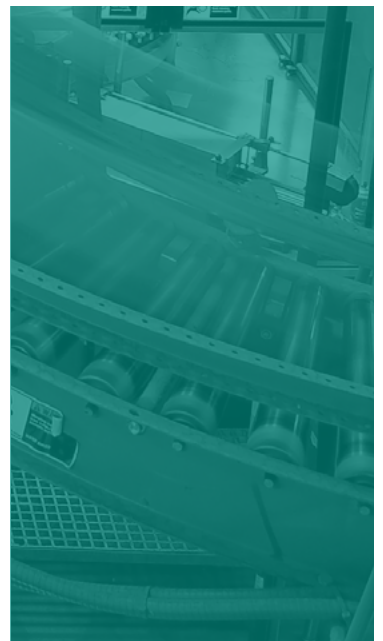


BluePlant

SCADA/HMI Software



www.altus.com.br



altus

evolution in automation

A new vision of your reality

Impressive: high-quality graphics and intuitive configuration

Superior: security, redundancy and high performance

Versatile: scalar architecture adaptable to any application

“ A complete solution for supervision and data acquisition as you always wanted.



Sophistication in systems supervision

Altus SCADA/HMI software is part of BlueWave, a suite of products for industrial automation and process control, integrating hardware and software in the same system in order to create a unique experience for users.

A solution for supervision, control and data acquisition, BluePlant combines design and high performance. It delivers high connectivity, richness of features and functionalities, as well as being adaptable, offering an attractive and intuitive visual look.

The tool relies on a client-server architecture with numerous choices of quantities of communication tags, besides simulation and debugging tools. The software has also a vector graphical interface that provides a new user experience. BluePlant can also be applied to any type of project, redundant or not, and allows users to connect remotely to develop their programming or work collaboratively with multiple developers simultaneously. Thus, it improves application development and presents a high level of reliability and security.

BluePlant comes up as an ultimate solution for your business. It meets the industry and process control requirements, such as Oil & Gas, Power, Building, Sanitation, Transportation, Steel, Food, Mining, among others.



Impressive



Superior Graphics Processing

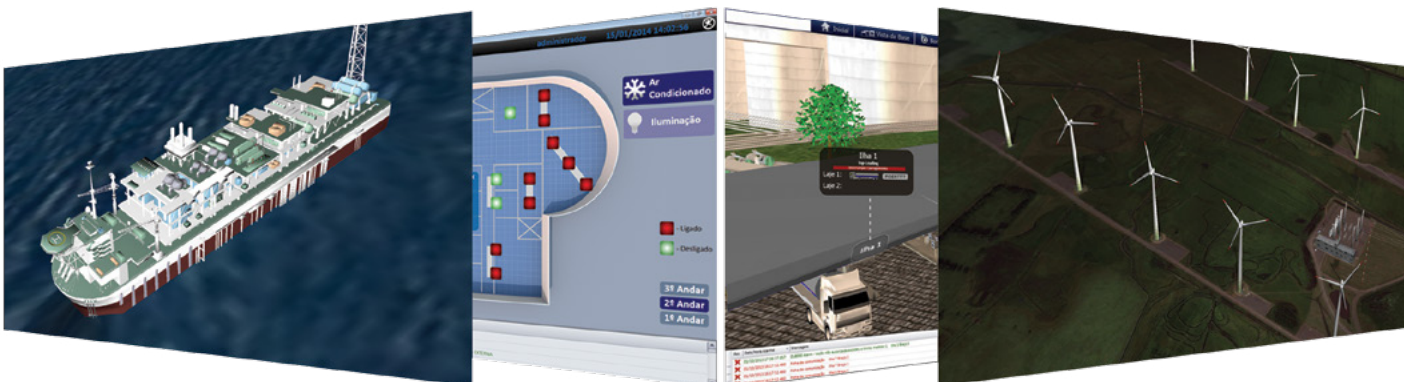
BluePlant visual system uses Microsoft's WPF technology for creation of complete user interfaces with real-time mapping of values and process tags, what differentiates this supervisory solution from others in the market. The screens are saved internally using XAML, in order to provide resolution independence, with code isolation and easy extensibility.

