

Informix 12.10 Command Utilities Quick Reference Guide

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Compliments of



An IBM Advanced Partner

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In 1995, after years of trying to find a manual to check the command line syntax of a utility, or scribbling notes to myself on scraps of paper with the command line options of the Informix Dynamic Server utilities, I decided to make myself a quick reference guide. Several friends asked for copies, which resulted in the 5.X and then the 7.3x, 9.X, 10.X and 11.X following. This updated guide is based on 12.10.FC6, and is meant to jog your memory. Some of the commands are very powerful so please use them with care. And some command options may not be available in earlier versions.

Enjoy this updated version! - Lester Knutsen

ONCHECK

Usage: oncheck {-cCheckOptions | -pPrintOptions} [-y | -n] [-q]
[{ database:[owner.]table[,fragdbs]#index}]
| TBLspace number | Chunk number } { rowid | page number }] [# pgs] [-h]

-c CheckOptions

- r Reserved pages
- R Reserved pages including logical and physical logs
- e Extents
- c Database catalogs [database]
- i Table indexes database:[owner.]table[#index]
- I Table indexes and rowids in index database:[owner.]table[#index]
- x Place share lock on table during index check
- d TBLspace data rows including bitmaps database:[owner.]table[,fragdbs]
- D TBLspace data rows including bitmaps, remainder pages and BLOBs database:[owner.]table[,fragdbs]
- s SBLOBspace metadata partitions
- S SBLOBspace metadata partitions and LO extents

-p PrintOptions

- r Reserved pages (-cr)
- R Reserved pages including logical and physical logs (-cR)
- e Extents report (-ce)
- c Database Catalog report (-cc) [database]
- k Keys in index (-ci) database:[owner.]table[#index]
- K Keys and rowids in index (-cl) database:[owner.]table[#index]
- l Leaf node keys only (-ci) database:[owner.]table[#index]
- L Leaf node keys and rowids (-cl) database:[owner.]table[#index]
- x Place share lock on table during index check
- d TBLspace data rows (-cd) database:[owner.]table[,fragdbs] [rowid]
- D TBLspace data rows including bitmaps, remainder pages and BLOBs (-cD) database:[owner.]table[,fragdbs] [page number]
- t TBLspace report database:[owner.]table[,fragdbs]
- T TBLspace disk utilization report database:[owner.]table[,fragdbs]
- p Dump page for the given [table[,fragdbs] and rowid | TBLspace and page number] [{# pgs} [-h]]
- P Dump page for the given chunk number and page number [chunk num and page number] [{# pgs} [-h]]
- B BLOBspace utilization for given table(s) database:[owner.]table[,fragdbs]
- s SBLOBspace metadata partitions
- S SBLOBspace metadata partitions and LO extents

-q Quiet mode - print only error messages

-n Answer NO to all questions

-y Answer YES to all questions

ONINIT

Usage: oninit [-ijpsy] | -SDS=<alias>

- i Initialize disk space and shared memory, leave in on-line mode. (Note: This will destroy all data on any existing dbspaces)
- j Initialize shared memory, leave in administrative or single-user mode
- p Do not reclaim temporary tables
- s Initialize shared memory, leave in quiescent mode
- t Test startup: adjust configuration, print all parameters, and exit
- v Initialize in verbose mode displaying extra debugging messages
- w Wait until server is initialized successfully
- y Respond yes to all prompts
- S Start database server in standard mode; disables HDR
- D Prevent both ER and HDR from initializing
- U Specifies a list of users who can access IDS in administration mode
- SDS =<alias> Define SDS primary server alias
- PHY Initialize shared memory, but wait for logical log restore.

ONMODE

Usage: onmode [-abCcDdFkIMmnOpQRrSsuyZz] | [-wf <onconfig variable>=<value>] | [-wm <onconfig variable>=<value>]

