

Keyed Arrays in APL - Using a .Net Dictionary in APL+Win

The APLNext .Net Dictionary can provide enhanced performance when accessing data which is identified by and associated with text vector keys. If the list of such keys is relatively large and if the application system often searches those keys, e.g. using dyadic iota or a 'rowfind' function, the .Net Dictionary structure can be an alternative since the hashing of the keys for performance is done only once in a .Net Dictionary and the keys and associated data values are stored externally to the APL+Win workspace memory.

The APLNext .Net Dictionary can be used as:

- An ActiveX component via `□wi`, for a capacity of up to 2Gb, or
- As a .Net assembly via `□cse`, for a capacity in APL+Win v16 up to the available memory of the workstation.

Some typical uses of a 'keyed array' include:

- A list of alpha-numeric policy numbers is to be searched for one or more specific policy numbers and some data related to those selected policies is to be obtained for processing.
- A list of employee identification codes is to be searched for one or more specific codes and some data related to those selected codes is to be obtained for processing.
- A list of product inventory codes is to be searched for one or more specific codes and some data related to those selected codes is to be obtained for processing.

This version of the APLNext .Net Dictionary includes:

- A pdf-format document containing:
 - Detailed information about the component's methods
 - Detailed example illustrating its use via `□wi`
 - Detailed example illustrating its use via `□cse`
- A Microsoft msi-format installer to register the component as ActiveX when it will be used via `□wi`.
- A Microsoft dll-format .Net assembly when it will be used via `□cse`.

For detailed documentation including examples click [here](#).

Current APL+Win subscribers may download this tool from the Software Downloads at <http://www.apl2000.com/software.php> . The download includes pdf-format documentation and the Visual Studio 2015 solution containing the source code and release versions of the dll.