INTEGRATED TERMINAL AUTOMATION
Safety, Security and Operations
Introduction

For decades, the number of systems being installed on terminals has been growing exponentially. Presently, most terminals operate on a variety of systems in various stages of their lifecycle. In the coming years, it's no surprise that the systems and their complexity is expected to grow further by legislation, HSE requirements and challenging market conditions. This will result in increased focus on efficiency improvement and operational excellence.
As a Consequence …

General
• Low level of integration
• Lack of consistency
• Piecemeal approach for system replacement

Operations
• Multiple systems to work with
• Multiple HMI’s/UI’s to work with

Maintenance
• Multiple systems from different vendors to support and maintain
• Multiple support contracts to manage

Management
• Manual collection of data for KPI reporting
• No dashboard to operate from
• Difficult to benchmark different parts of the organization
A scattered landscape of systems in various stages of their lifecycle.
Systems Deployed on Terminals Nowadays

Integration requires a common platform!
Honeywell’s Experion /EBI platform can integrate all these systems!
The Same Platform but Different Functionalities

Experion and EBI share the same platform. Integration via DSA.
The Platform for Process Automation: Experion

- Configuration
- HMI
- Alarm Handling
- Data
- Analysis
- Applications

- Process Control
- 3rd Party
- Process Safety
- Loading
- Fire & Gas
- CCTV
- Wireless
- Perimeter Prot.
- Tank Gauging
The Platform for Site Security and Building Automation: EBI

EBI: Enterprise Buildings Integrator
The Integrated Terminal Platform

Experion

DSA

EBI

Configuration
Integrated HMI
Integrated Alarm handling
Integrated Data
Analysis
Applications

Process Control
3rd Party
Process Safety
Loading
Fire & Gas
CCTV
Wireless
Perimeter Prot.
Tank Gauging
Security
Life Safety
Video Surveillance
Energy Mngt.
Building Mngt.
Platform Characteristics

**Experion**

- **Scalability**
  - 3 sizes (large – small): PKS, LX and HS
  - Licensed by modules and number of points
  - Distributed System Architecture

- **Redundancy**
  - Redundant servers
  - Redundant networking
  - Redundant controllers and I/O

- **Cloud connectivity**
  - Experion Elevate

**EBI**

- **Scalability**
  - Licensed by modules and number of points
  - Distributed System Architecture

- **Redundancy**
  - Redundant servers
  - Redundant networking

- **Cloud connectivity**
  - Remote monitoring and tuning
  - Mass notification

Flexible, scalable and reliable platform
### The Benefits of Honeywell's Integrated Solution

<table>
<thead>
<tr>
<th>General</th>
<th>Maintenance</th>
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<tbody>
<tr>
<td>• A single, integrated platform for all your terminal automation needs</td>
<td>• Single platform to support and maintain</td>
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<td>• You can start with a single application and expand over time</td>
<td>• Common infrastructure is easier to maintain</td>
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<td>by adding more systems and applications to it</td>
<td>• Common/similar maintenance tools</td>
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<td>• Easier to implement, support and maintain</td>
<td>• Easier to sign a performance based support contract</td>
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<td>• Lesser training required</td>
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<tr>
<td>• Single operator window, uniformity in user interfaces,</td>
<td>• Combined data collection enables combined data analysis,</td>
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<tr>
<td>common look and feel</td>
<td>KPI reporting and a single dashboard</td>
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<tr>
<td>• Common alarm management, all alarms and events combined in a single</td>
<td>• Possibility of a step-by-step migration delivering benefits</td>
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<tr>
<td>list</td>
<td>right from the start</td>
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<td>• Automatically triggered responses to events across systems</td>
<td>• Easier and more cost effective way to expand and add</td>
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<tr>
<td></td>
<td>functionality</td>
</tr>
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<td></td>
<td>• A flexible automation platform supporting corporate agility</td>
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