

## 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;
}
```

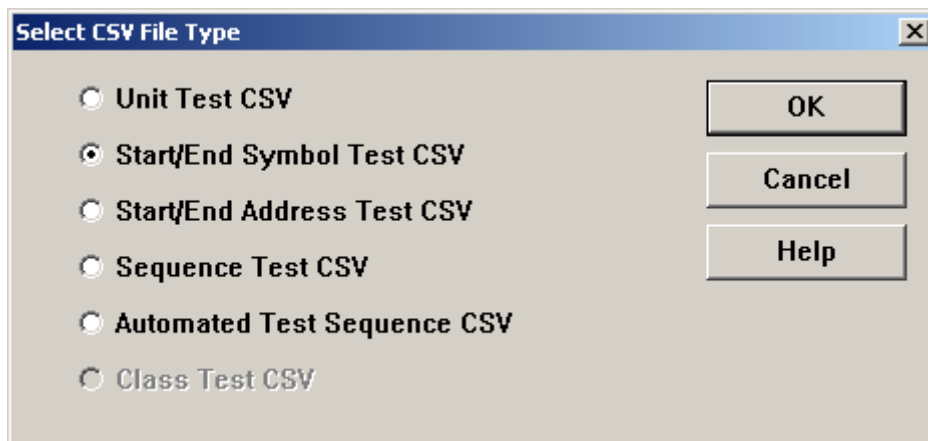
[Dummy function (Debug.c)]

```
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 dummy()    /* 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.

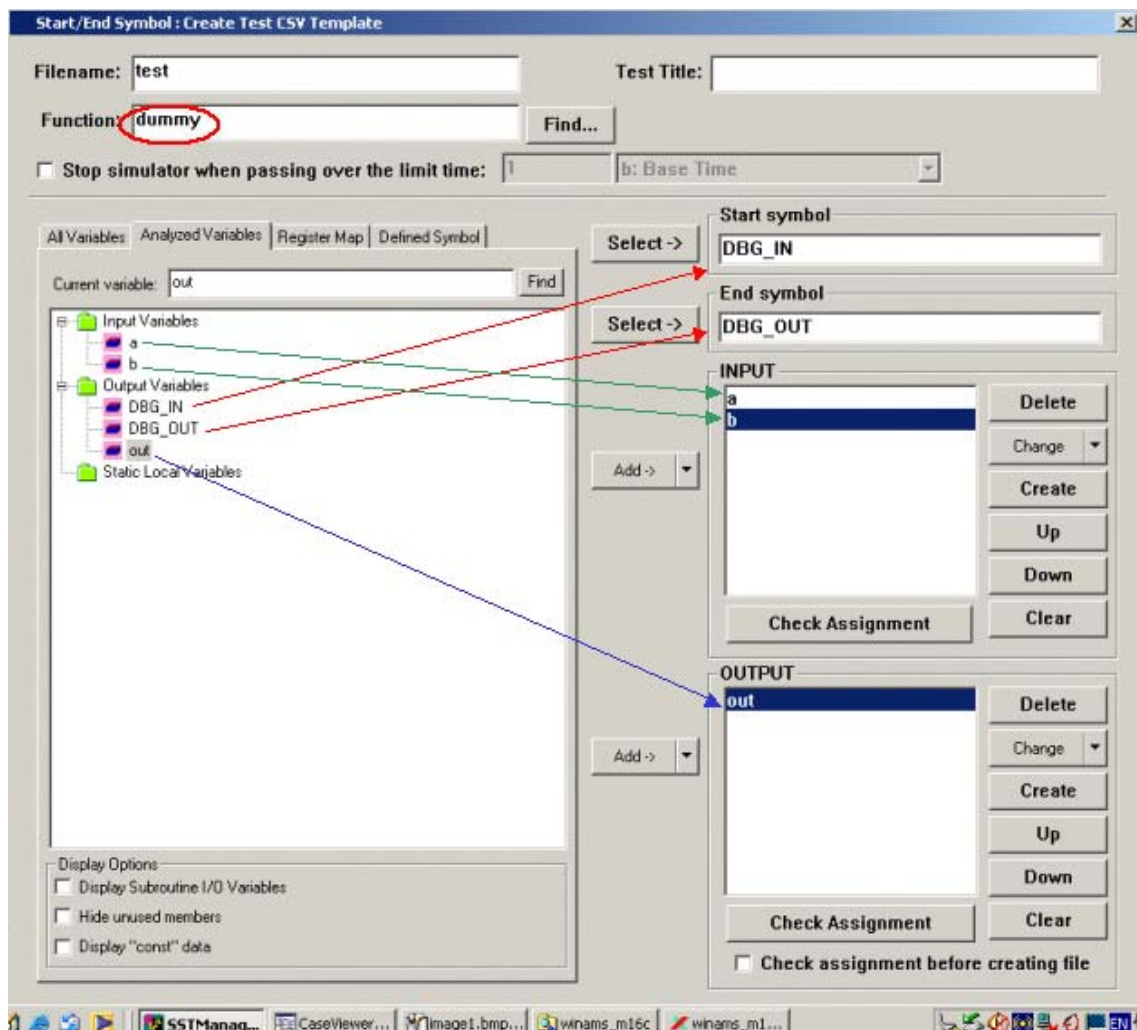
[Process]

