

SOR/Hot Files 2.0

2019 OpenFox[®] Training and Implementation
Meeting

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What is SOR?



The SOR system assist agencies with monitoring and tracking sex offenders after their release into the community

What is SOR?



- Offenders name
- Current location
- Offenses

Evolution of SOR

Flag on CCH Record

Oracle Forms

SOR 1.0

SOR 2.0



Tracking SOR Records

CCH Detail

Actions Reports Accessibility Sort Details View Columns

🔒 🔓 ✅ ↶ ➕ ↷ 📄 📞 🖨️ 📄 -- Record Count: 1

Notes	SID ▲	FBI	Middle Name	SOC
★ 🔒	D777778		TESTER	

Identification Alias Arrest Event Arrest Charges Prosecution Disposition Custody Documents

List of Cycles for Subject

Arresting Agency ORI	DOA	Officer ID
CPI000001 = CPI Agency 1	20150101	M39100

Cycle # 1 of 1

Next Prev New OK X

Detail of Cycle

TCN	SID	* Arrest Event Type	* DOA	Sexual Offender?	* Arrest Agency
OTH-D777778-12722812	D777778	ARR = Arrest	20150101	Y = SOR	CPI000001
Arrest County	* Fingerprint Agency	Officer ID	MUG Shot	Prisoner	
COOK	CPI000001 = CPI Agency 1	M39100	Y = Yes	M	

Names

Last	First	Middle	Suffix



Demands

NCIC Implements The National Sex Offender Registry File



Evolution of SOR

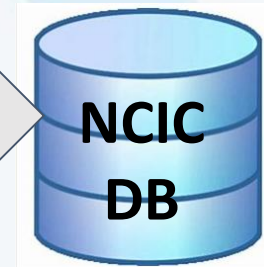
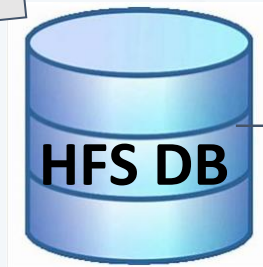
STEP BACK, REASSESS, MOVE FORWARD



Evolution of SOR – HFS



Hot File System (HFS)



**OpenFox
Message Switch**

Evolution of SOR – HFS Sync

Enter Sex Offender Record

- Enter Base (EXS)
- Enter Supplemental (EXSN)

Modify Base Record

- Modify Base (MXS)

Modify Supplemental

- Cancel Supplemental (XXSN)
- Re-enter Supplemental (EXSN)



