

# Start Parameters (Processes)

## Start parameters of processes

Start parameters can be used to start processes. During the process configuration, these parameters are defined by means of the button **Parameters** in the [configuration dialog box](#) or in file [Start Parameters \(Processes\)#default.arg](#). The parameters may be set also in the [registry on a computer with D2000 Server](#) to which the process is connecting.

The following table includes the overview of the start parameters for processes.

Parameter	Parameter validity	Meaning
/? /h	All client processes of the D2000 system	Displays the list of permissible parameters along with an explanation of their meaning for the existing process. When this parameter is set, all other start parameters will be ignored. After writing up a text with an explanation for the process, this process will be ended.
/AF<Method>	<a href="#">D2000 HI</a> , <a href="#">D2000 GrEditor</a> , <a href="#">D2000 CNF</a> , <a href="#">D2000 Application Manager</a> , <a href="#">D2000 DDE Server</a> , <a href="#">D2000 System Console</a> , <a href="#">D2000 Tell</a> , <a href="#">D2000 Browser</a>	Forces another authentication method for verification of a user's identity than the authentication method required by the process <a href="#">D2000 Server</a> . Value of <Method> parameter can be <ul style="list-style-type: none"><li>• <a href="#">D2000</a></li><li>• <a href="#">NTLM</a></li><li>• <a href="#">Kerberos</a></li></ul> To use a specific authentication method, it must be permitted for the in his <a href="#">configuration</a> (parameter <a href="#">Authentication methods</a> ).
/AN<Name>	<a href="#">D2000 HI</a> , <a href="#">D2000 GrEditor</a> , <a href="#">D2000 CNF</a>	<i>Name</i> is the name of a D2000 system user for automatic login into the process after starting the process. If the <a href="#">/AP</a> parameter is not entered, the name is added into the login window and a password will be required.
-- ANONYMIZE PERIOD=<seconds>	<a href="#">D2000 DBManager</a>	The parameter sets time period in seconds of anonymization and table rows deletion. Default value is 3600 seconds (1 hour).
--ANSI	<b>D2000 GateWay Client</b> , <b>D2000 GateWay Server</b>	The parameter enforces the Windows 1250 encoding for transmitted texts. If it is not entered, the texts use UTF8 encoding. The parameter must be used providing that the communication partner is of older version than 9.X and the text values are transmitted.
/AO<NameOfPicture>	<a href="#">D2000 HI</a> , <a href="#">D2000 GrEditor</a>	NameOfPicture is the name of picture opened after +1. logon into the process
/AP<Password>	<a href="#">D2000 HI</a> , <a href="#">D2000 GrEditor</a> , <a href="#">D2000 CNF</a>	<i>Password</i> is the user's password for automatic login into the process after starting the process. <a href="#">/AP</a> means that the password is an empty string.  The parameter is also <a href="#">used</a> when changing the access password to the configuration database by the kernel.exe process.
/AS	<a href="#">D2000 HI</a> , <a href="#">D2000 GrEditor</a>	Disables the synchronization of bitmaps when starting the process.
/ASE	<a href="#">D2000 System Console</a>	Enables switching the HOT server (manual or automatic).
/ASG<group>	<a href="#">D2000 System Console</a>	Automatic HOT server switching. The parameter <i>group</i> defines the name of a redundant group.
/ASI<interval>	<a href="#">D2000 System Console</a>	Automatic HOT server switching. The parameter <i>interval</i> defines the time interval, after the lapse of which the HOT server is to be switched.
/B<BkpNr>	<a href="#">D2000 Server</a>	BkpNr is the number of configuration database backups. Database backups is generated when starting the process. The parameter <a href="#">/B0</a> causes no generation of the backup. The number of backups (value of the parameter BkpNr) can be within 0...3. If the parameter is not entered, there are automatically used the parameters <a href="#">/B0</a> for the process <a href="#">D2000 Server</a> .
-- batch_mode	<a href="#">D2000 Event Handler</a>	Parameter modifies an interpretation of <a href="#">DB_SET_PROCESS_PARAMS</a> .
/C<ApplicationName>	<a href="#">D2000 Server</a>	Application name.
/CT	All client processes of D2000 system	The process will use the time of the computer, where it is started. If the parameter is not entered (Default), the process will use the time of the computer where the <a href="#">D2000 Server</a> is running.
/BCA	<a href="#">D2000 Archiv</a>	The process <a href="#">D2000 Archiv</a> in the <i>active</i> mode deletes old data from the archive database and <a href="#">reorganizes</a> it (in redundant systems, the process must be also connected to HOT Server).

