

Examples of Batch Processing under Windows

This paper will show several examples of executing SAS batch jobs under Windows 95, 98, NT, ME and Windows 2000 operating systems. These examples will work with all of the operating systems listed. The examples in this paper were created using the Windows NT environment. The screen shots for Windows 2000, Windows 95/98/ME/XP may be slightly different.

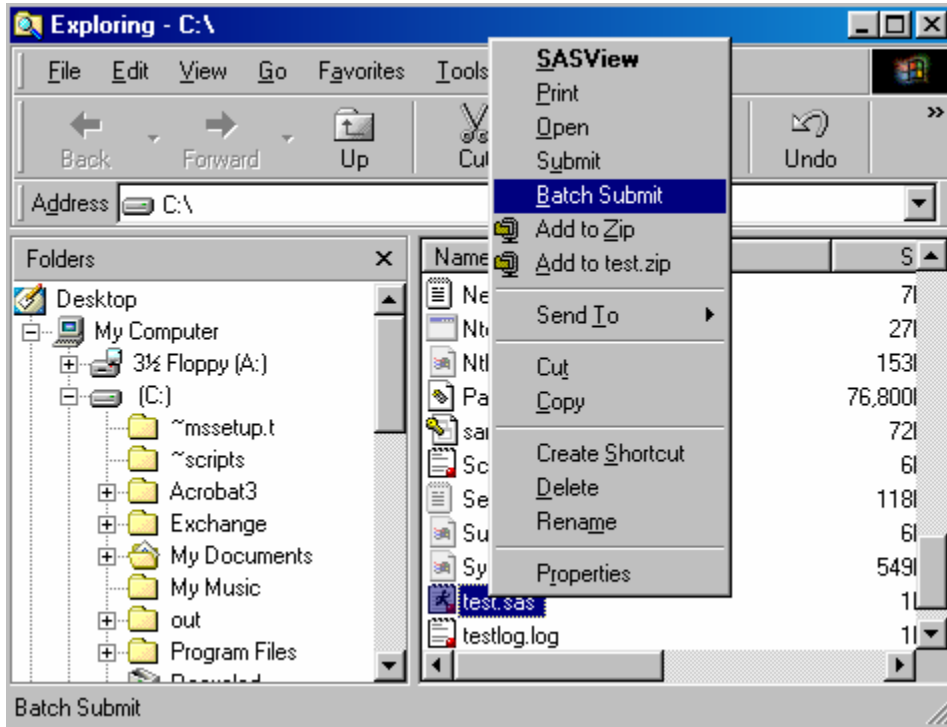
(Note: For all the examples in this document, assume that the SAS System is installed in the "C:\Program Files\SAS Institute\SAS\V8\" directory. Change the path as necessary).

1. The first example of running SAS in batch is the simplest way. If SAS is registered properly, open Explorer and right click on the program to be executed. (*SAS should be registered properly when you install SAS the first time. If SAS is not registered properly refer to the example on the next page.*) Select the Batch Submit option. This will execute the program as a batch job. The .LOG and .LST file will be located in the same folder as the program by default.

The .LOG file is the log for the program that has been executed. This file will contain useful information if the program did not run correctly.

The .LST file is the output file for the program that has been executed. This file is only created if there is output for the program.

