Agenda

- DVS Data via MyBCA
- Single Sign-on Expansion Project
- NIEM 3.0
- BCA Deprecation Schedule
- Changes to SOA Approach
- Statute Service Web Service Update
- Data Center Move Impact on Vendors
- New Crime Reporting System
- New Criminal History System
- New Bid Submission System
- eCitations / Incident Referral
- Vendor Adaptor Validation
DVS Data via MyBCA

Robert Paul Johnson
MNJIS Deputy Director
DVS Data via MyBCA

- Functionality of LE Support Website will be moved to the BCA
  - Search Drivers License
  - Search Driver Photo(s)
  - Search Vehicle
  - Search Disability Certificate
  - Search Dealer
  - Search Purged Vehicles
  - Search Hotlist
  - Search Partial Plate

- Access to CRASH
DVS Data via MyBCA

- Agencies must have Master JPA
- Agencies will be required to connect via the CJDN
- Mobiles devices will require Advanced Authentication
- All users will need a SSO User ID
- Agencies will need DVS Certification through BCA
- All queries and responses will be in Archive Services
- Archive Services data will feed into BCA Analytics
SSO Security Expansion
SSO Security Expansion

- Future SSO Applications
  - POR
  - MRAP
  - CIBRS
  - LEMS

- Expanded Security for ISS accessing LEMS Services
- Mobile devices with access to LEMS
- Password Self-Service
- Expanded Security for accessing data via Services
Questions?
Thank you!

For More Information:
Robert Paul Johnson
robert.p.johnson@state.mn.us
bca.dps.mn.gov
NIEM 3.0 and the BCA Deprecation Schedule

October 16, 2013
Greg Schiller
Agenda

- Migrating to NIEM 3.0
- BCA Deprecation Schedule
NIEM 3.0
NIEM 3.0

What is NIEM?
- The National Information Exchange Model (NIEM) is an XML-based framework used by the BCA to exchange data with its partners.

Most of our current XML data exchanges are based on NIEM 1.0.

The latest version of NIEM is scheduled for a mid-October 2013 release.
Migration to NIEM 3.0

- What does this mean to our partners?
  - NIEM 3.0 will become the standard for new XML exchange schemas.
  - Existing schemas will continue to be supported.
What will change?

- In the future, BCA schemas will adhere closer to national standards.
- The BCA will make extensive use of substitution groups.
- The BCA will extend standard NIEM objects by using augmentation points.
What is a substitution group?

- A substitution group is a schema technique that allows elements to be substituted for each other.
- Example: both fragments below are valid

```xml
<?xml version="1.0" encoding="UTF-8"?>
<nc:Person>
    <nc:PersonSexCode>M</nc:PersonSexCode>
</nc:Person>

<nc:Person>
    <nc:PersonSexText>Male</nc:PersonSexText>
</nc:Person>
```
Here is how it works:

```xml
<xs:complexType name="PersonType">
    <xs:complexContent>
        <xs:extension base="structures:ObjectType">
            <xs:sequence>
                <xs:element ref="nc:PersonSex" minOccurs="0" maxOccurs="unbounded"/>
                <xs:element ref="nc:PersonAugmentationPoint" minOccurs="0" maxOccurs="unbounded"/>
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>
```
Note: PersonSex is defined as abstract.

```xml
<xsl:element name="PersonSex" abstract="true">
    </xsl:element>
```

Note: PersonSexText is a member of PersonSex substitution group.

```xml
<xsl:element name="PersonSexText" type="nc:TextType" substitutionGroup="nc:PersonSex">
    <xsl:annotation>
        <xsl:documentation>A gender or sex of a person.</xsl:documentation>
    </xsl:annotation>
</xsl:element>
```
Augmentation Points

- NIEM has added placeholders called augmentation points to most commonly used objects.
- These substitution groups are used to add data (or augment) standard objects.
Here is how it works:

```xml
<xs:complexType name="PersonType">
    <xs:complexContent>
        <xs:extension base="structures:ObjectType">
            <xs:sequence>
                <xs:element ref="nc:PersonAugmentationPoint" minOccurs="0" maxOccurs="unbounded"/>
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>
```
Augmentation example:

Note: a MINJIS data element was added to NIEM Person.

