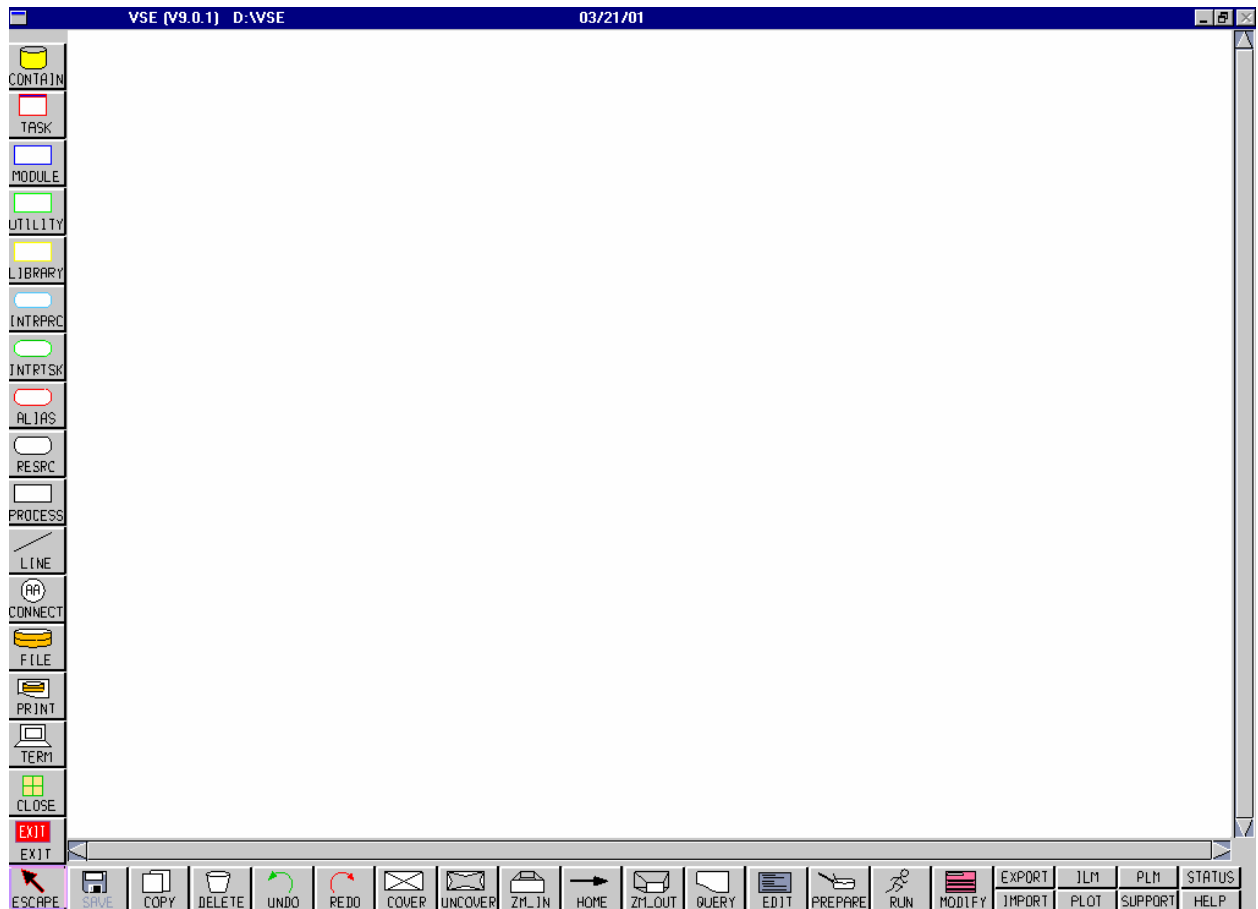


CHAPTER 2: VSE BASICS

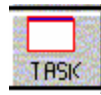
This is a walk through of a simple Task to say "HELLO" to the VSE World. Our Task involves printing a simple statement "Hello World" on the console. We follow three simple steps in fulfilling this Task:

Step 1: Drawing the skeleton.