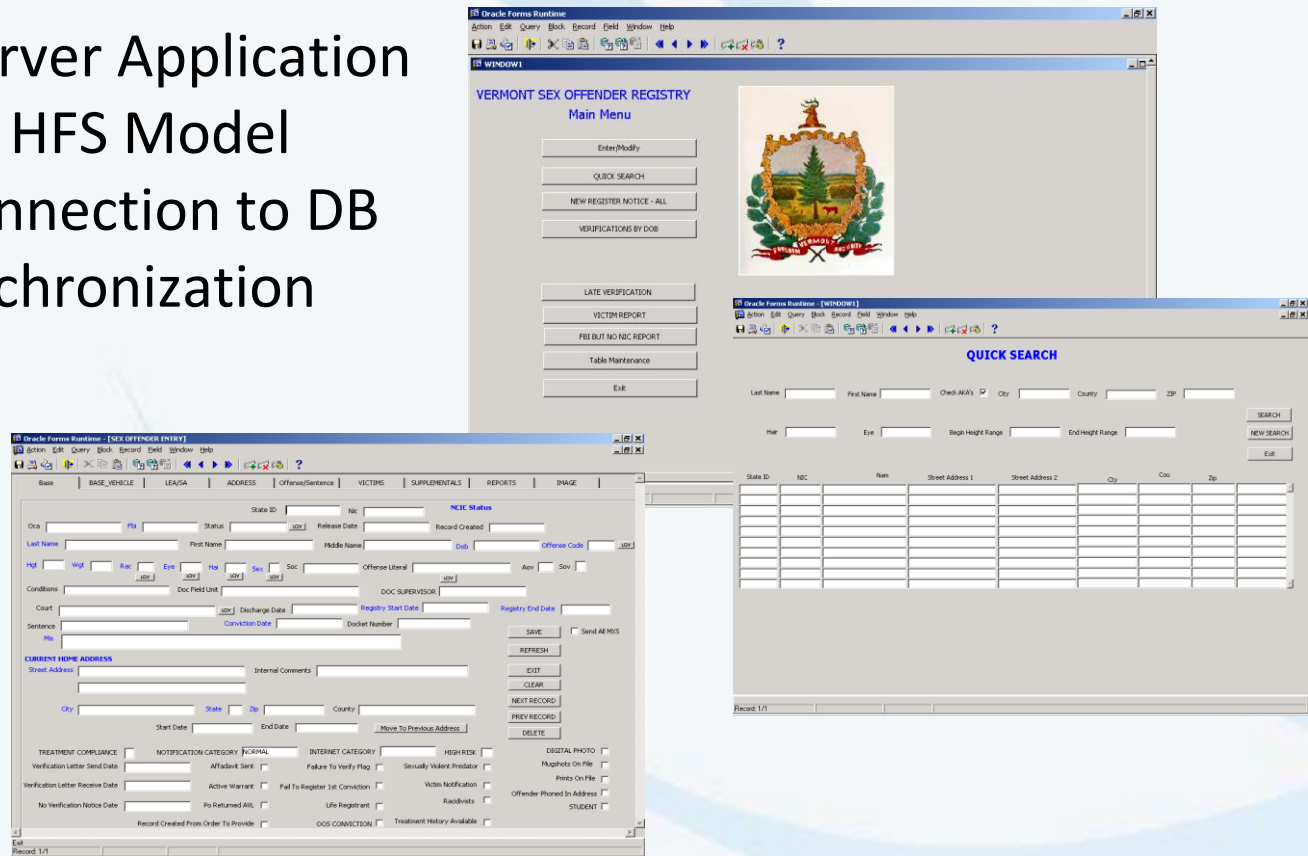
Evolution of SOR – Demands



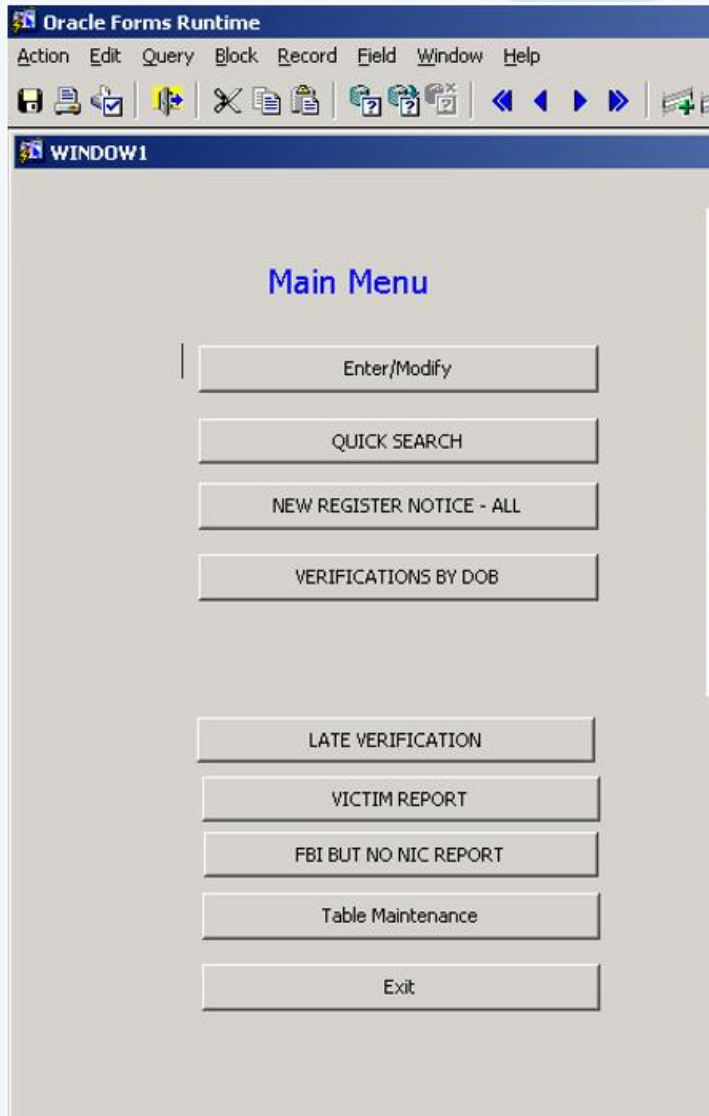
- Employment
- Vehicles
- Warrants
- Historical data

Oracle Forms

- Originated in 2003
- Client/Server Application
- Leverage HFS Model
- Direct connection to DB
- NCIC Synchronization



Oracle Forms - Functionality



- Search Functionality
- Record Maintenance
- Active & Historical Data
- Address Verification
- Reports & Letters
- Table Maintenance
- NCIC Sync



Evolution of SOR



OpenFox SOR 1.0



- Released in 2008
- Fully integrated into the Desktop Environment
- Takes full advantage of all features available to Desktop modules

