Informix 11.70
Command Utilities
Quick Reference Guide
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Compliments of

An IBM Advanced Partner

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Advanced DataTools is dedicated to providing the best database tools, web technologies, consulting services and training to companies using IBM Informix® database software. We have years of relational database experience in designing and implementing systems. We have successfully implemented web-enabled data warehouses and OLTP systems for our customers. We offer advanced Informix training, and provide support for all aspects of a systems life cycle, from planning and development, to performance tuning and maintenance. Our goal is to boost the performance and reliability of your database systems, and enable your staff to effectively utilize Informix database systems to meet your business requirements.

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 and 9.X versions. This updated guide is based on 11.70, 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 11.70 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   Catalog report (-cc) [database]
            k   Keys in index (-ci) database[:[owner.]table[#index]]
            K   Keys and rowids in index (-cI) database[:[owner.]table[#index]]
            l   Leaf node keys only (-ci) database[:[owner.]table[#index]]
            L   Leaf node keys and rowids (-cI) 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 single-user mode
-p   Do not reclaim temporary tables
-s   Initialize shared memory, leave in quiescent mode
-y   Respond yes to all prompts
-V   Initialize in verbose mode displaying extra debugging messages
-SDS   =<alias> Define SDS primary server alias
-PHY   Initialize shared memory, but wait for logical log restore.

ONLOG
Usage: onlog [-l] [-q] [-b] [-d <tape device>]
               [-n < starting log unique identifier-<ending log unique identifier>>]
               [-u <user name>] [-t <TBLspace number>] [-x <transaction number>]
-l   Display maximum information about each log record
-q   Do not display program header
-b   Display information about logged BLOB pages (-d option only)
-d   Read from tape device
-n   Display the specified log(s)
-u   Display the specified user(s)
-t   Display the specified TBLspace(s)
-x   Display the specified transaction(s)

ONMODE
Usage: onmode [-abCcDdFklMmnOpQRrSsuyZz] | [-wf <variable>=<value>] |
               [-wm <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 #|high|low|threshold} 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
-e   {on|off|enable|flush} configure or flush shared statement cache
-F   Free unused memory segments
-I   stop verbose error trapping
-I   <iserrno> [<session ID>]   trap specified error for session ID
-j   Change to 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   <variable>=<value> update the value for the variable in the onconfig file
-wm   <variable>=<value> update the value for the variable in memory
-y   Do not require confirmation
-Y   <sid> [0|1] Set or unset dynamic explain
-Z   <address> heuristically complete specified transaction
-z   <sid>   Kill specified session id

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 <mdoffset>] [-Ms <mdsize>] } | -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 -S <SBLOBspace> [-t] -p <path> -o <offset> -s <size> [-m <path> <offset>]
          [-Mo <mdoffset>] [-Ms <mdsize>] [-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
-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 alice bitmap for all indexes being cleaned
-C alice	Print efficiency of alice cleaning method
-C all	Print all onstat -C options
-d	Print spaces and chunks

ONSTAT (continued)

-d [update] update - Ask server to update BLOB chunk statistics
-D   Print spaces and detailed chunk stats
-f   Print dataskip status
-F   Print page flushers
-g   Print MT subcommand (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
-m   Print message log
-o   Put 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>
buf   Print profile information related to buffer pools
ckp   Print checkpoint statistics
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
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   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
iov   Print disk IO statistics by vp
ipl   Print index page logging status
lap   Print light append information
lmx   Print all locked mutexes
lsc   Print Light Scan information
mem [<pool name>|<session id>] Print pool statistics

ONSTAT –g MT COMMANDS (continued)

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
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
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 [<sesson 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|Sl|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