



- ▶ Version 10.1
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## Larger Component Files

In Version 10.1, the restriction that a component file could not exceed 4GB in size has been removed. Effectively, the size of component files is now restricted only by operating systems and hardware constraints.

This capability has been implemented using 64-bit technology.

`□FCREATE` (See below) has been extended to allow you to specify the address size of a new component file, which may be 32 or 64.

If you specify an address size of 64, internal component addresses are represented by 64-bit values, which allows file sizes up to operating system limits. However a file with an address size of 64 cannot be accessed by any version of Dyalog prior to Version 10.1.

If you specify an address size of 32, internal component addresses are represented by 32-bit values, which restricts the maximum size of the file to 4GB. Such a file may be accessed by older versions of Dyalog.

Note that the optional file size limit that may be specified in the left argument to `□FCREATE`, is now honoured where previously it was ignored. This has been done so that you can ward against the danger of a runaway application (writing data to a 64-bit component file) from overloading your file system.

```
{R}←X □FCREATE Y
```

*Y* must be a simple integer scalar or a 1 or 2 element vector containing the file tie number followed by an optional address size.

The file tie number must not be the tie number associated with another tied file.

The address size is an integer and may be either 32 or 64. A value of 32 causes the internal component addresses to be represented by 32-bit values which allow a maximum file size of 4GB. A value of 64 causes the internal component addresses to be represented by 64-bit values which allows file sizes up to operating system limits.

Note that a component file created with an address size of 64 may not be accessed by versions of Dyalog prior to Version 10.1.0

### Examples:

```
'LARGE' □FCREATE 5 64 a 64-bit file
'SMALL' □FCREATE 6 32 a 32-bit file
```