



**IICC/IHE LAW Profile  
Connectivity Demonstration**

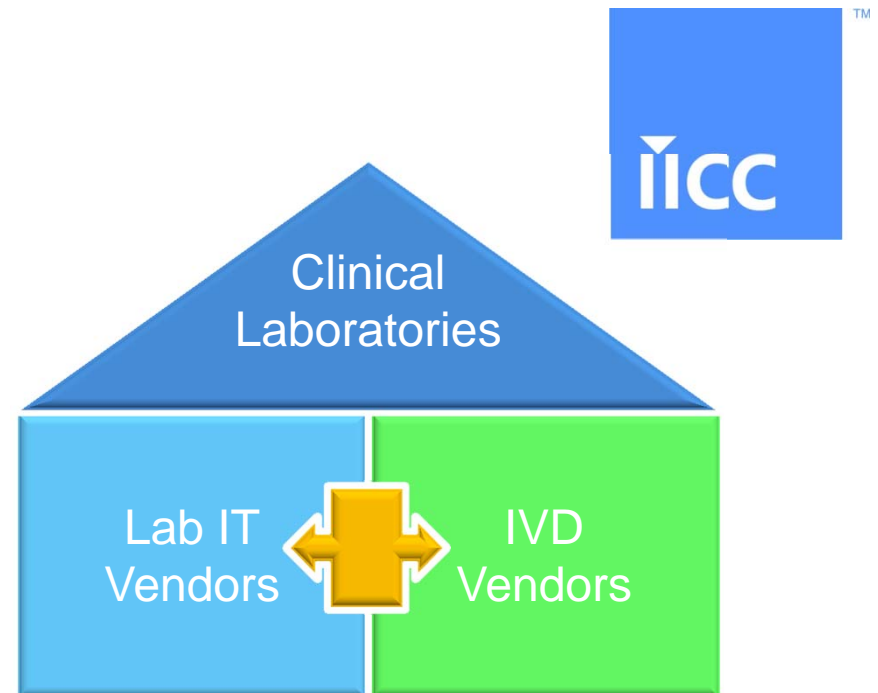
## IICC Demonstration Schedule



- Tuesday, July 28                      2:00pm
- Wednesday, July 29                10:00am, 2:00pm
- Thursday, July 30                    10:00am

## What is IICC About?

- IICC is a global nonprofit organization founded by leading laboratory vendors and healthcare providers
- IICC's mission is to modernize connectivity between laboratory IT systems and analyzers
- IICC's goal is to enable clinical laboratories to achieve more and spend less



*Mission: "To create and ensure adoption of an interoperable connectivity paradigm to reduce the complexity and variability of data exchange between IVD testing systems and healthcare informatics systems"*

## What is the IHE LAW Profile?



- Laboratory Analytical Workflow
- Developed by the IHE Laboratory Domain with support from IICC
- Included as part of the IHE Laboratory Technical Framework for laboratory interoperability
- Captures the IICC vision for the modernization of analyzer and IT system connectivity