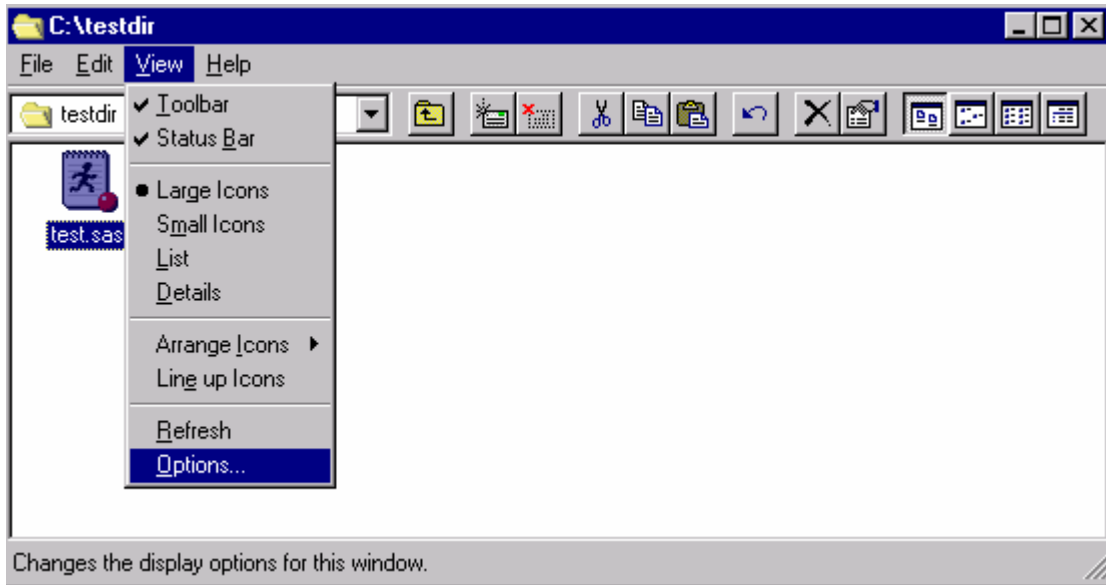
Example:



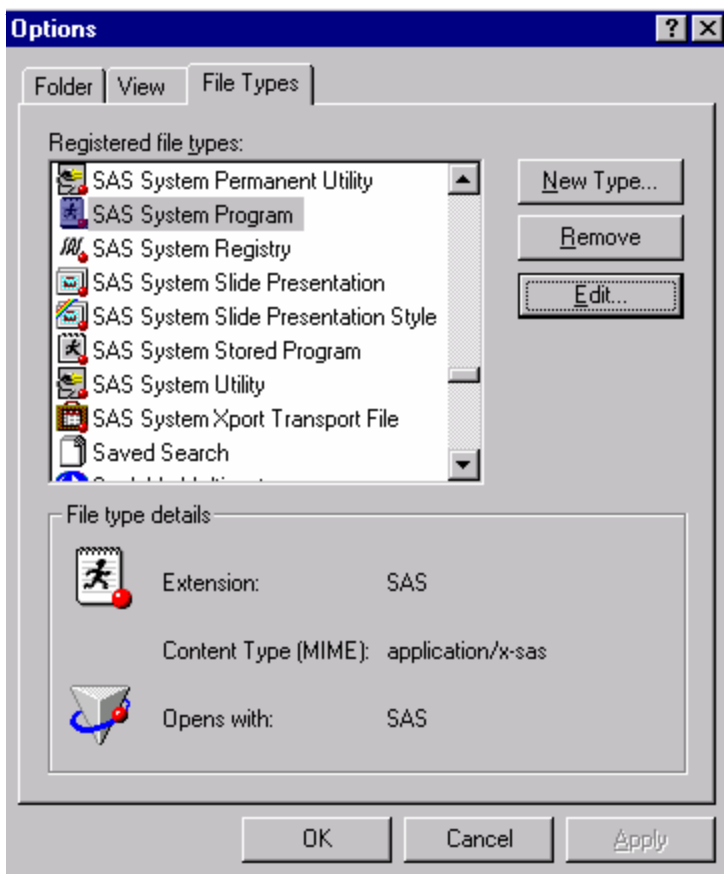
You can also have .SAS files run in batch when you double click on the files within Explorer. The default action for .SAS files needs to be set to Batch Submit.

