



PHIN INTEROPERABILITY BEGINS AT HOME

Integrating Enterprise Laboratory Services

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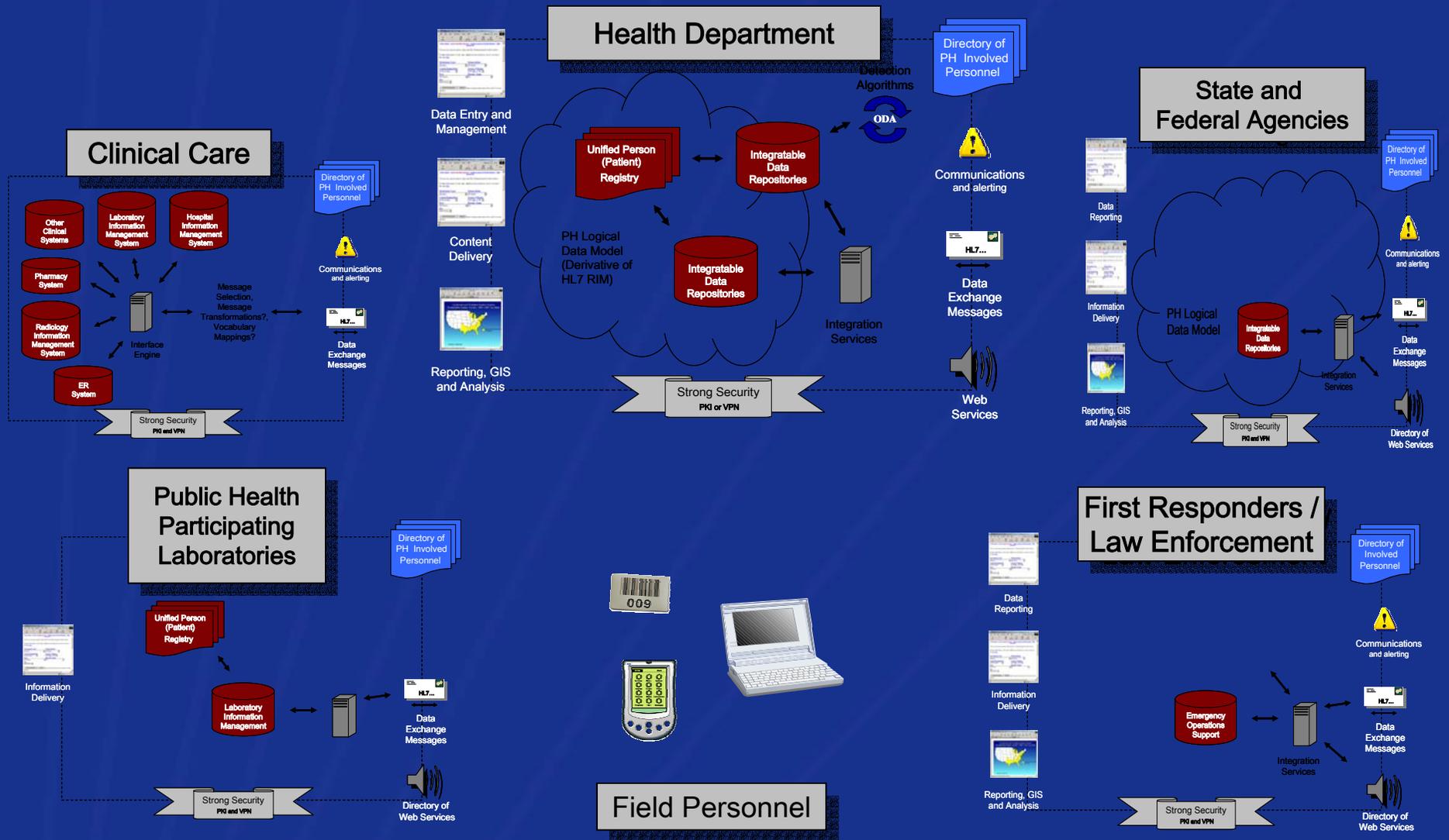


TOPICS

- **PHIN Requirements for Public Health Labs**
- **Identifying Enterprise Services**
- **Creating a Sustainable Enterprise Architecture**
- **Benefits of Component-based Architectures**
- **Questions**



