



Criminal Justice Information Sharing Committee Update

November 17, 2021

**CRIMINAL JUSTICE COMMISSIONER
TENISHA STEVENS**





Shared infrastructure that:

- Provides justice professionals with the accurate and timely information they need to effectively fulfill their respective missions.
- Provides policymakers with data to effectively plan, prioritize, and evaluate the impact of resources invested in the criminal justice system.
- Provides the public at-large with information by which to evaluate the performance of the justice system and returns on taxpayer resources.

Current Data Supply Chain

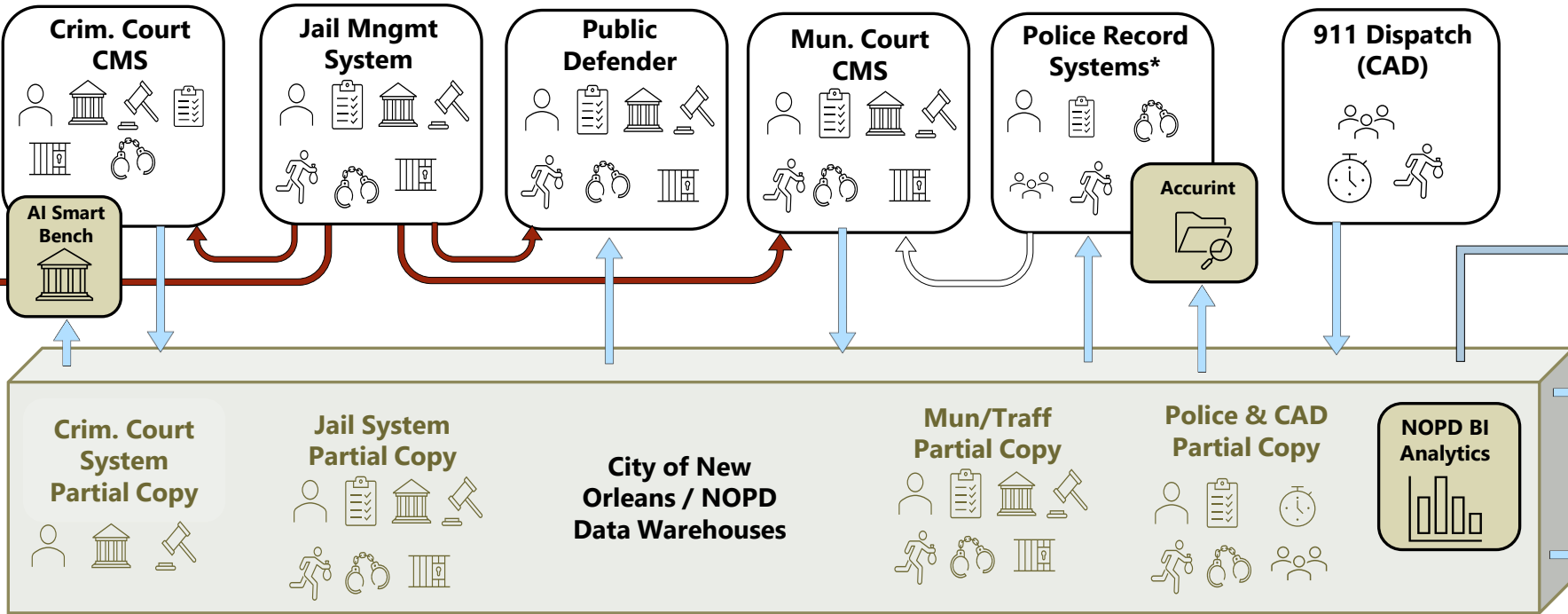


A Agencies enter information on people, places and events in their respective IT systems as they interact with cases.



B Some data is pushed directly between IT systems in nightly batches (ex. Arrest register)

C Other information is replicated to the City/NOPD data center nightly and pushed to agencies (e.g. Court -> City -> Public Defender)



➔ FTP Transfer
 ➔ Linked Server Transfer
 = Reporting app – no data entered.
 = Interagency app w/ data entry.