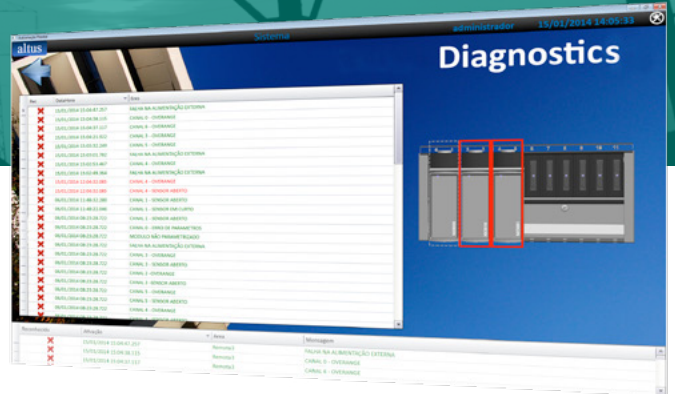
There is also a library of predefined symbols that accelerates the creation of synoptic screens, where processes can be monitored, allowing the creation of graphical screens, sceneries and representations of impressive plants with a set of resources for changing graphical attributes dynamically and perform animations.

Allied to its modern environment, many screen design resources are offered, such as capability to handle 3D objects and multi-touch support feature, which recognizes one or more points of contact with the surface, smart zoom with the mouse scroll, chart and pizza graphs, among others. The tool also allows the integration of image libraries in many formats in the application with a transparent background image, speeding up the development of screens.

Three technologies are used in remote stations, where all of them support redundant servers. They are:

- BluePlant Visualizer Clients: run as a desktop application on a microcomputer. Ideal for intranet operators/users with security demands.
- Web Smart Clients: indicated for remote clients, it enables quick installation without administrator requirements.
- Web XBAP Partial Trust Clients: the screens run directly in web browsers without the need to install any software or even ActiveX controls. This option guarantees that customers run their screens in an isolated and secure environment.





Users Management and Rights

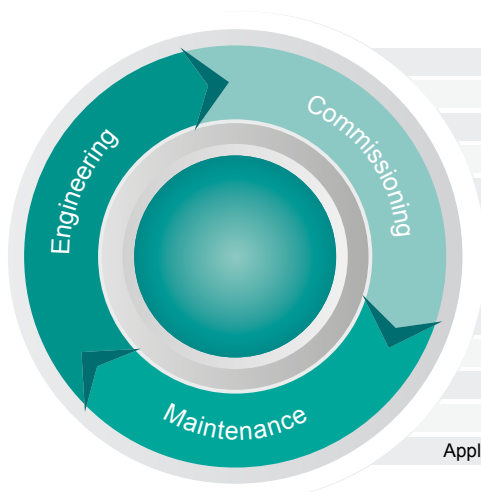
This feature allows different levels of permissions to be set up for groups of users. Through them, what each user can do in the system and its restrictions will be determined. For example, a group can only view what is happening in the programming and perform some design modifications in the project, while another group will be allowed to operate certain actions during execution.

Quick and Intelligent Reports

The software has support for web services, XML and other data exchange interfaces with the intention to send data to external tools. However, unlike other packages, for reports generation, BluePlant has its own internal editor.

It allows the inclusion of dynamic texts and symbols, with the addition of graphs and databases queries with a complete and easy-to-use editor. Reports can be saved in text, HTML, PDF or XPS format. They are also easily displayed on remote clients and web pages.