If the default action for the .SAS files needs to be changed, follow this example:

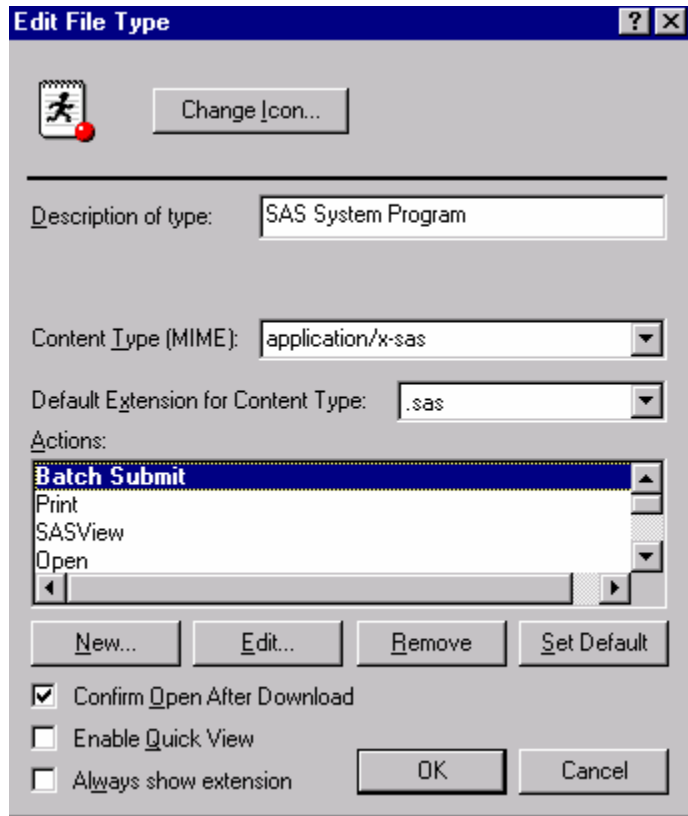
A. Open up Windows Explorer and Select View > Options.



B. Now Select >File Types and SAS System Program



C. Select >Edit



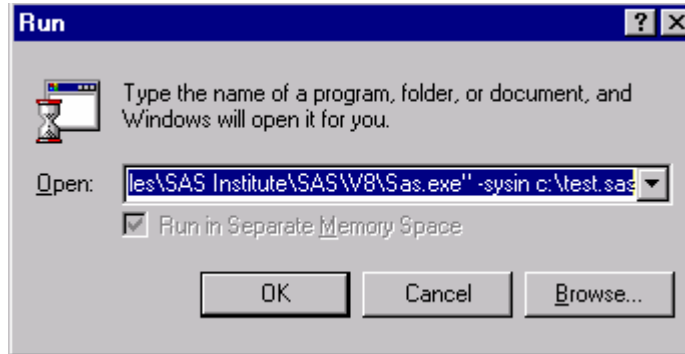
D. Highlight the Batch Submit action and Select > Set Default and then select OK.

Once this is set, double clicking a .SAS file will execute the SAS program in batch Mode. The .LOG and .LST files will be created in the same folder as the .SAS file.

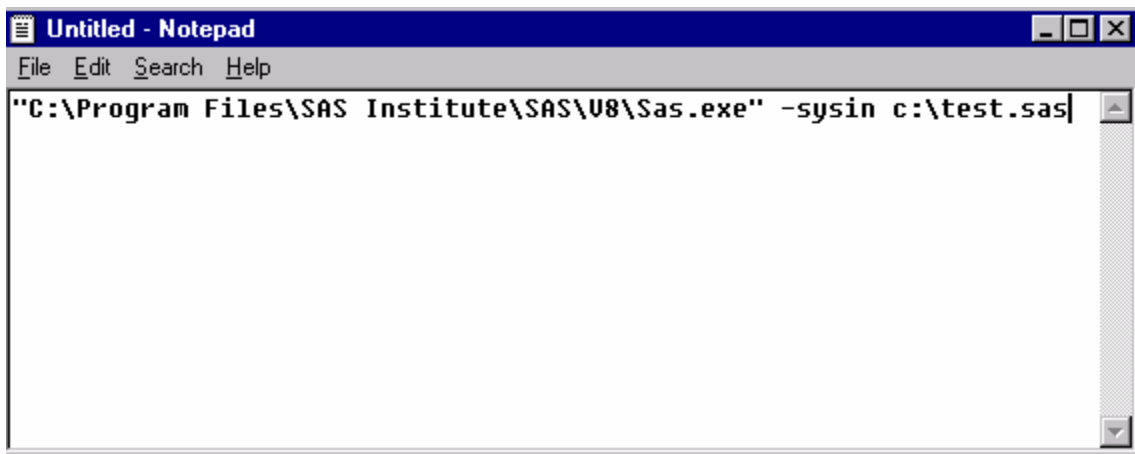
2. The second example of SAS batch submissions uses the SAS executable command with the -SYSIN option. Select START>Run and type in the command illustrated in Example 2 below. Specify the location of the program. This example will run the TEST.SAS program located in root of the C drive. The splash screen can be eliminated by using the -NOSPLASH option. Also, adding the -ICON option will minimize the DOS window when the program is started. The .LOG and LST files will reside in the SAS root directory.

