This article was originally published in Electroindustria Magazine's October 2016 Issue.
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ESINFA uses Infilink in its Continuous Emission Monitoring Systems

As a company dedicated to environmental engineering, ESINFA Ltda. Specializes in emissions measurement and monitoring systems, process validation. Its own development solution called CEMSLogger uses the Infilink software provided by Fabelec. To know more about how they have integrated this product in their developments, we talked with Francisco Gonzalez, General Manager; Miguel Orellana, Leader of the Development Department, and Jessica Zavala, Software Engineer, all of ESINFA Ltda.

Rodrigo Tapia, Sales Manager of Fabelec; Miguel Orellana, Leader Development Department of ESINFA; Fabian Nunez, ESINFA Software Engineer; Jessica Zavala, Engineer ESINFA software; Francisco Gonzalez, General Manager of ESINFA; Elias Iriarte, Marketing Manager, Fabelec.

More than five years of existence and a group of professionals with a lot of experience in environmental engineering, ESINFA Ltda occupies a prominent place in its segment, participating as advisors in the fulfillment of the technical and normative demands raised by the environmental authority . The Development Department of ESINFA is responsible for the "CEMSLogger" solution used by its continuous emission monitoring systems (CEMS), a name that refers to the set of equipment and instruments that allow continuous monitoring of emissions from sources such as thermoelectric power stations or copper smelters. Its client portfolio is made up of companies whose facilities include "large chimneys", among which are Codelco, Colbun, AES Gener, Endesa and Cementos Melon, among others.

Each CEMSLogger system is integrated by a programmable logic controller (PLC), a server and the software. The CEMS instruments measure the physical variables, which are captured through the PLC and are transmitted to an OPC server that concentrates the data, validates them and labels, and then is manipulated by a computer application that processes them according to various criteria established by environmental regulations. Then, from this information, a report is generated that is available to the Superintendent of the Environment (SMA), which is responsible for analyzing it and, based on that, to determine actions. SMA generates a series of conditions that the sampled data must meet to be valid, and all these conditions

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These are the ones that are programmed in CEMSLogger systems. "We take the data, store it, run all the conditions generated by SMA, make the respective comparisons and see what is happening, and what results as a result generates a final basis that is the one that analyzes the authority," he points out Francisco Gonzalez, General Manager of ESINFA.

> "In our developments, Infilink has meant a significant differentiating advantage. The fact that we can implement the CEMSLogger with this SCADA supposes a high level of improvement in our applications"

Infilink on CEMSLogger systems

An important difference of the systems That sells ESINFA is given For the software they have developed. "Our software differentiates us, because You can change the PLC or the server, But the software will continue to work. This one is developed on Infilink more An informative application ", comments Miguel Orellana, Leader of the Department Of Development of the company. "Infilink is the control HMI that Communicates with the OPC, and on Mount the application that validates the data, Manipulates them and generates reports ". In this sense, the CEMS-Logger platform is more than just a data logger, since monitoring systems must be strictly adhered to, since environmental standards clearly define how to manipulate, work, store and mark Data in question, as well as the nomenclature for errors, faults and operating conditions of the system. In this way, Infilink plays an important role in CEMSLogger, since in its programming scripts the validation criteria that the authority demands are applied. "All the tagging criteria, and all the CEMS daily check routines are programmed in the scripts," says Orellana.

This software is also used as an instantaneous data visualizer and interface for the operator to interact with the elements of the system, so the professionals of ES INF A aim to obtain the maximum benefit of this SCADA in each application that they develop. "We try to take advantage of all the features that Infilink offers us: alarms, trends and other functionalities that have been added over time," says Jessica Zavala, ESINFA Software Engineer.

Among these, the professional highlights the "wizards" or assistants to the program, stating that they save a lot of time, especially in the implementation of trend graphs. Also, Infilink stands out as a robust software with many features and, at the same time, friendly, and with the possibility to add scripts or fragments of Programming that use a very simple language.

In addition, the engineer points out that the support provided by Fabelec is of very good quality. "The support engineer is generally worried, and the resolution of the queries is quick," he says.

Configurable and standardized application

In order to optimize maintenance and support times, the engineers are working on standardizing their projects. In that sense, Infilink has been a useful tool for CEMSLogger to be transformed into a highly configurable system. "One of the advantages of our software is that it is highly configurable, so that it can be adapted to the characteristics of any unit, without having to change programming every time," says Zavala.

At present, ESINFA totals 13 systems installed throughout Chile, all with Infilink, and already has the first standardized version of its software, which brings them important advantages. "We are working with 20 digital input signals, 20 digital output signals, 20 analog inputs, and with that we set up a configurable package, where it is very easy to identify the variable that forms part of the system," says Orellana. "The fact that we can implement the CEMSLogger with this SCADA, means a high level of improvement in our applications," said Francisco Gonzalez.