v1 (xmlns value should be either in single quote or double quotes). Please check your Request and try again.
		Stop tag contains invalid namespace, Example of valid Stop tag namespace is xmlns=urn:Leader:xsd:v1 (xmlns value should be either in single quote or double quotes). Please check your Request and try again.
SSWS028	DUPLICATE_STOP_ERROR_CODE	Request with same Vendor Stop Id has already been processed. Please check your Request and try again.
SSWS029	AGENCYORI	AgencyORI is required. Please check your Request and try again.
		AgencyORI is not valid in AgencyMetaData. Please check your Request and try again.

2.9 Other Tips

- The client is of type UCSCient.
- The parameters are an array of type ParameterRequest
- If you specify a parameter type, you must set typeSpecified to true

2.10 SOAP Sample Request

```
<soapenv:Envelope xmlns:soapenv=http://schemas.xmlsoap.org/soap/envelope/
xmlns:con="http://www.ducs.org/iucs/configurator">
  <soapenv:Header/>
  <soapenv:Body>
    <con:ImportToIUCSRequest>
      <userName>UserName</userName>
      <password>Password</password>
      <dataType>XML</dataType>
      <data>XML schema compliant data goes here.</data>
      <moduleName>ModuleName</moduleName>
    </con:ImportToIUCSRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

2.11 SOAP Sample Error Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <ns3:ImportToIUCSResponse xmlns:ns3="http://www.ducs.org/iucs/configurator">
      <data> ResponseDataFromIUCS in XML </data>
      <dataType>XML</datatype>
      <errored>ERROR</errored>
      <responseMessage>
        <responseCode>ERR019</responseCode>
        <responseMessage> Data type is must be XML </responseMessage>
      </responseMessage>
      <userName>JOHN </userName>
    </ns3:ImportToIUCSResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.12 Audit Trail Logs

IUCS Audit Trail Logs record activity for IUCS exports that make new data available, such as a user updating a court location name and manually exporting new data or the automatic create of new court date schedules every six hours.

IUCS Audit Trail Logs also record information from calling Web Service Clients and record the nature of the information retrieved by the client and when it occurred.

These logs are available under Logs & Audit Trails, Export Import List. The audit functions will be called LEADER_SENDSTOP, LEADER_CHANGESTOPORFORMSTATUS, LEADER_ADDTSSFORM, and LEADER_ADDTOWFORM. (Note Add Tow Form is not currently available.)

County-Specific Rules

Each county or municipality may have different requirements for what their case managements system can accept in order to be successfully filed in that jurisdiction. These requirements may apply to a stop, to a specific form or to specific elements on a form. Please contact the jurisdiction that will be accepting your case filings electronically to ensure that the requirements are being met. Jurisdictions added to LEADER will be documented here as they become available.

The general requirements (optional/required, cardinality, etc.) that apply to all counties and municipalities using LEADER are documented in the LEADER 1.0 schema mapping spreadsheet.

3 DuPage County-Specific Case Management Rules

3.1 Stop Requirements

- 3.1.1 Every stop that contains a court-filed Citation must have a valid court appearance date. DuPage County is not using the 504 exemption for electronic citations. Stops that consist solely of non-court filed documents (warning, tss, tow, municipal administrative violations) do not require court appearance information.

3.2 Filing Jurisdiction Requirements

- 3.2.1 DuPage County does not allow state violation (SV) types to be combined with any other type of local violation (LSV, LCV or LAV) within one case.
- 3.2.2 Since local administrative violations (LAV) are heard in municipal hearings rather than court, no LAV violations are submitted to the filing jurisdiction of the DuPage County Circuit Clerk. The ability to submit municipal violations to local entities for administrative hearings is under future consideration.
- 3.2.3 If Local State Violations and Local Court Violations are combined in one case, all complaints in the case will be assigned to the municipality's local prosecutor.
- 3.2.4 To reiterate the general requirements, the information in the Filing Jurisdiction will indicate where the Stop will be filed. The jurisdiction information in the individual forms will not be considered and will not be validated against the stop's filing jurisdiction.

3.3 Defendant Requirements

- 3.3.1 Last Name and First Name are required fields.
- 3.3.2 If either the DL Number or DL State is provided, then both fields are required. If the defendant is using a foreign DL, international DL or passport, that information should be provided in OtherLicenseOrPermit. Information provided in the DL fields is intended for US-issued licenses and may be sent to the Secretary of State.

3.4 Charge Violation Specific Requirements

- 3.4.1 DuPage County requires the IUCSViolationKey and the ClerkCMSViolationKey on each violation written on a citation. The Violation Code and Violation Description are highly recommended for easier error resolution and logging purposes.
- 3.4.2 When a speeding violation issued on a citation, the Actual Speed and Posted Speed values are required. This situation is indicated on the IUCS violation when Collect Speeds is set to Y (YES).

3.5 Court Appearance Specific Requirements

- 3.5.1 DuPage County requires the IUCSLocationKey on citations. Building Description, Address information, etc. will not be used to assign to the location, but may facilitate error resolution or logging.
- 3.5.2 The IUCSLocationKey provided must be a DuPage County court location as configured in IUCS.

Sample .NET Configuration for TEST

```

1  <configuration>
2    <configSections>
3      <sectionGroup name="userSettings"
4      type="System.Configuration.UserSettingsGroup, System, Version=4.0.0.0,
5      Culture=neutral, PublicKeyToken=b77a5c561934e089" >
6        <section name="IUCS_WinForms.Properties.Settings"
7        type="System.Configuration.ClientSettingsSection, System, Version=4.0.0.0,
8        Culture=neutral, PublicKeyToken=b77a5c561934e089"
9        allowExeDefinition="MachineToLocalUser" requirePermission="false" />
10       </sectionGroup>
11     </configSections>
12     <startup>
13       <supportedRuntime version="v4.0" sku=".NETFramework,Version=v4.5" />
14     </startup>
15     <system.serviceModel>
16       <bindings>
17         <basicHttpBinding>
18           <binding name="IUCSSoap11" maxReceivedMessageSize="2147483647"/>
19         </basicHttpBinding>
20       </bindings>
21       <client>
22         <endpoint address="
23         http://iucstest.illinoiscourtservices.net/IUCSTEST/services/"
24         binding="basicHttpBinding"
25         bindingConfiguration="IUCSSoap11" contract="IUCS.IUCS"
26         name="IUCSSoap11" />
27       </client>
28     </system.serviceModel>
29     <userSettings>
30       <IUCS_WinForms.Properties.Settings>
31         <setting name="AgencyORI" serializeAs="String">
32           <value>XX00000000</value>
33         </setting>
34         <setting name="Username" serializeAs="String">
35           <value>USERNAME</value>
36         </setting>
37         <setting name="Password" serializeAs="String">
38           <value>PASSSWORD</value>
39         </setting>
40         <setting name="County" serializeAs="String">
41           <value>DUPAGE</value>
42         </setting>
43         <setting name="Sync_Date" serializeAs="String">
44           <value>2014-08-01</value>
45         </setting>
46         <setting name="IUCS_URL" serializeAs="String">
47           <value>http://iucs.illinoiscourtservices.net/IUCS/services</value>
48         </setting>
49         <setting name="IUCS_URL_DEV" serializeAs="String">
50           <value>
51             http://iucstest.illinoiscourtservices.net/IUCSTEST/services/</value>
52         </setting>
53       </IUCS_WinForms.Properties.Settings>
54     </userSettings>
55   </configuration>

```