*Multiple apps– EPR, FIC, DORS, BEAST. To be consolidated into Hexagon in 2022

Highlighted Gaps & Solutions



➤ Problem: Redundant data entry / paper-driven workflows

Process	Redundant Data Entered	Prior Entry Point
Jail Acceptance / Pre-Booking Workflow (OPSO)	<ul style="list-style-type: none"> • Incident information (offense location, offense time, Item Number, etc.) • Arresting officer information • Charges • Suspect information • Victim/Witness information • Gist 	NOPD (Electronic Police Report)
Post-First Appearance Inmate Charge Record Update (OPSO)	<ul style="list-style-type: none"> • Probable cause determination • Bond amount • Release conditions 	Clerk of Criminal Court (AS400 DEFCHG)
Prosecutor Screening Decision	<ul style="list-style-type: none"> • NOPD incident report & supplemental materials 	NOPD (Electronic Police Report)
Screening Action (Clerk of Court / OPSO if defendant in active custody)	<ul style="list-style-type: none"> • Refused charges / accepted charges / modified charges • Bill of Information 	District Attorney (Prosecutor By Karpel)
Charge disposition tracking – arraignment through sentencing (District Attorney / Public Defender)	<ul style="list-style-type: none"> • Plea entered • Verdict • Sentence 	Clerk of Court (AS400 DEFCHG, SENTEN)

Highlighted Gaps & Solutions

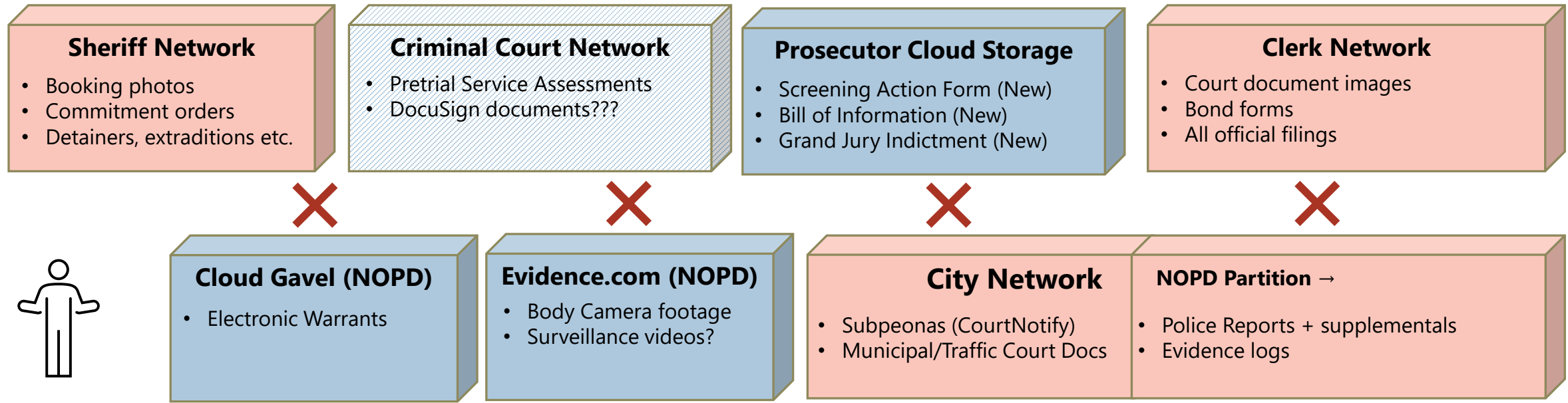


- Inability to link key records for cross-system defendant/charge tracking

Data Object in System A	Data Object in System B	Issue
Electronic Police Report arrested subject ("Offender")	Jail Management System arrested subject ("Inmate Folder")	NOPD lacks persistent person-level identifier across incident reports. No police report person identifiers included in jail booking data.
Sheriff inmate charge (IMCHGD)	Criminal Court defendant charge (DEFCHG)	Person (SCN) and arrest (Arr No, ATN) identifiers shared by both systems, but no shared identifier at charge level.