<nc:Person>
  <nc:PersonSexCode>M</nc:PersonSexCode>
  <mnjs:PersonAugmentation>
    <mnjis:PersonGangAffiliationOrganizationReference ref="G234"/>
  </mnjs:PersonAugmentation>
</nc:Person>
BCA Deprecation Schedule

**Phase 1**

- Exchange partners are notified that an existing schema is scheduled to be replaced.
- A release date for the new schema is announced.
- Full support for the legacy schema is scheduled to continue for one year after the date that the replacement goes into effect.
What is full schema support?

- Exchanges using a fully supported legacy schema will be accepted.
- New versions of the schema **MAY** be allowed if changes in business requirements arise. Example: mandates from the legislature.
- Cont…
What is full schema support? (cont..)

- Minor changes **WILL** be allowed as long they are backward compatible with the current version.
  - Example of an allowed change: an optional element is added.
- Technical support.
  - Schemas and supporting technical detail will be provided upon request.
Phase II

- After one year, full support ends for legacy schemas.
  - Only minor (backward compatible) changes are allowed.
  - Schemas will no longer be published.
  - The date for freezing of changes is communicated to internal and external users.
Phase III

- After two years
  - No changes will be allowed.
  - The date for end of all support is announced.
Phase IV

- After three years, exchanges using a deprecated schema will no longer be accepted.
Questions?
Thank you!

For More Information:
Greg Schiller
Greg.Schiller@state.mn.us
bcadps.mn.gov
Agenda

- MNJIS Architecture Team
- NIEM 3.0
- Event Driven Architecture
- Predictive Analysis Audit Process
- Miscellaneous Updates
MNJIS Architecture Team

- Formalizing the Architecture Team within MNJIS
  - Middleware, Service Orientation, Data and Infrastructure

- Goals of Architecture Team
  - Adoption of Architecture Methodology - TOGAF
  - Document the Enterprise Architecture
  - Determine Standards/Best Practice
  - Improve consistency and quality of delivered solutions
NIEM 3.0

- Future services based on NIEM 3.0 standard
- Previous presentation spoke to this in more detail
Event Driven Architecture

- Send more generic events
  - Incident
  - Court Disposition
  - Case Expunged (Internal)
- Reduce tight coupling between applications/systems
- Subject to data practices
- Oracle SOA Suite 11g: Event Delivery Network
Predictive Analysis Audit Process

- Purpose & Goal

- Impacts
  - Ensure the BCA Header is populated with accurate & complete information
  - Important to include actual user who the service request is on behalf of
Miscellaneous Updates

- Continue to enhance internal practices for design, development and deployment
- Explore/Test best usage and practice to leverage additional capabilities of the Oracle SOA Suite platform
  - Business Activity Monitoring, Complex Event Processing, Business Rule Engine, Business Process Execution Language
- Explore options to better handle schema and service versioning
Questions?
Thank you!

For More Information:

Dave Everson | Mark Girard

david.everson@state.mn.us
mark.girard@state.mn.us

bcadps.mn.gov
Statute Service Web Service Update

Paul Schoen
Project Manager
Statute Service Web Service

- Feb 2013 – We moved the new web service on the CJDN and have restricted access to approved IP addresses.
- Support is being provided for all three previous versions and the current version.
Statute Service Web Service

- The old legacy web service is still running and is targeted to be shut down by the end of 2013.
- If you have not moved to the new web service please contact us regarding your plans to move to the new service.
Questions?
Thank you!

