

INFORMIX[®]-Universal Server

Quick Reference Guide

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his quick reference guide lists the command-line utility options and corresponding ON-Monitor options and System Monitoring Interface (SMI) tables for performing routine Universal Server administration tasks. For a complete list of available utility commands, see the [INFORMIX-Universal Server Administrator's Guide](#).

A separate table appears for each of the following tasks:

- Initializing Universal Server and Changing Modes (see page 6)
- Configuring Universal Server (see page 7)
- Modifying Universal Server Disk Structures (see page 9)
- Verifying Database Consistency (see page 12)
- Monitoring Universal Server (see page 14)

For information on the syntax of command-line utilities, refer to [“How to Read the Syntax Conventions” on page 2](#).

In this manual, all instances of Universal Server refer to INFORMIX-Universal Server.

Further Information

The following chapters of the [INFORMIX-Universal Server Administrator's Guide](#) contain more information on monitoring tasks, the ON-Monitor utility, the SMI tables, and Universal Server command-line utilities:

- Chapter 33, “Monitoring Universal Server”
- Chapter 36, “ON-Monitor”
- Chapter 39, “Universal Server Utilities”
- Chapter 38, “The sysmaster Database”

The [INFORMIX-Universal 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 Syntax Conventions

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

abc Enter nonitalicized text exactly as shown. For example, enter the following command just as it is, with no arguments:

```
onstat -p
```

abc Substitute a value for any item that appears in *lowercase italics*. In the following example, 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 *blob*space or a value for *db*space.

... An ellipsis indicates that you could enter an indefinite number of additional items such as the one immediately preceding the ellipsis. The following example shows that you could enter an indefinite number of parameters as *dbspace* after choosing either ON or OFF:

```
onspaces -f {ON|OFF} [dbspace ...]
```

Quick Reference Command-Line Utilities

Command-line utilities are described on the pages shown in the following table.

Command	Reference
oncheck -cc	page 13
oncheck -cd	page 13
oncheck -cD	page 13
oncheck -ce	page 12
oncheck -ci	page 12
oncheck -cI	page 12
oncheck -cr	page 12
oninit -i	page 6
oninit -s	page 6
onmode -c	page 6
onmode -F	page 6
onmode -k	page 6
onmode -m	page 6
onmode -p	page 7
onmode -p - number CPU	page 7
onmode -s	page 6
onmode -u	page 6
onparams -a -d	page 7
onparams -d	page 7
onparams -p	page 8

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Command	Reference
onspaces -a	page 9
onspaces -c -b	page 10
onspaces -c -d	page 10
onspaces -d	page 11
onspaces -f	page 9
onspaces -m	page 11
onspaces -r	page 11
onspaces -s	page 9
onstat	page 16
onstat -b	page 14
onstat -B	page 14
onstat -c	page 15
onstat -d	page 14
onstat -D	page 14
onstat -F	page 14
onstat -g act	page 16
onstat -g ath	page 16
onstat -g dll	page 15
onstat -g dri	page 15
onstat -g glo	page 17
onstat -k	page 15
onstat -l	page 15
onstat -m Displays the most recent lines of the system message log	page 15

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Command	Reference
onstat -O	page 16
onstat -p	page 16
onstat -R	page 14
onstat -s	page 15
onstat -t	page 16
onstat -u	page 17
onstat -x	page 16
onstat -X	page 14

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

Configuring Universal Server	From Command Line	Using ON-Monitor	Other
Add a logical-log file	onparams -a -d <i>dbspace</i> [-s <i>size</i>] -a Adds a logical-log file -d <i>dbspace</i> Specifies the dbspace in which the logical-log file is located -s <i>size</i> Specifies the size of the new logical-log file	Parameters menu / Add-Log option	Edit ONCONFIG file directly and reinitialize shared memory
Add virtual processors	onmode -p (+ <i>number</i> {CPU AIO SHM TLI SOC}) -p + <i>number</i> 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 a logical-log file	onparams -d -l <i>logid</i> -d Drops a logical-log file -l <i>logid</i> Specifies the logical-log file to drop	Parameters menu / Drop-Log option	Edit ONCONFIG file directly and reinitialize shared memory
Drop virtual processors	onmode -p - <i>number</i> CPU -p - <i>number</i> Indicates how many virtual processors of the CPU class to drop	Mode menu / Drop-Proc option	Edit ONCONFIG file directly and reinitialize shared memory

