WACIC and WASIS – ACCESS Interface

Introduction

The WACIC and WASIS applications are critical data sources for the Criminal Justice community in Washington, and nationwide. Following the federal model, the Washington State message switch – ACCESS - is the central connection point for Criminal Justice agencies. Historically, the format of transactions in this dedicated network have been string-based, a legacy of the original teletype based communication network. The ACCESS switch was replaced in 2014, and WSP is now in the position with the replacement of the WACIC and WASIS applications to redefine the communication protocol with ACCESS, and to migrate to a form of XML to replace the string-based transactions used in the current system.

Summary – WACIC transaction types:

- Enter, Modify, Locate, Clear, Cancel transactions for WACIC files.
- Formatting and forwarding transactions to NCIC for records that are NCIC qualified.
- Impounded Vehicle transactions to NICB (via Nlets).
- Stolen vehicle notices to DOL.
- Processing NCIC acknowledgement messages.

Summary – WASIS transaction types:

- Process inbound $. Message types from NCIC.
- Criminal History inquiries (inter and intra state).
- III updates.
- Supplemental data updates.
- Sex Offender Registration updates (NCIC NSOR).
- Send Unsolicited Messages;
  - Arrest Notices.
  - ABIS status updates.

The following portions of this document describe the intended architecture and design of the transactions that will pass between WACIC, WASIS, and ACCESS. Examples using the Wanted Persons file are included to illustrate the intent of the design and architecture of the message traffic between systems.

Transaction Formatting – WACIC and WASIS

Communications Protocol: WACIC to ACCESS and WASIS to ACCESS

The communication protocol between the CCH and CIC applications to the switch shall be DMPP-2020. The ACCESS switch will open a connection to the CIC and CCH applications each on their own, individual interface.
Transaction Format Protocol: inbound and outbound from WACIC

All communication between WACIC and the ACCESS switch will use a basic form of XML organized to facilitate the routing of transactions by the ACCESS switch and optimize data organization communicated to and from WACIC. Datamaxx has developed this specific message structure to address the model of communication and transaction based processing necessary in the state message switch environment.

The FBI is in the process of defining and finalizing a NIEM standard for communication with NCIC. The WACIC transactions will use components of NCIC’s NIEM design to facilitate migrating to the finalized standard when the NCIC 3rd Generation application is eventually implemented.

Formatting examples for Wanted Persons transactions have been included to illustrate the intent and structure of the XML implementation described in this document. These examples are included as illustrations only. Because of pending system changes and clarification from the FBI minor modifications will be necessary prior to final implementation.

Please see the WACIC Transaction Matrix document for a list of the transactions currently defined as the requirements for the transaction portion of the application. This list does not currently include the MKE’s for the responses (acknowledgement, error, query response) that will also be defined.

Overview – Organization of the XML nodes in transactions received and sent by WACIC

HEADER <HDR>

Contains the data elements used by the ACCESS switch to validate, manage, and route ACCESS transactions.

NCIC <NCIC>

Contains the data elements of standard NCIC transactions. Currently transactions are dependent on the data elements being in a fixed order. This approach defines tagged data elements, using the Message Field Codes (MFC’s) as the tag name, removing the fixed string format dependency. Additionally the data elements will be organized using the proposed FBI NIEM sub-groups to expedite eventual implementation of the NIEM formats.

WACIC <WACIC>

Contains the data elements that are specific to Washington State’s implementation(s) of the NCIC files, or the data elements for those files that exist only in Washington State. As with the NCIC node, the MFC’s will be used to tag the data elements.

Destination Values <DST>

The destination value in the header will be used by WACIC and WASIS to facilitate communication and identify the expected handling of any responses resulting from the outgoing transaction. The following
table identifies the DST values, and the associated behaviors regarding responses. Additional values may be added to this table as new transactions are implemented, or new business needs are identified.