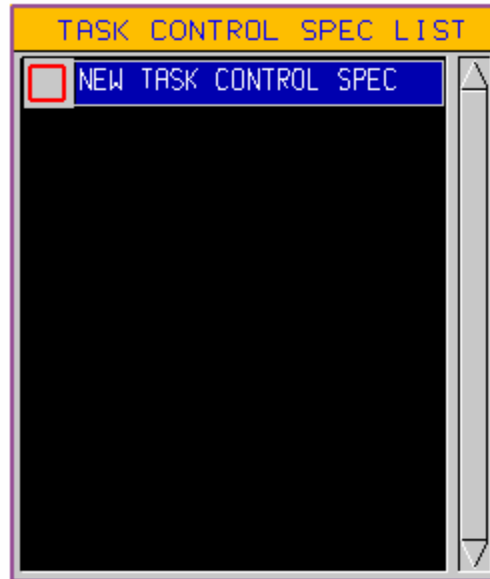
Below is the main window you will be using. Let's start with creating our Task.



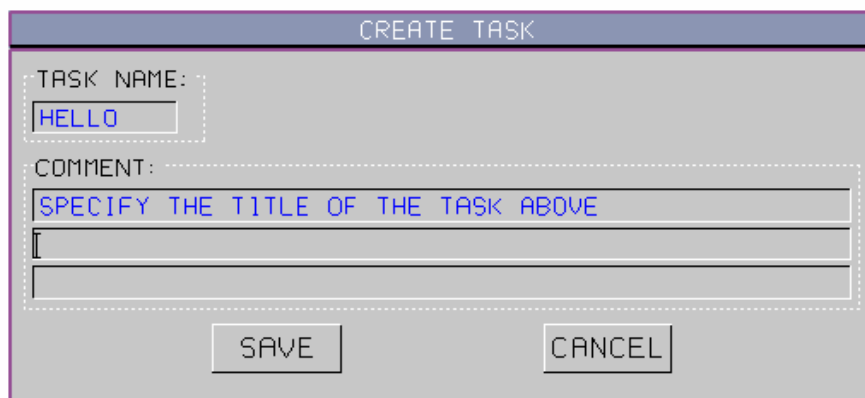
The first thing you do is hit the TASK button, which looks like this:



The box below pops up after clicking on the above, and has a row called "NEW TASK CONTROL SPEC". Click on that row and then click on the white space in the main window.



This creates the Task box and immediately another box like below pops up where VSE prompts you to give the task a Title and to provide comments if needed. You must give the Task a name, so call it 'HELLO'. Then hit SAVE to continue further.



CREATE TASK

TASK NAME:
HELLO

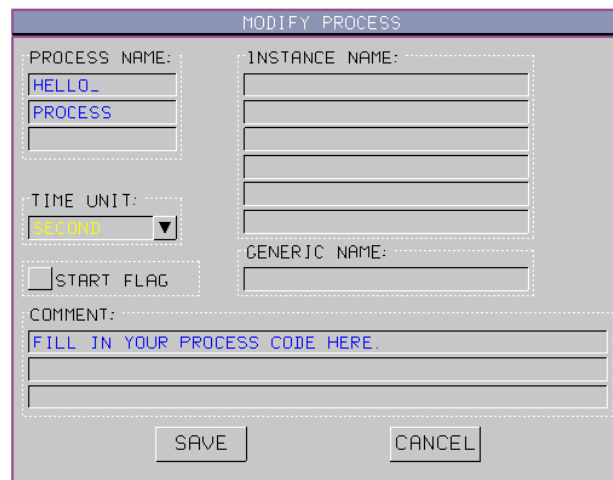
COMMENT:
SPECIFY THE TITLE OF THE TASK ABOVE

SAVE CANCEL

Having done that you get an empty Task box like below, with it's name inside:



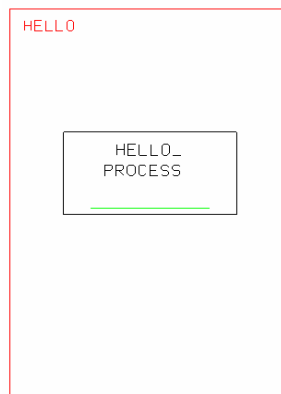
Next you need to build a Process Box, which contains the code that actually does the Task. Click on the PROCESS button on the tool bar and then click again inside the red Task Box. This immediately pops up a box where VSE prompts you to name the process, which is shown below. You must name the process, so call it 'HELLO_PROCESS'. Then hit the SAVE button to proceed further.