/DBCP	D2000 Archiv	The process <b>D2000 Archiv</b> in the <i>passive</i> mode deletes old data from the archive database and <b>reorganizes</b> it (or <i>passive</i> mode in redundant systems, but the process must be connected to SBS Server).
/DBCS	D2000 Archiv (only for Oracle database)	The process <b>D2000 Archiv</b> will use <i>ALTER TABLE SHRINK SPACE</i> instead of SQL command <i>ALTER TABLE MOVE</i> for <b>reorganization</b> (this command is available only for Oracle 10g and above).
/DBCY	D2000 Archiv	Enables the <b>reorganization of the archive database</b> . If the process <b>D2000 Archiv</b> is not started with the parameter, the process deletes old data from the archive database but doesn't reorganize the archive tables (for reasons of backward compatibility before the implementation of the reorganization features).
/DBCY	D2000 DBManager	Enables the debug information on the status of the Oracle cluster. The parameter can be used only when the database TNS points to the cluster and contains the <b>FAILOVER</b> section (recovering the connection after one of the instances of the Oracle cluster fails). If the <b>FAILOVER</b> section is not included in the database TNS, no debug information will be generated on a failure or disconnecting of a cluster instance.  <b>Warning:</b> The parameter can be used just for <i>dbmanager_ora.exe</i> .
/DBCP	D2000 Archiv	Only in passive mode, the process <b>D2000 Archiv</b> can delete old data from the archive database and reorganize it (ORACLE).
/DBD<number_of_days>	D2000 Archiv	The process <b>D2000 Archiv</b> limits the maximum archive depth to the number of days defined by the parameter <i>&lt;number_of_days&gt;</i> . The limitation is to be applied to all objects of <b>Historical values</b> , no matter how the objects are configured.
/DBD<version>	D2000 KOM	When the parameter is entered, the D2000 KOM process will report the specified version of the KomAPI interface ( <i>VerLo</i> item in the <i>InitParams</i> structure) during the initialization of the OEM protocols. Attention - in fact the interface does not change, so OEM protocols may not work correctly if they use non-existent <i>InitParams</i> structure items or items that were moved or changed when the interface version was changed.
/DBD<number_of_requests>	D2000 DBManager	The process <b>D2000 DBManager</b> will log performance warnings when a number of requests queued for a non-transactional connection exceed the value <i>number_of_requests</i> . This parameter can be used for performance tuning. <a href="#">More...</a>
/DBIV<flag>	D2000 Archiv	The process <b>D2000 Archiv</b> ignores all values with the same <b>flag</b> as defined by the parameter <i>&lt;flag&gt;</i> . The parameter can be used to ignore several flags at the same moment (e.g. the process started with the parameter <i>/DBVI /DBIVG</i> ignores all values with the flags of I or G).
/DBPO	D2000 Archiv	Activates the archive attribute (Archiv keeps only primary data). Requests for recalcs of the statistic and calculated archive objects are ignored. Parameter can be controlled by <b>TELL</b> command <b>SET_OPTION DBPO ON/OFF</b> .
/DBS<size>	D2000 DBManager	Support for long strings (e.g. for working with CLOB columns of Oracle database). By default, <b>D2000 DBManager</b> works with strings up to 4000 characters long. With this parameter, a reserved maximum size for a string can be changed. <b>Note:</b> An increase in reserved size will affect memory consumption.
/DBSH	D2000 Archiv	The process <b>D2000 Archiv</b> shares the archive database with another process <b>D2000 Archiv</b> (e.g. at work with database cluster). There are 2 possible configurations:  1. Two (or more) archive processes ( <i>SELF.ARC</i> ), where one is connected to the HS Server, the other (s) is connected to SBS Server (s). If <i>SELF.ARC</i> is connected to the SBS Server, it works in the <i>ReadOnly</i> mode. If it is connected to the HS Server, works as usual. 2. Two (or more) instance archive processes ( <i>SELF.ARC_1</i> , <i>SELF.ARC_2</i> , etc.), that are connected to the HS Server. The active instance works as usual, the passive one (s) works in the <i>ReadOnly</i> mode.
/DBSH	D2000 DBManager	The parameter is meaningful only in <b>redundant systems</b> . The process <b>D2000 DBManager</b> will close all databases connections if <ul style="list-style-type: none"><li>its D2000 server changes its state to <b>SBS</b></li><li>DbManager is run as an instance (supported since version D2000 8.0) and the instance becomes passive</li></ul> When the server changes its status to <b>HS</b> again (resp. when the instance becomes active), the connections to the databases will be restored.  <b>Note:</b> Without the parameter <i>/DBSH</i> in a redundant system with two (or possibly more according to the degree of redundancy) processes <b>D2000 DBManager</b> it is necessary to consider the fact that a total number of open database connections may be as much as twice the value in a non-redundant system. That can cause problems, e.g. for the Oracle database if the value of the <i>pfile</i> parameter <i>processes</i> is not sufficiently large.
/DBSH	D2000 KOM	For <b>Serial</b> , <b>Serial Line Redundant</b> , and Modem communication lines, it causes the serial port to be closed if the D2000 KOM process is connected to the SBS Server or if the D2000 KOM process becomes a <b>passive instance</b> . See <a href="#">note</a> for more information.
/DBX	D2000 DBManager	If the parameter is specified, when working with a PostgreSQL database with BLOB fields (BYTEA), these will be read/written in hexadecimal format - DbManager will convert individual letters into hex code according to the ASCII table, i.e. if the string "ABC" is in the BLOB, it will be read as "414243".

