

1. The dummy Function

Normally you don't need to modify your programs for winAMS.

But some development tools output not enough debug information for winAMS simulator. In that case it cannot be called function from winAMS or cannot be input the data through function argument. To solve these problems, we recommend you to use a dummy function. Call target function from endless loop in dummy function. The trigger of start test is "Start symbol" and end is "End symbol".

How to create a dummy function?

You may write in directly to the user source file. But we recommend you to create new source file for dummy function. (e.g. Debug.c)

The below sample is testing func1() by dummy function.

[Target function]

```
int x;
char ary[10];
struct {
    int x;
    int y;
}table;

int func1(int arg1, int arg2) /* test target */
{
    |
    return 1;
}
```

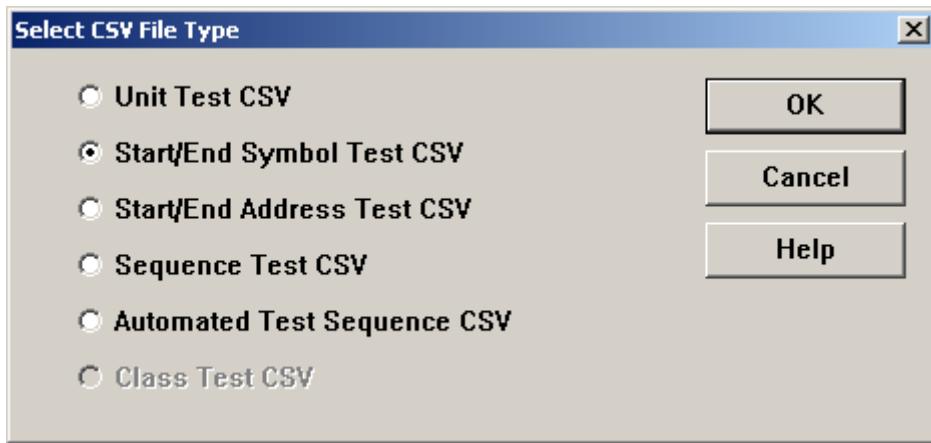
[Dummy function (Debug.c)]

```
int out;      /* function return symbol */
int a, b;
int DBG_IN;    /* Start symbol */
int DBG_OUT;   /* End symbol */
extern int func1(int); /* prototype declaration */

void dummy0    /* dummy function */
{
    while(1){ /* endless loop to CALL target function */
        DBG_IN = 1; /* trigger for start test */
        out = func1(a,b) /* CALL target function */
        DBG_OUT = 1; /* trigger for end test */
    }
}
```

2. Creating test case

Selecting “Start/end Symbol Test CSV” when using dummy function.



Opens “Start/End Symbol:Create Test CSV Template” to set INPUT and OUTPUT.

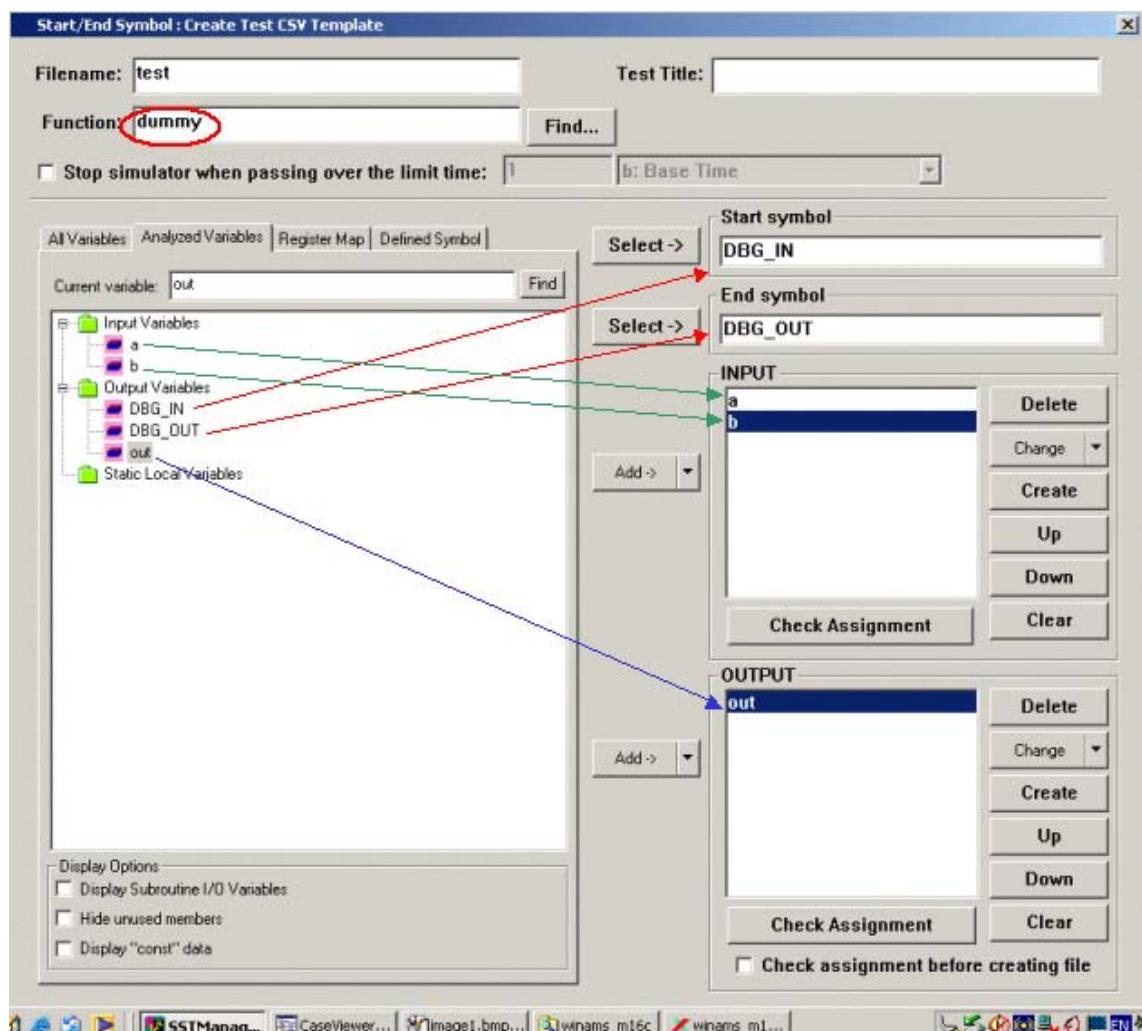
[Process]