Automation and Process Control Projects Life Cycle



	Engineering	Commissioning	Maintenance
Supports C# and VB.NET Scripts	● ● ●	● ○ ○	● ○ ○
Distributed and Remote Engineering	● ● ●	● ● ●	● ● ●
Symbols Library	● ● ●	● ○ ○	● ○ ○
Graphical XAML Support and 3D Models	● ● ●	● ○ ○	● ○ ○
Multiple Integrated Communication Drivers	● ● ●	● ○ ○	● ○ ○
Project Comparison	● ○ ○	● ● ●	● ● ●
Simulation	● ● ●	● ● ●	● ● ●
System Diagnostics	● ○ ○	● ● ●	● ● ●
Project Cross References	● ○ ○	● ● ●	● ● ●
Debugging and Controlling Panels	● ○ ○	● ● ●	● ● ●
Report Editor	● ● ●	● ○ ○	● ● ●
User Management and Access Rights	● ○ ○	● ● ●	● ● ●
Applications Changes Without Stopping The System	● ○ ○	● ● ●	● ● ●

Superior

Redundancy and Availability

Its redundant servers system allows the build up of two different computers, both running an application in a hot-standby topology. All redundancy configuration is done automatically in the application itself, being necessary to set the IP addresses of the primary and secondary stations. This helps to prevent error situations on a server that could make the system inoperative. This feature is recommended for applications that require high availability. In this topology, a computer on standby mode is held in conjunction with the computer running the active application. If a hardware error occurs, the standby server takes over automatically without loss of data or system halt.

High Connectivity

The product is provided with key communication drivers to enable the interconnection of BluePlant with the most popular existing automation devices on the market. Featuring an OPC DA driver for collecting information from remote devices, BluePlant also supports MODBUS TCP, for direct access to programmable controllers, remote I/O systems, fieldbus, scanners, barcode readers, RFID devices and digital monitors. The amount of tags, informed in each product model, is the number of communication points that the model allows you to communicate with the field devices. By the availability of a large variety of different licenses, BluePlant perfectly fits to any size of customers' systems.

In addition to the native resources, BluePlant offers the most common communication drivers for the electrical segment: DNP 3.0 Client, IEC 61850 Client and IEC 104 Server

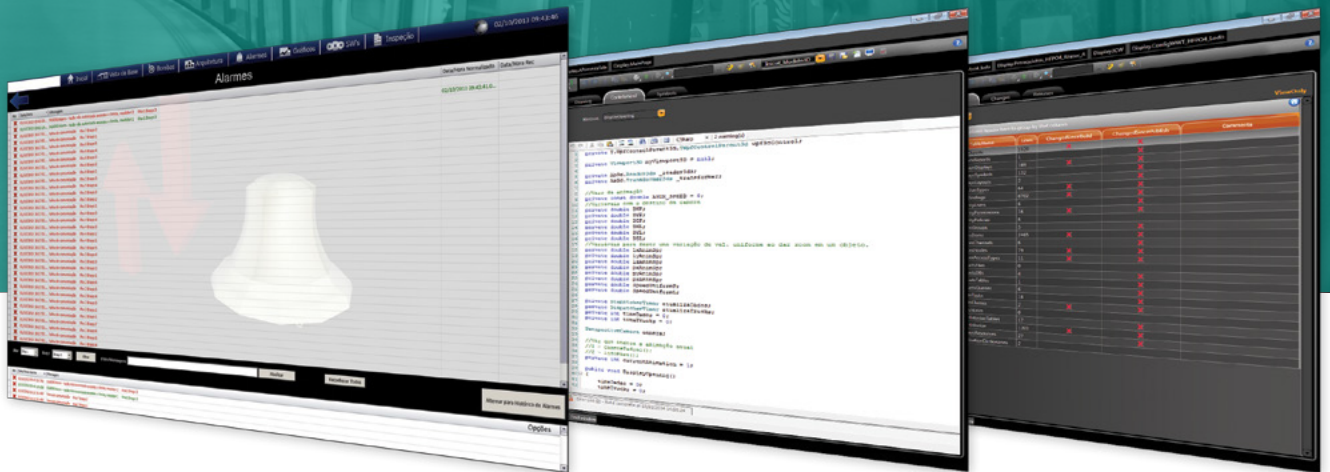
Compatibility Database

BluePlant allows the creation of historian files in external databases such as Microsoft's SQL Server or Oracle. In a practical way, BluePlant provides an embedded database for use in various industrial SQL applications. It allows data to be saved based on the modification of data values or triggers for data logging. It also has an exclusive option of

time stamping, which prevents the recording of data within a period smaller than a predefined time value, allowing the creation of more compact and optimized databases. Another resource, event stamping, allows to use the value provided directly by the control device or fieldbus, rather than the computer, ensuring greater accuracy in the event. The organization of samples allows adding or removing tags registries without losing compatibility with the latest data. In addition, a complete trend graph object is also provided for online and historical data viewing.