Select target function name “func1”.

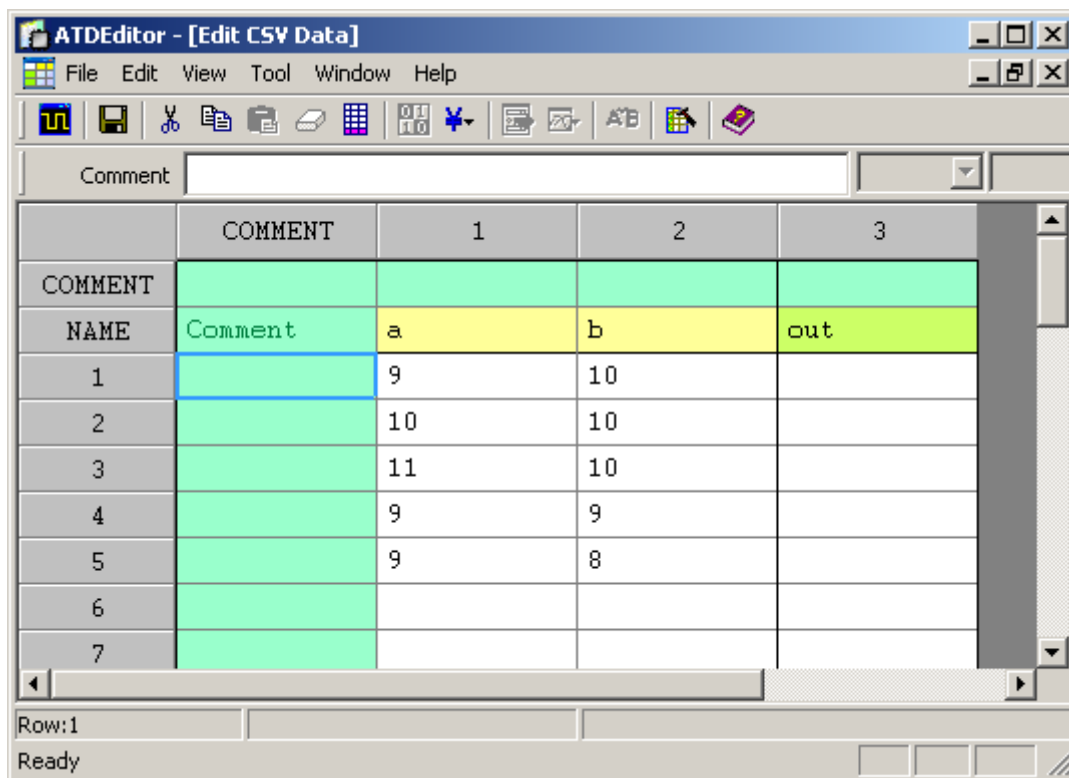
Set “DBG\_IN” as Start symbol and “DBG\_OUT” as End symbol.

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



### 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 sample1(), sample2() and sample3()

```
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 dummy() /* 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 sample1(), set the value “1” to symbol “no”.

If you want to test sample2(), set the value “2” to symbol “no”.

If you want to test sample3(), set the value “3” to symbol “no”.