INFORMIX®-OnLine Dynamic Server

Database Server

Quick Reference Guide

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This quick reference guide lists the command-line utility options and corresponding ON-Monitor options and SMI tables for performing routine OnLine administration tasks. A separate table appears for each of the following groups of tasks:

- Monitoring OnLine (see page 3)
- Initializing OnLine and Changing Modes (see page 7)
- Configuring OnLine (see page 8)
- Modifying OnLine Disk Structures (see page 11)
- Modifying Logging Status for a Database (see page 14)
- Verifying Database Consistency (see page 15)

The syntax of the command-line utility options is given in BNF notation.

Further Information

The following chapters of the *INFORMIX-OnLine Dynamic Server Administrator's Guide* contain more information on monitoring tasks, the ON-Monitor utility, the SMI tables, and the OnLine command-line utilities:

- Chapter 29, "Monitoring OnLine"
- Chapter 34, "ON-Monitor"
- Chapter 37, "OnLine Utilities"
- Chapter 39, "The Sysmaster Database"

The *INFORMIX-OnLine Dynamic Server Performance Guide* contains information on the **onperf** utility, a graphical monitoring tool. You can perform many of the monitoring tasks with this tool.

How to Read the BNF Syntax

This quick reference guide uses the BNF syntax notation to describe the syntax of command-line utility options. The BNF notation uses the following conventions:

abc Enter non-italicized text exactly as shown. For example, you would enter the following command just as it is, with no arguments:

```
onstat -p
```

abc Substitute a value for any term that appears in *lowercase italics*. In the following example, you should substitute a value for *dbspace*:

```
onparams -a -d dbspace
```

[ ] Do not enter brackets as part of a statement. They surround any part of a statement that is optional. In the following example, you have the option of specifying **-d** *dbspace*:

```
onparams -p -s size [-d dbspace]
```

{ } When you must choose only one of several options, the options are enclosed in braces and are separated by vertical bars.

| The vertical bar indicates a choice among two or more options. For example,

```
{blobspace| dbspace}
```

means that you enter a value for *blobspace* or a value for *dbspace*.

... An ellipsis indicates that you can enter an indefinite number of additional items such as the one immediately preceding the ellipsis.

Monitoring OnLine	From Command Line	Using ON-Monitor	Using SMI Tables
Monitor archive files	None available	Status menu / Archive option	None available
Monitor buffers	**onstat -b** Displays information about buffers currently in use **onstat -B** Displays information about all buffers configured **onstat -X** Displays information about the threads that are waiting for buffers	None available	None available
Monitor buffer pool	**onstat -F** Displays a count of each type of write that writes data to disk **onstat -R** Displays detailed information about the LRU buffer queues	None available	Query **sysprofile** table

Monitoring OnLine	From Command Line	Using ON-Monitor	Using SMI Tables
Monitor chunks	**onstat -d** Displays information about the chunks in each dbspace **onstat -D** Same as **-d** except that page reads and writes per chunk is also displayed.	Status menu / Spaces option	Query **sysdbspaces**, **syschunks**, and **syschkio** tables
Monitor configuration information	**onstat -c** Displays contents of **$ONCONFIG** file	Status menu / Configuration option	None available
Monitor databases	None available	Status menu / Databases option	Query **sysdatabases** table
Monitor data-replication information	**onstat -g dri** Displays data-replication information	Status menu / data-Replication option	Query **sysdri** table
Monitor latches	**onstat -s** Displays general latch information	None available	None available

Monitoring OnLine	From Command Line	Using ON-Monitor	Using SMI Tables
Monitor locks	**onstat -k** Displays information about active locks	None available	Query **syslocks** table
Monitor logs	**onstat -l** Displays information about the physical log and the logical log	Status menu / Logs menu	Query **syslogs** table
Monitor Parallel Database Query (PDQ)	**onstat -g mgm** Displays information for the memory-grant manager	None available	None available
Monitor system profile	**onstat -p** Displays system-profile statistics	Status menu / Profile option	Query **sysprofile** table
Monitor tblspaces (active)	**onstat -t** Displays information about each active tblspace	None available	Query **sysptprof** table

Monitoring OnLine	From Command Line	Using ON-Monitor	Using SMI Tables
Monitor threads	**onstat -g ath** Displays information about all threads **onstat -g act** Displays information about active threads	See "Monitor user-threads"	See "Monitor userthreads"
Monitor transactions	**onstat -x** Displays transaction information	None available	None available
Monitor userthreads	**onstat -u** Displays information about each user thread	Status menu / User-threads option	Query **syssessions** and **syssesprof** tables
Monitor virtual processors	**onstat -g glo** Displays information about each virtual processor currently running	None available	Query **sysvpprof** table

