Director – MIAW & NetLingo

Starting a Movie from Within a Movie

It is possible to start playback of a second movie from a Director movie, using the following syntax:

```
on mouseUp
    go to movie "NewMovie"
end
```

… or you can go to a specific frame within the new movie:

```
on mouseUp
    go to frame 10 of movie "NewMovie"
end
```

Note: when using multiple movies, you will save yourself a *lot* of headaches if you leave all movies in the same folder … using subfolders – usually a wise idea for organizational purposes – really adds a significant amount of difficulty to the task.

Alternately, you can use the "`play`" command instead of "`go to`" to initiate playback of the movie immediately when loaded. When using this method, it is also quite easy to add a second command ("`play done`") to the end of the movie, causing it to return automatically to the previous movie.

```
on mouseUp
    play frame 2 of movie "NewMovie"
end

on exitFrame -- placed in last frame of the called movie
    play done -- causes the movie to return to previous movie
end
```

Movie in a Window (MIAW)

Creating MIAWs is a four-step process … the first three create the window and initiate playback, the last one removes the window:
- define the window and specify the movie to play in the window
- set the window's properties
- open the window and play the movie
- close or delete the window — this is *extremely important*, since memory is used for this movie and is not released until the "`forget`" command is used (the "`close`" command will make the window disappear but does not release the RAM)

For an example, see "`Multiplex.dir`" in the Tutorials folder of the Demystified CD

Note: Before creating a Shockwave movie, make certain that you review the list of Lingo commands that are disabled for security reasons (pp. 489 – 490) and the "pre-shock checklist" (p. 496).

Internet Access & Using NetLingo

Opening Director Movies or Importing Cast Members over the Internet

- File→Open or File→Import, depending on task
- Click on the "Internet" button
- In the "Open URL" dialog box, type the appropriate URL address & and filename
  - Cannot "Save" the movie files … must use "Save As" and save on local hard drive. Changes must be uploaded using an appropriate FTP program (or other means of file transfer)

It is also possible to import files in a movie using the "`importFileInto`" command (p. 461)

Though you cannot use any commands for managing MIAWs from Shockwave movies, it *is* possible to use MIAW techniques to create a window from a Director movie and playback movies accessed via the web (see p. 463 – 464)

You should familiarize yourself with Director's network cache settings, including the Network Preferences (File→Preferences→Network…) and the variety of related Lingo commands (e.g., `clearCache`, `cacheSize()`, `cacheDocVerify()`, etc.)

netID

Performing network operations involves, once again, a 4-step process:
1. start a network operation and save the value returned by the network command
2. test to make sure the operation is complete
3. check for errors
4. make use of the network operation results

The `netID` is a unique identifier returned following every network command. You must save this `netID` as a variable so that you can use it later in the `netDone` and `netError` functions, allowing you to check the status of the network processes. [Follow the instructions on 468 – 469 & 470 - 474 using "netMIAW.dir" … both files are from the Demystified CD.] Other netLingo commands you may find useful include `getNetText` & `netTextResult` (used as a pair), `netAbort`, `netLastModDate`, and `netMIME` (see pp. 473 – 474 for explanation).

The `Thing` commands

In order to avoid playback problems when downloading large files (like sound files) over the Internet, you can use the `preloadNetThing` command. This command allows you to download many types of documents, including HTML, text files, Shockwave movies, images, or just about anything else.

You can also use netLingo to copy a file from the Internet onto the user's local hard drive (be careful with this one!) using **downLoadNetThing**. This command is *disabled in Shockwave movies* for security reasons (pp. 469 – 470).

The **gotoNetPage** command

To open a web page in the user's browser, simply use the following syntax:

```
gotoNetPage "http://www.server.edu/subfolder/filename.htm"
```

Placing this Lingo command (with the appropriate information instead of the placeholders shown above) into a mouseUp event for a sprite will cause the user's browser to open and display the referenced page. This does, of course, require an internet connection. [See the movie "myHomePage.dir" for an example.]

Shockwave Audio

Allows you to stream audio in Director or Shockwave. The audio file must first be converted to SWA format, then "Inserted" into the movie cast

How to Create

- Macintosh – must open the digital sound file in SoundEdit 16 or Peak LE and export it as SWA file
- Windows – Use the Xtra built into Director to operate on WAV files
    - Xtras→Convert WAV to SWA
    - Click the "Add Files" button, select the audio file, then click "Open"
    - Choose a folder for your output file by clicking on the "Select New Folder" button, selecting the desired location, and clicking on "Select Folder."
    - Set the Compression Settings, Accuracy, and Copyright info as you would like, then click on the "Convert" button
        - see p. 499 for a description of the various compression bit rates, resulting audio quality, and the (sometimes amazing) amount of sound file reduction … note the trade-off between audio quality and file size

Working with SWA

Shockwave Audio files can be either inserted into the Internal cast of your movie or accessed via the Internet. Note that SWA cast members *cannot* be placed in the Sound channels of the Score. Instead, they occupy a Sprite channel. However, it is not necessary to place them on the Stage or in the Score at all to access them via Lingo. Useful Lingo commands include "**preLoadTime**" (to set the number of seconds preloaded into memory before the sound file begins to play), "**preLoadBuffer**" (begins the process of preloading), "play," "pause," and "stop" (see pp. 502 – 503).

Once a sound has been preloaded (using **preLoadTime** and **preLoadBuffer**), it is simple to playback the sound file using Lingo using the following syntax:

- To play an SWA cast member
  play member("mySound") … or **member("mySound").play()**
- To pause an SWA cast member
  pause member("mySound") … or **member("mySound").pause()**
- To stop payback of an SWA cast member
  stop member("mySound") … or **member("mySound").stop()**

Other useful SWA-related Lingo commands
- **duration** – determine how long a sound will play
- **volume** – sets or checks the volume level (0 to 255)
- **URL** – allows you to determine or change the file associated with an SWA cast member
- **getError** & **getErrorString** – assist in handling errors that occur and are reported when checking the **state** property
- **percentStreamed** – reports the percentage of a sound that has been streamed

Compressing Internal Sounds with SWA

Director uses the settings you provide in the "Publish Settings" dialog box to compress audio when creating a Shockwave movie
- File→Publish Settings
- Click on the "Compression" tab