/DC	D2000 HI	Disables the cache for pictures. The aim is to decrease the memory requirements of the process at the expense of slowing down the picture opening.
--DEFAULT-TOOLBAR-COLOR	D2000 HI	Paint toolbars using default grey color. If not specified, toolbars are painted white.
/DG	D2000 HI	Decreases the memory requirements of the process at work with graphs at the expense of slowing down the drawing of graphs which contains a lot of data.
/DI	D2000 HI, D2000 GrEditor, D2000 Archiv	Shows specialized information (debug info) when starting the process.
/DL	D2000 HI, D2000 GrEditor	Enables writing the contents of Listener window to *.LOG file (HI.LOG or GRE.LOG).
/DM<nickname>	D2000 Server	<p>Developer mode: enables the parallel running of several <a href="#">D2000 Server</a> processes on one computer for development purposes. The value of &lt;nickname&gt; will be displayed in the topic of text console window of the <a href="#">D2000 Server</a> process (if the console window is visible, see the parameter <a href="#">/X</a>) and it will be also added to the name of shared memory used for interprocess communication.</p> <p>To avoid collision and change the standard number of TCP port (3119) all processes <a href="#">D2000 Server</a> (with the exception of a single one using standard TCP port 3119 and standard name of shared memory) must be run using the parameters <a href="#">/P</a> and <a href="#">/DM</a>.</p> <p>Example:</p> <p>ServerA: kernel.exe /P:1001 /CApp1 /DMThisIsApp1  ServerB: kernel.exe /P:1002 /CApp2 /DMThisIsApp2</p> <p>local connection to ServerA via shared memory: hi.exe /P:1001 /DMThisIsApp1  local connection to ServerB via shared memory: hi.exe /P:1002 /DMThisIsApp2</p> <p>local connection to ServerA via TCP/IP: hi.exe /P:1001 /TP  local connection to ServerB via TCP/IP: hi.exe /P:1002 /TP</p> <p>remote connection to ServerA: hi.exe /Sserver_name /P:1001 /TP  remote connection to ServerB: hi.exe /Sserver_name /P:1002 /TP</p> <p><b>Note:</b> Starting with version 7.02.006, the process <a href="#">D2SMC</a> supports parameters <a href="#">/DM</a> and <a href="#">/P</a>. Multiple instances of <a href="#">D2SMC</a> can be executed, each of them connected to a different <a href="#">D2000 Server</a> running in <i>developer mode</i>.</p>
/DP	Processes with text console	( <b>Debug Pipe</b> ) – The process will display the course of communication with the <a href="#">D2000 Server</a> .
/DPA /DPP /DPR	D2000 HI, D2000 GrEditor	Mode of receiving messages from the process <a href="#">D2000 Server</a> : /DPR - when receiving /DPP - before processing /DPA - both the modes
/DUMP /DUMP_MEDIUM /DUMP_FULL	All client processes of D2000 system	<p>The monitoring process <b>procdump.exe</b> is started up along with the given process. It monitors the unhandled exceptions that may occur in the given process. If the process crashes due to this exception, a dump file is created in the log file of the D2000 system (subdirectory <i>dumps</i>). The dump file contains the information about the process at the time of its crash, from which a user may determine the reason for the crash.</p> <p>Size of dump file and contents depend on the used parameter:</p> <ul style="list-style-type: none"> <li>• /DUMP - generates the file with the basic information about the process, such as threads and their call stacks. The size of this file is quite small. Mostly, the information in this file is sufficient for analyzing the reasons for the crash.</li> <li>• /DUMP_MEDIUM - generates the file with the information about the process and a part of memory that is formed by the heap. The size of this file is bigger than when using /DUMP parameter.</li> <li>• /DUMP_FULL - generates the file containing the full process image at the time of the crash. The size of this file can be very large (equal to the size of the process in memory). Use this parameter only in extraordinary situations!</li> </ul>
/DW	Processes with text console	Not minimizing the text window of the process after starting. If the parameter is not defined, the window will be minimized after starting.
/E+<debug_category> /E-<debug_category>	All processes of the D2000 system	<p>Enables (+) / disables (-) displaying of debug information of a given category (<i>debug_category</i>) at the start of the process.</p> <p>Debug information is designed for internal development purposes.</p> <p>To enable/disable displaying of debug information and to view it you may also use the process <a href="#">D2000 System Console</a>.</p> <p><b>Warning:</b> Displaying debug information may cause system overload.</p>




/E+DBG. CHECK. OBJECTS	D2000 Server	After the process <a href="#">D2000 Server</a> has been started it executes the check of the configuration of all objects.
/E+DBG /E+RTM. USELOCAL CACHE	D2000 HI	It activates the use of the cache data that are transferred from the <b>D2000 Server</b> to <b>D2000 HI</b> . It enables, especially for slow networks (WiFi), to speed up the start of D2000 HI. The parameter must be entered when starting the process. When it is started for the first time, it creates the cache, which stores a lot of files into the <i>/ocalstore</i> subdirectory (on the client-side) in the <a href="#">application directory</a> (for example, one for each event and picture).
/F<Period>	All client processes of the D2000 system	The period is the sending period of <b>WatchDog</b> messages between the client process and the <a href="#">D2000 Server</a> process. It is set in seconds, where zero means not sending the message. Default value is /F60. <b>Note:</b> As a part of the WatchDog message, the D2000 Server sends the current time. This allows remote client processes (running on another computer) to calculate the local time difference from the D2000 Server time. This difference is then used as a correction for all times of new values generated by the client process.
/FI	D2000 Event Handler	Timeout for processing a request. It is given in seconds. Default value is /FI120. <a href="#">More...</a>
/FM	D2000 Topology	Using this parameter the topology will use complete calculation instead of partial <a href="#">More..</a>
/FS	D2000 HI, D2000 GrEditor, D2000 CNF	Time to display error report if attempting to establish a connection with <a href="#">D2000 Server</a> has failed. The default value is 60 s. For the value of /FS0, there will be displayed neither the start window nor the error report.
--fullscreen	D2000 HI	Switches to full-screen mode - it hides a header and toolbars of the main window and maximized dialog windows (pictures) as well. This functionality can be changed to a special mode of HI. See more in the chapter <a href="#">Specific displaying of HI</a> .
/GTWC<ipAddress: portNr>	D2000 Gateway Client	IP address and port of D2000 Gateway Server, to which D2000 Gateway Client connects to. The parameter may be specified several times (in systems with redundant networks and/or redundant D2000 Gateway Servers).
/GTWL<portNr>	D2000 Gateway Server	TCP port to listen for incoming D2000 Gateway Clients.
/H	D2000 Server	Increases the priority for <a href="#">D2000 Server</a> . The result is to get a better response during communication with network client processes.
/HW	All client processes of the D2000 system	The parameter allows the process to log on to the <b>WDDemon</b> application that checks the functionality of client processes. The parameter may be used only if the WatchDog message sending period (the parameter <i>/F</i> ) is different from 0 (zero).
/KA<ArchivSize>	D2000 KOM	The parameter enables a function of the <a href="#">KOM Archiv</a> . <ArchivSize> is the size of archive file - buffer within the range of 1...400 megabytes.
/KC<AppName>	D2000 KOM	The parameter is valid just for the process KOM with the function <a href="#">KOM Archiv</a> , which is starting without the <a href="#">D2000 Server</a> . <AppName> must be the same as for the parameter <i>/C</i> of the server, the process KOM is attempting to connect to.
/KD<seconds>	D2000 KOM	This parameter is meaningful only for values that are acquired with timestamp information.  If the value of the parameter <i>seconds</i> is positive, only those values from communication will be accepted which have the timestamps newer than the current time minus <i>seconds</i> (i.e. <i>TimeNew</i> > <i>Clock</i> - <i>seconds</i> ).  If the value of the parameter <i>seconds</i> is negative, only those values from communication will be accepted which have the timestamps newer than the timestamp of current value minus the absolute value of <i>seconds</i> (i.e. <i>TimeNew</i> > <i>TimeOld</i> - <i> seconds </i> ). Moreover, if the current value is invalid, the newly acquired value with an old timestamp will have its timestamp updated to the current time and it will be accepted. This feature enables the KOM process to accept valid values (with updated timestamps) from communication (which may come with old timestamp) right after the startup - when all I/O tags have invalid values with current timestamp. A special case is setting the parameter <i>seconds=-1</i> , which causes the old values not to be discarded, and in case that current value is invalid, a newly acquired value with an old timestamp will have its timestamp updated to the current timestamp and will be accepted. If the parameter <i>/KD</i> is not set or if it has a default value <i>seconds=0</i> then the values will not be discarded /modified as described above.  Discarded values will be logged in the subdirectory <i>TRACE</i> of the <a href="#">application directory</a> - in a file named <i>DISCARDED_VALUES_SELF_KOM.log</i> (for SELF.KOM) or <i>DISCARDED_VALUES_name_KOM.log</i> (for name.KOM).  Values with modified time will be logged in the subdirectory <i>TRACE</i> of the <a href="#">application directory</a> - in a file named <i>CHANGED_VALUES_SELF_KOM.log</i> (for SELF.KOM) or <i>CHANGED_VALUES_name_KOM.log</i> (for name.KOM).  The format of rows in both log files is following: current time - timestamp of current value - timestamp of newly acquired value - I/O tag's name - current value - newly acquired value.