<table>
<thead>
<tr>
<th>Source</th>
<th>Destination</th>
<th>Routing</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client</td>
<td>WACIC</td>
<td>ACCESS will route to WACIC connection.</td>
<td></td>
</tr>
<tr>
<td>Client</td>
<td>WASIS</td>
<td>ACCESS will route to the WASIS connection</td>
<td></td>
</tr>
<tr>
<td>WACIC</td>
<td>NCICO</td>
<td>Response to Originating Agency</td>
<td>Example: QG sent from WACIC to NCIC on a Pawned Gun entry.</td>
</tr>
<tr>
<td>WACIC</td>
<td>NCICO</td>
<td>Return acknowledgement to: Originator</td>
<td>Modify Clear Cancel</td>
</tr>
<tr>
<td>WACIC</td>
<td>NCICR</td>
<td>Return acknowledgement to: Originator</td>
<td>Entry</td>
</tr>
<tr>
<td>WACIC</td>
<td>NCICL</td>
<td>Return response to: Originator ORI of the record</td>
<td>Locates</td>
</tr>
<tr>
<td>WACIC</td>
<td>NCICW</td>
<td>Return response to: WACIC only</td>
<td>ED, MD, XD, CD</td>
</tr>
<tr>
<td>WACIC</td>
<td>NCICM</td>
<td>Return response to: MPU only</td>
<td></td>
</tr>
<tr>
<td>WACIC</td>
<td>NLETO</td>
<td>Return Response / acknowledgement to: Originator</td>
<td></td>
</tr>
<tr>
<td>WACIC</td>
<td>NLETR</td>
<td>Return Response to: Originator</td>
<td></td>
</tr>
<tr>
<td>WACIC</td>
<td>DOLDB</td>
<td>Route to DOL No response expected</td>
<td>Stolen Vehicle</td>
</tr>
<tr>
<td>WACIC</td>
<td>DOCAP</td>
<td>Route to DOC No response expected</td>
<td>Arrest Notices</td>
</tr>
</tbody>
</table>

**Nlets Transactions**

Nlets transactions will be formatted by using the Omnixx Header components as defined in the OFML specification documentation, and the Nlets XML specification for the data portion of the transaction. The ACCESS switch is responsible for the communication, including the header construction, with Nlets.

**Responses and Unsolicited Messages**

The Datamaxx OFML specification includes an architecture for creating structured and specific hit response, acknowledgement, error and unsolicited messages from WACIC and WASIS. The objective is to create transactions that can be identified, classified, and successfully processed by all of the participants in the Washington Criminal Justice Community. All responses will be identified with an
MKE, and the key identifying fields (i.e. WAC, LIC, VIN, NAM & DOB, OCA) will be tagged to allow for easy identification.

In order to accommodate the diverse software, hardware, and levels of expertise in WSP's customer base the goal is to provide transactions in both string and XML formats depending on the individual requirements of the participating agencies. In the instance of responses and unsolicited messages originating in the CIC or CCH applications, the data will be transmitted to the ACCESS switch using the appropriate OFML structure. Additionally, as part of the design of the responses Cascading Style Sheet (CSS) formats will be developed for the layout of a formatted textual response. These CCS formats will be provided to Datamaxx and be used to offer both traditional string and XML formatted transactions.


Supplemental Transactions

Supplemental Transactions support a varying number of data elements in each category. The structure of these messages will contain a single node, or any number of nodes between one and the maximum number of entries allowed for the data category in a single message. These nodes will not need to contain all of the possible MFC's for a transaction, only those MFC's for the provided data. Please see the example below.

Linking a response back to the original transaction.

The OFML.HDR.REF element in the OFML is used by the Omnixx software to link responses and initial transactions. However, if WACIC or WASIS initiates a transaction with the pipe symbol “|” followed by 3 digits the ACCESS Switch will save the reference number and restore that data in the REF field when the response to the original transaction is routed back to WACIC or WASIS. This will allow the local application to use the 3 characters as a key to link the response back to the original transaction.

Examples

**OFML XML Example – EW - WACIC**

```xml
<OFML>
  <HDR>
    <ID>1234560789</ID>
    <SRC/></SRC>
    <DAC/></DAC>
    <REF/></REF>
    <MKE>EW</MKE>
    <ORI>WA0034000</ORI>
    <DST>WACIC</DST>
    <CTL>ZBC1234543</CTL>
    <SUM>EW NAM/PERSO,MEAN E</SUM>
  </HDR>
  <NCIC>
    <NotifyAgency>
```

<NOA>Y</NOA>
</NotifyAgency>
<Person>
<NAM>PERSON, MEAN E</NAM>
<SEX>M</SEX>
<RAC>W</RAC>
<POB>CA</POB>
<DOB>19850101</DOB>
<DOE>20030101</DOE>
<HGT>507</HGT>
<WGT>190</WGT>
<EYE>BRO</EYE>
<HAI>BRO</HAI>
<FBI></FBI>
<SKN></SKN>
<SMT></SMT>
<FPC></FPC>
<MNU></MNU>
<SOC>2223344444</SOC>
<DNA>N</DNA>
<DLO></DLO>
<CTZ>US</CTZ>
<ETN></ETN>
<CMC>34</CMC>
</Person>
<DriverLicense>
<OLN>PERSOME15OR3</OLN>
<OLS>WA</OLS>
<OLY>2014</OLY>
</DriverLicense>
<Offense>
<OFF>3495</OFF>
<OOC>3343</OOC>
<ADO>N</ADO>
</Offense>
<Warrant>
<DOW>20150115</DOW>
<WNO>TEST99333</WNO>
<EXL>D</EXL>
</Warrant>
<Case>
<OCA>TEST99333</OCA>
<LKI>WA0040000</LKI>
<LKA>CASE33945</LKA>
</Case>
<Court>
<CTI>WA0034001</CTI>
</Court>
<Incident>
<MIS>POSSIBLY HEADED FOR BRITISH COLUMBIA</MIS>
</Incident>
<VehicleRegistration>
<LIC>AMD3546</LIC>
<LIS>WA</LIS>
<LIT>2014</LIT>
<VIN></VIN>
<VYR></VYR>
<VMA></VMA>
<VMO></VMO>
<VST></VST>
<VCO></VCO>
</Vehicle>
</VehicleRegistration>
<StolenFradulent>
<SOC></SOC>
<MNU></MNU>
<OLN></OLN>
<OLS></OLS>
<OLY></OLY>
</StolenFradulent>
<Address>
<SNU>330</SNU>
<SNA>CHERRY ST</SNA>
<CTY>PUYALLUP</CTY>
<COU>27</COU>
<STA>WA</STA>
<ZIP>98371</ZIP>
<ADD>HO</ADD>
<DDA>20150128</DDA>
</Address>
</NCIC>
</WACIC>
<TOW></TOW>
<OFL></OFL>
<AOB></AOB>
<SID></SID>
<PCN></PCN>
<PACK></PACK>
</WACIC>
</OFML>