SOR 1.0 - Desktop Features

Foxtalk Communication Protocol

Central Site Application

Browser Based

Automated Update Delivery

Integrated User Authentication/Authorization

RMS Library



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SOR 1.0 - Desktop Features

Demographics

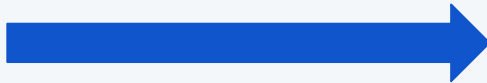
* Last Name
TEST

* Date of Birth * Sex
19800101 M = Male

* Hair Color
Brown

← **Focus Indicator**

Code List



SMT Editor

Actions

Supplemental Scars, Marks, Tattoos

Row #	Total Rows
1	3

SMT

SMT	Description
ART L ARM = Artificial Arm, left	ACCIDENT
ART L ARM = Artificial Arm, left	
ART ARM = Artificial Arm, nonspecific	
ART R ARM = Artificial Arm, right	
ART L EAR = Artificial Ear, left	
ART EAR = Artificial Ear, nonspecific	
ART R EAR = Artificial Ear, right	
ART L ELB = Artificial Elbow, left	
ART R ELB = Artificial Elbow, right	

Updating Operator ID
LOUIS

OK Delete Prev Next New



SOR 1.0 - Desktop Features

VIN Assist

Sex Offender Detail

Actions Letters Accessibility Sort Details View Columns

Record Count: 6

Vehicle Editor

Actions

Vehicle Information

Row #	Total Rows
new	1

VIN: 2G1FP22G3X2145000

Vehicle Year: 1999

Vehicle Make: CHEV = Chevrolet

Vehicle Model: CAM = Camaro

Vehicle Style: 2D = Sedan, 2-door

Vehicle Color: BLK = Black / BGE = Beige

Vehicle Ownership:

License Plate Information

License Plate Number	License Plate State	License Plate Expiration Year	License Plate Type

Record Management

Date/Time Entered	Entering Operator ID	Date/Time Updated	Updating Operator ID
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SOR 1.0 - Desktop Features

Inter Module Communication

INTERNET DESC

Miscellaneous Information

MISC INFO

 Run QH

 Run QR

 Run QXS

 View CCH Record

Record Management

Entered By

LOUIS

Entered Date

20181119 12:30:53

Modified By

TYLER



SOR 1.0 - Functionality

- Ease of Record Maintenance
- Robust Search Engine
- Active & Historical Data
- State-Specific Data
- Image Handling
- NCIC Sync process leveraging HFS model



SOR 1.0 - Enhancements


- Address Validation
- Geocoding
- Registration Functionality
- Signature Capture
- Enhanced Reporting/Letter design



SOR 1.0 - Enhancements

Image Processing

Image Management



20180618 20180618 20180618 20180618 20180618 20180618 20180618 20180618 20180618 20180618 20180618 20180618 20180618 20180618 20190409

Manage Images

Currently Selected Image

Import Image Format Image Export Image


Store at NCIC? NCIC Image #
N = No

* Image Type * Date of Image
M = Mugshot 20180618

* Name Description
TEST ONE MUGSHOT IMAGE 1

Image Size * Extension
0 PNG

Next
Draw
New
OK



SOR 1.0 - Enhancements

Address Validation

SOR Validate Address

Actions

ADDRESS VALIDATION

Error

Error Message

VALIDATED ADDRESS	ORIGINAL ADDRESS
Street Number <input type="text" value="1510"/>	Street Number <input type="text" value="1510"/>
Direction 1 <input type="text"/>	Direction 1 <input type="text"/>
Prefix <input type="text"/>	Prefix <input type="text"/>
Street Name <input type="text" value="E ELM ST"/>	Street Name <input type="text" value="E ELM STREET"/>
Suffix <input type="text"/>	Suffix <input type="text"/>
Direction 2 <input type="text"/>	Direction 2 <input type="text"/>
Unit Designator <input type="text"/>	Unit Designator <input type="text"/>
Unit Number <input type="text"/>	Unit Number <input type="text"/>
State <input type="text" value="MO"/>	State <input type="text" value="MO"/>
City <input type="text" value="JEFFERSON CITY"/>	City <input type="text" value="JEFFERSON CITY"/>
Zip Code <input type="text" value="65101-4118"/>	Residence Zip Code <input type="text" value="00000"/>
County <input type="text" value="026"/>	County <input type="text"/>

Dpv Desc

Dpv Note

Correction



SOR 1.0 - Enhancements

Registration Functionality



- Allows Agencies to register a sex offender
- Allows central sites to review registrations and sync with NCIC
- Registration History

SOR 1.0 - Enhancements

Topaz Signature Pad Support



Capture offenders
signature at
registration

SOR 1.0 - Enhancements

JasperReports

- Open source Java reporting library
- Rich displays that include in-line imaging
- Highly configurable

WEST VIRGINIA STATE POLICE
WEST VIRGINIA STATE
INFORMATION SERVICE
SEX OFFENDER REPORT
701 Jefferson
South Charleston, West Virginia
Colonel Jan
Superintendent
September 2

Mr. SEVEN A. TEST
400 STREET DR STE F
CITY, WV 26035

Dear Mr. SEVEN A. TEST,

You are hereby notified that according to West Virginia law, you are required to register as a sexually violent predator. You must verify your address every 90 days. You will be required to register in April, July and October to comply with the address change requirements.

