

# Stored Procedures

Stored procedures are executable programs written in BASIC+ and stored in the OpenInsight repository as an entity. Within OpenInsight, there are two basic categories of stored procedures — System Stored Procedures and Stored Procedures.

\* **System Stored Procedures (SSPs)** are stored procedures that are supplied in executable form with OpenInsight.

\* **Routines** are a type of SSP (executable module) written in BASIC+ and stored in OpenInsight repository. Because of their close ties to OpenEngine, routines are generally only supplied with OpenInsight and not created by the developer.

\* **Stored Procedures** are stored procedures that you write specifically for your data processing needs. Stored procedures fall into one of two categories — event handlers and stored procedure.

\* **Event handlers** are a type of procedure that are tightly coupled to windows and forms, and their controls.

\* **Stored procedures**, which are any other custom procedures that you write. Stored procedures that are not event handlers fall into two basic types — *sub routines* and *functions*. (These types also apply to system stored procedures.)

\* **Subroutines** may be called internally from within a stored procedure, or externally from other stored procedures, including event handlers. A subroutine executes a process, but does not return a value to the place that called it. However, it can modify the values of any arguments passed to it from the calling program. Subroutine commands provide the means to modularize procedures. They allow you to establish local or external subroutines, to share data between routines, and to pass control between a main procedure and its modules.

\* **Functions** may be called externally by any stored procedure or event handler. A function always returns a data value to the place that called it.



Arguments are passed by reference.

Full descriptions of routines, subroutines, and functions supplied with OpenInsight are listed in [Chapter 3: BASIC+ Command Reference](#). Appendix B: BASIC+ By Category lists all routines, subroutines, and functions and their descriptions, organized by category.

For more information on stored procedures, refer to Chapter 13: Stored Procedures in the *Guide to Application Development*. For more information on event handlers, refer to Chapter 12: Procedural Event Handlers in the *Guide to Application Development*.