Versatile



Versatile by Nature

BluePlant has a wide range of resources to meet the demands of control and supervision of industrial processes and machines of production, utilities and manufacturing areas. By using this software, users can combine the programming features that are more appropriate for their application. All modules such as Alarm, Historian, Device and Datasets may be on different computers under the management of a server, creating a distributed system.

The client server topology allows the configuration of each of the modules on different computers and in the exact quantities for their application. Besides its modern and native 64-bit platform, it also supports 32-bit operating systems, redundancy support and OPC technology.

Four different models are available to better suit customer needs. The first is BluePlant Student, designed for schools and universities, then BluePlant Express and BluePlant Lite, designed for projects evaluation and small centralized applications, and finally BluePlant Enterprise for plant management process in medium-to-large applications.

Richness of Programming and Editing Resources

BluePlant is a SCADA/HMI software that supports Microsoft's .NET languages in complete integration with Microsoft's .NET Framework. Scripts and project logic can be written in C# and VB .NET. An integrated language converter also allows a dynamic switch in the code between the two languages. In its environment, it is possible to compile, perform objects cross-reference and directly access .NET classes and project objects, including alarms, reports and communication nodes.

Absolute Control

The system features maintenance, testing, simulation and advanced diagnostics resources that allow the exchange of versions of a project in a secure and traceable manner.

Thus, parameters, modules and objects data can be verified and simulated in a controlled and independent session from the main application environment. This ensures that development errors are not forwarded due to the fact that validation can be performed by users before publishing a new application version.

These tools can also start and stop, individually, all system modules. On the same server, applications under test can run side-by-side with those that are already running, allowing a hot version change, which can be done without stopping the process. Processor utilization and communication statistics of system modules and communication networks are also included to help in debugging and system maintenance.