You are hereby notified that you are required to notify the state police of any change of address, employment, change in school or training, e-mail address and/or screen names. You will also be required to submit to fingerprinting if you are incarcerated and you are required to re-register if you are released from incarceration.

MISSOURI STATE HIGHWAY PATROL
MISSOURI SEX OFFENDER REGISTRATION

Registration Type: _____ Next Registration Date: _____
Next Registration Time: _____

MISSOURI SID NUMBER: _____ SHP #: _____ FBI NUMBER: _____ DOC NUMBER: _____ DCN: _____

OFFENDER NAME (Last, First, Middle): _____

PLACE OF BIRTH: _____ SEX: _____ DATE OF BIRTH: _____ SOCIAL SECURITY NUMBER: _____

CITIZENSHIP: _____ RACE: _____ HEIGHT: _____ WEIGHT: _____ EYE COLOR: _____ SKIN TONE: _____ HAIR COLOR: _____

DRIVERS LICENSE/ID NUMBER: _____ DL EXP YEAR: _____ STATE: _____ PROFESSIONAL LICENSE: _____

PROFESSIONAL LICENSE TYPE: _____ OCCUPATION: _____ PERSISTENT OFFENDER: _____ TIER LEVEL: _____

SCARS/MARKS/TATTOO: _____ SMT DESCRIPTION: _____

ADJ. OF FAILING TO REGISTER: _____ MNU: _____

ALIAS INFORMATION

LAST NAME	FIRST NAME	MNA	NICK NAME	SUFFIX	DOB	SOC	MNU

SCARS/MARKS/TATTOOS

SMT	DESCRIPTION

IDAHO SEX OFFENDER REGISTRY

and 3 must be completed on EVERY registration
(Please Type or Print Legibly - Black Ink)

1. Use blank sheet for additional information, if needed.

3. Other jurisdictions previously registered: _____ 4. Idaho Sex Offender Registry # _____

5. Designated as Violent Sexual Predator: Yes _____ No _____

7. Date of Birth: 01/01/1950 MM/DD/YYYY

8. Other Dates of Birth used: _____

11. Sex: M 12. Race: W 13. Height: 509 14. Weight: 167 15. Eyes: BLU 16. Hair: BLN

19. E-mail or instant messaging addresses:
TRECORDER@GMAIL.COM

20. Other nicknames and pseudonyms: _____

21. Present address or description of residence:
City BOISE County ADAMS ST ID Zip 50438

22. Tribal Lands? Yes _____ No If yes, which Tribe? _____

25. If moving to above primary address, give effective date of move:
Fill in street address or description of residence: _____



SOR 1.0 Implementations



SOR Reboot - Change is coming



SOR Reboot - Change is coming

Searches

CRUD (**C**reate **R**ead **U**pside **D**elete)

NCIC Synchronization

Reports

Client Specific Functionality



SOR Reboot



SOR Reboot - New Backend

Fennec Broker platform

- Java middle tier app
- Powerful language
- Platform independent
- Database independent



