

Error reporting

In order to simplify and quicken the localization process and the correction of errors occurring in D2000 systems, each D2000 system generates various files (so-called logs) containing the description of behaviour of individual processes as well as of the entire system. The following text contains all essentials, required for localization of possible error and eliminating it.

Please, send the specifications described below along with your error report.

Log file types

- *.log - file into which a process writes a current debugging information,
- *.prev.log - file, containing the next to last log (from the next to last start of the process),
- *.his.log - file, containing a log history (except for those in *.log and *.prev.log),
- *.his.log.bak - file represents a backup of *.his.log and it can be created only if parameter [Max_Log_Size](#) is defined (limit of *.his.log file size).

Operation principle

- Backup with the name *.his.log.bak is generated automatically if the parameter [Max_Log_Size](#) is defined and file size of *.his.log (or *.log) exceeds the value of this parameter at process start (original file is cancelled after this).
- File *.his.log is generated by cumulation of logs from the file *.prev.log (file *.prev.log is cancelled after this).
- File *.prev.log is generated as a copy of *.log (file *.log is cancelled after this).
- *.log is a new log of the process which has been just started up.

D2000 system information

1. Your D2000 system version and release number can be found e.g. in the file *kernel.log* - the line **SoftwareVersion**, or by means of the user processes ([D2000 HI](#), [D2000 CNF](#), [D2000 GrEditor](#)) - the item **Info** from the menu **Help**.
2. Name of the application and the method (procedure) that causes the error, eventually names of objects, etc. because many problems are hard to invoke.
3. Description of the activity when the error occurred. Is it possible to repeat the error or is it an accidental error?
4. The file **SimpleWrite_ERROR** - if exists, it is placed in the subdirectory **/Log** of the [installation directory](#).

Warning: The file may contain more error records, each of them consists of two parts: *D2000 Exception : Exception Information* and *D2000 Exception : Symbolic Traceback*.

5. Each process of the D2000 system creates a log file – the name is in the following format: extension[_mode][-name_of_the_process][-instance].his.log (possibly file *.his.log.bak, if it exists)*. For instance: KOM-SELF.his.log, HIP.his.log, HIP-PC1.his.log, ARC-SELF-2.his.log, etc. A list of extensions is closer described in the chapter [Processes](#). Other parts of the name creation depend on the process's configuration. For interactive processes such as HI, Graph. editor, CNF and VBApi the implicit SELF identifier is not automatically added to the name. Some processes may create another name than described in particular process's documentation. A process instance is only used in case that the process is defined as an instance object. The parameter `_mode` is specific only for some kinds of processes, when it is appropriate to distinguish which mode the process was started from (a common example of this is event – as a standalone process or as a child process of HI in a DLL library).

These files are located in the directory **/Log**, which is a subdirectory of the [installation directory](#) of D2000 system.

Warning: These files (*.his.log and *.his.log.bak) may contain error records, each of them contains of two parts: *D2000 Exception : Exception Information* and *D2000 Exception : Symbolic Traceback*.

* **Note:** Process [D2000 Server](#) generates the file called *kernel.log*.

6. For process [D2000 DBManager](#):
 - type of database (Sybase, Oracle) + version (e.g. Sybase 7.0 Engine, Sybase 9.0 Network Server, Oracle 9.2.0.4, ...),
 - version of ODBC driver (for *dbmanager.exe*),
 - version of ORACLE on the computer with the running process **D2000 DBManager** - can be detected e.g. from Oracle Universal Installers (for *dbmanager_ora.exe* and *dbmanager.exe*),
 - configuration:
 - D2000 DBManager and database on one computer,
 - communication between D2000 DBManager and database through network.
7. Communication:

D2000 systems support a great number of communication standards and protocols. Errors may occur when configuring the communication with I/O devices or during the system operation. In such a case:

 - check out the status of hardware devices used for communication (serial ports, interface converters, cabling, Ethernet connections and connectivity, etc.)
 - check out, if the configuration of an I/O device has not been changed and if possible change has been performed in D2000 system configuration
 - in the configuration of communication line, set the parameter [Communication tracing](#) to the level **Screen & disk**. The communication process will save service debug information into the file called *line_name.log* placed in the subdirectory **\Trace** of the [application directory](#).
 - type of communication protocol
 - description of the configuration of communication objects ([lines](#), [stations](#) and [I/O tags](#)), unless you send the entire configuration database of D2000 system - the file *syscfg.db*.
8. Return code of process.

It defines a type of error that has occurred. This code can be find in list of events of operating system. The following return codes are used:

0		The process has been closed correctly.
1	MAIN_THREAD_CRASH	The special status has occurred in main thread of client.
2	THREAD_CRASH	The unexpected error has occurred.
3	KERNEL_ERROR	The connection to the process D2000 Server is wrong.
4	WD_ERROR	Flow of Watch Dog messages between process and D2000 Server has been aborted.
5	FATAL_ODBC_ERROR	The connection error to the database.
6	HARD_KEY_ERROR	The hardware key error.
8	APP_SYNCHRO_ERROR	The process with this name has been running in DODM.
10	CLIENT_REFUSED_ERROR	D2000 Server refused to connect the client.

9. Process dump

If the process has been started with parameter **/DUMP** (or its derivations), after its crash the dump file is generated in the folder `\\Log\dumps`, which is subfolder of [installation directory](#). Format of dump file name is `[process name]_[date of crash]_[time of crash].dmp`.

Other information

1. Processor type, memory size, graphic card type of the computer where the error occurred.
2. Information from the Task Manager - tab **Performance**.