Initializing OnLine and Changing Modes	From Command Line	Using ON-Monitor
Initialize disk space and OnLine shared memory	**oninit -i**	Parameters menu / Initialize option
Initialize OnLine shared memory only	**oninit -s**	Mode menu / Startup option
Take OnLine from quiescent mode to on-line mode	**onmode -m**	Mode menu / On-Line option
Take OnLine off-line	**onmode -k**	Mode menu / Take-Offline option
Take OnLine from on-line mode to quiescent mode immediately	**onmode -u**	Mode menu / Immediate-Shutdown option
Take OnLine from on-line mode to quiescent mode gracefully	**onmode -s**	Mode menu / Graceful-Shutdown option
Force a checkpoint	**onmode -c**	Force-Ckpt option
Free unused shared memory	**onmode -F**	None available

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Configuring OnLine	From Command Line	Using ON-Monitor	Other
Modify shared-memory configuration parameters	None available	Parameters menu / Shared-Memory option	Edit $ONCONFIG file directly and reinitialize shared memory
Modify multithreading configuration parameters	See "Add virtual processors" and "Drop virtual processors" on page 10	Parameters menu / perFormance option	Edit $ONCONFIG file directly and reinitialize shared memory
Modify data-replication configuration parameters	None available	Parameters menu / data-Replication option	Edit $ONCONFIG file directly and reinitialize shared memory
Modify diagnostic configuration parameters	None available	Parameters menu / diaGnostic option	Edit $ONCONFIG file directly and reinitialize shared memory
Modify parallel database query (PDQ) configuration parameters	None available	Parameters menu / pdQ option	Edit $ONCONFIG file directly and reinitialize shared memory

Configuring OnLine	From Command Line	Using ON-Monitor	Other
Add a logical-log file	**onparams -a -d** *dbspace* **[-s** *size***]** **-a** Adds a logical-log file **-d** *dbspace* Specifies the dbspace in which the logical-log file is located **-s** *size* Specifies the size of the new logical-log file	Parameters menu / Add-Log option	Edit $ONCONFIG file directly and reinitialize shared memory
Drop a logical-log file	**onparams -d -l** *logid* **-d** Drops a logical-log file **-l** *logid* Specifies the logical-log file to drop	Parameters menu / Drop-Log option	Edit $ONCONFIG file directly and reinitialize shared memory
Modify size or location of the physical log	**onparams -p -s** *size* **[-d** *dbspace***]** **-p** Modifies the physical log **-s** *size* Specifies the physical log size in kilobytes **-d** *dbspace* Names the dbspace where the physical log will be located	Parameters menu / Physical-Log	Edit $ONCONFIG file directly and reinitialize shared memory

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Configuring OnLine	From Command Line	Using ON-Monitor	Other
Add virtual processors	**onmode -p (+** *number* **{CPU | AIO | SHM | TLI | SOC})** *+ number* Indicates how many virtual processors of the specified class to add	Mode menu / Add-Proc option	Edit $ONCONFIG file directly and reinitialize shared memory
Drop virtual processors	**onmode -p -** *number* **CPU** *- number* Indicates how many virtual processors of the CPU class to drop	Mode menu / Drop-Proc option	Edit $ONCONFIG file directly and reinitialize shared memory

Modifying OnLine Disk Structures	From Command Line	Using ON-Monitor
Create a dbspace	**onspaces -c -d** *dbspace* **[-t] -p** *pathname* **-o** *offset* **-s** *size* **[-m** *pathname offset***]** **-c -d** *dbspace* Creates and names a new dbspace **-t** Indicates that the dbspace is a temporary dbspace **-p** *pathname* Specifies the pathname of the primary chunk **-o** *offset* **-s** *size* Specifies the offset and size of the primary chunk **-m** *pathname offset* Specifies the pathname and offset of the mirror chunk	Dbspaces menu / Create option
Create a blobspace	**onspaces -c -b** *blobspace* **-g** *pageunit* **-p** *pathname* **-o** *offset* **-s** *size* **[-m** *pathname offset***]** **-c -d** *blobspace* Creates and names a new blobspace **-p** *pathname* Specifies the pathname of the primary chunk **-g** *pageunit* Specifies the pageunit, the number of disk pages per blobpage **-o** *offset* **-s** *size* Specifies the offset and size of the primary chunk **-m** *pathname offset* Specifies the pathname and offset of the mirror chunk	Dbspaces menu / Create option