/KD<seconds>	D2000 DBManager	This parameter concerns the warnings <i>timeout expired</i> , that the process DBManager writes to the log files and publishes via system variable <a href="#">SystemError</a> if a database operation takes more than 60 seconds to complete. Via this parameter, a default value of 60 seconds can be changed. It can be set to a higher value e.g. if DBManager executes SQL queries (e.g. runs stored procedures), that can take a longer time to complete and generate undesirable alarms. More information is available in document <a href="#">D2000 DBManager - logs evaluation</a> .
/KDBC	D2000 KOM	This parameter disables the cache for browsing values (Kom Disable Browser Cache) in selected protocols that support the spontaneous sending of values without prior request or with group request (IEC101, IEC104, KNX, DNP3). By default, caching is enabled for these protocols, so spontaneously incoming values are stored in it. In configurations with many objects, the cache can take up a significant amount of memory, which this parameter can prevent.
/KDI<mask>	D2000 KOM	Startup value of mask for debugging of values. This mask can be changed later by TELL command <a href="#">DI ON/OFF</a> .
/KI	D2000 KOM	If the parameter is entered, the initial values of input I/O tags will be loaded from the process <a href="#">D2000 Server</a> after starting the process <a href="#">D2000 KOM</a> . If it is not entered, the initial values will be invalid. So the process <b>D2000 KOM</b> started without the parameter sends the values of all input I/O tags and started with the parameter then sends just the values changed. <b>Note:</b> Values of input I/O tags are read by the process <b>D2000 KOM</b> always after its start from the <b>D2000 Server</b> (since the D2000 v7.01.011).
/KKVOE	D2000 KOM	If the parameter is entered, the I/O tag values will not be invalidated (Kom Keep Values On Error) after a communication failure occurs and after the station switches to StHARDERR.
/KM<Archive Mode>	D2000 KOM	Method for sending values from the <a href="#">KOM Archiv</a> after connection with the <a href="#">D2000 Server</a> . <ArchiveMode> can get the values: <ul style="list-style-type: none"> <li>• 1 - automatic sending of values, read during work in the offline mode, from the KOM archive (implicit value),</li> <li>• 2 - values are sent only on demand (by a <a href="#">READKOMARC</a> command).</li> <li>• 3 - automatic sending of values from KOM archive (as the mode 1), but the statistical archive values are not recalculated.</li> </ul>
/KO	D2000 KOM	Using the parameter, the process <a href="#">D2000 KOM</a> will switch over all stations to the status STOFF - switch off all communication.
/KS<period>	D2000 KOM	Using the parameter, the process <a href="#">D2000 KOM</a> will simulate the values of all I/O tags.  The parameter <i>period</i> is optional and is given in seconds. Minimum value of the parameter is 5 s. If the <i>period</i> is not specified, the process <b>D2000 KOM</b> will simulate the values of I/O tags with the period specified by the <a href="#">polling parameter Delay</a> of the respective station (if <b>Delay</b> is not specified, i.e. 0:0:0, the values of I/O tags will be simulated with the period of 5 s.).
/KS<count>	D2000 DBManager	DbManager tries to find a connection to the database up to <i>count</i> times, always with a 1-second delay. The default value is 10 times. The parameter is important when switching redundancy when the <a href="#">/DBSH</a> parameter is used (the database connection is maintained by only the active DbManager) so that the database operations of initializing events don't fail because the connections to the database are not yet functional. The original behavior (a single attempt to find a connection) can be achieved by setting / KS1.
/KX	All client processes of the D2000 system	The parameter allows operating in the offline mode (even for <a href="#">KOM Archiv</a> ). If the connection with the process <a href="#">D2000 Server</a> is broken (stop or crash of <a href="#">D2000 Server</a> , the connection failure), the process is still running and attempting to connect to <a href="#">D2000 Server</a> . For functionality, it is necessary to set the parameter /F other than 0 (zero).
/L<LNG>	All client processes of the D2000 system	Definition of process language mutation. Parameter <LNG> can be: <ul style="list-style-type: none"> <li>• SK - for the Slovak version</li> <li>• CZ - for the Czech version</li> <li>• GB (EN) - for the English version</li> <li>• RU* - for the Russian version</li> <li>• KZ* - for the Kazakh version</li> <li>• RS* - for the Serbian version</li> </ul> <p>If the parameter is not entered, then the language version of the process is set by the regional settings of the operating system.</p> <p>*The parameters apply for <b>D2000 HI</b>, other processes use English.</p> <p><b>Note:</b> For on-line help applies, if it exists for given language, it will be used, if not, English version will be used.</p>
/M	D2000 HI	Enables the system-modal mode of the HI main window.
-- MEMORY_LIMIT_TERMINATE=<byte count>	D2000 HI (64bit)	If the process uses more operating memory than <byte count>, it is automatically stopped. The default value is 10000000000, i.e. 10 GB.

