

Because the symbols already contain the information of the space ID, you don't have to specify it manually.

```
Data.dump myVariable ; Will show the memory at the virtual  
; address of "myVariable" with the space ID  
; of the process holding this variable
```

address	0	4	01234567
ND:0141:08048FD8	00090000	0000036F	NNNNNNNN
ND:0141:08048FE0	00000010	0D696918	UUUUUUUU

virtual address of current process 0x141

address	0	4	01234567
ND:0BB9:08048FD8	EC83E589	FC45C728	EEEEEEEE
ND:0BB9:08048FE0	00000000	00E445C7	NNNNNNNN

virtual address of specified process 0xBB9

address	0	4	01234567
AND:08048FD8	EC04BF90	CE00BF20	EEEEEEEE
AND:08048FE0	5C803304	FD027781	UUUUUUUU

access to physical address A:0x08048FDD

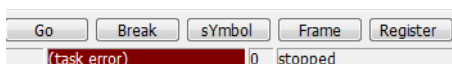
address	0	4	01234567
ND:0BB9:0804A3E8	00010101	01000101	NNNNNNNN
ND:0BB9:0804A3F0	00010001	00010100	NNNNNNNN

Symbol "flags" with process 0xBB9

NOTE:

Address extension with the memory space IDs is per default disabled in TRACE32. The command **System.Option.MMUSPACES ON** has thus to be included at the start of the Linux debugging script.

If the Linux awareness is enabled, the debugger tries to get the space ID of the current process by accessing the kernel's internal data structures. If this fails e.g. because of wrong symbol information, an access error, or simply because the kernel's data structures have not been yet initialized (in case you stop the target early in the kernel boot process), the debugger sets the current space ID to 0xFFFF and shows the message "task error" in the status line.



You can ignore the "task error" message as long as the kernel has not yet booted. In case you still get this error after the kernel boot, then you probably have a wrong configuration or a problem with the kernel debug symbols.

On Demand Paging

Linux is designed for heavy MMU usage with on-demand paging. On-demand paging means that code and data pages are loaded when they are first accessed. If the processor tries to access a memory page that is not yet loaded, it creates a page fault. The page fault handler then loads the appropriate page and creates a translation in the current page table.