For More Information:
Paul Schoen – 651-793-2706
Paul.Schoen@state.mn.us
Data Center Move

October 16, 2013
Kurt Augustin, Asst. Director
Technical and Infrastructure Shared Services
Agenda

- Scope
- Background
- Timeline
- Challenges
- Team
Scope

- Move MNJIS infrastructure and corresponding systems and applications at Centennial Office Bldg. (COB) to new Tier 3 Data Center – Enterprise Data Center 4 (EDC4)

Infrastructure @ COB
- 15 Computer Cabinets
- 80 Physical Servers
- 50 network components and other appliances
- Storage Array Network (SAN) with 57TB of data
- 171 Test and Production Virtual Servers
- WAN Connectivity to FBI CJIS, NLETS, CJDN, VPN and the BCA
  - Note: Not all components are moving to EDC4
Scope

- Systems and Services @ COB
  - 16 Priority 1 & 2 Services
  - 28 Priority 3 & 4 Services
  - Includes MNJIS, Lab and Investigations Services
  - Corresponding Test Environment
Background

- Original scope and timeline driven by Data Center Consolidation Tactical Project – one of several IT Consolidation Projects currently on-going by MN.IT. Project scope was to consolidate 36+ data centers to 2-4 MN.IT data centers within the next five years.

- Decommissioning of COB Data Center expedited due to Capitol Complex Renovation Project. Capitol office staff will be moving into COB 5th Floor.

- COB 5th Floor needs to be vacated prior to December 30, 2013. Original MN.IT directive was to move systems by November 22, 2013. BCA requested extension to Dec. 14, 2013.
# Timeline

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proof of Concept to Swing Services to BCA Data Center</td>
<td>8/2/13</td>
</tr>
<tr>
<td>Draft Move Plan Completed</td>
<td>7/1/13</td>
</tr>
<tr>
<td>Final Move Plan Approved</td>
<td>8/30/13</td>
</tr>
<tr>
<td>All New Equipment Orders and Contracts Finalized</td>
<td>9/16/13</td>
</tr>
<tr>
<td>Migrate Production Systems from COB to BCA</td>
<td>9/16 – 10/21</td>
</tr>
<tr>
<td>All Network Infrastructure in Place at EDC4</td>
<td>11/14/13</td>
</tr>
<tr>
<td>Test Move Plan</td>
<td>11/16/13</td>
</tr>
<tr>
<td>Final Physical Move</td>
<td>12/14/13</td>
</tr>
<tr>
<td>Start Bringing Test Environment Back On-line</td>
<td>12/16 – 12/19</td>
</tr>
<tr>
<td>Migrate Production Systems from BCA to EDC4</td>
<td>12/30 – 1/31</td>
</tr>
</tbody>
</table>
Challenges

- All Data Center moves are unique and challenging
- Limit Downtime to Priority 1 & 2 Services to 4 hours or less.
  - Three Phase Solution
- WAN Connectivity
- SAN and Data Storage
- Multi-agency move overseen by a new State Agency – MN.IT
- Cost – Both one-time and on-going costs
  - One-time
    - Staging Contractor
    - Moving Contractor
    - IT Infrastructure Vendors
    - New Infrastructure at EDC4
  - Increased On-going Costs
    - EDC4 Tier 3 Data Center Costs
    - WAN Connectivity Costs
Project Team

The “Failure Is Not an Option” Team
- Sandra Solie – Project Manager
- Mark Perish – Network Ops Manager
- Jeremy Hursh – Storage Lead
- Pete Donlin – ESX Lead
- Troy Root – DBA Lead
- Jerome Crea – Server/Middleware Lead
- Jim Solie – Network/Security Lead
- Many others…
Crime Reporting System (CRS) Project

October 16, 2013
Sara Bechel Hutton, Project Manager
Agenda

- FBI Uniform Crime Reporting (UCR) Program
- FBI UCR Program Implemented in MN
- FBI Reporting Methods
- CRS Project Goals & Timeline
- Points of Interest
FBI Uniform Crime Reporting (UCR) Program
FBI UCR Program

- 1920’s
  - National crime statistics federally recognized
- 1930
  - UCR Program initiated and developed
  - FBI named national clearinghouse
Primary Purpose of UCR