Highlighted Gaps & Solutions

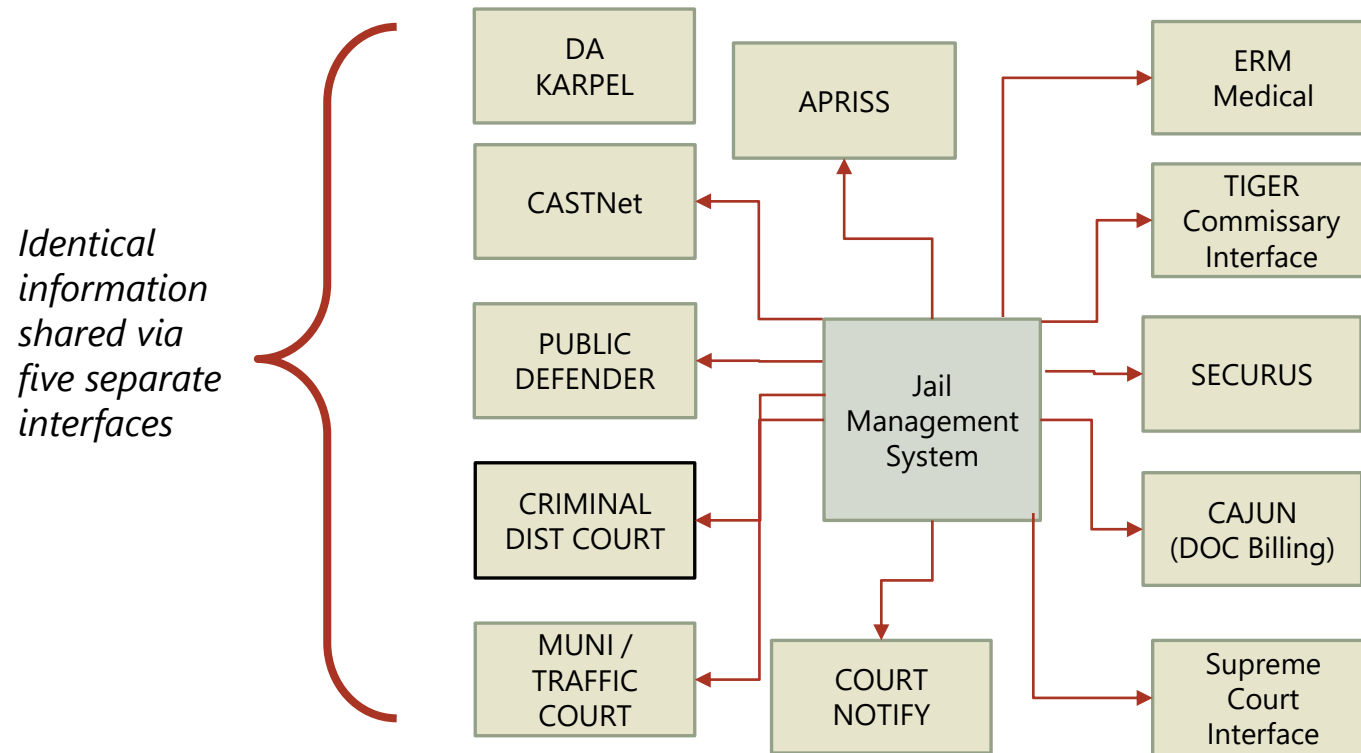
➤ Problem - Documents stored on disparate network and cloud environments. Users need documents and images from across the system but can only access those stored in their respective agency's environment.