The -SYSIN option specifies the SAS program file that will be run in batch. The path needs to be a valid Windows path.

Example:



3. Another option using the command in the previous example is to create a .BAT file. This is a file that can be executed by the operating system. The easiest way to create a .BAT file is to use Notepad or another text editor. Here is an example of the text that can be used within the file.



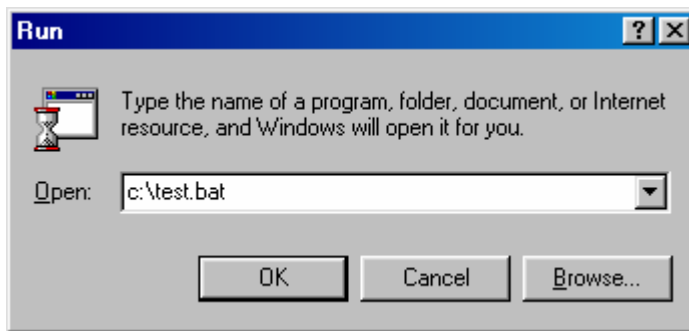
Once this file is created, select Start>Run, to execute the job or double click on the .BAT file. The .LOG file and the .LST files will reside in the folder of the .BAT file. The destination of the .LOG and .LST file can be changed using the –LOG and the -PRINT options.

The –PRINT option is used to change the destination folder for the output of the program.

The –LOG option is used to change the destination folder for the log of the program that has been executed.

Example: "C:\Program Files\SAS Institute\SAS\W8\Sas.exe" -SYSIN c:\testprog.sas
-NOSPLASH -ICON -PRINT c:\test.lst –LOG c:\test.log

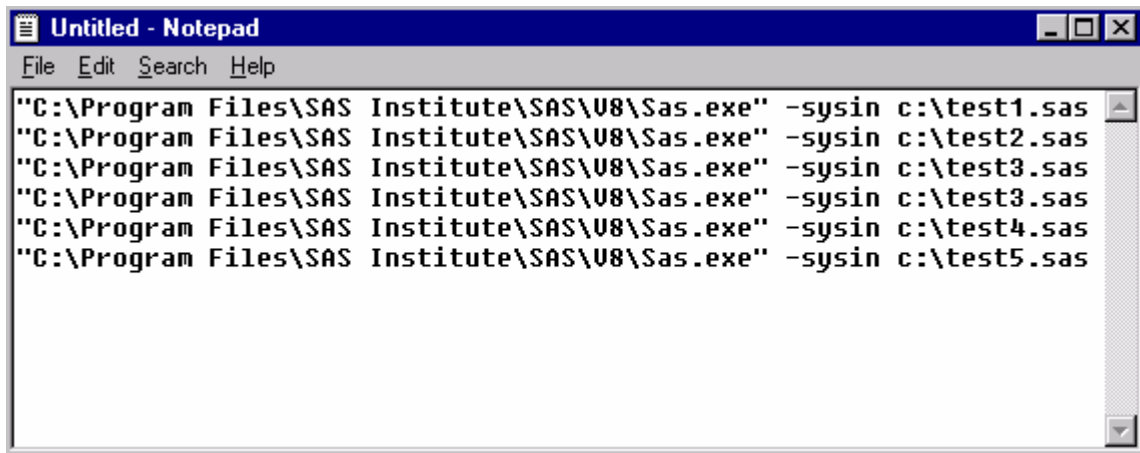
Example:



Running a .BAT program will open a DOS window, which will not close until the job is finish.