Public Health Information Network – Architecture





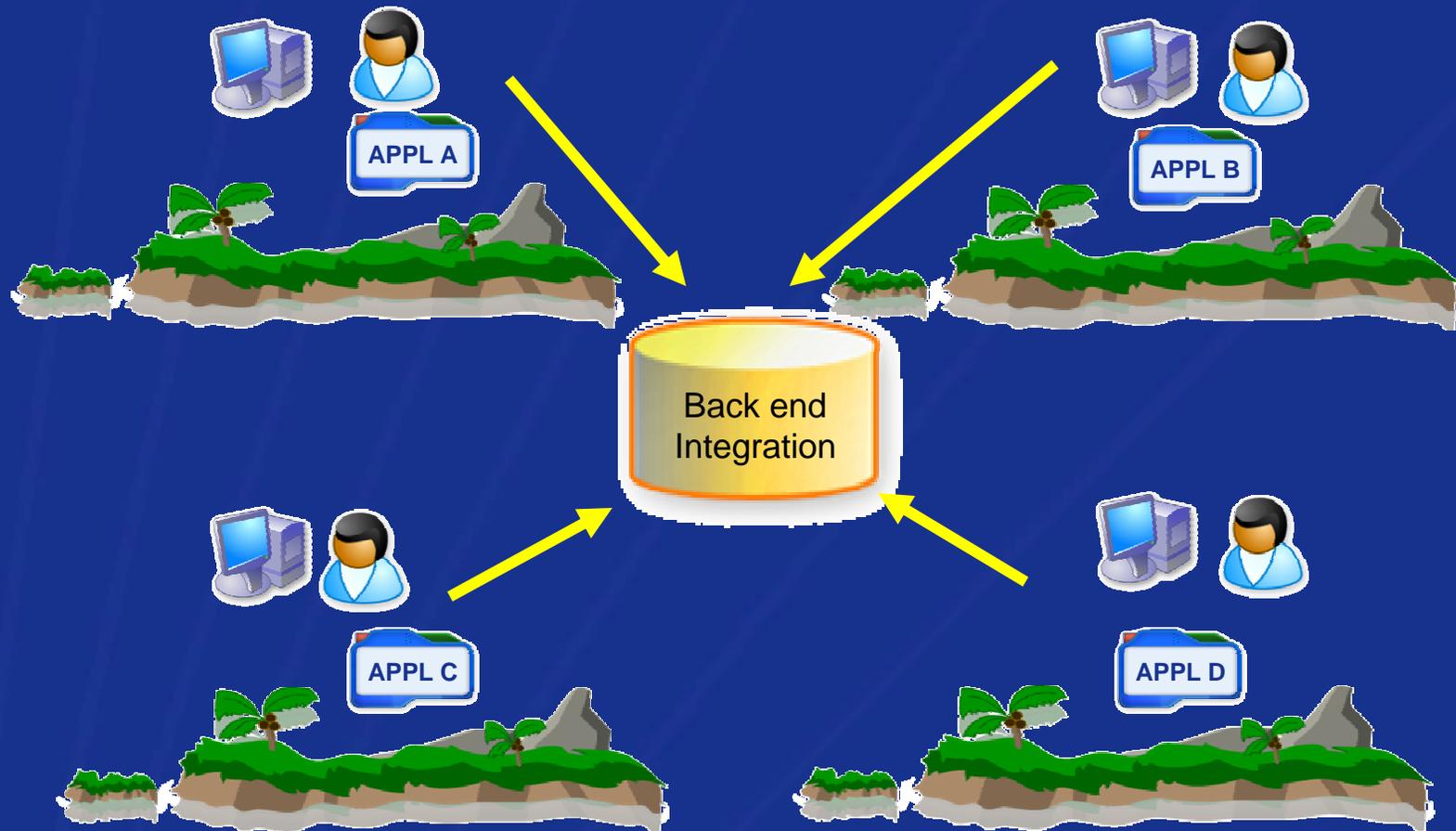
PHIN Requirements for PH Labs

- **HL7 Message Standards (Send and Receive)**
 - Laboratory Results
 - Laboratory Requests
 - Laboratory Transfers of Specimens
- **Unique Identifiers**
 - Subject Identifiers
 - Specimen/Sample Identifiers
- **PHIN Vocabulary Standards**
 - LOINC
 - SNOMED
 - HL7
- **Secure, Reliable Messaging**
 - Internet-based message delivery via ebXML transport
 - PKI encryption
 - Routing to appropriate partner organizations

Computing Islands



Computing Islands





According to Webster, “Integration” is:

*To form, coordinate or
blend into a
functioning or unified
whole*



Building with Components

Candidate Enterprise-Level Laboratory Functions:

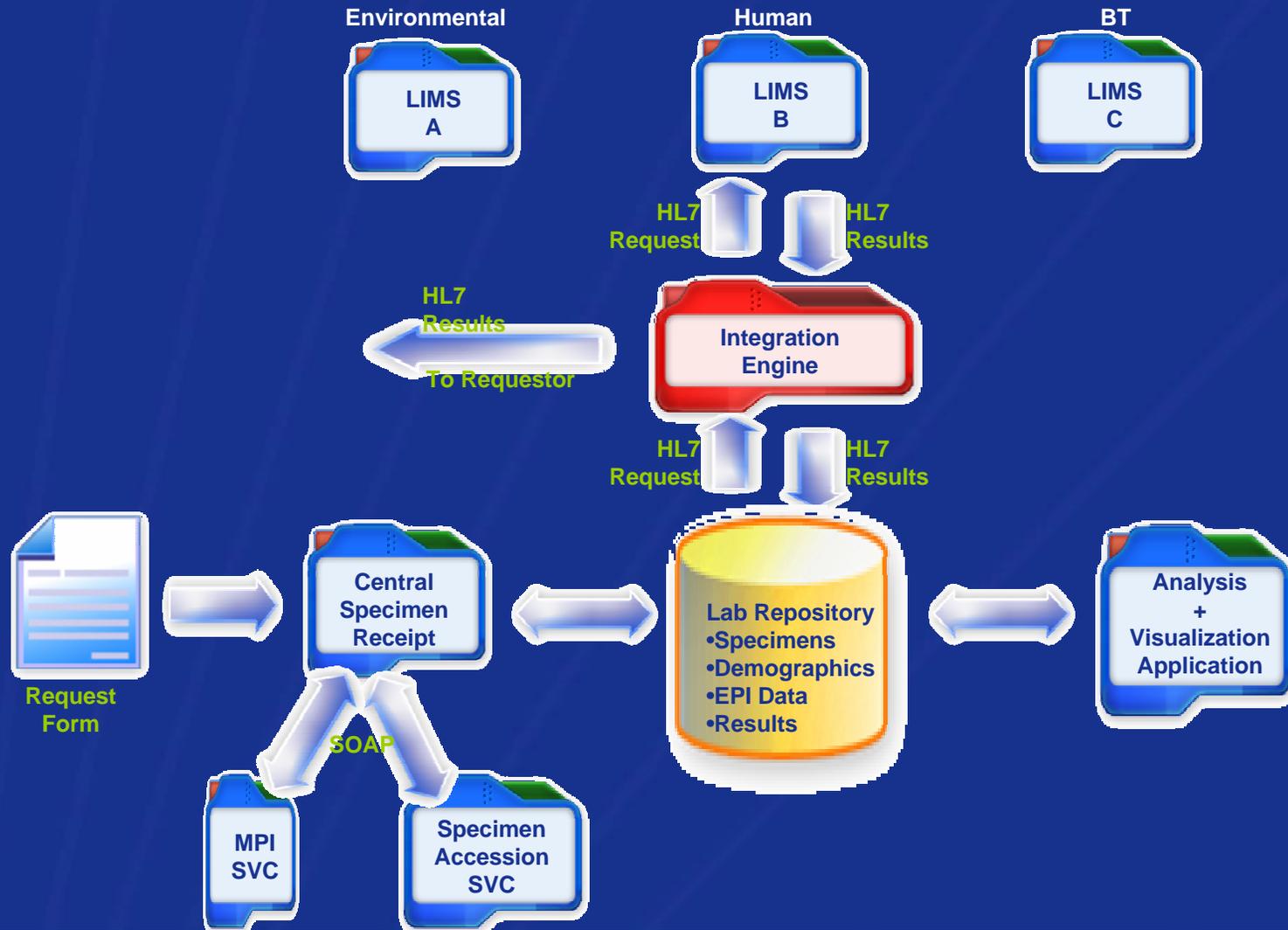
- **Specimen Shipments/Transfers**
- **Specimen and Laboratory Request Entry**
- **Specimen Accessioning**
- **Specimen Routing**
- **Chain of Custody**
- **Master Person Index (MPI) & Patient Demographics**
- **Results Repository with Epi data**
- **External Reporting**
- **Billing**
- **Document Management**



Integration Methods

- Custom application to application interfacing
- HL7 messaging
- EAI - Integration Engines and Brokers
- Web Services
- Back-end data warehousing

Example Component Integration





Benefits of Enterprise Integration

- **Reduced Data Entry**
- **Improved work flow and coordination**
- **Higher quality data and public health decision making**
- **Greater use of COTS and GOTS software systems**
- **Increased flexibility**
- **Positions organization for PHIN interoperability**



Audience Questions