

IBM SystemBuilder



Applications for today's development and deployment demands

The demands of today's e-business environment require developers to increase their productivity with rapid application development. Plus, they need support for character-based and graphical-user interfaces (GUI) from a *single* set of source code, and support for integrating with existing application code—all while adhering to industry standards.

With IBM SystemBuilder,[™] developers can take advantage of industry-standard support for increasing productivity and improving application maintainability and portability. A cross-platform, complete application development and deployment environment, IBM SystemBuilder enables developers to focus on what they know best: their application, their

Highlights

- ***Increases productivity and improves application maintainability and portability***
- ***Takes advantage of powerful tools for a component-based, distributed architecture***
- ***Builds mission-critical business solutions optimized for multiple databases***
- ***Reaps the benefits of rapid, flexible deployment and development***
- ***Manages the growing complexity of applications with object-oriented processes.***

business and their users. Developers can thus build client/server, mission-critical business solutions specifically optimized for nested relational and multivalued databases. IBM SystemBuilder is comprised of SB+ Server, a 4GL development environment for host-based and client/server development, and SBClient, a second component of the client/server solution that brings GUI features to host-based applications. Applications developed using SB+ Server and SBClient are deployed in many organizations worldwide across a vast range of operating environments, databases and user interfaces.

Powerful tools for a component-based, distributed architecture

IBM SystemBuilder incorporates the latest technology and supports ActiveX® controls to help companies

move toward a component-based, distributed architecture. Additional enhancements to SystemBuilder include GUI objects such as tab folders, dynamic combo boxes, multivalued scrollbars and multivalued grid control support. The SBX navigation system of SB+ simplifies visual development and introduces a menuing system for end users familiar with the Windows® Explorer metaphor. In addition, SBClient supports OLE and VBScript, while SB+ exposes this functionality via new paragraph statements.

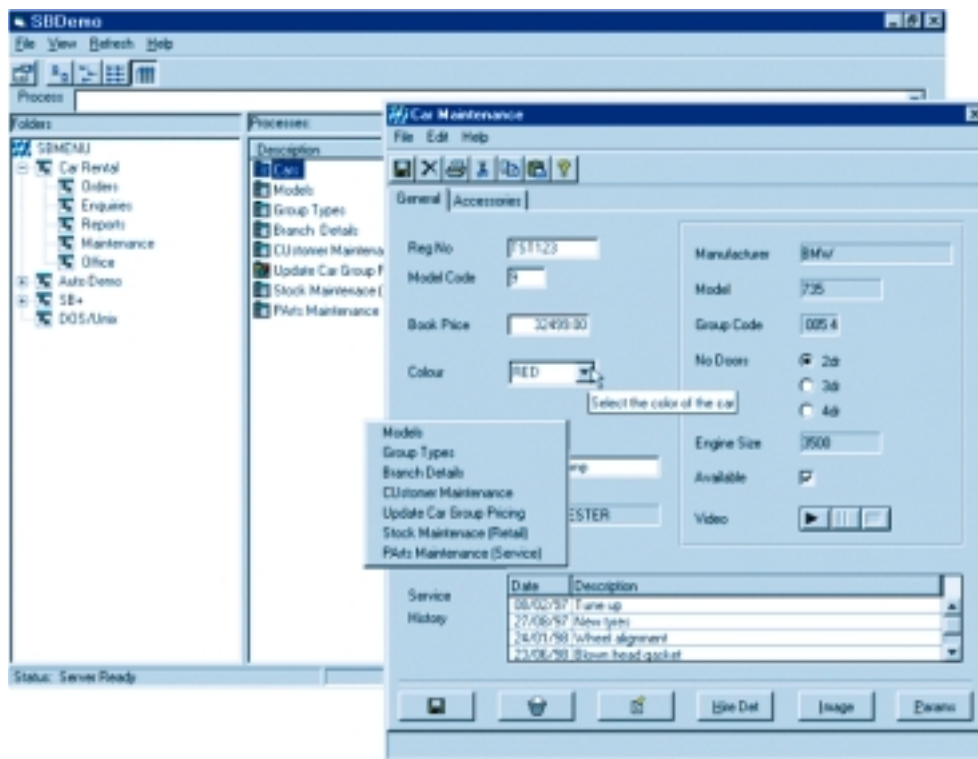
Secure data for extensible applications: Now and in the future

With SB+, application data is secure for current—and future—requirements. The latest transaction processing semantics, which are now incorporated into SB+, allow recoverability up to the latest committed transaction

on supported platforms. New features of both SB+ and SBClient, including encapsulation as a Microsoft® COM Server, mean that SB+ foreground processes (GUI screens and reports) and background processes (periodic and batch processes) may be invoked from other visual environments such as Internet Explorer, Delphi and Visual Basic via standard COM messaging. Such support for object components helps allow the extensibility of applications onto emerging distributed application architectures.