4a. Running more than one job at a time can be done within the .BAT file. Use the previous example but add more programs within the TEST.BAT file. This example will execute 5 jobs concurrently.

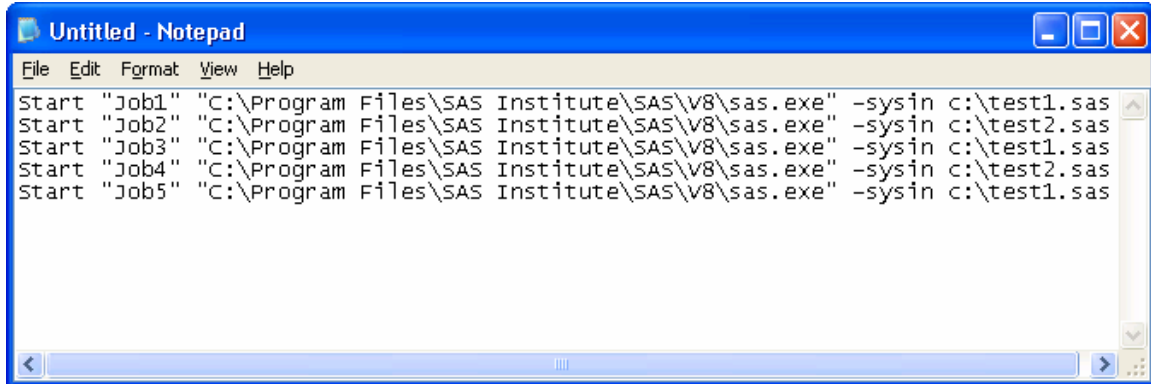
Example:



4b.

This example shows how to run concurrent batch jobs for Windows 2000 and Windows XP. The Start command is needed so the batch jobs will run concurrently. The START command also requires a title. The title can be double quotes but this example uses Job#.

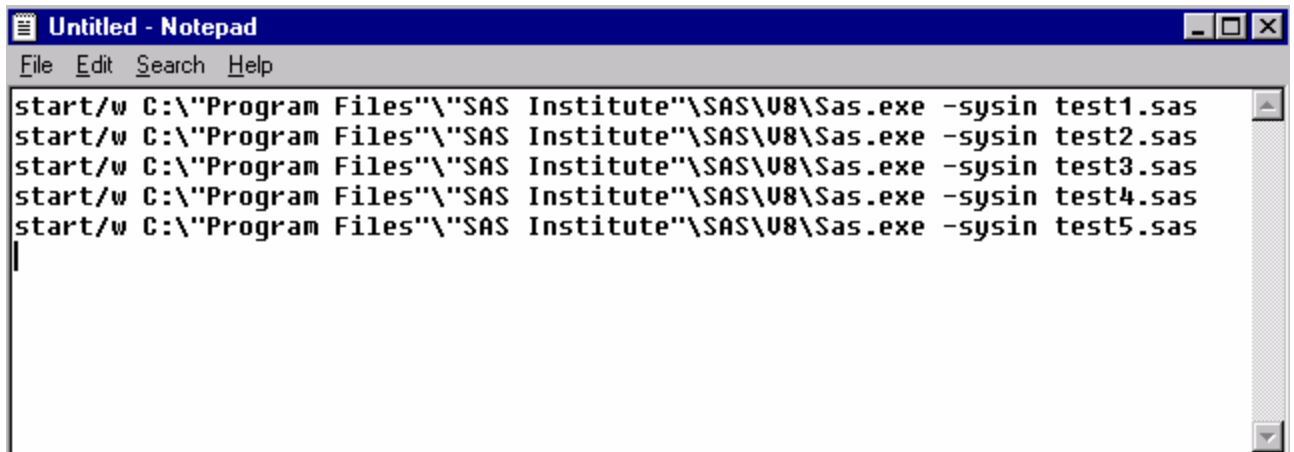
Example:



```
Untitled - Notepad
File Edit Format View Help
Start "Job1" "C:\Program Files\SAS Institute\SAS\V8\sas.exe" -sysin c:\test1.sas
Start "Job2" "C:\Program Files\SAS Institute\SAS\V8\sas.exe" -sysin c:\test2.sas
Start "Job3" "C:\Program Files\SAS Institute\SAS\V8\sas.exe" -sysin c:\test1.sas
Start "Job4" "C:\Program Files\SAS Institute\SAS\V8\sas.exe" -sysin c:\test2.sas
Start "Job5" "C:\Program Files\SAS Institute\SAS\V8\sas.exe" -sysin c:\test1.sas
```