The dialog box is titled 'MODIFY PROCESS'. It contains the following fields and controls:

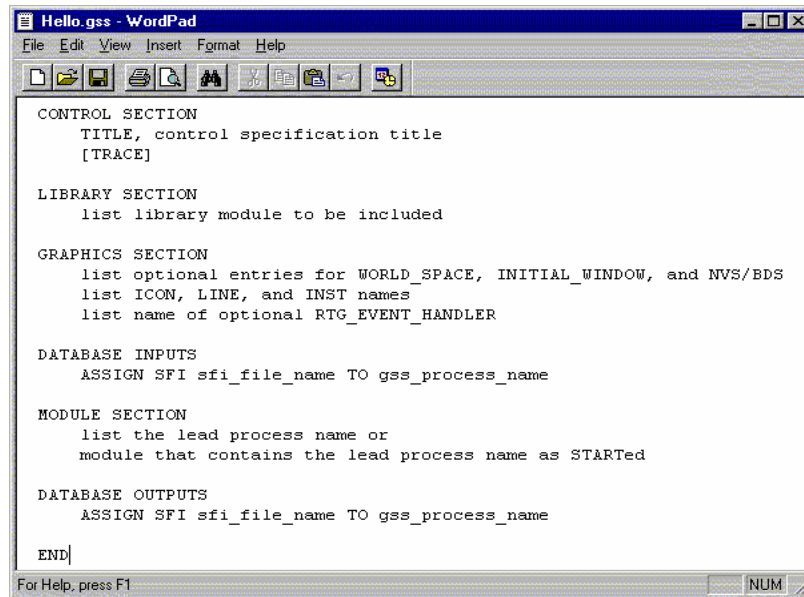
- PROCESS NAME: A text box containing 'HELLO_PROCESS'.
- INSTANCE NAME: A multi-line text box.
- TIME UNIT: A dropdown menu with 'SECOND' selected.
- START FLAG: A checkbox.
- GENERIC NAME: A text box.
- COMMENT: A multi-line text box containing 'FILL IN YOUR PROCESS CODE HERE.'
- SAVE and CANCEL buttons at the bottom.

Once you have done that you get a picture of the Task Box like the one below.



Step 2: Building the Code.

Double clicking on the white space inside the Task Box opens a text editor named "HELLO.GSS". You will see the following:



```
CONTROL SECTION
  TITLE, control specification title
  [TRACE]

LIBRARY SECTION
  list library module to be included

GRAPHICS SECTION
  list optional entries for WORLD_SPACE, INITIAL_WINDOW, and NVS/BDS
  list ICON, LINE, and INST names
  list name of optional RTG_EVENT_HANDLER

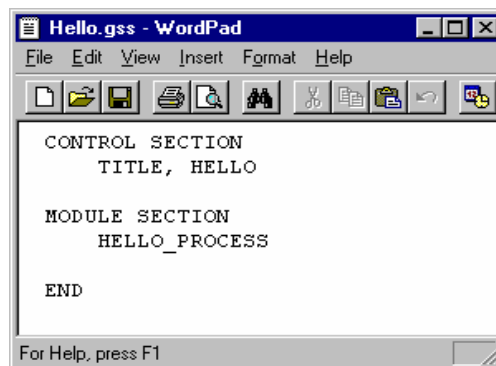
DATABASE INPUTS
  ASSIGN SFI sfi_file_name TO gss_process_name

MODULE SECTION
  list the lead process name or
  module that contains the lead process name as STARTed

DATABASE OUTPUTS
  ASSIGN SFI sfi_file_name TO gss_process_name

END|
```

