Malpensa Airport
Milan, Italy

Customer Success Story

Malpensa Airport/Elsag S.p.A.
Milan, Italy

SEA's Baggage Handling Client Interface

"The customer can easily handle the entire system just by looking at the general overview page and can handle all the commands with confidence. If necessary, they can switch between the two servers without having a temporary loss of communication within the field."

Masnata Ivano
Project Manager
Elsag S.p.A.

About Malpensa Airport/Elsag S.p.A./SEA

Elsag S.p.A., a division of FINMECCANICA, provides IT solutions focused on postal, automation, security, industrial and defense systems. It works in tandem with SEA, the company that manages both the Malpensa and Linate airports in Italy, specifically on the Malpensa Airport T1 terminal's baggage handling system. Elsag S.p.A.'s application is used to monitor and control the Handling Baggage Security (HBS) and Early Baggage System (EBS).

ICONICS Software Deployed

Elsag S.p.A. and SEA selected ICONICS GENESIS32™ HMI/SCADA suite including DataWorX™32 OPC data bridging, aggregation and redundancy.

Project Summary

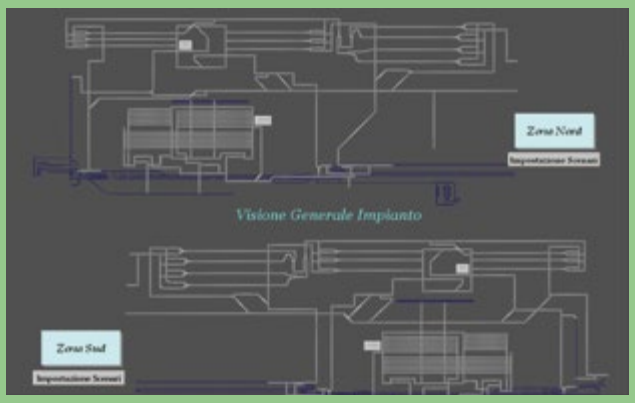
SEA required an HMI/SCADA solution for an in-house data trending application to assist operators with determining the number of baggages processed in defined intervals. The involved system consists of two hot backup servers and 11 clients, used for monitoring the state of the HBS and EBS systems. One server runs ICONICS AlarmWorX™32 (with alarm logger), ScriptWorX™32 and DataWorX™32. Both servers handle client security (aligned between the two servers by means of a script) and can switch automatically if a failure is detected on the primary, or on demand by an operator.

The client interface consists of a main page with all other pages shown concurrently. In this way, the most important required information is constantly represented on screen, including alarm indicators, emergency scenarios, network status (of each PLC or server), reporting, the terminal's Flight Managing System, and login/logout. Selecting one of the symbols on the general view opens a related page in which each element composing the line

is represented. It's possible to open a more detailed page in which each signal related to the element is shown. It's also possible to navigate between different displays (without returning to the general view) via "arrow" navigational tool.
Secured commands can be issued to the PLCs in order to change the working lines of the system. This allows the customer to plan maintenance of the plant, as well as for recovery of faults without affecting the behavior of the entire system.

Benefits of the System

Malpensa's new ICONICS solutions provide full plant monitoring as well as remote system control, including the ability to switch between the two connected servers. SEA also values the integration into its Flight Managing System. Configuring the system (displays, alarms, trending) was considered "easy and efficient". Communication between the ICONICS applications and existing Siemens S7-300 PLCs is via an OPC server link by Applicom Cards (two for each server). Integration with the PLCs, the Profibus Remote I/O, as well as with the Oracle DB8 database and Windows 2000 Server and Professional operating systems, is seamless.



Baggage Handling Line Overview

Individual Baggage Handling Line Overview

Key Features

Elsag S.p.A. and SEA had specific requirements in their HMI/SCADA solution for the Malpensa terminal, including:

- Hot Backup Ability
- Extension via Web Interface and Thin Client
- High Quality Graphics and Related Features
- Good Reliability
- Logging and Trending Archive
- Integration with the Terminal's Flight Managing System

Conclusion

Elsag S.p.A. and SEA are now able to ensure smooth travel for Malpensa Airport's baggage thanks to the multiple, secure capabilities of ICONICS GENESIS32 and additional solutions.

Solutions Highlighted

DataWorX32
Data Aggregation, Bridging, Redundancy and Tunneling Software