-- MPTCOUNT =<count>	D2000 Server	Experimental feature. When you enter this parameter, the <a href="#">D2000 Server</a> will use <count> parallel threads to process the requests. The default value is 1.
/N	D2000 Server	Using the parameter, <a href="#">D2000 Server</a> does not start any processes (ignores the parameter <i>Autostart</i> in the configuration of objects of Process type).
/NES	D2000 DBManager	No empty strings: the empty string will be written to the database as NULL (behavior compatible with Oracle, which understands the empty string and NULL as identical).
/NFL	D2000 KOM	Using this parameter, flags of communication line are not set according to the <a href="#">documentation</a> .
/NMI	D2000 DBManager	Do not mask invalid: The null string will be interpreted as an invalid value. By default, a null string is interpreted as a valid empty string (Oracle compatibility).
/NP	All client processes of the D2000 system	Enables the communication between the client process and the process <a href="#">D2000 Server</a> through the protocol <i>NamedPipes</i> (if is not defined, the communication is performed through <i>TCP/IP</i> ).
/NQ	D2000 DBManager	<b>Do not use quotation marks</b> - if the parameter is used, then the <a href="#">D2000 DBManager</a> does not close the column names into quotes when working with the <b>PostgreSQL</b> database.
/NQ	D2000 Server	When starting, the application (kernel.exe process) always checks the structures of the configuration database are up-to-date. If they are old, the application considers it as an error and "terminates itself". This status will be written to a log file. Then, the kernel.exe must be started manually with the parameters /Capplcation_name and /NQ. This combination of parameters will ensure the upgrade of the database. /NQ parameter will start up kernel.exe in order to upgrade the configuration database of an application. The process will check the database is up-to-date and, if needed, will upgrade it and "terminate itself". For that reason, this parameter must not be used when configuring the production application. If the database is already updated, its backup will be stored in the directory AppDir\ApplicationName\Backup_CNV_yyyy_mm_dd before the database upgrade. The characters yyyy_mm_dd are replaced by the current year, month, and day.
/NS	D2000 Server	Allow changing the UUID of system structured variables. This feature can be useful if it is necessary to transfer their values through the transparent gateway to another application (in combination with the renaming of system structured variables and the functionality of the transparent gateway based on UUIDs).
/P:<PortNr>	All client processes of D2000 system, <a href="#">D2000 Server</a>	<i>PortNr</i> is the number of a TCP port, through which the TCP/IP communication between the process <a href="#">D2000 Server</a> and D2000 client processes is being performed. If the parameter is not entered, the process <a href="#">D2000 Server</a> is listening on standard D2000 port 3119. More information about using parameter /P is available in the description of parameter <a href="#">/DM</a> . Note: If the local computer is not running <a href="#">D2000 Server</a> but <a href="#">D2000 SAS</a> , it is also necessary to enter / TP parameter.
/QM	D2000 Topology	Quick topology calculation mode, in which the topology calculation stops, as soon as a contribution with the same value and coming from the same direction has already been made as the currently contributing node is making. <a href="#">More...</a>
/Q	D2000 Calc	The parameter activates a feature that causes the calculation of eval tags and publishing of values after the redundancy switching (values can be published through the value of the own eval tag or by writing to the structure fields in the case of structured eval tags). This behavior is not desirable and is disabled by default (recalculation is not performed after redundancy is switched). If necessary, you can activate this feature by the / Q parameter.
/RD<RDG_name>	D2000 HI, D2000 SAS	Using the parameter allows a client to connect the active (hot) server of the given redundant group (RDG). The active server is detected by means of multicast TCP/IP network messages. More details are described <a href="#">here</a> .
/Replay	D2000 KOM	Process <b>D2000 KOM</b> started with this parameter does not communicate with devices. It is in the mode to be ready to replay data by the command <a href="#">START_REPLAY</a> (data have been previously recorded by <a href="#">START_RECORD</a> command).
/RF<RDG_name>	D2000 HI, D2000 SAS	Using the parameter allows a client to connect the active (hot) server of the given redundant group (RDG). The active server is searched from the list of servers, which are defined in the system registry. It is appropriate for connecting D2000 clients placed behind routers, which do not send multicast network messages (see the parameter <a href="#">/RD</a> ). More details are described <a href="#">here</a> .
/RO	D2000 Server	Runs the application with no possibility to write into a log database.
/RO	D2000 Archiv	Runs the archive in "Read-only" mode. It is not possible to write into and delete any data from the archive. The parameter can be controlled by the command <a href="#">SET_OPTION RO ON/OFF</a> .
/RO	D2000 Gateway Client	Runs the Gateway Client (gtwcli.exe) in "Read-only" mode. It is not possible to write any value to Gateway Server, i.e. all write operations from Gateway Client to Gateway Server will be ignored.
/RO	D2000 KOM	When the parameter is entered, the <b>D2000 KOM</b> will be started in "Read-only" mode. All writes will be ignored. For server protocols - output I/O tags will publish the manually entered <a href="#">start value</a> but will ignore the automatic start value.