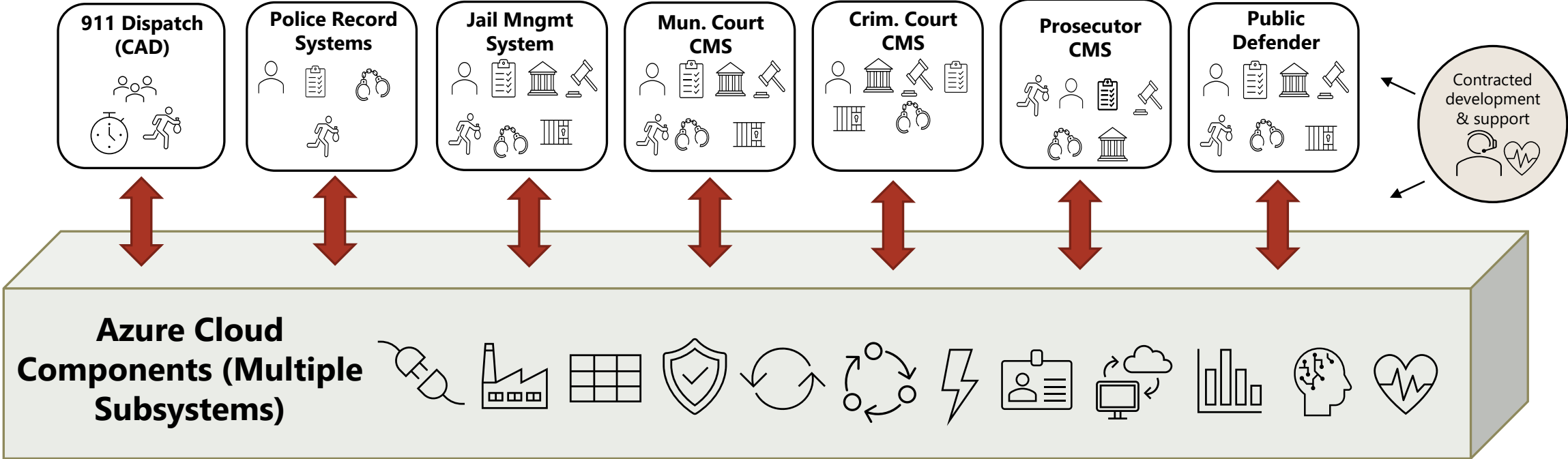
Highlighted Gaps & Solutions

- Problem - complex system-to-system interface requirements massively inflate cost and difficulty of replacing key legacy systems.

Example: Jail System Interfaces



Long Term Vision for CJIS Environment



Connect.
 Web hooks connect agency source systems to cloud. Solution is vendor / source application neutral and compatible with both on premise and cloud data sources.

Extract & Transform.
 Extract, check and transform data from source systems:

- Data type & business rule validation
- Map to adopted naming standards
- Add meta data, security tags and enhancers.

Store.
 Raw and transformed tabular data, meta data and image files stored in data lake zones.

Secure.

- Encryption
- Admin roles
- Activity logs
- Audits

Backup.

- Point in time restore
- Disaster recovery

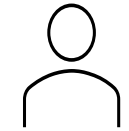
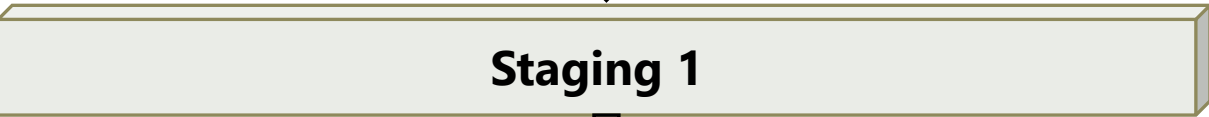
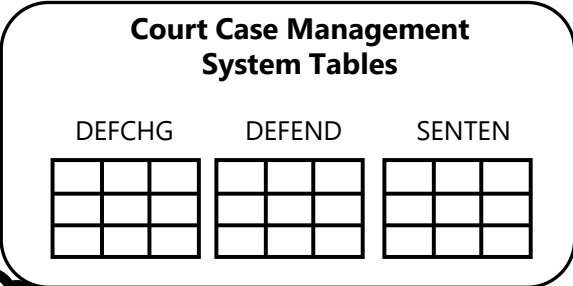
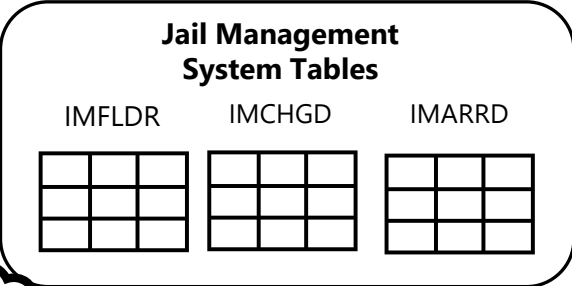
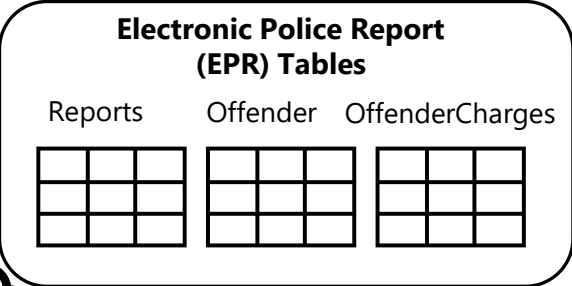
Integrate.
 Enterprise service bus allows source systems to receive data via API at desired update frequency (data latency).