SOR Reboot - New Backend

1.0



2.0

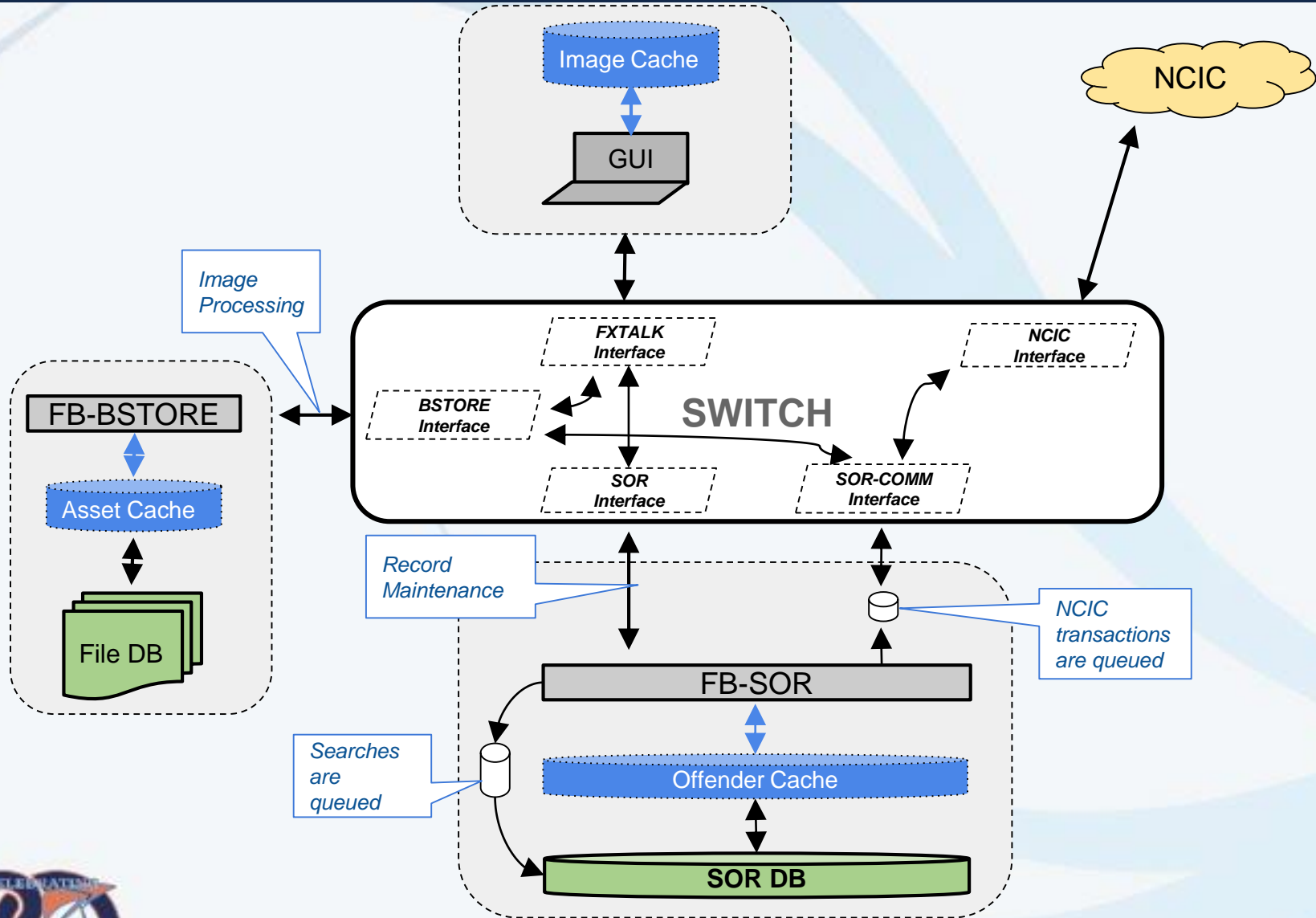


SOR Reboot - New Sync Process

- FB queries NCIC data to determine current state of NSOR records
- FB creates new NSOR record
- FB compares NSOR records to NSOR records
- FB compares NSOR records to NSOR records
- FB submits NSOR records to NSOR records