# Summary of Benefits



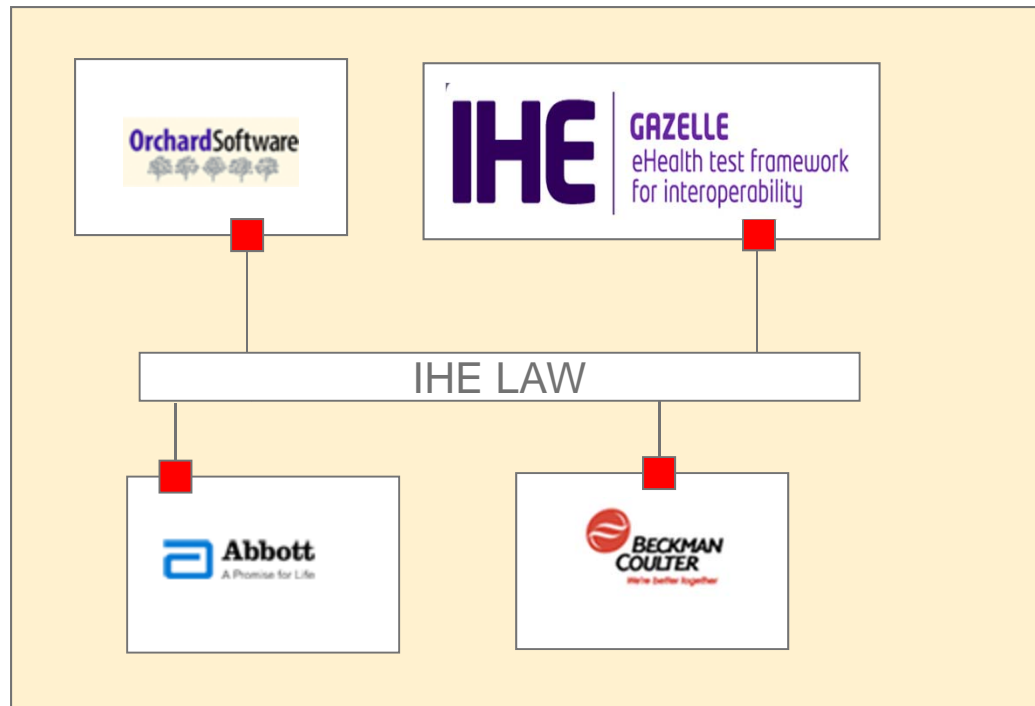
IICC Vision		Business Impact
1	We will move from ASTM to HL7	<ul style="list-style-type: none"> <li>➤ Increased access to tools and support</li> <li>➤ Increased access to trained workforce</li> <li>➤ Alignment with rest of Healthcare IT</li> </ul>
2	We will all use HL7 the same way	<ul style="list-style-type: none"> <li>➤ Reduced cost of IT system development via elimination of “driver” paradigm</li> <li>➤ Faster time to market for IVD systems</li> </ul>
3	Analyzers will plug-and-play	<ul style="list-style-type: none"> <li>➤ Faster for labs to install analyzers</li> <li>➤ Faster for IVD vendors to recognize revenue</li> <li>➤ Lower cost across value chain</li> </ul>
4	Modern features and performance	<ul style="list-style-type: none"> <li>➤ More efficient routing in automated labs</li> <li>➤ Improved clinical decision logic</li> <li>➤ Reduced exposure to communication bottlenecks</li> </ul>
5	All communications will be traceable	<ul style="list-style-type: none"> <li>➤ Reduced exposure to patient error</li> </ul>
6	The global community is in charge	<ul style="list-style-type: none"> <li>➤ Development of global CLSI AUTO16 Standard</li> <li>➤ Improved global applicability</li> <li>➤ Lower costs through shared version control</li> <li>➤ Future benefits through expansion</li> </ul>

# IICC Demonstration



Analyzer  
Manager

Analyzer



# Connectivity Summary



- Participants
  - Abbott and Orchard are demonstrating in the booth
  - Beckman Coulter is demonstrating from their company site in Minnesota with the cloud-based IHE Gazelle Order Manager simulator
- Coordination Required for Connectivity
  - Network information
  - LOINC for test codes
  - LAW Options used by the Analyzer

## LAW Connectivity Maturity



- Successful testing at LAW Virtual Connectathon held earlier this month
  - Abbott (Analyzer)
  - Beckman Coulter (Analyzer)
  - Orchard (Analyzer Manager)
  - Siemens (Analyzer)
  - Omnilab (Analyzer Manager)
  - Inpeco (Analyzer Manager)
- IHE Gazelle provided cloud-based testing infrastructure



# Abbott



- A Clinical Chemistry instrument
- Supports the following LAW options:
  - Bi-direction communication (LAW\_BIDIR)
  - Query All (LAW\_QUERY\_ALL)
  - Contributing Substances (LAW\_CONTRIB\_SUB)
  - Dilutions (LAW\_DILUTIONS)
  - Patient Demographics (LAW\_PAT\_DEM)
  - Reflex (LAW\_REFLEX)
  - Rerun (LAW\_RERUN)