- a <kbytes> Increase shared memory segment size
- b <version> Revert Dynamic Server disk structures
- BC [1|2] Change server large chunk mode
- c [block | unblock] Do Checkpoint. Block or unblock server
- C {start #|stop #|threshold <size> | duration <seconds>|rangesize <size>|alice <mode>} compression <low|med|high|default>} Tune Btree scanner resources
- D <max PDQ priority allowed>
- d {standard|{primary|secondary <servername>}} set DR server type
On DR secondary only:
{idxauto {on|off}} set DR automatic index repair mode
{index <database>:[owner.]<tablename>#<indexname>} DR repair index
{add RSS <servername> <optional password>} add RSS server
{change RSS <servername> <password>} change RSS server password
{delete RSS <servername>} remove RSS server definition
{RSS <source Node> <optional password>} set RSS server type
{set SDS primary <alias> [force]} define SDS primary server alias
{clear SDS primary <alias> [force]} remove SDS primary server alias
{make primary <alias> [force]} make server into the MACH11 primary
{on|off|enable|flush} configure or flush shared statement cache
- e
- F Free unused memory segments
- I stop verbose error trapping
- l <iserrno> [<session ID>] trap specified error for session ID
- j Change to administrative or single-user mode
- k Shutdown completely
- l Force to next logical log
- M <decision support memory in kbytes>
- m Go to multi-user on-line
- n Set shared memory buffer cache to non-resident
- O Override space down blocking a checkpoint
- p <+<#> <class> Start up or remove virtual processors of a specific class
- P [start|stop|restart] <servername> dynamic listen thread control
- Q <max # decision support queries>
- R Rebuild the /INFORMIXDIR/etc/.infos.DBSERVERNAME file
- r Set shared memory buffer cache to resident
- S <max # decision support scans>
- s Change to quiescent mode
- u Change to quiescent mode and kill all attached sessions
- W {STMT_CACHE_NOLIMIT {0|1} | STMT_CACHE_HITS <#>} Sets SQL cache parameters
- wf <onconfig variable>=<value> update the value for the variable in memory and the onconfig file
- wm <onconfig variable>=<value> update the value for the variable in memory only
- wi <path> Import tunable configuration parameters from the specified file
- we <path> Export all configuration parameters to the specified file
- x <n> <remote server> Start up SMX pipes to remote server
- y Do not require confirmation
- Y <sid> [0|1|2] [filename] Set or unset dynamic explain where 0=off 1=plan + statistics on 2=only plan on
- Z <address> heuristically complete specified transaction
- z <sid> Kill specified session id
- cache surrogates Reload entries from the surrogates file /etc/informix/allowed.surrogates

ONPARAMS

Usage: onparams -a -d <DBspace> [-s <size>] [-i] |
-b -g <pagesize> [-n <num buffers>][-r<num LRUs>] [-x<maxdirty>] [-m<mindirty>]]
-d -l <log file number> [-y] | -p -s <size> [-d <DBspace>] [-y]
-a Add a logical log file
-b Add a buffer pool
-i Insert after current log
-d Drop a logical log file
-p Change physical log size and location
-y Automatically responds "yes" to all prompts

ONSPACES

Usage: onspaces -a <spacename> -p <path> -o <offset> -s <size> [-m <path> <offset>]
{ { [-Mo <mddoffset>] [-Ms <mddsize>] } | -U } |
-c -d <DBspace> [-k <pagesize>] [-t] -p <path> -o <offset> -s <size>
[-m <path> <offset>] |
-c -d <DBspace> [-k <pagesize>] -p <path> -o <offset> -s <size>
[-m <path> <offset>] [-ef <first_extent_size>] [-en <next_extent_size>] |
-c -b <BLOBspace> -g <pagesize> -p <path> -o <offset> -s <size>
[-m <path> <offset>] |
-c -P <PLOGspace> -p <path> -o <offset> -s <size> [-m <path> <offset>] |
-c -S <SBLOBspace> [-t] -p <path> -o <offset> -s <size> [-m <path> <offset>]
[-Mo <mddoffset>] [-Ms <mddsize>] [-Df <default-list>] |
-c -x <Extspace> -l <Location>|-d <spacename> [-p <path> -o <offset>] [-f] [-y] |
-f[y] off [<DBspace-list>] | on [<DBspace-list>] |
-m <spacename> {-p <path> -o <offset> -m <path> <offset> [-y] | -f <filename>} |
-r <spacename> [-y] |
-s <spacename> -p <path> -o <offset> [-O | -D] [-y] |
-ch <sbspacename> -Df <default-list> |
-cl <sbspacename> |
-ren <spacename> -n <newname>
-a Add a chunk to a DBspace, BLOBspace or SBLOBspace
-c Create a DBspace, BLOBspace, SBLOBspace or Extspace
-d Drop a DBspace, BLOBspace, SBLOBspace, Extspace, or chunk
-f Change dataskip default for specified DBspaces
-m Add mirroring to an existing DBspace, BLOBspace or SBLOBspace
-r Turn mirroring off for a DBspace, BLOBspace or SBLOBspace
-s Change the status of a chunk
-ch Change default list for smart large object space
-cl garbage collect smart large objects that are not referenced default-list = {[LOGGING =
{ON|OFF}] [,ACCESSTIME = {ON|OFF}] [,AVG_LO_SIZE = {1 - 2097152}] }
-ren Rename a DBspace, BLOBspace, SBLOBspace or Extspace