Provide accurate & reliable crime statistics to:

- Law Enforcement
- American Public
- Others
FBI UCR Program Implemented in Minnesota
UCR Program & CJRS

- Since 1936
  - MN has participated in FBI UCR Program
- 1972
  - Computerized CJRS implemented
- Today
  - ~90% submit via Records Management System
  - ~10% submit via a User Interface
FBI Reporting Methods
Methods for Reporting Crime Data to the FBI

1. Summary Method
   a. Only most serious crime of each incident reported
   b. Summarized data

2. National Incident Based Reporting (NIBRS) Method
   a. All crimes for each incident (up to 10)
   b. Incident level data
Example 1:
3 incidents in Anoka County in January, 2010

Incident 1:
Murder

Incident 2:
Murder
Rape
Drug

Incident 3:
Murder
Burglary

Reported in Summary
• 3 murders
Totals Only

Reported in NIBRS
• 3 murders
• 1 rape
• 1 drug offense
• 1 burglary
Totals & Detailed Data
Example 2:

Summary versus NIBRS Reporting

How many rapes involving young adults, ages 18-24, occurred in 2010?
Summary

How many rapes involving young adults, ages 18-24, occurred in 2010?

Cannot Answer Today
NIBRS

How many rapes involving young adults, ages 18-24, occurred in 2010?

265

Violent sexual assaults involving young adults ages 18 to 24 years

<table>
<thead>
<tr>
<th>Young adults ages 18 to 24 were most likely assaulted</th>
<th>Victims ages 18 to 24 assaulted in a residence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Offender Age</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>54</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Victims ages 18 to 24 assaulted in a non-residence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offender Age</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>7-11</td>
</tr>
<tr>
<td>12-17</td>
</tr>
<tr>
<td>18-24</td>
</tr>
<tr>
<td>25-34</td>
</tr>
<tr>
<td>35-44</td>
</tr>
<tr>
<td>45-54</td>
</tr>
<tr>
<td>55-64</td>
</tr>
<tr>
<td>65+</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Overall Total 103 78 665 153 1039

Victim & Offender information not collected in Summary Reporting
CJRS Replacement Submission Options

**Option 1:**
Full NIBRS FBI Submission

- **All LE Agencies**

**Option 2:**
Summary FBI Submission

- **All LE Agencies**

**Option 3:**
Hybrid FBI Submission

- **Some LE Agencies** AND **Some LE Agencies**

**States**
- **15 States**
- **17 States**
- **18 States**

(10 are testing/developing NIBRS)
CRS Project
CRS Project Goals

- Replace CJRS (new CRS)
- Replace eReports
- Move MN to NIBRS
- Integrate with existing BCA applications
  - Supplemental Reporting System (SRS)
  - Comprehensive Incident-Based Reporting System (CIBRS)
Project Timeline

- Project Approved – July, 2013
- Project Kick-Off – October, 2013
- Project Development – 2013 to 2016
  - Summary Reporting – Present to 2016
- Pilot – Mid 2016
- Statewide Deployment – 2017 to 2022
  - Hybrid Reporting – 2017 to 2022
  - Full NIBRS – 2022
Points of Interest

- Staff Augmentation RFP – 1st Quarter, 2014
- Internally Developed CRS Database
- Adaptor Specifications – 4th Quarter, 2014
- New Reporting Tool
- Moving MN to be a MN NIBRS Compliant State

Project updates found at:

- https://dps.mn.gov/divisions/bca/bca-divisions/mnjis/Pages/crime-reporting-system.aspx
Questions?

For More Information:

https://dps.mn.gov/divisions/bca/bca-divisions/mnjis/Pages/crime-reporting-system.aspx
Agenda

- Overview
- Objectives
- Funding
- In Scope
- Out of Scope
- Constraints
- Current Activities
- Milestones
What is Criminal History?

