SPACE APPLICATION NOTE
ABOUT
USING PROCESS DATA

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1. INTRODUCTION

This report describes the usage of technology data in the SPACE system.

2. READING PROCESS DATA

To read the "maskdata", *space* calls the database interface function dmGetMetaDesignData. This function retrieves from the project key the process id to use for finding the "maskdata" file. A project key can be used after that a project is successfully opened with dmOpenProject. Function dmOpenProject stores the process id in "pkey -> procid" and sets "pkey -> procpath" to a null string. If the "procid" is not a number, "procid" is set to -9 and "procpath" contains the path to the process directory. Note that "procpath" can be DM_MAXPATHLEN (= 1024) long. Function dmGetMetaDesignData uses the "procpath" if it is set.
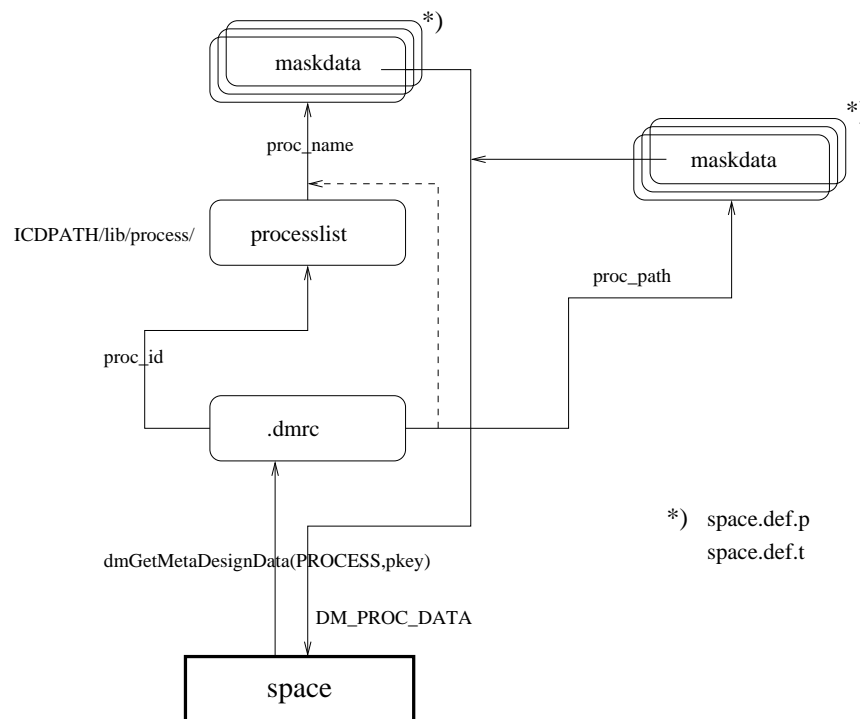
Figure 1. Reading process data.

Note that the "procpath" (at this moment) can not be a process name. In that case it must be a process id (number) which must be in the "ICDPATH/lib/process/processlist". Note that the "procpath" may be a relative directory path, but it may not begin with a digit.

3. TECC PROCESS DATA FLOW

The program *tecc*, the SPACE technology compiler, uses also the "maskdata" file for converting the technology input file into a tabular one. Default, *tecc* uses the process id or path from the current project. If the CWD environment variable is not set, the current working directory is the current (default) project path. Note that this default is superceded by the setting of the ICDPROCESS environment variable. The "maskdata" file path can also be specified with the **-m** option. The process name or path can also be specified with the **-p** option. Note that only one of these options may be specified. If the process name is not a process name from the "processlist", it is used as a process path.
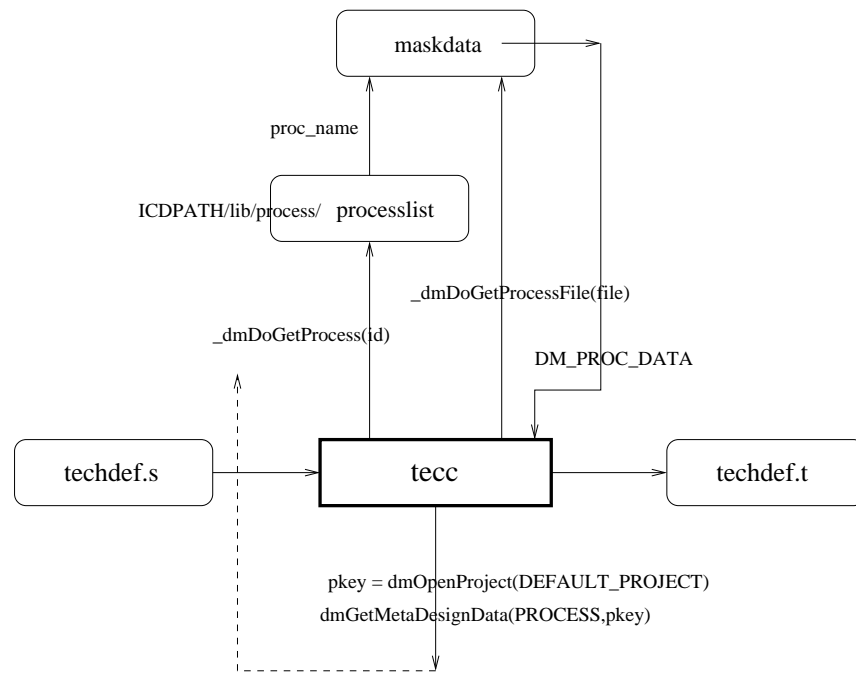

Figure 2. Tecc process data flow.

Note that the "maskdata" used by *tecc* and *space* must be identical!

4. GETPROC PROCESS DATA FLOW

The program *getproc* can display the contents of the "maskdata" file. Default, *getproc* uses the process id or path from the current project. If the CWD environment variable is not set, the current working directory is the current (default) project path. A process id, name or path can also be specified as program argument. If the process name is not in the "processlist", it must be a path. If the argument is a path, then is the process id and name unknown. The basename of the path can maybe used as process name.

With the **-m** option *getproc* displays the contents of the specified "maskdata" file. In that case the process name and id displayed is unknown. With the **-p** option *getproc* displays the contents of the "processlist" file.

5. REFERENCES

For SPACE see:

> The usage of SPACE is described in the user manuals:
>
> - Space Tutorial, October 2000
> - Space User's Manual, September 2000
> - Space3D Cap. Extraction User's Manual, October 2000
> - Space Substrate Res. User's Manual, May 2000