# Security and Redundancy



# **Security and Redundancy**

Obesigned to deliver world-class mission-critical applications

Redundancy switch time and high volume data was tested to meet rigorous offshore requirements.

# **Group and User Permissions**

Total flexibility to define privileges based on groups or specific users. Permissions can be global or tied to a specific display, object or input action.

# **Runtime Users**

Dynamically create users and store credentials in SQL databases. Get users from Active-Directory or third party system for integrated security or unified login.

# **User Policies**

Identification policies, session duration, control, automated logoff, esign, audit-trail and a complete set of user management features are available.

# FDA and NERC Regulated Applications

FactoryStudio allows delivering applications in conformance with Title 21 CFR Part 11 and it was designed following the applicable recommendations from NERC, such as the CIP- 007-1-Cyber Security-System Management.

# Security at the Core Level

Security must be implemented at the core, not applied externally. FactoryStudio modules have built-in security related components designed from the core.

# In this section ...

#### Hot-standby Fault-tolerant Servers

Reliable, easily configurable redundancy, for seamless failover; FactoryStudio automatically initializes and continues to synchronize the primary and secondary server. The Device communication channels are also easily setup for redundant physical networks and redundant PLC nodes.

#### **Database Redundancy**

The Alarm and Historian database can be assigned to a third-party external cluster or replicated automatically when running on the FactoryStudio servers.

# **Project Configuration Synchronization**

Engineering tools provide features to simplify configuration and updates in redundant scenarios.

# Hot-swapping

Redundant or stand-alone servers allow dynamic switching of project versions, without interrupting service for connected clients and keeping the real-time database loaded.

# **Redundancy at the Core Level**

Real-Time tags, Devices, Alarms, Historian, Scripts, Clients, all modules were designed from the ground up to meet redundancy and hot-swapping requirements.