/RS	<a href="#">D2000 Archiv</a>	Archive database backup will be executed by the command "COPY" also for Sybase and MS SQL. (By default, Sybase executes the backup using its own utility <i>dbbackup</i> . Using Sybase of version 6.0.2 on multiprocessor computers, this utility randomly "freezes" and blocks the archive. By default, MS SQL executes the backup by the command BACKUP DATABASE into a .dat file. Using the parameter temporarily disconnects the database and .mfd and .ldf will be copied).... <a href="#">more</a> The parameter can be controlled by the command <a href="#">SET_OPTION RS ON/OFF</a> .
/RX	<a href="#">D2000 Server</a>	Runs the application with no possibility of deleting anything from the log database.
/RX	<a href="#">D2000 Archiv</a>	Runs the archive with no possibility to delete any data from the archive. Running the archive in the mode requires the operator's confirmation. The parameter can be controlled by the command <a href="#">SET_OPTION RX ON/OFF</a> .
/RXN	<a href="#">D2000 Archiv</a>	Runs the archive with no possibility to delete any data from the archive. Running the archive in the mode doesn't require the operator's confirmation.
/RXN	<a href="#">D2000 KOM</a>	When the parameter is specified, the communication of the OEM protocols will be stopped (and in the case of <a href="#">TCP/IP-TCP and TCP/IP-TCP Redundant</a> lines, the connections will also be closed) while the D2000 KOM process is passive. It is thus possible to make the D2000 KOM process redundant with simple request-response type OEM protocols without modifying the source codes of the OEM protocols.
/S<Server> /S<ServerIP>  /S<ServerIP 1,ServerIP2>	All client processes of the D2000 system	<i>The server</i> is the name of the server (computer) with the running process <a href="#">D2000 Server</a> . <i>ServerIP</i> is the IP address of a computer with the running process <a href="#">D2000 Server</a> . In case of a <a href="#">redundant network</a> (computers have 2 network interfaces and 2 IP addresses), it is possible to use the 3-rd form of parameter, where <i>ServerIP1</i> and <i>ServerIP2</i> are IP addresses of a computer with the running process <a href="#">D2000 Server</a> . It is necessary to use one of the forms of the /S parameter when starting a client process remotely - on a different computer than the computer with running <a href="#">D2000 Server</a> (unless parameters <a href="#">/RD</a> or <a href="#">/RF</a> are used).
/T<Time>	All client processes of the D2000 system	<i>Time</i> is the waiting period (in seconds) of the client process for the initialization of the <a href="#">D2000 Server</a> . The default value is 1 second. <b>Note:</b> This parameter is ignored if used together with parameters <a href="#">/RD</a> or <a href="#">/RF</a> .  The parameter has another meaning on the Windows platform if the process is run as a service (see the parameter <a href="#">/X</a> ). It indicates the required service start time - from the start of the process to the successful connection to the <a href="#">D2000 Server</a> process. The historical default value was 10 seconds, therefore to keep the compatibility the start time is specified as 9 +<Time>. The default value may not be sufficient, for example, when a process is being run remotely and connects via a slow WAN network, so Windows will report a timeout starting the service.
/TI<Time>	<a href="#">D2000 KOM</a>	The delay (in seconds) between the completion of the process initialization (after the process has started or connected to the HOT <a href="#">D2000 Server</a> ) and the sending of the "process is ready" message. The wait is used to establish communication before other processes (e.g. <a href="#">D2000 Event Handler</a> ) start writing to the output I/O tags. The default value of the parameter is 1 second.
/TL:<portNr>	All system client processes of the D2000 system	Configuration of reverse connect. The client process listens on the specified TCP port and the <a href="#">D2000 Server</a> connects to it. The reverse connection is used for remote processes (especially processes running in the DMZ or on a network with a lower security level) that are not started by the <a href="#">D2000 Server</a> but have their own watchdog.  For the functionality of the reverse connection from the <a href="#">D2000 Server</a> , it is necessary to configure the <a href="#">parameters of the reverse connection</a> in the configuration of the appropriate process.
/TP	All client processes of the D2000 system	Enables the communication between the client process and the process <a href="#">D2000 Server</a> through the protocol <i>TC P/IP</i> (this is the default value for a network client). If the parameter is not used, communication takes place via shared memory.
/TPP	All client processes of the D2000 system	Enables the communication between the client process <a href="#">D2000 Server</a> through the protocol <i>TCP/IP</i> with on-the-fly compression of messages.
/TZ<timeZone>	<a href="#">D2000 HI</a>	Ensures that <b>D2000 HI</b> process runs in different time zone as it is set in D2000 System. As a time zone name, it is possible to use any name from <a href="#">tz database</a> or define fixed offset from UTC using the format "(+/-)hh[:mi[:ss]]", where <i>hh</i> defines the number of hours, <i>mi</i> defines the number of minutes, and <i>ss</i> defines the number of seconds. Sign as well as number of hours are mandatory parts of offset definition, number of minutes and seconds are optional and default to 0 (e.g. "+02:30" defines offset of 2 hours and 30 minutes from UTC).

