

NLIS2\$ - List Windows Directory (Normalised File Type)

The NLIS2\$ routine is used to list the contents of the directory on the host operating system (normally Windows) previously opened using the NOPEN\$ routine. NLIS2\$ is a "more correct" version of the NLIST\$ routine (see the description of the DETYPE field).

1. Invocation

To list the directory code:

```
CALL NLIS2$ USING area de
```

where area is the PIC X(140) work-area previously passed to the NOPEN\$ routine and de is a block containing the returned file information:

```
01  DE
02  DELENG      PIC 9(4) COMP      * Number of fields returned
02  DENAME      PIC X(20)          * Filename
02  DESIZE      PIC 9(9) COMP      * File size
02  DEDATE      PIC DATE           * Creation date
02  DETIME      PIC 9(9) COMP      * Creation time
02  DETYPE      PIC 9 COMP         * File Type (see below)
02  DEFILL      PIC X(16)         * Pad to 50 bytes
```

2. STOP Codes and Exception Conditions

The following STOP codes may be generated by NLIS2\$:

STOP code	Description
24001	The file name read by the NLIS2\$ routine exceeds the maximum length expected.

The following EXIT codes may be returned by NLIS2\$:

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 NLIS2\$ routine by the host operating system is invalid.

3. Programming Notes

NLIS2\$ is only available with GSM SP-33, or later.

The NLIS2\$ routine must be used in conjunction with the NOPEN\$ and NCLOS\$ routines.

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

The PIC X(140) work-area must not be used for any other routines apart from the preceding NOPEN\$ call and the subsequent NCLOS\$ calls, until the final NCLOS\$ has completed. In particular, it must not be used for any nested NOPEN\$ calls.

NLIS2\$ 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 NLIS2\$ depends on what's already been returned. If one, or more files, have been returned from previous calls on NLIS2\$ then the documented End-of-Directory exception (\$\$COND=2) is returned by NLIS2\$. However, if no files match the wildcard spec, NLIS2\$ 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 NOPEN\$ with a target filename of "c:\test*.jpg" will be successful. Subsequent, calls of NLIS2\$ will return success, success, \$\$COND=2.

However, a call of NOPEN\$ with a target filename of "c:\test*.xxx" (when no such files exist) will also be successful. The 1st subsequent call of NLIS2\$ will return an immediate \$\$COND=1/\$\$CRES=2.

Unlike the related NLIST\$ routine, which returns a value in DETYPE which is difficult to interpret, NLIS2\$ 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

NOPEN\$	Open Windows Directory
NLIST\$	List Windows Directory
NCLOS\$	Close Windows directory
NEOPN\$	Extended Open Windows Directory
NELIS\$	Extended List Windows Directory
NELI2\$	Extended List Windows Directory (Normalised File Type)
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