

# NELI2\$ - Extended List Windows Directory (Normalised Type)

The NELI2\$ routine is used to list the contents of the directory on the host operating system (normally Windows) previously opened using the NEOPN\$ routine. NELI2\$ is a "more correct" version of the NELIS\$ routine (see the description of the DETYPE field).

## 1. Invocation

To list the directory code:

```
CALL NELI2$ USING area de
```

where area is the PIC X(400) work area previously passed to the NEOPN\$ routine and de is a block containing the returned file information:

```
01  DE                                * Number of fields returned
02  DELENG                            PIC 9(4) COMP                * Filename
02  DENAME                            PIC X(256)                   * File size
02  DESIZE                            PIC 9(9) COMP                * Creation date
02  DEDATE                            PIC DATE                    * Creation time
02  DETIME                            PIC 9(9) COMP                * File Type (see below)
02  DETYPE                            PIC 9 COMP
```

## 2. STOP Codes and Exception Conditions

The following STOP codes may be generated by NELI2\$:

STOP code	Description
24001	The file name read by the NELI2\$ routine exceeds the maximum length expected.

The following EXIT codes may be returned by NELI2\$:

EXIT code	\$\$COND	Description
24001	01	An unexpected error condition has been returned by the host operating system. The error code will be returned in \$\$CRES.
24002	02	The end of directory has been reached.
24003	03	The data returned to the NELI2\$ routine by the host operating system is invalid.

## 3. Programming Notes

The NELI2\$ routine must be used in conjunction with the NEOPN\$ and NECLS\$ routines.

The NELI2\$ routine has been modelled on the traditional LIST\$ routine. NELI2\$ is an extended version of NLIS2\$.

The PIC X(400) work-area must not be used for any other routines apart from the preceding NEOPN\$ call and the subsequent NECLS\$ calls, until the final NECLS\$ has completed. In particular, it must not be used for any nested NEOPN\$ calls.

NELI2\$ should be called repeatedly to return each file in the directory in turn until the End of Directory exception has been returned.

When no more files that match the wildcard spec are detected the exception from NELI2\$ depends on what's already been returned. If one, or more files, have been returned from previous calls on NELI2\$ then the documented End-of-Directory exception (\$\$COND=2) is returned by NELI2\$. However, if no files match the wildcard spec, NELI2\$ will return \$\$COND=1 with \$\$CRES=2 (ERROR\_FILE\_NOT\_FOUND). For example, consider a folder that just contains:

```
C:\test\File1.jpg
C:\test\File2.jpg
```

a call of NEOPN\$ with a target filename of "c:\test\\*.jpg" will be successful. Subsequent, calls of NELI2\$ will return success, success, \$\$COND=2.

However, a call of NEOPN\$ with a target filename of "c:\test\\*.xxx" (when no such files exist) will also be successful. The 1<sup>st</sup> subsequent call of NELI2\$ will return an immediate \$\$COND=1/\$\$CRES=2.

Unlike the related NELIS\$ routine, which returns a value in DETYPE which is difficult to interpret, NELS2\$ returns the following "normalised" values in DETYPE:

```
0 = directory (normal)
1 = normal file
2 = hidden file
3 = system file
4 = hidden and system file
5 = hidden directory
6 = system directory
7 = hidden, system directory
```

The order in which the search returns the files, such as alphabetical order, is not guaranteed, and is dependent on the file system. If the data must be sorted, the application must do the ordering after obtaining all the results. The order in which this function returns the file names is dependent on the file system type. With the NTFS file system and CDfs file systems, the names are usually returned in alphabetical order. With FAT file systems, the names are usually returned in the order the files were written to the disk, which may or may not be in alphabetical order. However, as stated previously, these behaviours are not guaranteed.

## 4. Examples

[EXAMPLES REQUIRED]

## 5. Copy-Books

None.

## 6. See Also

NOOPEN\$ Open Windows Directory  
NLIST\$ List Windows Directory  
NLIS2\$ List Windows Directory (Normalised File Type)  
NCLOS\$ Close Windows directory  
NEOPN\$ Extended Open Windows Directory  
NELIS\$ Extended List Windows Directory  
NECLS\$ Extended Close Windows Directory  
NXOPN\$ Specialised Open Windows Directory  
NXLIS\$ Specialised List Windows Directory  
NXCLS\$ Specialised Close Windows Directory  
OPEN\$ Open Global volume  
LIST\$ List Global volume  
CLOSE\$ Close Global volume