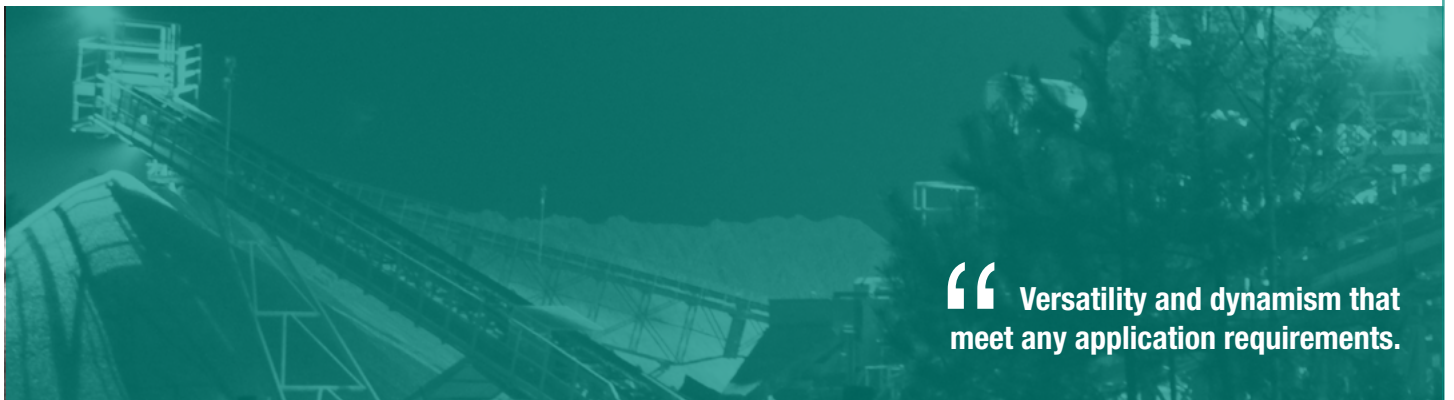
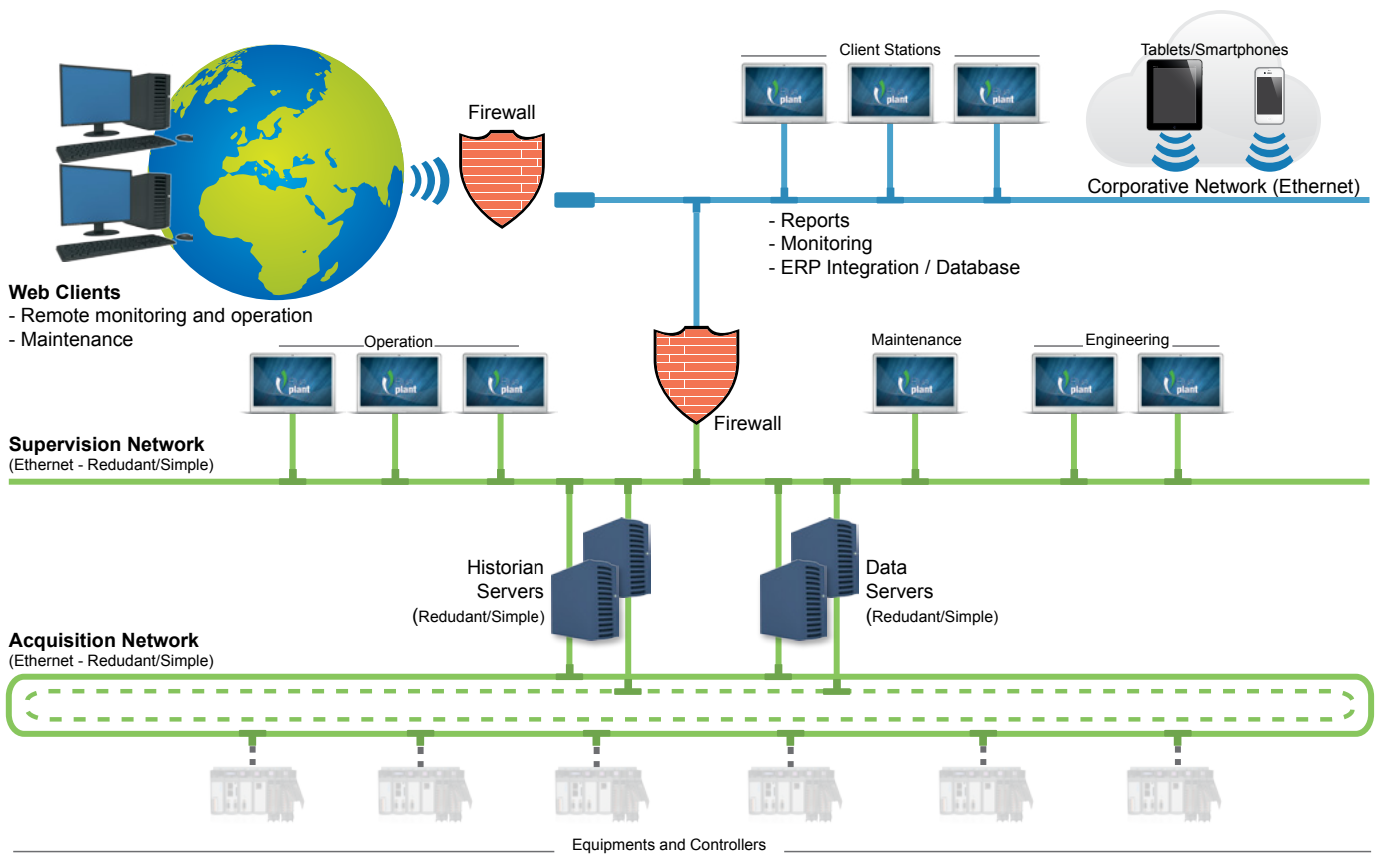
No Boundaries