Select target function name “func1”.

Set “DBG_IN” as Start symbol and “DBG_OUT” as End symbol.

Select the symbols from Input Variables /Output Variables list and set to INPUT/OUTPUT.

You cannot specify the function argument in the “Start/End Symbol:Create Test CSV Template”. Please use the global variables of dummy function.



Edit CSV with ATDEditor

The screenshot shows the ATDEditor application window titled "ATDEditor - [Edit CSV Data]". The menu bar includes File, Edit, View, Tool, Window, and Help. The toolbar contains various icons for file operations like Open, Save, Print, and Cut/Copy/Paste. A search bar labeled "Comment" is present. The main area is a grid-based CSV editor with the following columns: COMMENT, 1, 2, and 3. The first row is a header with "COMMENT" in the first column. The second row has "NAME" in the first column and "Comment" in the second column. Rows 1 through 7 contain numerical values: Row 1 has 9 in column 1 and 10 in column 2; Row 2 has 10 in column 1 and 10 in column 2; Row 3 has 11 in column 1 and 10 in column 2; Row 4 has 9 in column 1 and 9 in column 2; Row 5 has 9 in column 1 and 8 in column 2; Row 6 is empty; Row 7 is empty. The "out" value in the second column of the second row is highlighted in yellow. The status bar at the bottom shows "Row:1" and "Ready".

	COMMENT	1	2	3
COMMENT				
NAME	Comment	a	b	out
1		9	10	
2		10	10	
3		11	10	
4		9	9	
5		9	8	
6				
7				

3. How to test multi functions with the dummy function?

Sample source code (test target functions)

```
int sample1 (int argument) /* target function 1 */
{
    |
    return 1
}

void sample2 (char a)  /* target function 2 */
{
}

int sample3 (int I, int j)  /* target function 3 */
{
}
```

Dummy function for testing sample10, sample20 and sampl30

```
int no;          /* target function index */
int x, y;        /* for function input */
int out;         /* for function output */
int DBG_IN;     /* Start symbol */
int DBG_OUT;    /* End symbol */
extern int sample (int); /* target function prototype declaration */

void dummy0 /* dummy function for test */
{
    while (1) { /* endless loop to CALL target function */
        DBG_IN = 1; /* trigger for start test */
        switch (no) { /* index for target function */
            case 1: out = sample1 (x);
                        break;
            case 2: sample2 (x);
                        break;
            case 3: out = sample3 (x,y);
                        break;
        }
        DBG_OUT = 1; /* trigger for end test */
    }
}
```

Add the symbol “no” to INPUT and set the value 1, 2 and 3 in CSV. Now you may test all target function.

If you want to test sample10, set the value “1” to symbol “no”.

If you want to test sample20, set the value “2” to symbol “no”.

If you want to test sample30, set the value “3” to symbol “no”.