- Current system is Computerized Criminal History (CCH)
- System for identifying, recording and indexing criminal records in accordance with Minn. Statute 299C.09
Computerized Criminal History

- Arrest Bookings
- Court Disposition
- Custody

Automated Processing

Add Custody
Add Court
Add Arrest

CCH Database

Criminal History Reports
How is Criminal History Data Used?

- **Criminal justice purposes**
  - Crime investigations
  - Presentencing investigations
  - Jail/prison housing decisions

- **Non-criminal justice purposes**
  - Employment, Licensing, Housing background checks
  - Adoption & child placement checks
  - Public background checks on Internet
  - Individuals requesting their own data
  - Firearms purchases and permits
Objectives

- Replace and decommission the current CCH system. The replacement Criminal History System will provide all of the currently used capabilities of CCH.
- Enhance readability of RAP sheet.
- Ad-hoc queries for non-tech users.
- Data entry standardization and simplification.
Objectives

- Full support of current court data (MNCIS)
- Suspense file reduction (court records not matched to an arrest)
- End-to-end process awareness
- Rapid implementation of new or updated business rules and processes
- Handle increased volume of queries
Objectives

- Management metrics and dashboards
- Proactive system monitoring and alerting
Funding

- FY 2014 - $ 3,050,000
- FY 2015 - $ 2,580,000
- FY 2016 - $ 4,930,000
- FY 2017 - $ 417,000
- Total - $10,977,000

This includes infrastructure and other costs
In Scope

- Existing B2B Interfaces (some updated)
- New B2B Interfaces
- Rap Back (need legislation before using)
- Ability to retrieve and display arrest photo
- Ability to retrieve and display associated documents contained in Infolmage
In Scope

- Background check process improvement:
  - On-line request for fingerprint based and Name & DOB checks
  - On-line payment
  - On-line results to requestor
  - On-line results to subject
  - Mailed-in paper request and payment
  - Walk-in request for fingerprint based and Name & DOB checks
In Scope

- Support for all current LEMS queries including III, Nlets, and MN unique queries
- Database synchronization process
- Update workflows for record entry and maintenance. Automate and simplify!
- AFIS updates needed to implement workflow changes.
Out of Scope

- Will not implement any **additional interfaces** beyond those in specs
- Will not **replace the functionality currently included in NEIS, ISS, Portals, LEMS, POR, Livescans, or any external systems**
- Will not include **updates to other systems** that may be impacted
Out of Scope

- Will not perform criminal history data cleanup
- Will not perform correction of synchronization errors
- Will not include Infolmage replacement unless the needed features are supported in the criminal history system product purchased
Out of Scope

- Will not implement **Rap Back Fee management** since the legislature could implement a variety of fee models if it authorizes Rap Back.
- Will **not** implement Secure Communities
- Will not implement **arrest photo in RAP sheet**
- Will not interface to **BCA or FBI DNA database**
Constraints

- Must meet the high availability and performance levels of the current criminal history system.
- The transition from CCH to the new system must provide a clear transition to the new “database of record.”
- The integrity of the criminal history record information must be maintained during and after transition to the criminal history system replacement.
Current Activities

- RFP Package is in the review process
- Requirements were refined significantly since the RFI, no major functionality changes
- Risk Assessment required by statute is in process. RFP contains questionnaire
- Preparing for RFP support & review
Milestones

- Funding received July 1, 2013
- Risk Assessment Sept thru Feb
- RFP Writing Complete October 3
- RFP Posted Oct/Nov
- RFP Responses due Dec/Jan
- Award Feb/Mar
- Start Contract May
- Go-Live Dec 2016
Questions?
Thank you!

For More Information:

bca.dps.mn.gov
Important Information for Vendor Submissions

http://www.mmb.state.mn.us/vendor-training
Vendor Training

SWIFT has developed an online training course to assist vendors in navigating the Supplier portal. The online course was designed specifically for State of Minnesota vendors who will be accessing the SWIFT Supplier portal. The course provides an explanation of the functions used for navigating the portal.