5a. This next example shows how to create a batch (TEST.BAT) file that will run 5 jobs consecutively, instead of concurrently. The log (.LOG) and output files (.LST) will be located in the directory where the .BAT file is located unless you use the –PRINT and –LOG options on the command line. (This example is for Windows 95,98,ME,NT)

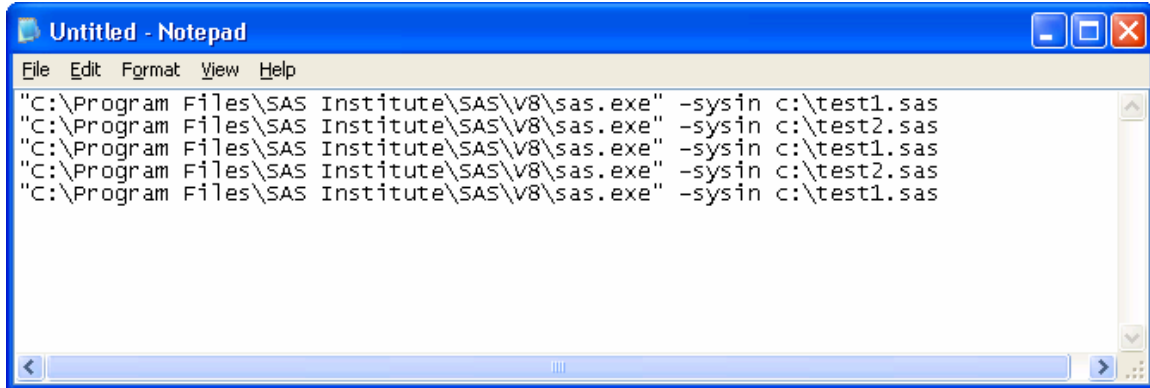
Example:



```
Untitled - Notepad
File Edit Search Help
start/w C:"Program Files"\SAS Institute\SAS\U8\Sas.exe -sysin test1.sas
start/w C:"Program Files"\SAS Institute\SAS\U8\Sas.exe -sysin test2.sas
start/w C:"Program Files"\SAS Institute\SAS\U8\Sas.exe -sysin test3.sas
start/w C:"Program Files"\SAS Institute\SAS\U8\Sas.exe -sysin test4.sas
start/w C:"Program Files"\SAS Institute\SAS\U8\Sas.exe -sysin test5.sas
```

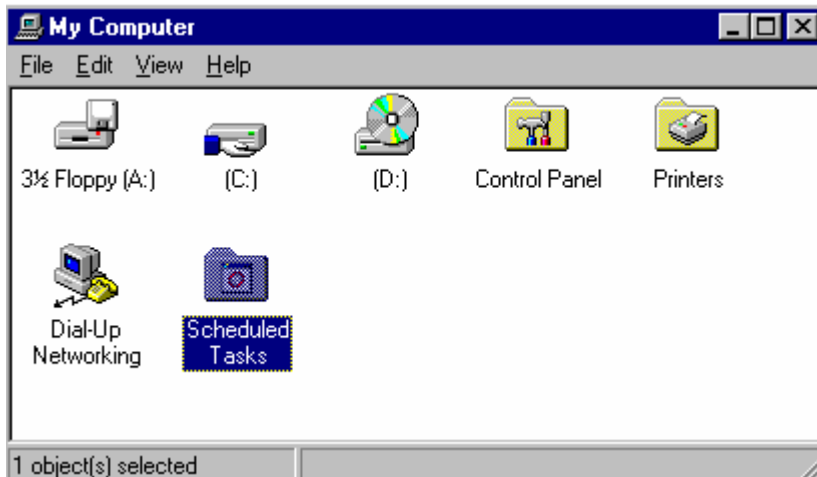
5b. This example is for Windows 2000 and Windows XP. This example shows how to execute batch jobs consecutively.