Automate.
 Inputs from source systems trigger workflows defined by inter-agency business logic.

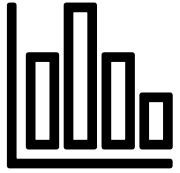
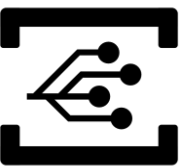
Authenticate.
 Federated access via agency-specific active directories.

Interact.
 Front-end BI/DW application for business analysts. No-code & AI enhanced apps for functions not supported by agency source system.

Data flow sample (high level)



6. Service Bus updates source tables via Enterprise Service Bus. (Repeat.)



1. Azure data factory web hooks check for records where modified date/time >= cloud timestamp.

2. Light modifications (e.g. date translation). Validation rules applied. Field names changed to NIEM standards.

3. Objects merged. Inferred / derived fields added. Surrogate keys generated.

4. Merged into enterprise data models for service bus and DW/BI Warehouse.

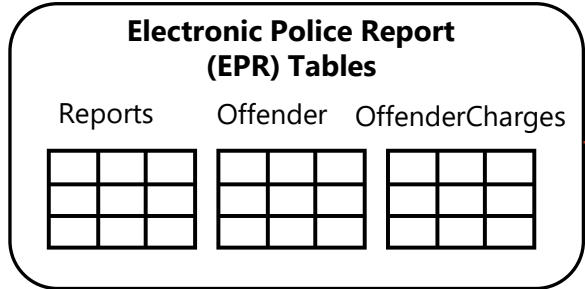
5. Pushed to DW/BI Analysis Service and Enterprise Service Bus (Logic Apps)

Detailed Data Flow With Azure Components

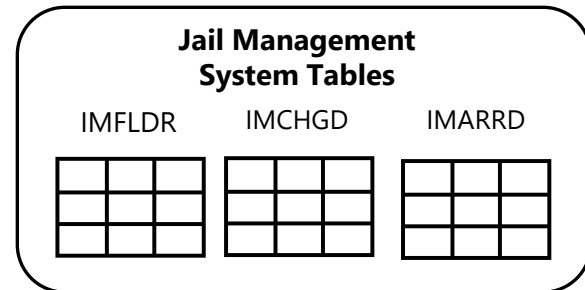


(From Data Platform in 30 Days proposal by Insight)