ONSTAT

Usage: onstat [-abcdfghklmpstuxzBCDFRX] [-i] [-r [<seconds>]] [-o [<outfile>]] [<infile>]
-a Print all info as onstat -mcuxskbPFhRtdGflPpO; onstat -g all; onstat -XC
-b Print buffers
-B Print all buffers
-c Print configuration file
-C Print btree cleaner requests
-C prof Print profile information for the system and scanner threads
-c hot Print hot list index keys
-C part Print all partitions with index statistics
-C clean Print information about all partitions cleaned and need to be
-C range Print savings in pages processed with range scanning
-C map Print current alic bitmap for all indexes being cleaned
-C alic Print efficiency of alic cleaning method
-C all Print all onstat -C options
-d Print spaces and chunks
-d [update] update - Ask server to update BLOB chunk statistics
-D Print spaces and detailed chunk read and write stats
-f Print dataskip status

-F Print page flushers
 -g Print MT subcommand – see MT section (default: all)
 -G Print global transaction ids
 -h Print buffer hash chain info
 -i Interactive mode
 -j Print interactive status of the active onpload process
 -k Print locks
 -l Print logging
 -L Print distribution of available locks on the lock free lists
 -m Print message log
 -o Output shared memory into specified file (default: onstat.out)
 -O Print Optical Subsystem memory and staging cache information
 -p Print profile
 -P Print partition buffer summary
 -r Repeat options every <seconds> seconds (default: 5)
 -R Print LRU queues
 -s Print latches
 -t Print TBLspaces
 -T Print tablespace information
 -u Print user threads
 -x Print transactions
 -X Print entire list of sharers and waiters for buffers
 -z Zero profile counts
 <infile> Read shared memory information from specified dump file

ONSTAT -g MT COMMANDS:

act Print active threads
 afr <pool name|session id> Print allocated pool fragments
 all Print all MT information
 ath Print all threads
 bfr <blk pool address> Print allocated block pool blocks for <blk pool address>
 bth Print blocking threads
 buf Print profile information related to buffer pools
 cac Print information about all cached objects
 cac agg Print the aggregate cache
 cac aqt Print the aqt cache
 cac am [<AM name>] Print the access method cache
 cac cast Print the cast cache
 cac dic Print the dictionary cache
 cac dsc Print the distribution cache
 cac ed Print the external directive cache
 cac lbacply Print the LBAC security policy cache
 cac lbacsrc Print the LBAC credential cache
 cac opci Print the op class instance cache
 cac prc Print the procedure cache
 cac prn Print the procedure name cache
 cac rr Print the resolution routine cache
 cac ssc Print the statement cache
 cac ttype Print the secondary transient cache
 cac typei [<xtype id>] Print the extended type by id cache
 cac typen [<xtype name>] Print the extended type by name cache
 cfg Print configuration parameter info, basic info: name and current value of all params
 cfg <name> Print basic info for the given parameter
 cfg full Print all info, all params
 cfg tunable Print params that can be modified on the fly
 cfg diff Print params that have been adjusted or modified
 cfg msg Print params that generated a warning or error message
 ckp Print checkpoint statistics
 cluster Print cluster information
 cmsm Print Connection Manager statistics
 con Print conditions with waiters
 cpu Print CPU info for all threads

