

Basic Functions

An Ever changing Marketplace Demands Flexible Solutions

The demands on a modern information system grow continuously. Fascinating new possibilities are opened up by each new generation of hardware and software. Of paramount importance is the use of graphical user interfaces that offer users intuitive interactions with the computer. Parallel to the success of graphical interfaces, Client/Server computing has grown significantly in importance. Powerful desktop computers now deliver significant computing power directly from the desktop networked, with several servers running different operating systems, within the corporation or are linked over the Internet. The automation of event driven processes is also increasing throughout national and international businesses. The development of software for such an environment demands a powerful tool to help professional application developers attain higher productivity and to be freed from the constraints of different operating platforms.

The Foundation

proALPHA is developed on a foundation provided by PROGRESS. PROGRESS is an object oriented application development environment designed for programming mission-critical applications. In addition to its core components, a fourth generation language (4GL), the User Interface Builder and a Relational Database System (RDBMS), PROGRESS contains many more fully integrated programming tools. Included are:

- A DataServer, that provides low level connection to other data base systems
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- WEBSPEED for the design of Internet and Intranet applications with direct links to the databases
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- Translation Manager, which facilitates multi-language translation applications developed with PROGRESS
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- Report and Form Builders.

This highly efficient application development environment produces software that is independent of a hardware platform or its operating system. Proven in daily use in hundreds of thousands of companies, the object-relational database system guarantees the consistency and security of data through the concept of secure transactions and automatic recovery procedures including after-imaging. The capabilities of PROGRESS to support n-levels of Client/Server implementations through application specific servers, to replicate and support partitioned databases, and its transparent access to the databases of other servers have made it a recognised market leader in this field of technology.

The proALPHA development methodology is based on the use of SMARTOBJECTS. These are software components based on the PROGRESS 4GL and are available in source code form. These makes it possible to adapt the code to specific programming requirements, as well as create new objects and seamlessly integrate them within the same technology. The result is the encapsulation of functions and the ability to re-use the resulting components. Development and functional specialists can then produce complex classes of software objects with pre-defined functionality, that are then available to applications developers, removing repetitive tasks and at the same time imposing standards that ensure the uniformity and completeness of screen layout and functionality.

Data processing investments are safeguarded through the separation of the user interface, programming logic, and data storage. Entrusting data integrity completely to database triggers guarantees the integrity of the data at all times and means just a single implementation.

The object oriented development approach of separating application logic from the user interface allows customisation to meet specific user requirements. Because every important software component has pre-defined "User Exits" it is possible to change a procedure's logic according to need, without having to change any standard components.

The result is that even after complex modifications you can take advantage of upgrades to new releases. When compared to alternative "Standard Software" approaches in which parameters are heavily used, this method has the advantage of requiring significantly less software code, lower hardware costs and can result in 100% coverage of specific business requirements.

Focus on the User

The high degree of satisfaction among proALPHA users can be attributed to the focus on user-friendly and ergonomically efficient features of the total system.

The context sensitive Help System, for example, can be edited for both a window and a single field within a window. This permits the standard Help to be customised for particular organisational processes. Additionally, every user can create individual "reminders" as Help texts.

The international dimensions of the marketplace demand a multi-language user interface. proALPHA maintains one set of source code but runs in multiple languages and supports the use of multiple languages for output on customer documents and for data such as item descriptions.

User specific menus ensure that each user has access only to those applications and functions that are necessary to carry out a role. A powerful scheme of access privileges provides the basic conditions for efficient data protection. User authorisations can be set at the application, function, or field level - for single users or groups of users and for write or read only privileges.

Individual user hotkeys can be used to connect into all functional areas of proALPHA. An example is the sales person who, while entering an order can view the detailed record of customer turnover. In doing so, all data, such as customer number and product number required to identify associated information are used automatically, without additional user intervention. Simply pressing a key or clicking the mouse can provide additional information from every key field. With the appropriate authorisations, even master data files can be updated or expanded.

Search and Find

It is not enough to know that information is in the system - it must be retrieved rapidly and accurately. From Match-Code (keyword) Search to an optimised full text search with Word-Indexing, proALPHA makes it all possible.

Where there is, a structure associated with important data such as master classifications used for product identification, or customer, supplier asset or order types, a user can establish individual search criteria using these features and get rapid access to the data with a minimum of effort.

Communications - Local or Global

Global markets are demanding worldwide communication; this is the driving force behind the booming market in Internet products. The World Wide Web is more than just a platform for various marketing activities. Robust ITP (Internet Transaction Processing) applications make possible rapid flows of information between customers and suppliers via the Internet and via company Intranets. In this context, proALPHA can permits direct data access to a supplier's warehouse, with a guarantee of data integrity, in order to check the availability a product.

Traditional means of communication, by Fax or EDI are also supported.

Automate Business Processes with proALPHA® WorkflowAutomation

In order to meet tight delivery schedules reliably, business processes must be automated. One goal for example, may be the automation of the total order handling process - from sales and technical design, to the production and shipment of the final assembly. proALPHA's WorkflowAutomation, based on the concept of event driven processes, takes each information object, such as an order, and automatically deals with it according to its position in the logic of a process activity sequence. The links between each activity in such a sequence are prompted for or ended by the occurrence of a certain state. The existence of a company-wide communications network (EDI, Internet) can even make possible external control of the sequence of activity.

An employee will be notified of any situation that concerns his or her area of responsibility, such as a budget variance, a follow-up or, any other unfinished task and can deal with each issue from the activity manager on the desktop.

A new product introduction can serve as a simple example of automating a process. First, access to the newly designed part is blocked, to prevent the use of incomplete master parts data and the reason for refusal is stated. Parallel to this, the appropriate employees in Sales, Purchasing, and Production Engineering are notified via their activity manager that their part data must be added to the master data record. When confirmation is received from all employees involved in the process that the update has been completed, proALPHA automatically removes the block and warning messages and releases the part into the system for general use.

Of course, the opportunity to use manual controls is not lost. So to clear up quotations, sales orders, or purchase orders, each may be called back for follow-up or sent to another colleague for further work.

The object oriented approach of proALPHA WorkflowAutomation supports functional expansion and customisation to meet your unique operating requirements.

Decision makers need system-wide information, on demand, that can be served in "bite-sized" pieces. Whilst there are many terms used to describe this objective, whether it is a MIS (Management Information System), an EIS (Executive Information System) or, a Data Warehouse - the goal is the presentation of real time information for decision making.

The Information and Controlling System within proALPHA is the basic component that makes all its data available on request. The user, employing its flexible tools, can customise its many views, reports, and evaluation methods. The content and level of summation of the information is determined, and may vary, according to the responsibilities of a user and can be protected against unauthorised access by assigning suitable access privileges.

Consolidated totals can be broken down through all summary levels to a single document such as an invoice. The detail associated with individual records can be explored up, down and across a hierarchical structure. For example, if a particular shipping document is chosen, a user can identify which order initiated the shipment; if and when the shipment was billed; what account number was used with the billing; and, available down to the lowest level, all other details both technical and commercial about the product to be shipped.