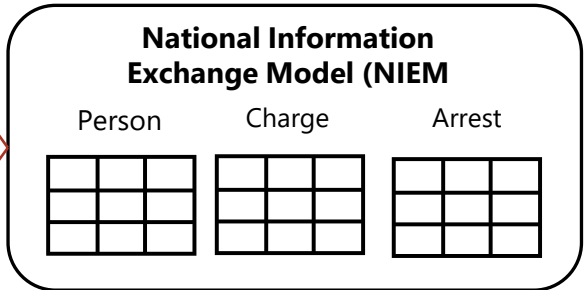
Data Translation



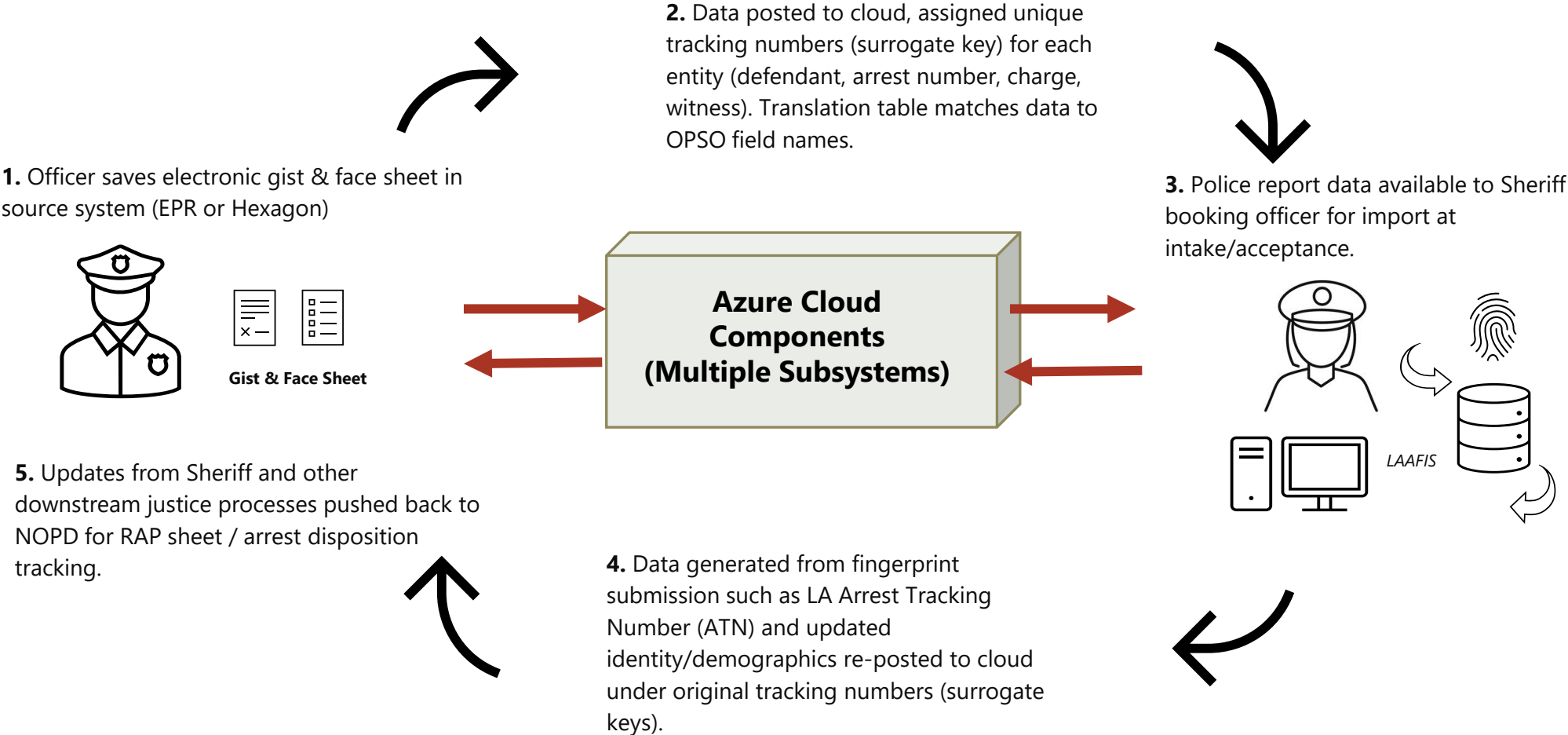
NOPD EPR/FIC Element	Corresponding NIEM Element / (Definition)
<ul style="list-style-type: none"> FirstName 	nc:PersonGivenName (A first name of a person.)



Sheriff JMS Data Element	Corresponding NIEM Element / (Definition)
IFFNAM	nc:PersonGivenName (A first name of a person.)