Example:



```
Untitled - Notepad
File Edit Format View Help
"C:\Program Files\SAS Institute\SAS\V8\sas.exe" -sysin c:\test1.sas
"C:\Program Files\SAS Institute\SAS\V8\sas.exe" -sysin c:\test2.sas
"C:\Program Files\SAS Institute\SAS\V8\sas.exe" -sysin c:\test1.sas
"C:\Program Files\SAS Institute\SAS\V8\sas.exe" -sysin c:\test2.sas
"C:\Program Files\SAS Institute\SAS\V8\sas.exe" -sysin c:\test1.sas
```

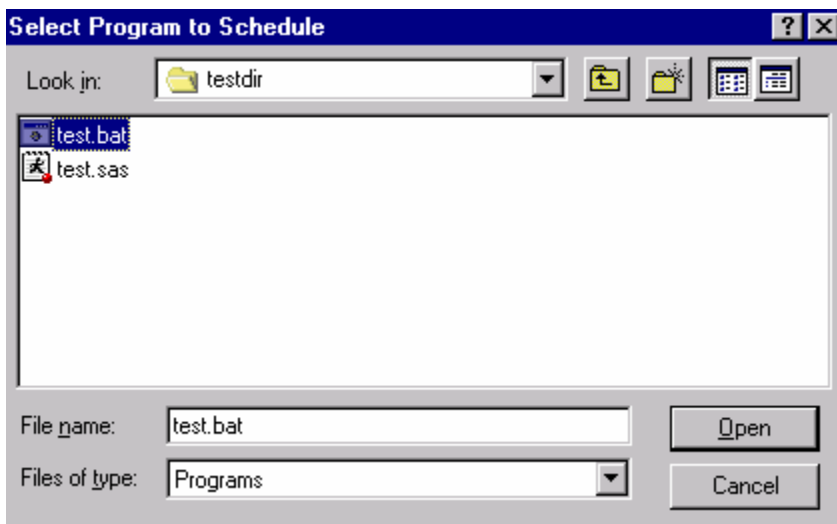
6. This next section will show examples of using a scheduler to run SAS jobs at a specific time. These jobs can be executed overnight without having anyone at the computer. The Scheduled Tasks program is located under My Computer for Windows NT 4 and is located in the Control Panel under Windows 2000 and Windows 98 and ME. Windows95 doesn't have this scheduler.



Double click on the Scheduled Tasks icon to invoke the following wizard:



Now that the Scheduler Wizard is running, select the Browse button and point to the TEST.BAT file.



Once a file has been selected, choose how often this task should be executed and select the next button.



Now select the date and time this job should be executed and select Next.



After the time has been selected, the prompt for the user name and password will appear. Enter the user name and password this job will running under and select Next.



Now that the user name and password are entered, the following message window will be displayed.



The task has now been scheduled, select the Finish button.

This will display the Task Scheduler's main menu and the job will be listed there.

Scheduled Tasks [min] [max] [close]

File Edit View Advanced Help

Scheduled Tasks [add] [refresh] [cut] [copy] [paste] [undo] [redo] [delete] [help] [calendar] [calendar] [calendar]

Name	Schedule	Next Run Time	Last Run Time	Status
Add Scheduled Task				
test	At 11:35 AM on 1/2...	11:35:00 AM ...		Never

1 object(s) selected