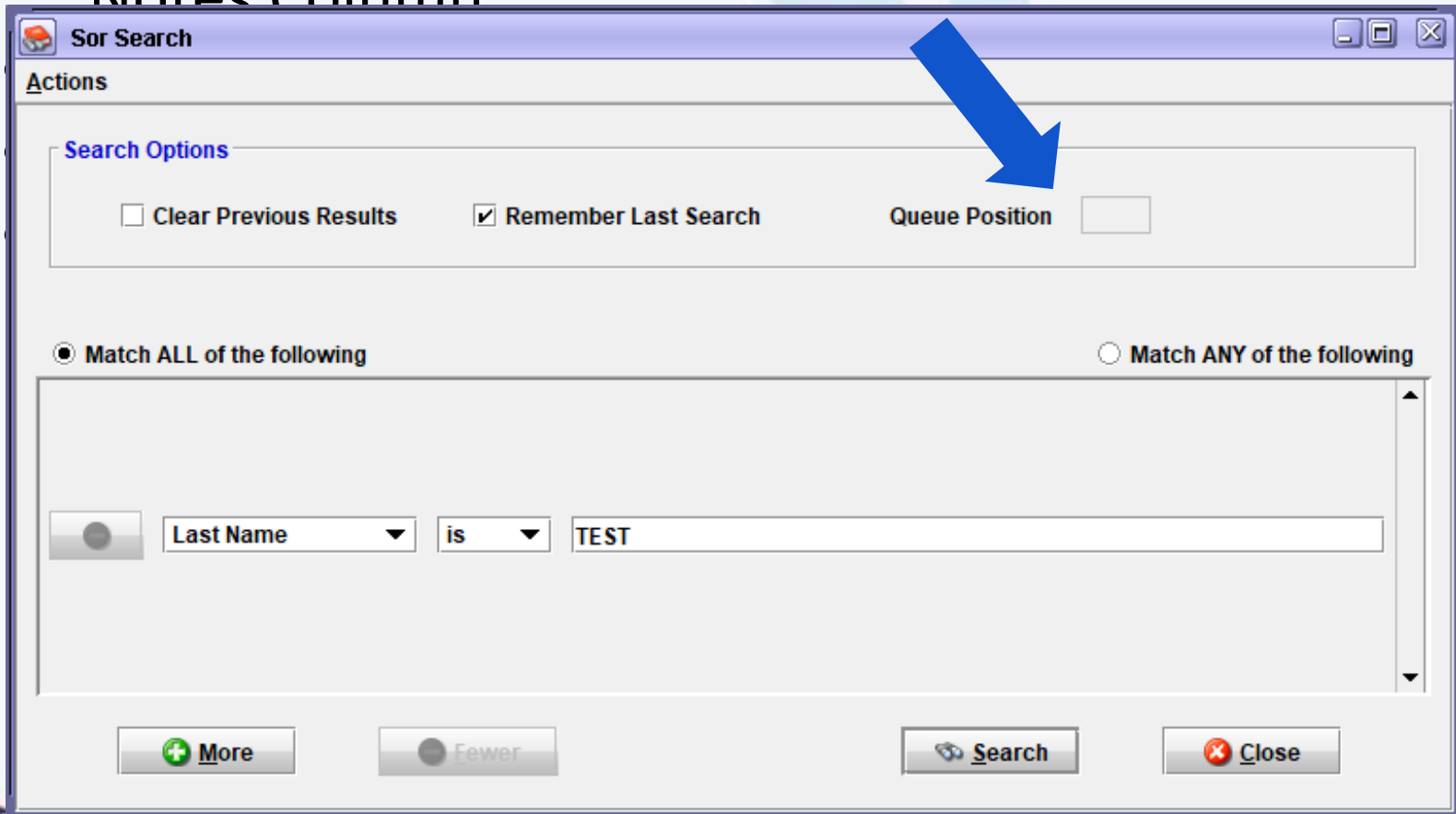


SOR Reboot - Architecture



SOR Reboot - Transparency

- Search Queues
- Notes Column



The screenshot shows a window titled "Sor Search" with a standard Windows-style title bar. Below the title bar is a section labeled "Actions". Under "Actions", there is a "Search Options" section containing three items: a checkbox for "Clear Previous Results" (unchecked), a checked checkbox for "Remember Last Search", and a text input field labeled "Queue Position". A large blue arrow points to this "Queue Position" field. Below the search options, there are two radio buttons: "Match ALL of the following" (selected) and "Match ANY of the following" (unselected). Below these is a search criteria area with a search icon, a dropdown menu showing "Last Name", a dropdown menu showing "is", and a text input field containing "TEST". At the bottom of the window, there are four buttons: "More" (with a plus sign), "Fewer" (with a minus sign), "Search" (with a magnifying glass icon), and "Close" (with a red X icon).

SOR Reboot - Transparency

- Search Queues
- **Notes Column**
- NCIC Sync

Sex Offender Detail

Actions Letters Accessibility Sort Details View Columns

Record Count: 7

Notes	NIC #	Last Name ▲
	PUBLIC	JOHN SEVEN
	Y950M7879M	TEST
	TEST	JULYTES
	TEST	TEST
	TEST	ANOTHEI

Base Supplemental Internet/Phone Address Employment Education Conviction

Demographics

* Last Name * First Name

PUBLIC JOHN

SOR Reboot - Transparency

- Search Queues
- Notes Column
- **NCIC Sync**
- System Health

NCIC Sync Detail

Actions

This window will auto refresh every 30 seconds.

Name Date of Birth Sync Record Status

Field T... ▲	MFC	Action	Status	Time	Data Sent to NCIC
BASE		ADD_OFFENDER	COMPLETE	20180615 16:27:41	NAM/TEST,SEVEN.OCA/OCATEST7.SEX/M.RAC/W...
BASE	SXP	MODIFY_FIELD	COMPLETE	20180615 16:27:41	SXP/N
BASE	POB	MODIFY_FIELD	ACTIVE	20180615 16:27:41	POB/IL
BASE	DNA	MODIFY_FIELD	PENDING	20180615 16:27:41	DNA/N.DLO/
BASE	ROV	MODIFY_FIELD	PENDING	20180615 16:27:41	ROV/CS.AOV/22.SOV/M



SOR Reboot - Transparency

- Search Queues
- Notes Column
- NCIC Sync
- **System Health**
- Admin Notifications

The screenshot shows a web-based application window titled "System Health". The window has a purple title bar and standard window controls. Below the title bar, there is a section labeled "Actions" with a note: "This window will auto refresh every 30 seconds." Below this note, there are five rows of system metrics, each with a small icon, a numerical value in a red box, and a text label:

- Records Locked: 2
- NCIC Records with Error: 4 (Total NCIC Errors: 12)
- Sync Total: 0
- Active Searches: 0
- Total Sex Offender Records: 18

Below the metrics, there is a section titled "NCIC ERRORS" which contains a table with the following data:

Record ID ▲	Name	Date of Birth	Error Message	Time Elapsed
1	LAST, FIRST M	20160101	test sound error	2 weeks
1	LAST, FIRST M	20160101	another test error	2 weeks
1	LAST, FIRST M	20160101	test sound error 3	2 weeks
3	TEST, TWO	20020202	REJECT - EQUIPMENT PROBLEM - EXSN	4 weeks



SOR Reboot - Transparency

- Search Queues
- Notes Column
- NCIC Sync
- System Health
- **Admin Notifications**

NCIC Sync Pending



Record is awaiting NCIC sync.
Queue position: 1

Click the 'View Sync Detail' button for more information.