## Beckman Coulter

- A Hematology instrument
- Supports the following LAW options:
  - Bi-direction communication (LAW\_BIDIR)
  - Patient Demographics (LAW\_PAT\_DEM)
  - Reflex (LAW\_REFLEX)
  - Rerun (LAW\_RERUN)
  - Contributing Substances with Specimen Role is QC (LAW\_CONTRIB\_SUB)
  - AWOS Priority (LAW\_AWOS\_PRIORITY)
  - Specimen Details (LAW\_SPECIMEN)
  - Images – Sent as LAW Supplemental Results (S\_IMAGE)

## Orchard

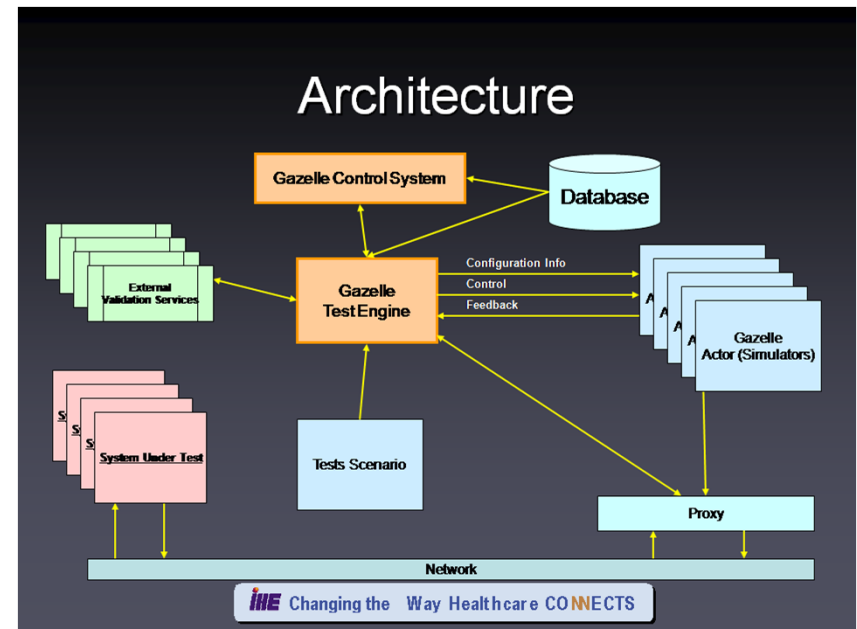


- A Laboratory Information System (LIS)
- Supports all required LAW message components, which includes the options used by Abbott and Beckman Coulter



# Gazelle

- Gazelle is the tool used for testing at IHE Connectathons
- Gazelle tools are freely available from the cloud/online/Internet
  - Tools are available 24x7
  - Tools are supported by IHE
- Gazelle supports all LAW transactions and options



## Demonstration Objectives



1. Tracing of Work Requested to Work Performed
2. Semantic Understanding of Work Performed
3. Variability of Instrument Capabilities
4. Support from IHE Gazelle Tools

# Demonstration



1. Analyzer rejection of Analytical Work Order Step (AWOS) Request (Abbott and Orchard)
2. Analyzer Reflex (Abbott and Orchard)
3. Analyzer Rerun (Beckman Coulter and Gazelle Order Manager)
4. Analyzer Options



Thank You!

# Important Links



- IHE Laboratory Wiki
- <http://wiki.ihe.net/index.php?title=Laboratory>
- LAW Wiki
- [http://wiki.ihe.net/index.php?title=Laboratory Analytical Workflow](http://wiki.ihe.net/index.php?title=Laboratory_Analytical_Workflow)
- LAW Supplement for Trial Implementation
- [http://www.ihe.net/Technical Framework/upload/IHE LAB Suppl LAW.pdf](http://www.ihe.net/Technical_Framework/upload/IHE_LAB_Suppl_LAW.pdf)
- IICC Website
- <http://www.ivdconnectivity.org/>