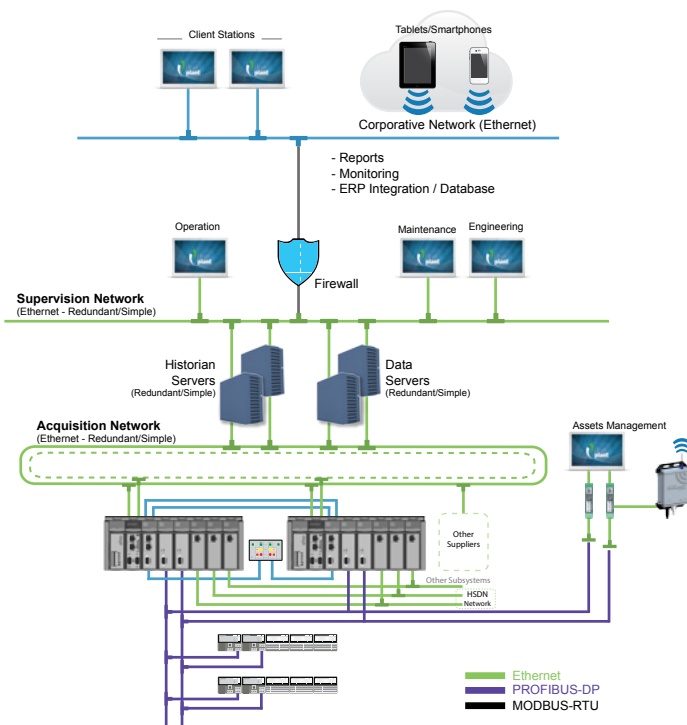
BluePlant capability of distributed engineering allows the creation of user-friendly and collaborative development of applications. A project can be shared by multiple workstations and simultaneously amended by staff. This allows different users to develop specific parts of the application, significantly reducing the engineering hours. Users can also connect to the project server remotely, eliminating borders and allowing development around the globe.

Accurate Alarms

Various levels of alarms can be set for each point and/or tag, plus a variety of behavior specifications, logging, recognition and exhibition settings. There is also a set of ready-to-use definitions that facilitates application engineering and development costs reduction.

Architecture





BlueWave is a revolutionary suite of products for industrial automation and process control, integrating in an innovative way, hardware and software into a single system. Its technology allows the correct application life cycle monitoring, promoting risk and cost reduction in engineering, commissioning and maintenance of your business.

Among its main features, there are the ability to use multiple controllers in the same project, 3D process viewing, asset management, distributed engineering, simulations, secure IEC 61131-3 logic and more..

With over 30 years of experience in products and solutions development for the automation market, Altus consolidates its high technological level. BlueWave is ready to overcome the most sophisticated automation challenges with its advanced software and hardware platform.

BluePlant

Communication Tags	BluePlant Enterprise		BluePlant Lite		BluePlant Express	BluePlant Student
	Engineering Runtime	Runtime	Engineering Runtime	Runtime	Engineering Runtime	Engineering Runtime
75	-	-	-	-	BP6400	-
150	BP1203	BP1103	BP2203	BP2103	-	-
300	BP1205	BP1105	BP2205	BP2105	-	-
500	BP1207	BP1107	BP2207	BP2107	-	-
1500	BP1209	BP1109	BP2209	BP2109	-	BP4400
2500	BP1211	BP1111	-	-	-	-
5000	BP1213	BP1113	-	-	-	-
15000	BP1215	BP1115	-	-	-	-
25000	BP1217	BP1117	-	-	-	-
50000	BP1219	BP1119	-	-	-	-
100000	BP1221	BP1121	-	-	-	-
Ultimate	BP1299	BP1199	-	-	-	-

Accessories	
Code	Description
BP9501	Internet Explorer Web Visualizer Client
BP9601	BluePlant Rich Client
BP9701	Internet Explorer Web Full Client
BP9901*	Driver DNP 3.0 Client
BP9903*	Driver IEC 61850 Client
BP9906*	Driver IEC 60870-5-104 Server

*Under request.