Main course focus:
- Procurement Events
- Viewing Payments and Invoices
- Creating and Maintaining User Accounts

The interactive course is produced using User Productivity Kit (UPK) software.
- Instructions For UPK
- Basic The Interactive C
The interactive course is produced using User Productivity Kit (UPK) software.

- Instructions for UPK
- Begin the Interactive Course
- Locate the Event Due Date
- Add/Change Vendor Contact Information
- Screen Reader Accessibility Mode
How to get Started

• Current vendors who had a vendor ID number with state prior to July 1, 2011 have been reassigned new IDs. See Current Vendor link in the right menu.
• New vendors assigned a new vendor ID when they go through the registration process in the Supplier portal.
• Once you have your vendor ID, you may register in SWIFT. To register, go to the Supplier portal at http://supplier.swift.state.mn.us and click on “Vendor Registration Link.”
• When you register, you will be assigned user ID and password. (Follow Step-by-Step instructions in the right menu.)
• Keep your new State of Minnesota vendor number, user ID and password in a secure place where you can find it easily. You will need this information for accessing the Supplier portal.
Topics

- Overview of eCharging
- Hennepin Incidents
- Court Citations
- New model for Binary attachments
- Next Steps
eCharging is…

- Electronic data passage
  - Incident to prosecutor
  - Prosecutor to court
  - Law enforcement to court (citations)
  - Law enforcement to DVS (DWI)

- Electronic workflow
  - Signatures
  - Workflow management
  - Monitoring

- Criminal Justice Data Integration

- Live in 42 counties in Minnesota – 37k+ complaints and 290k+ citations successfully submitted to court to date
Hennepin Incidents

- Driven by County Attorney’s Office. March 2014 Go-live.
- New data elements
  - Juvenile guardian data
  - Custody flag
  - Gang info
- HCAO will reject if missing info they require
- Hennepin-compliant adapter will work statewide
- Some BCA funding available
- Incident Referral UI for agencies unable to submit from RMS
Changes to Citations

- New ordinance Model
  - Enumerated list maintained by Court
  - Validation
  - Live Winter of 2014
  - Required by Court summer of 2014
- 3rd offense flag supported in XML
- Because of urgency on ordinance issue, BCA funding available
Binary attachment model

- Old Model
  - Embedded in XML
  - 10 MB total cap
  - Update one – update all
  - Updates disabled after prosecutor charge

- New Model
  - MQ
  - One document at a time
  - Higher cap (TBD)
  - Perpetual updates

- Push Notifications now available
Next Steps for eCharging

- Additional complaint/referral Counties
  - Hennepin County Attorney
  - Additional greater Minnesota deployments (Polk, Pope, etc.)
- Additional Adapters
- Data standards
- Additional development
Thank You

Questions Regarding eCharging:

• Tom Miller, Project Manager

Phone: 651-793-2707   email: Thomas.C.Miller@state.mn.us
Summary

- Initiative background
- Steps in new process
- Details
- Benefits
- Communication
Business Needs

- Number of agency service consumers and service providers growing each year
  - Service growth- CIBRS, eCharging, LEMS Services, etc.
  - 45 new agencies in 2012
  - 31 new agencies in first six months of 2013
Business Needs

- Critical nature of data – Information used for real-time public safety in the field
- Need to ensure the security and reliability of our SOA Infrastructure
- BCA currently doesn’t have a vendor adapter validation process
Steps in New Process

- What is going to happen
- When change is going to happen
Details

- BCA is going to focus on:
  - XML calls
  - asynchronous service
  - synchronous service
  - error handling
Expected Benefits

- Improve performance
- Reduced uncertainty
- Potential cost saving
Communication

- Provide us with feedback
  - Michael.Povolotsky@state.mn.us
Questions?
Next Vendor Conference

Wednesday, April 23, 2014
9 a.m. – 11:30 a.m.
Bureau of Criminal Apprehension
Thank you!

For More Information:

Jill Oliveira
jill.oliveira@state.mn.us
bca.dps.mn.gov