12/18/07 - #25 z TidBitz (Clist/REXX for conversion of date to/from Gregorian to Julian for z/OS)

We had an interesting question asking about information to help with Clist/REXX for conversion of date to/from Gergerian to Julian for z/OS. In general, anyone using either of these two programming types should acquaint themselves with that language's built in functions (BIFs). A function is a sequence of instructions that can receive data, process that data, and return a value. Each language type provides the functionality to call standard routines to negate the need writing the same procedure during each invocation. A user can also create an in-house function(s) that can be called across applications.

REXX is a common language that runs on several platforms (portable) offering both foreground (interpretive) and background (compiled) facilities. The value added feature of REXX on z/OS is it also interfaces with Unix System Services.

In REXX, there are several kinds of functions:
* Built-in functions - These functions are built into the language processor.
* User-written functions - These functions are written by an individual user or supplied by an installation and can be internal or external. An *internal function* is part of the current exec that starts at a label. An *external function* is a self-contained program or exec outside of the calling exec.
* Function packages - These are groups of functions and subroutines written by an individual user or supplied by an installation. They are link-edited into load modules and categorized as user, local, and system. TSO/E external functions are provided in a system function package.

REXX in general offers these categories of FUNCTIONS:

-Arithmetic Functions .
-Comparison Functions
-Conversion Functions
-Formatting Functions (DATE) "For this specific inquiry"
-String Manipulating Functions
-Miscellaneous Functions

See these pubs for further details on usage:

REXX Users Guide SC34-5764
VM REXX/VM User's Guide SC24-6114 (portable)
TSO/E REXX User's Guide SA22-7791

The **CLIST language** includes built-in functions specific to only TSO that you can perform on variables, expressions, and character strings. If necessary, CLIST evaluates the variable or expression first, and then performs the requested function. The CLIST then stores the result under the name of the built-in function. To use a built-in function, type its name, followed by the variable, expression, or character string in parentheses. The variable, expression, or character string is also called the argument of the built-in function. The argument must immediately follow the built-in function name, with no blanks between them. There is a table in the pub below describing each of the built-in functions and provides page numbers where you can find more information.

Try the &DATATYPE built-in function:

TSO/E CLISTs SA22-7781