OK

Notifications

[Dismiss All](#)



New SOR NCIC Sync Error 1:43 PM

There is a new NCIC error

SOR 2.0 - Goals

NCIC
Data Model

Reliability

Performance

Transparency



SOR 2.0 - Summary

3 Tier Architecture

Patent Pending NCIC Sync Process

NCIC Data Model

Out of Box Functionality



What's next?

**Where else can
this technology
be used?**



What's next?

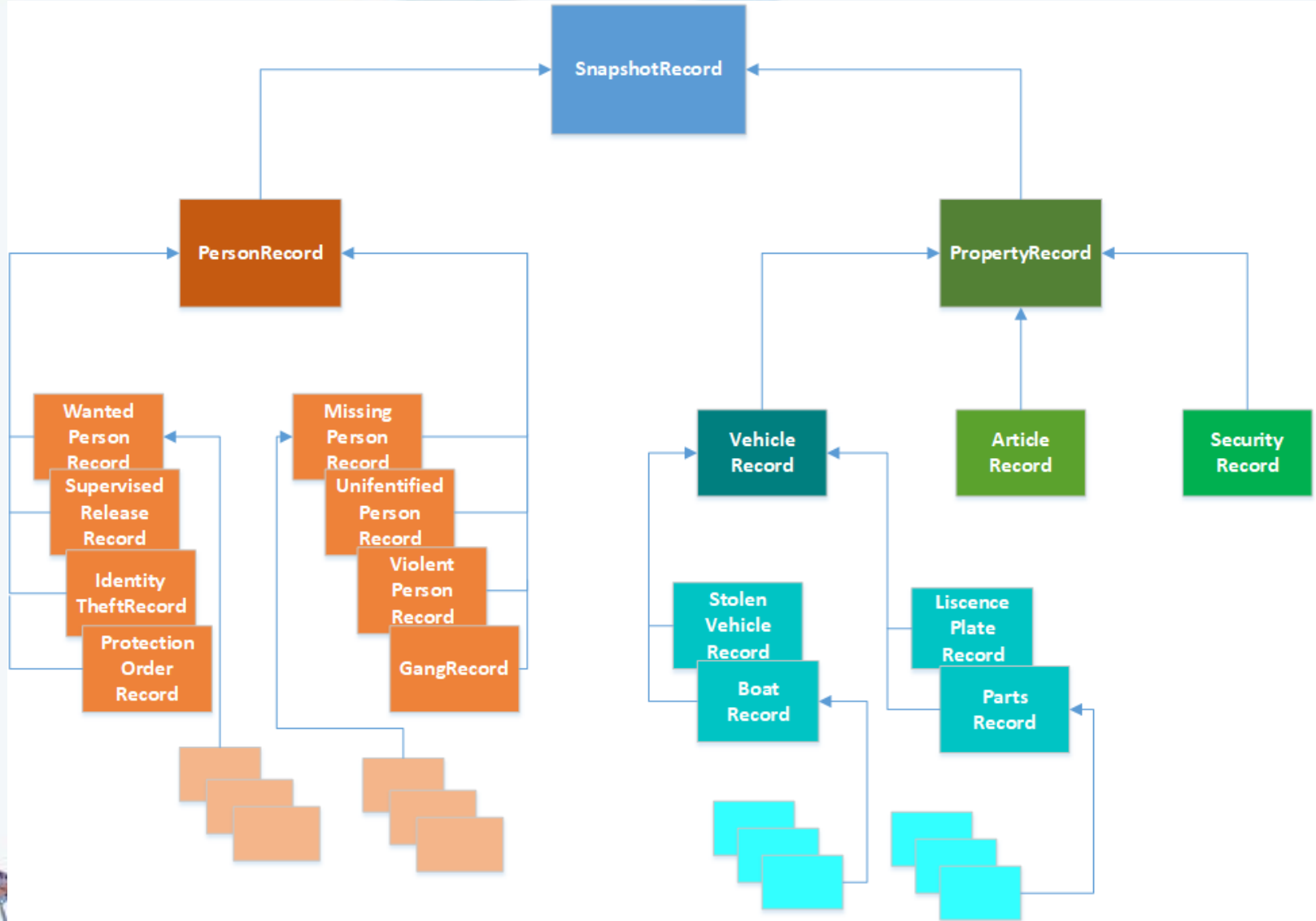
KAREN YUAN

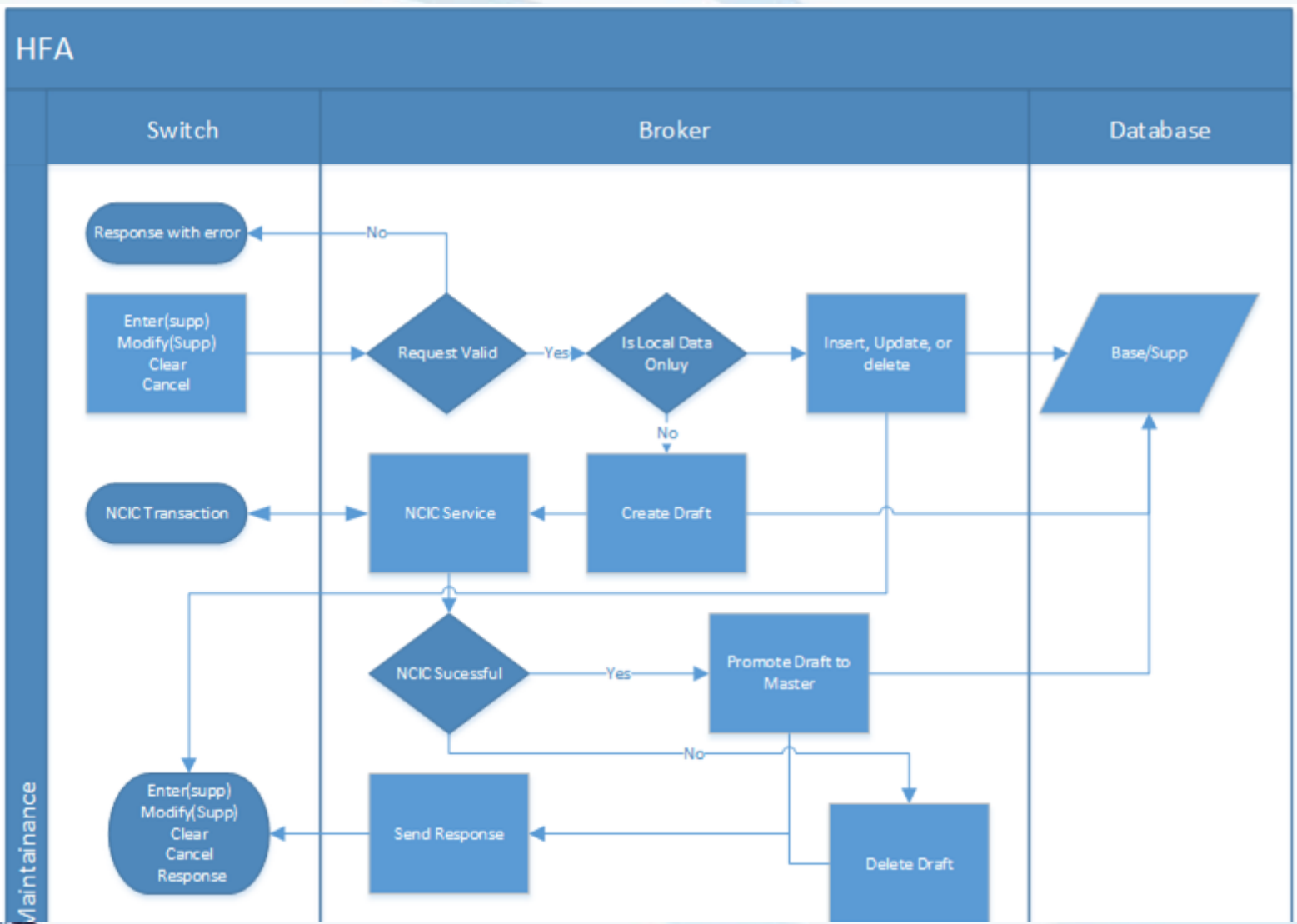


- NCIC compliance
- Enhance performance
- Enhance flexibility
- Ease of maintenance
- Robust query functionalities
- Flexible reporting capabilities

- Leverage patent pending NCIC sync technology
- New NCIC data model
 - Handle both letter O and zero for record matching
- Handle NCIC unsolicited messages
- Send unsolicited messages for local only records
- Validation and reporting capabilities







Maintenance



- Underline database independent
- Code auto generation
- More robust data retrieval
- Conjunction with data structure redesign

Real-time Replication Reporting Database

- Enhance Flexibility
- No negative impact on production database performance
- Soft delete allow reports on purged records

- Arizona under UAT
- Illinois LEADS in development
- More agile approach can be utilized
- Automated testing to ensure quality

- Adding GUI client
- Others?
- Birds of a Feather sessions in the afternoon

Thank You!

