ICN's Carrier-Grade Lab for Testing Operations

Located at the Capitol Complex in Des Moines, IA, the carrier-grade testing Lab allows Iowa Communications Network (ICN) to operate efficiently as a carrier and establish a standards base approach to evaluate future technology.

The testing facility is an innovative, critical piece of operations for the security and protection of the ICN's production environment. The focus is on enhancements to network stability, integration of new services, and research and development of emerging technologies.



The facility offers the capability to develop and test new services focused on the research and development of emerging technologies.

## **Automated Operations**

Today's customers have an 'always-on' connectivity expectation. As a result, ICN is moving away from traditional network management tools and approaches. Technology integration provides the ability to maintain service integrity in virtualized network environments, and keep pace with the demands of digital business.

#### **Faster Customer Controls**

The telecom landscape is creating a shift towards increasing the need to move broadband faster. ICN's business model is changing from delivering basic conduits for connectivity to providing customer automation. The ICN Lab will leverage network modeling technologies to tackle key business challenges and support the delivery of virtualized services.

### Simulation of Production Network

The Lab consists of a series of racks that duplicate an environment representative of the production network. This design enables the test area to mimic the production network environment to the largest extent possible.

### **Data Center Environment**

The space is a controlled area similar to a data center environment. The Lab is furnished with network equipment, racks, supporting servers, storage, and infrastructure space for cable plant and power distribution systems.

# **Technology Validation**

Addressing production related testing as it pertains to new product introductions, protocol enhancements, service improvements/changes, and scalability in the network infrastructure.

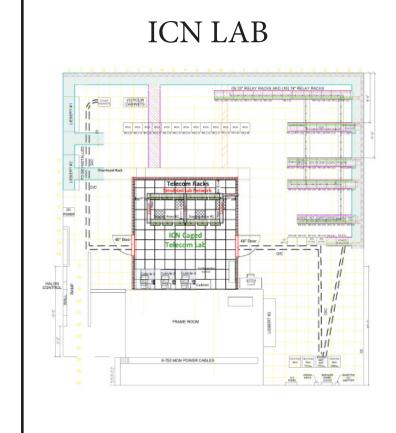
## **Built to the Highest Standards**

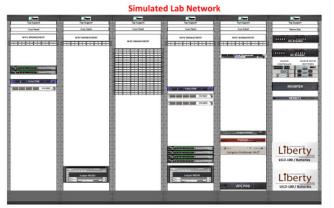
The ICN Lab is a premier telecommunications technology test facility, designed and built around the innovative Telecommunications Infrastructure Standard for Data Centers. It has the electrical power, network connectivity, HVAC considerations, and rack space/shelving needed. The ICN Lab also took environmental factors into consideration, such as physical space, power, climate control, and structured cabling.

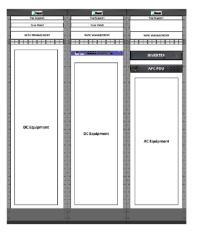
### **Access and Testing**

The ICN Lab will also provide customers with access to training demonstrations and equipment testing.









The activities within the ICN Lab are focused on the research and development of emerging technologies.