OFML XML Example – EW – NCIC

<OFML>
 <HDR>
  <ID>1234560789</ID>
  <SRC>WACIC</SRC>
  <DAC></DAC>
  <REF>456</REF>
  <MKE>EW</MKE>
  <ORI>WA0034000</ORI>
  <DST>NCICR</DST>
  <CTL>ZBC1234543</CTL>
</HDR>
</OFML>
<MIS>POSSIBLY HEADED FOR BRITISH COLUMBIA</MIS>
</Incident>
<VehicleRegistration>
<LIC>AMD3546</LIC>
<LIS>WA</LIS>
<LYY>2014</LYY>
<LIT>PC</LIT>
</VehicleRegistration>
<Vehicle>
</VIN>
</VYR>
</Vehicle>
</Vehicle>
</Vehicle>
</Vehicle>
</StolenFraudulent>
<Address>
<SNU>330</SNU>
<SNA>CHERRY ST</SNA>
<CTY>PUYALLUP</CTY>
<COU>27</COU>
<STA>WA</STA>
<ZIP>98371</ZIP>
<ADD>HO</ADD>
<DDA>20150128</DDA>
</Address>
</Address>
</NCIC>
</OFML>

EW Entry Confirmation

<OFML>
<HDR>
<ID>1234560789</ID>
<SRC>WACIC</SRC>
<DAC>DEVA</DAC>
<REF/></REF>
<MKE>EWR</MKE>
<ORI>WA0034000</ORI>
<DST>TH005</DST>
<CTL/></CTL>
<SUM>ACK EW PERSON, MEAN E 19850101</SUM>
</HDR>
<WACIC>
<Confirmation>
<WAC>15W000325</WAC>
EW Entry Error Response

<OFML>
<HDR>
<ID>1234560789</ID>
<SRC>WACIC</SRC>
<DAC>DEVA</DAC>
<REF></REF>
<MKE>EWR</MKE>
<ORI>WA0034000</ORI>
<DST>TH005</DST>
<CTL></CTL>
<SUM>ERR EW PERSON,MEAN E 19850101</SUM>
</HDR>
<Error>
<RecID>
<WAC>15W000325</WAC>
<NAM>PERSON,MEAN E</NAM>
<DOB>19850101</DOB>
<OCA>TEST99333</OCA>
<DOW>20150115</DOW>
<WNO>TEST99333</WNO>
</RecId>
<Err>
<COD>AMD3456</COD>
<FLD>LIC</FLD>
<TXT>LIC, LIS, LIY, LIT MUST BE ENTERED AS A SET</TXT>
</Err>
</Error>
</OFML>

Example Outgoing Unsolicited Message

<OFML>
<HDR>
<ID>1234560789</ID>
<SRC>WACIC</SRC>
<DAC></DAC>
<REF></REF>
<MKE>ANO</MKE>
<DST>DOCAP</DST>
<SUM>ANO ARREST NOTICE EW PERSON,MEAN E 19850101</SUM>
</HDR>
<ArrestNotice>
  <SiD>WA99999999</SiD>
  <NAM>PERSON, MEAN E</NAM>
  <DOB>19850101</DOB>
  <SOC>333445555</SOC>
  <OCA>TEST99333</OCA>
  <MNU>20150115</MNU>
  <DOA>20150128</DOA>
  <SUP>CAMPBELL, ROB R</SUP>
  <ORI>WA0060000</ORI>
  <TXT>0736110 CONT SUB-POSS NO PRESCRIPTION RCW: 950.4013(2) CLASS C FELONY</TXT>
</ArrestNotice>