/W<Workstation>	All client processes of the D2000 system	<p><i>Workstation</i> is the name creating the first part of the name of a <i>Process</i> type object. If the parameter is not entered, there will be used the workstation name (computer name).</p> <p>Some processes can be started multiple times as a form of redundancy in D2000 - they are called instance processes or shadow processes (<a href="#">D2000 Archiv</a>, <a href="#">D2000 Kom</a>, <a href="#">D2000 Calc</a>, <a href="#">D2000 DBManager</a>). In that case the instance number must be written after the name of process as follows: /WSELF,2</p> <p>The system generates the process (object) name as follows: [InstanceNr]_originalName.Suffix</p> <p>Example: [2]_SELF.ARC Above mentioned object is dynamic and its name can be used within the structure <a href="#">SV._System_Proces</a>.</p> <p><b>Note:</b> See the chapters <a href="#">Redundant archiving</a>, <a href="#">Redundancy of communication process</a>.</p>
--WAIT-AFTER-RECONNECT=<seconds>	<a href="#">D2000 HI</a>	It defines how long (in seconds) is HI held after switching the redundancy. It is necessary for stabilization of system (e.g. to ensure so that the archives could be available, etc.) The default value is 7 seconds.
--WORKERTASKS=	<a href="#">D2000 Event Handler</a>	Parameter changes the default setting of number of the scheduler threads that are used to perform ESL scripts. If not used then the number of threads is equal to the number of logical processors. It is handy to use the parameter when debugging the performance of ESL scripts.
/X[0,1,2,3]	All system client processes of the D2000 system	<p>Definition of the process behavior:</p> <ul style="list-style-type: none"> <li>• 0 - optional parameter (default) - the process is to be running as console,</li> <li>• 1 - the process is to be running as Windows NT service without any interaction with user (desktop),</li> <li>• 2 - since version 10.0.37, /X2 is interpreted as /X1 (this is due to the producer's recommendation not to use Windows service in an interactive mode).</li> <li>• 3 - the process is to be running as Windows NT service under the user: D2000Admin/CondorD2000 (name /password).</li> </ul> <p>The parameter is intended just for the processes of the D2000 system without a desktop for interaction with the user - <a href="#">D2000 Server</a>, <a href="#">D2000 Calc</a>, <a href="#">D2000 KOM</a>, <a href="#">D2000 Archiv</a>, <a href="#">D2000 Event Handler</a>, <a href="#">D2000 Alarm</a>, <a href="#">D2000 Topology</a>, <a href="#">D2000 Switch</a>.</p> <div>  Since version 12.2, /X parameter is not supported. Process run mode can be configured in <a href="#">process configuration dialog</a> instead. </div>
/X4<user>	All system client processes of the D2000 system	<p>Defines the process behaviour. The process is to be running as Windows service under a defined "user". The user must be defined both in the application (D2000 system configuration) and in the operating system, on which the process is to be running. Name and password of the user must be equal in both the definitions.</p> <p>We recommended checking whether the "user" is in the list of users according to policy "Log on as a service" (Control Panel -&gt; Administrative Tools -&gt; Local Security Policy -&gt; Local Policies -&gt; User Rights Assignment -&gt; Log on as a service).</p> <p>The parameter is intended just for the processes of D2000 system without desktop for interaction with user - <a href="#">D2000 Server</a>, <a href="#">D2000 Calc</a>, <a href="#">D2000 KOM</a>, <a href="#">D2000 Archiv</a>, <a href="#">D2000 Event Handler</a>, <a href="#">D2000 Alarm</a>, <a href="#">D2000 Topology</a>, <a href="#">D2000 Switch</a>.</p> <div>  Since version 12.2, /X parameter is not supported. Process run mode can be configured in <a href="#">process configuration dialog</a> instead. </div>
/XA<alias>	All system client processes of the D2000 system	<p>Parameter /XA&lt;alias&gt; is meaningful only in conjunction with parameter /X4&lt;user&gt;. If parameter /XA is specified, then during the creation of Windows service &lt;alias&gt; will be used for specification of username instead of &lt;user&gt;. The parameter can be used e.g. in systems where names of Windows users contain special characters that are not permitted in D2000 usernames (e.g. dash).</p> <p>Should a D2000 process run under a Windows user <i>a-man</i>, it could be done by specifying parameters /X4<i>aman</i> /XA<i>a-man</i> (provided that a password of Windows user <i>a-man</i> is stored in configuration of D2000 user <i>aman</i>).</p> <div>  Since version 12.2, /X parameter is not supported. Process run mode can be configured in <a href="#">process configuration dialog</a> instead. </div>



**Note 1:** Besides entering start parameters of processes in the [configuration dialog box](#) or on the command line during manual startup it is possible to create a file named **default.arg** and located in the current directory. **D2000 Server** as well as other processes first read start parameters from the file **default.arg** (if available) and afterward they process start parameters they have been run with. It implies that a parameter entered in the [configuration dialog box](#) or on command line during manual startup will override the parameter from the file **default.arg**.  
If a process is started manually, current directory is the directory from which it was started. If it is started as a service (from the process **D2000 Application Manager**, automatically after Windows startup or from the process **D2000 Server**), current directory is %WINDIR%\System32.

