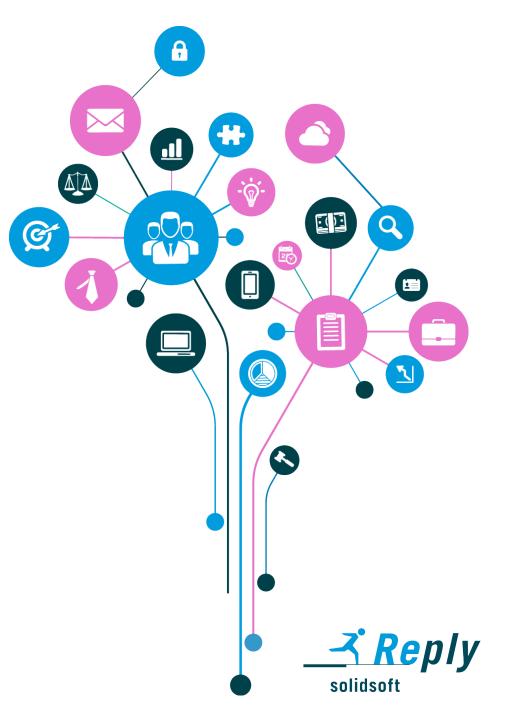
EMVS National Blueprint System

A Technical Overview for Pharmacies and Wholesalers

Charles Young



Local System Design



Local User Authorisation

NBS does not authenticate or authorise local users for systemto-system interchange.

- What permissions should be granted?
- What roles should be granted?



Scanning Hardware

Scan 2D GS1 Data Matrix barcodes

- What scanning hardware will be supported?
- How will it be connected and configured
- Maintenance and support



Scanned Data Processing

GS1 standards and Application Identifiers

- How will data be parsed?
- How will NTINs be handed?
- How will NHRNs be handled?
- How will additional data fields be handled
- What happens if data is incorrectly formatted?



Logging and Auditing

Auditing system operations and end-user actions

- Local organisation requirements
- Suspicious activity monitoring
- Forensic analysis



Reporting

Reports for Local Organisations

- Local organisation requirements
- Reporting tools and frameworks
- Analytics
- NBS Reports



Client Credentials

Represents client system identity

- Organisation
- Location
- Equipment
- Secure local storage
- Credentials for ITEs and IQEs
- Credentials for production
- Access Token Expiry
- Avoiding potential misuse and abuse
- Audit trails



User Experience

Local systems should support human use appropriately

- Protection of patients from falsified medicines
- Clear, unambiguous representation of pack status
- Intentionality
- Affordance
- Context
- Support for Standard Operating Procedures and other processes



Recovery Strategies

Recover from temporary loss of service or connectivity

- Immediate retry
- User notification on failure
- Store and forward
 - Durability
 - Automatic detection of service resumption
 - Recovery phase and automatic retry
 - Notification an user feedback



Alerting and Notification

Systems should provide appropriate proactive alerting.

- Error conditions and exceptions
- Suspicious activity
- Local requirements only
- Direct users to helpdesk where appropriate



Integrating verification

Interchange with other data stores and systems

- Local systems and repositories
- Bulk-of-Pack Operations
 - Asynchronous batch-like processing
- Automated systems
- Aggregation
- User experience, feedback and notification

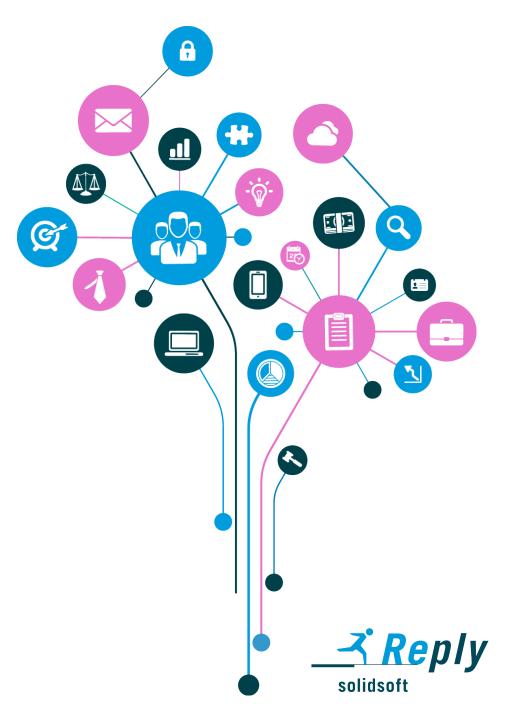




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Questions?



Thank You