You only need some of the sections present. For now, you need the "CONTROL SECTION" and the "MODULE SECTION". At the place indicating "TITLE", give a title to the Task control specification. This may be the same as the name of your Task Box. Under the "MODEL SECTION" give the name of the process. This should be the same as the name you gave to the Process Box. Remove all the remaining sections. Make sure that you don't disturb the alignment of the code present. Below is what it should look like:



```
CONTROL SECTION
  TITLE, HELLO

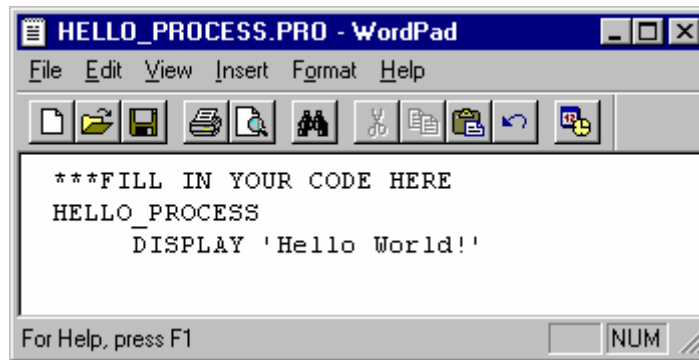
MODULE SECTION
  HELLO_PROCESS

END
```

Then SAVE the file and CLOSE it.

This leaves us with the final task of doing what we actually want our program to do, that is to print “Hello World!” By double clicking on the Process Box, opens up an editor window called "HELLO_PROCESS.PRO". This will give us a blank window. You only want to print “Hello World!” So you just have to type "DISPLAY 'Hello World!'"

In this case the code consists of just the name of the rule and a statement in the rule. Here "HELLO_PROCESS" is the rule and it could start from the column 1 through 4. In usual practice we place the rules flush against the left side of the editor. Whatever work you need (code you use) to get done from this process should be printed under this rule from the 5th column onwards, like here in the example:



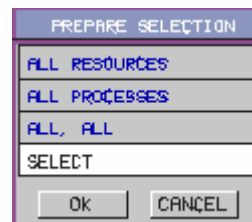
SAVE and CLOSE the window.

Step 3: Running the Task.

Now comes the final part of preparing and running the Task. First we prepare the process and then the whole Task before we run the actual Task. Click the Process Box so that you see its highlighted all around in green. Then click the PREPARE button:

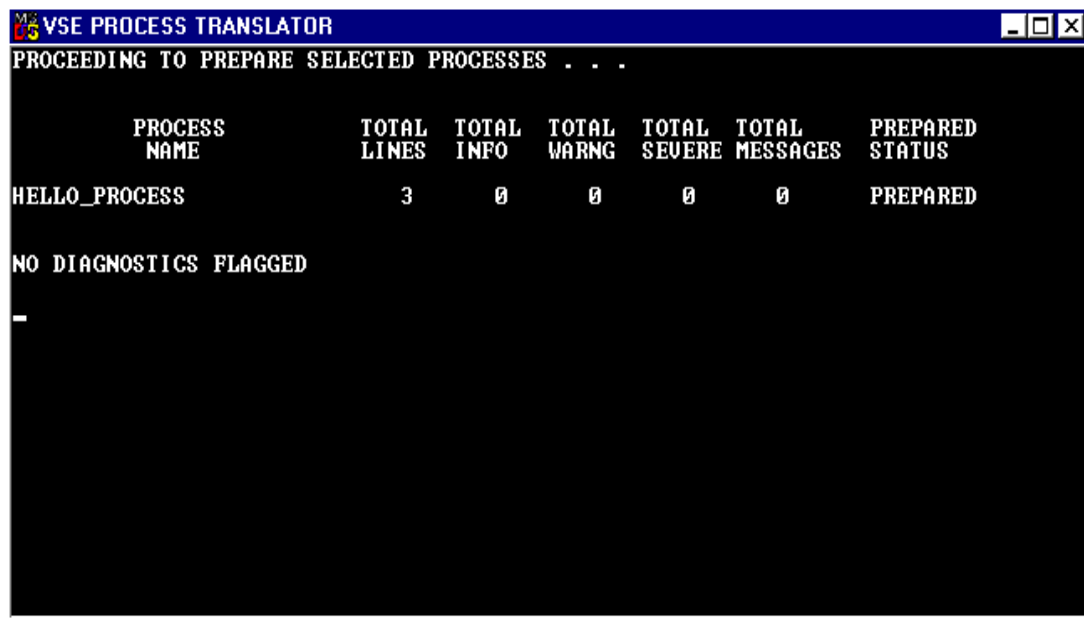


After clicking the PREPARE button, these two pop up boxes will appear, one after the other:



These small boxes are for confirmation about preparation. Hitting OK pops up the other box, where again you need to hit OK.