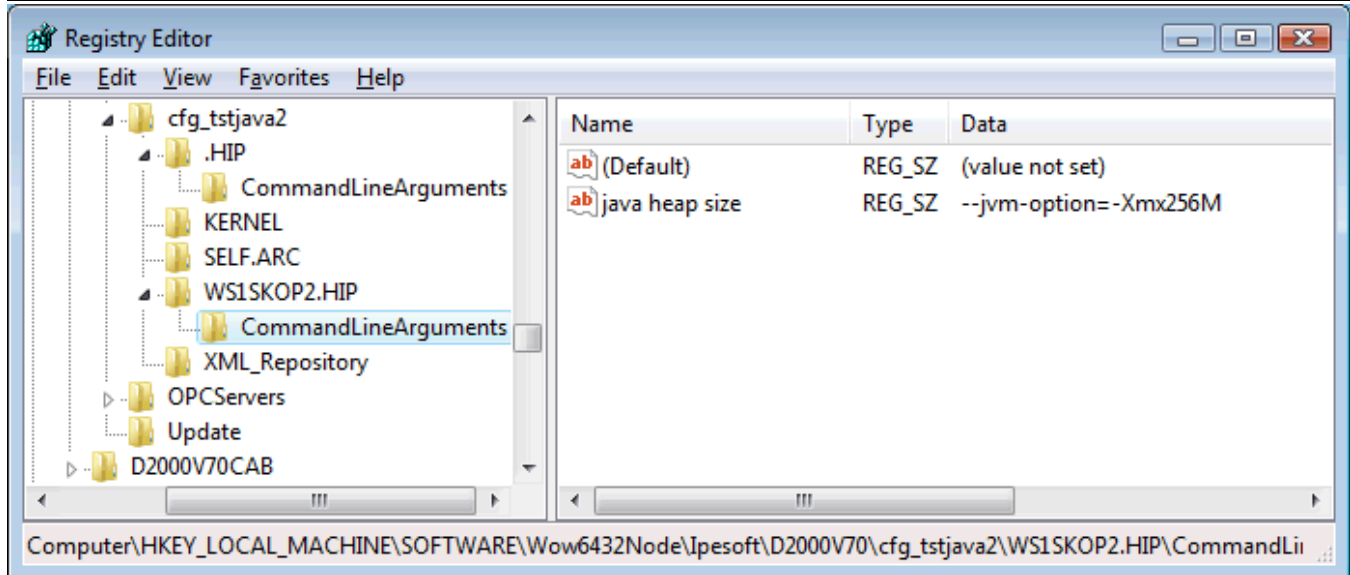
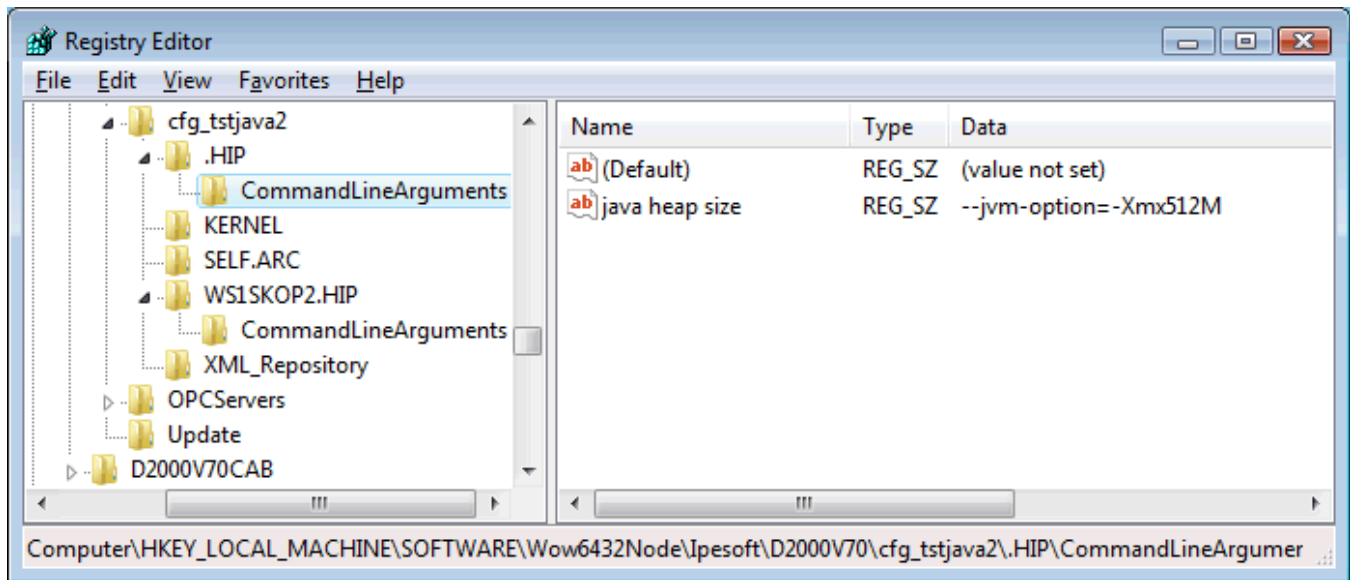
**Note 2:**

The parameters for processes or a group of processes may be set in the registry on a computer running the D2000 Server to which the process is being connected.

Create a text value with optional name in registry *HKEY\_LOCAL\_MACHINE\SOFTWARE\Ipssoft\D2000V70\cfg\_application\_name\process\_name\CommandLineArguments*. As "Data" write a start parameter.

*Process\_name* can be a full name of process (e.g. "WS1SKOP2") or only the suffix (including the full stop, e.g. ".HIP"). In case that only the suffix is entered, the parameters will be used for all the processes containing this suffix.

If parameters exist for both the specific process (characterized by name) and for a category of processes (characterized by suffix), resultant parameters will be created by joining both groups of parameters. If there are parameters with the same name in both groups ("java heap size" on the picture), a parameter from the group characterized by whole name of process will be used ("WS1SKOP2.HIP" on the picture).



**Note 3:** Maximum number of characters in parameters of the processes is 80. The parameters can be entered in quotation marks " ", however these quotes will be removed.



**Related pages:**

[D2000 system processes](#)

[Processes - configuration dialog box](#)