The next step: Incorporating HTML functionality

SB+ release 5 now adds more power to 4GL by incorporating HTML functionality. Not only can SB+ processes be called from HTML, but the Report Writer can now generate reports for output in HTML format. These reports are also customizable and can be



saved in the HTML format. In addition, second- and third-level help is now converted to and displayed in HTML, as well as any server-based text that's displayed in a browser control via the new HTML process.

SB+ can also coexist with the IBM Informix Application Server, RedBack,[®] to address both traditional client/server transactional applications as well as Web deployment via a browser for appropriate application modules. Plus, SB+ processes are reusable, thus extending the life of valuable business rules.

Development and deployment flexibility

With SB+, developers choose the environments in which they develop and deploy their software; for instance, developers can deploy applications that use the same source code in multiple system configurations, ranging from single-user notebooks to networked PCs to enterprisewide client/server configurations. In addition, developers can generate SB+ applications for character terminals and Windows PCs. The character and GUIs offer the same level of consistency and

navigational control in development and runtime environments alike, and maintain compliance with industry-accepted user interface standards.

Tools for rapid application development

SB+ reflects more than a decade of investment in research and development that has resulted in a comprehensive suite of tools for application development and deployment. Its robust 4GL environment integrates critical functions such as screen design, logical file definition, global dictionary management, process definition, menu design, report generation and system documentation. In addition, SB+ allows developers to rapidly proto-type screens and menus by executing the code interpretively during the design phase of the project, and then compiling the code for maximum performance prior to deployment.

Effective software development: Building blocks for an object-oriented approach

SB+ is built from processes, which are fundamental to creating and running SB+ applications, that can be called from menus, buttons, function keys, screens, reports and within expressions—as well as from any input prompt. These object-oriented processes help to manage the growing complexity of applications by encouraging the creation of software that is reusable, extensible and maintainable.

Processes range from the simple assignment of a variable; to a screen or report; to a UNIX,[®] NT[®] or Windows process; and to a complex set of data entry screens. “Selection” processes, which illustrate the power of SB+, may be used within applications to select records from a file and display those records' fields in a window for further manual selection by the end user.

Simplified database design and sophisticated application development features

The SB+ logical file model reflects the organization and relationships of real-world entities, and is well suited to complex applications commonly developed in SB+. Logical files link several “physical” files so developers can manipulate them as one. SB+ readily handles multifile processing and updates—allowing developers to enter, update and delete data from several files on one input screen, or view data from multiple files in an output screen or report. These fully customizable reports can now be created in an HTML format.

With SB+, developers can take advantage of support for the following sophisticated application development features:

- *Language translation*
- *Version management*
- *Multivalue definition*
- *Debugging*

Elegant end-user environment

The SB+ runtime environment delivers platform independence and a consistent user interface across multiple operating systems and databases. End users have complete flexibility to navigate freely between different applications and modules, and between the SB+ system, Microsoft Windows and the underlying database environment. In addition, the SB+ security system provides full, customized control over system access by individuals or groups, and provides for restrictions based on logon times, dates and access to operating system commands. What's more, the system can be tailored to suit organizational requirements.

Solutions for today's businesses

IBM Informix information management solutions are open, scalable, manageable, and extensible—providing the kind of flexibility that is essential for growing organizations. Whether utilized for data warehousing, analysis and decision support, Web content delivery, or broadcasting mixed media, IBM Informix products are engineered to enable today's businesses to efficiently manage all kinds of information—anywhere, at any time.

IBM Global Services: Delivering real business results

To help you optimize IBM SystemBuilder, IBM Global Services offers the broad experience and skills of more than 140,000 professionals in over 160 countries—industry experts, technology specialists and others who know how to deliver real business results. And you will benefit from *one point of contact* for accessing and deploying information management solutions from IBM and our worldwide team of Business Partners.

Find out more

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