SOUND$ - Play Microsoft System Sound or .WAV File

The SOUND$ routine can be used to play a sound on the PC running GX. The sound can be defined in a number of ways:

- a standard Windows system sound;

- a .WAV file defined indirectly via the GX.INI file, or a related INI file;

- a .WAV file, the location of which is provided directly by the application.

1.   Invocation

To play a standard Windows system sound or a .WAV file code:

```
        CALL SOUND$ USING flag sound_id          * flag = 0
or:
        CALL SOUND$ USING flag wav_id            * flag = 1
or:
        CALL SOUND$ USING flag wav_file          * flag = 2
```

where *flag* is a PIC 9(4) COMP variable, or literal value, which must contain one of the following values:

    0   Play standard Windows system sound
    1   Play .WAV file defined in the GX.INI file
    2   Play .WAV file passed as the 2nd parameter

All other values of *flag* are invalid and will result in a STOP code.

If *flag* contains 0 the second parameter, *sound_id*, is a PIC 9(4) COMP variable, or literal value, representing a standard Windows sound. The following *sound_id* values are valid:

    0   System Default sound
    16   System Hand sound
    32   System Question sound
    48   System Exclamation sound
    64   System Asterisk sound
    -1   Standard beep using the computer speaker

All other values of *sound_id* are invalid and will result in an exception from SOUND$.

If *flag* contains 1 the second parameter, *wav_id*, is a PIC 9(4) COMP variable, or literal value, between 1 and 9999 representing a entry in the [sounds] section of the GX.INI file. Each entry in the GX.INI [sounds] section is of the form:

    Sound*N*=*pathname_of_wav_file*

where *N* is between 1 and 9999 and *pathname_of_wav_file* is the full pathname of the corresponding .WAV file. If a Sound*N* entry corresponding to the *wav_id* is not present in the GX.INI file an exception will be returned by SOUND$.

Although a description of the GX.INI file is beyond the scope of this manual it should be noted that leading zeroes must **not** be included in the Sound*N* entries. For example, the GX.INI file entry for *wav_id* 1 must be:

Sound1=*pathname_of_wav_file*
rather than:
Sound0001=*pathname_of_wav_file*

If *flag* contains 2 the second parameter, *wav_file*, is variable length, zero-terminated PIC X(?) string, of up to 300 characters, containing the **full** pathname of the .WAV file. If the *wav_file* cannot be opened an exception will be returned by SOUND$.

Important note: The pathname defined by *wav_file* represents a file on the 'remote' PC that is running GX.EXE. It does **NOT** refer to a file on the PC/Server that is running GLOBAL.EXE.

2. STOP Codes and Exception Conditions
The following STOP codes may be generated by SOUND$:

STOP code	Description
14204	SOUND$ has been called by an application that is not running on GX
14205	The supplied *flag* value was greater than 2
14206	The *wav_file* parameter is longer than 300 characters

The following EXIT codes may be returned by SOUND$:

EXIT code	$$COND	Description
14204	4	The *sound_id* does not represent a Windows system sound (*flag* = 0); or the Sound*N* entry does not exist in the GX.INI file (*flag*=1); or the *pathname_of_wav_file* option in the GX.INI file is not a valid sound file (*flag*=1); or the *wav_file* is not a valid sound file (*flag*=2).

3. Programming Notes
SOUND$ is only available when running on GX. Any attempt to use SOUND$ on a non-GX terminal will result in a STOP code.

4. Examples
The following example plays the Windows system Asterisk sound:

```
CALL SOUND$ USING 0 64
```

The following example plays the .WAV file corresponding to entry Sound23 in the [Sounds] section of the GX.INI file:

```
CALL SOUND$ USING 1 23
```

The following example plays the file CELERY.WAV in the C:\SOUNDS folder on the PC that is running GX:

```
DATA DIVISION
01    Z-SOUND
  02  FILLER      PIC X(?)
      VALUE       "C:\SOUNDS\CELERY.WAV"
  02  FILLER      PIC X
      VALUE       #00
PROCEDURE DIVISION
      CALL SOUND$ USING 2 Z-SOUND
      ON EXCEPTION
          ERROR "Sound file not played"
      END
```

5.   Copy-Books
None.

6.   See Also
None.