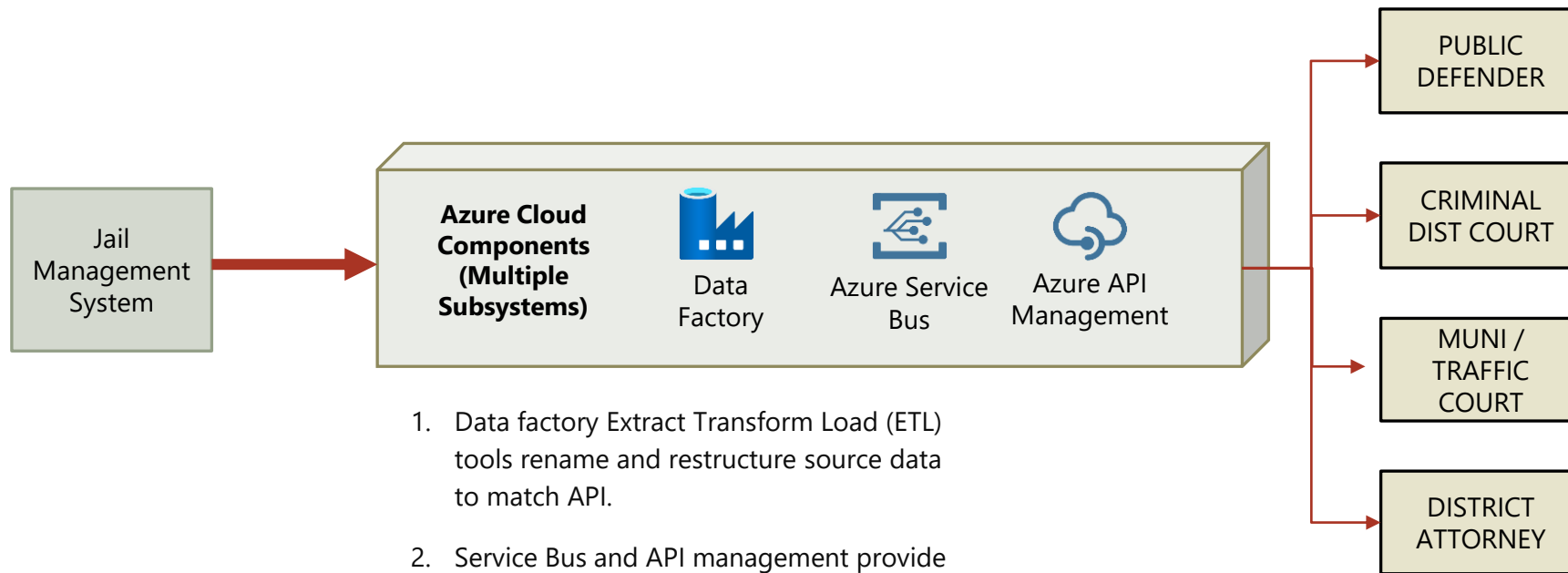
Surrogate Keys and Universal Tracking Numbers



Subscription & Publication



- Solution: Enterprise Service Bus allows data to be published to all authorized subscribers via one interface/API independent of source system.



1. Data factory Extract Transform Load (ETL) tools rename and restructure source data to match API.
2. Service Bus and API management provide data to authorized systems.
3. Source system can be replaced without disruption to external agencies dependent on jail/arrest data.

Shared Cloud Storage / Federated Access



Sheriff Network

- Booking photos
- Commitment orders
- Detainers, extraditions etc.

Criminal Court Network

- Pretrial Service Assessments
- DocuSign documents???

Prosecutor Cloud Storage

- Screening Action Form (New)
- Bill of Information (New)
- Grand Jury Indictment (New)

Clerk Network

- Court document images
- Bond forms
- All official filings

Orleans Law Enforcement Restricted Zone

- NOPD
- Probation & Parole
- District Attorney
- Dept. of Corrections

← **Azure Data Lake** →
General Orleans CJIS Zone

- CJIS Committee Agencies
- Not free-for-all: data can be restricted at table and field level

Public Document Zone

- *Optional – could be used for portal for attorneys and other members of public*



Complies with federal CJIS Standards



Multi-tenant active directory controls access at agency and user level.



Cloud Gavel (NOPD)

- Electronic Warrants

Evidence.com (NOPD)

- Body Camera footage
- Surveillance videos?

City Network

- Subpoenas (CourtNotify)
- Municipal/Traffic Court Docs

NOPD Partition →

- Police Reports + supplementals
- Evidence logs