Modifying OnLine Disk Structures	From Command Line	Using ON-Monitor
Start mirroring a dbspace or blobspace	**onspaces -m** {*dbspace* | *blobspace*} **{(-p** *pathname* **-o** *offset* **-m** *pathname offset***) | -f** *filename*} **-m** Specifies mirroring for a dbspace or blobspace **-p** *pathname* **-o** *offset* Specifies the pathname and offset of a primary chunk **-m** *pathname offset* Is the pathname / offset to the mirror chunk (You must specify a mirror pathname and offset for each primary chunk in the dbspace.) **-f** *filename* Indicates that chunk location information is stored in a file	Dbspaces menu / Mirror option
End mirroring for a dbspace or blobspace	**onspaces -r** {*dbspace* | *blobspace*} **-r** Indicates that mirroring should be ended for a dbspace or blobspace	Dbspaces menu / Mirror option
Drop a dbspace or blobspace from the OnLine configuration	**onspaces -d** {*dbspace* | *blobspace*} **-d** Indicates that the specified dbspace or blobspace is to be dropped	Dbspaces menu / Drop option

Modifying OnLine Disk Structures	From Command Line	Using ON-Monitor
Add chunk to a dbspace or blobspace	**onspaces -a {***dbspace* **|** *blobspace***} -p** *pathname* **-o** *offset* **-s** *size* **[-m** *pathname offset***]** **-a** Indicates that a chunk is to be added to the specified dbspace or blobspace **-m** *pathname offset* Specifies the pathname and offset of the mirror chunk	Dbspaces menu / Add_chunk option
Drop a chunk from a dbspace or blobspace	**onspaces -d {***dbspace* **|** *blobspace***} -p** *pathname* **-o** *offset* **-d** Indicates that a chunk is to be dropped from the specified dbspace or blobspace	None available
Change chunk status	**onspaces -s {***dbspace* **|** *blobspace***} -p** *pathname* **-o** *offset* **{-D | -O}** **-s** Changes the chunk status **-D** Takes the chunk down **-O** Restores the chunk and brings it on-line	Dbspaces menu / Status option
Change the DATASKIP parameter for a dbspace	**onspaces -f {ON | OFF} [***dbspace* **...]** **-f** Sets the DATASKIP configuration parameter *dbspace ...* Specifies the DATASKIP setting for one or more dbspaces (If a dbspace is not specified, *all* dbspaces are set.)	Dbspaces menu / datasKip option

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Modifying Logging Status for a Database	From Command Line	Using ON-Monitor
End logging for a database	**ontape -N** *database* **...** Directs the system to end logging for one or more databases	Logical-Logs menu / Databases option
Change status of a database to buffered logging	**ontape -s -B** *database* **...** **-s** Initiates an archive **-B** *database ...* Changes the status of the databases to buffered logging	Logical-Logs menu / Databases option
Change the status of a database to unbuffered logging	**ontape -s -U** *database* **...** **-s** Initiates an archive **-U** *database ...* Changes the status of the databases to unbuffered logging	Logical-Logs menu / Databases option
Change the status of a database to ANSI-compliant	**ontape -s -A** *database* **...** **-s** Initiates an archive **-U** *database ...* Changes the status of the databases to ANSI-compliant	Logical-Logs menu / Databases option

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Verifying Database Consistency	From Command Line	Using ON-Monitor
Validate OnLine reserved pages	**oncheck -cr** Checks each of the OnLine reserved pages against the **$ONCONFIG** file, ensures that chunks can be opened, and checks all logical and physical logs for consistency	None available
Validate system catalog tables for an OnLine database	**oncheck -cc [***database***]** **-cc** Performs check of each system catalog table in the database. *database* Specifies the database (If you do not specify a database, the system catalog tables of all databases are checked.)	None available
Validate extents in all OnLine databases	**oncheck -ce** Verifies that the extents on disk correspond to the control information describing them	None available

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Verifying Database Consistency	From Command Line	Using ON-Monitor
Validate indexes in an OnLine database	**oncheck -cI** *database***[**:*table***]** **-cI** Checks ordering of key values and the consistency of horizontal and vertical node keys for all indexes on the specified table(s); also checks that the key value tied to a rowid in an index is the same as the key value in a row *database*[:*table*] Specifies a database to be checked (You can specify a table as well if you want to limit the check.)	None available
Validate pages of all tables in an OnLine database	**oncheck -cD** *database***[**:*table***]** **-cD** Checks the pages of a table or tables for consistency (Entries in the bit-map pages are checked against the pages to verify mapping. Dbspace blobpages are included in the check.) *database*[:*table*] Specifies a database to be checked (You can specify a table as well if you want to limit the check.)	None available