This pops up a window like the one below, which shows us the details of the process, such as number of lines in it, number of lines that are severe (wrong), etc. If some of your code is shown to have an "ERROR", for further details you can type 'T', which gives you a line-by-line detail of the possible errors*.



```
VSE PROCESS TRANSLATOR
PROCEEDING TO PREPARE SELECTED PROCESSES . . .

      PROCESS      TOTAL  TOTAL  TOTAL  TOTAL  TOTAL  PREPARED
      NAME         LINES  INFO   WBRNG  SEVERE  MESSAGES  STATUS
HELLO_PROCESS          3      0      0      0      0      PREPARED

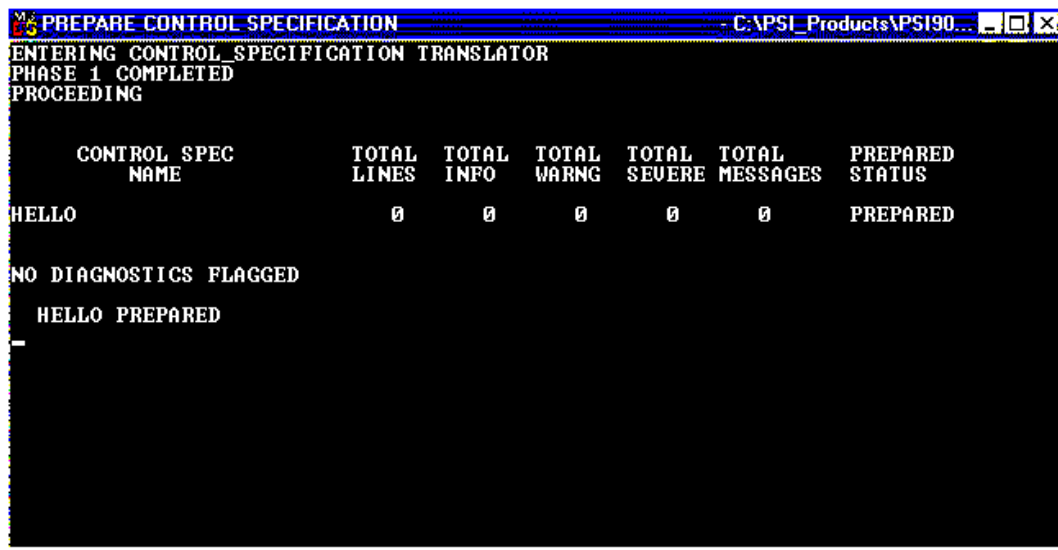
NO DIAGNOSTICS FLAGGED

-
```

To correct any errors you need to close this window first by typing 'END' and hitting ENTER. Then double click on the Process Box to open the "HELLO_PROCESS.PRO" text editor. After correcting the code you redo the preparation of the process. Once you get zero errors, it says "NO DIAGNOSTICS FLAGGED". Now you need to prepare the whole task.

*If you have an ERROR, it is most likely because you made a typo. Just go back to the given lines and find the problem. Sometimes it is very hard to see or figure out so try different things until it works and the task is prepared.

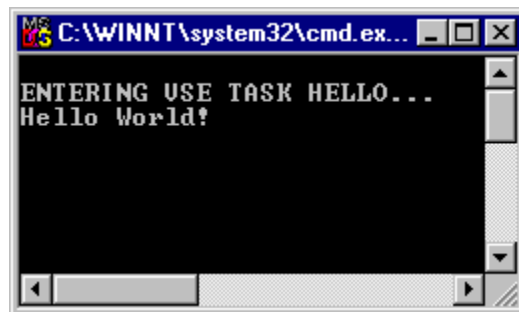
Hit on the white space in the Task Box. This highlights the Task Box in green all around. Then hit the PREPARE button. Since process is already prepared, only the Control Spec needs to be prepared. Just click OK to the pop up boxes and the following should appear:



This gives the details of the control specification of the program. If any errors are present, they need to be corrected in order to get the status prepared. If everything runs to perfection, it will finally display 'HELLO PREPARED'. You are ready to run the program. Just click the RUN button on the tool bar:



A window pops up displaying “Hello World!”:



You’ve just finished running your first Task in VSE!