dbc Print dbScheduler/dbWorker thread info
 ddr Print DDR log post processing information
 defragment Print the status of defragmentation commands given
 dic Print dictionary cache information
 dis Print a list of database servers and the status of each
 dll Print dynamic library statistics
 dmp <address> <length> Dump <length> bytes of shared memory starting at <address>
 dri [sta | msg | ckpt | idx] Print data replication information
 dsc Print a list of distribution cache informationenv [all | [<session-id>]] [<variable-name>]
 dsk Print storage manager information
 env [all | [<session-id>]] [<variable-name>[, <variable-name>...]] Print environment variable settings.
 ffr <pool name|session id> Print free pool fragments
 glo Print MT global information
 his [<ntraces>] Prints SQL statement tracing information for <ntraces>
 imc Print information about connected MaxConnect instances
 iob Print big buffer usage by IO VP class
 iof Print disk IO statistics by chunk/file
 iog Print AIO global information
 ioH Print IO history statistics by minute for the last hour
 iov Print disk IO statistics by vp
 ipl Print index page logging status
 lap Print light append information
 laq Print recovery queue statistics
 lmm Print Low Memory Manager information
 lmx Print all locked mutexes
 lsc Print Light Scan information
 mem [<pool name>|<session id>] Print pool statistics
 mgm Print Memory Grant Manager information
 nbm Print block map for non-resident segments
 nsc [<client id>] Print net shared memory status
 nsd Print net shared memory data
 nss [<session id>] Print net shared memory status
 ntd Print net dispatch information
 ntm Print net message information
 ntt Print net user thread access times
 ntu Print net user thread profile information
 opn [<tid>] Print open tables
 plk Print partition lock profiles
 pos Print /INFORMIXDIR/etc/.infos.DBSERVERNAME file
 ppf [<partition number> | 0] Print partition profiles
 ppd [<partition number> | 0] Print partition compression dictionary information
 pqs [<session id>] Print statistics for an active query
 prc Print information about SPL routine cache
 probe Print query probing data (workload analysis)
 proxy [all | [<proxy id> [<txn id> [<op num>]]]] Print updatable secondary related information
 qst Print queue statistics
 rbm Print block map for resident segment
 rea Print ready threads
 rss [verbose | log | <RSS Srv name>] Print RSS server related information
 rwm Print Read/Write Mutex lists
 sch Print VP scheduler statistics
 sds [verbose | <SDS server name>] Print SDS related information
 seg Print memory segment statistics
 ses [<session id>] Print session information
 sle Print all sleeping threads
 smb Print smart-large-object usage
 smx [ses] Print smx related information
 spi Print spin locks with long spins
 spf [<session id>] Prints execution statistics for prepared statements
 sql [<session id>] Print SQL information
 sqh [<sql heap address>] Print sql heap for <sql heap address> or summary for all sql heaps
 src <pattern> <mask> Search memory for <pattern>, where <pattern>==(memory&<mask>)
 ssc [pool|all] Prints ssc pool summary, or statement cache summary and entries
 stk <tid> Dump the stack of a specified thread

stm [<session id>] Prints all prepared statements approximate memory usage in a session
 stq [<session id>] Print stream queue information
 sts Print max and current stack sizes
 tgp Print generic page thread profiles
 tpf [<tid> | 0] Print thread profiles
 ufr [<pool name|session id>] Print pool usage breakdown
 vpcache Print CPU VP memory block cache statistics
 wai Print waiting threads
 wmx Print all mutexes with waiters
 wst Print thread wait statistics

ONSTAT -g ENTERPRISE REPLICATION COMMANDS:

cat [scope | replname] Print Enterprise Replication global catalog information
 cdr Print Enterprise Replication statistics
 cdr config [parameter_name] [long] Print Enterprise Replication configuration information
 cdr config CDR_ENV [variable_name] [long] Print Enterprise Replication configuration information
 dtc Print statistics for the Enterprise Replication delete table cleaner
 dss [UDR | UDRx] Print statistics about data sync threads and user-defined data types
 grp [A|E|Ex|G|L|Lx|M|Mz|P|pager|R|S|Sx|T|UDR|UDRx] Print statistics about Replication grouper
 nif [all | sites | serverid | sum] Print statistics about the Enterprise Replication network interface
 que Print statistics for the Enterprise Replication high-level queues
 rcv [serverid] Print statistics about the Enterprise Replication receive manager
 rep [replname] Print events that are in the queue for the schedule manager
 rqm [ACKQ | CNTRLQ | RECVQ | SENDQ | SYNCQ | SBSPACES | FULL | BRIEF | VERBOSE]
 Print statistics of low-level queues
 sync Print the Enterprise Replication synchronization status

ONSTAT -g CHANGED DATA CAPTURE COMMANDS:

cdc [<sessid>] [long] Print Change Data Capture information
 cdc [<sessid>] config [long] Print Change Data Capture configuration parameters for session(s)
 cdc [<sessid>] bufm [long] Print Change Data Capture buffer manager information for session(s)
 cdc [<sessid>] table [<full-table-name>] [long] Print Change Data Capture captured table information



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