Configuring Universal Server	From Command Line	Using ON-Monitor	Other
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 multithreading configuration parameters	See “Add virtual processors” and “Drop virtual processors”	Parameters menu / perFormance option	Edit ONCONFIG file directly and reinitialize shared memory
Modify shared-memory configuration parameters	None available	Parameters menu / Shared-Memory 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

Modifying Universal Server Disk Structures	From Command Line	Using ON-Monitor
Add chunk to a dbspace or blobospace	onspaces -a {<i>dbspace</i> <i>blobospace</i>} -p <i>pathname</i> -o <i>offset</i> -s <i>size</i> [-m <i>pathname offset</i>] -a Indicates that a chunk is to be added to the specified dbspace or blobospace -m <i>pathname offset</i> Specifies the pathname and offset of the mirror chunk	Dbspaces menu / Add_chunk option
Change chunk status	onspaces -s {<i>dbspace</i> <i>blobospace</i>} -p <i>pathname</i> -o <i>offset</i> {-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} [<i>dbspace</i> ...] -f Sets the DATASKIP configuration parameter <i>dbspace</i> ... Specifies the DATASKIP setting for one or more dbspaces—if a dbspace is not specified, <i>all</i> dbspaces are set	Dbspaces menu / datasKip option

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

Modifying Universal Server Disk Structures	From Command Line	Using ON-Monitor
Drop a chunk from a dbspace or blobspace	onspaces -d { <i>dbspace</i> <i>blobspace</i> } -p <i>pathname</i> -o <i>offset</i> -d Indicates that a chunk is to be dropped from the specified dbspace or blobspace -p <i>pathname</i> -o <i>offset</i> Identifies the chunk to be dropped	None available
Drop a dbspace or blobspace from the Universal Server configuration	onspaces -d { <i>dbspace</i> <i>blobspace</i> } -d Indicates that the specified dbspace or blobspace is to be dropped	Dbspaces menu / Drop option
End mirroring for a dbspace or blobspace	onspaces -r { <i>dbspace</i> <i>blobspace</i> } -r Indicates that mirroring should be ended for a dbspace or blobspace	Dbspaces menu / Mirror option
Start mirroring a dbspace or blobspace	onspaces -m { <i>dbspace</i> <i>blobspace</i> } {(-p <i>pathname</i> -o <i>offset</i> -m <i>pathname</i> <i>offset</i>) -f <i>filename</i> -m Specifies mirroring for a dbspace or blobspace -p <i>pathname</i> -o <i>offset</i> Specifies the pathname and offset of a primary chunk -m <i>pathname</i> <i>offset</i> Specifies the pathname / offset to the mirror chunk—you must specify a mirror pathname and offset for each primary chunk in the dbspace -f <i>filename</i> Indicates that chunk location information is stored in a file	Dbspaces menu / Mirror option

Verifying Database Consistency	From Command Line	Using ON-Monitor
Validate extents in all Universal Server databases	oncheck -ce Verifies that the extents on disk correspond to the control information describing them	None available
Validate indexes in Universal Server database	oncheck -ci <i>database [:table]</i> -ci Checks ordering of key values and the consistency of horizontal and vertical node keys for all indexes on the specified table(s) <i>database [:table]</i> Specifies a database to be checked—you can specify a table as well if you want to limit the check oncheck -cI <i>database [:table]</i> -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 <i>database [:table]</i> Specifies a database to be checked—you can specify a table as well if you want to limit the check	None available
Validate Universal Server reserved pages	oncheck -cr Checks each Universal Server reserved page against the ONCONFIG file, ensures that chunks can be opened, and checks all logical and physical logs for consistency	None available

Verifying Database Consistency	From Command Line	Using ON-Monitor
Validate pages of all tables in Universal Server database	oncheck -cd <i>database [:table]</i> -cd Checks the pages of a table or tables,excluding blobpages and sbpages, from the tblspace for the specified database, table, or fragment and checks for consistency in bit-map entries <i>database [:table]</i> Specifies a database to be checked—you can specify a table as well if you want to limit the check oncheck -cD <i>database [:table]</i> -cD Checks the pages of a table or tables for consistency, including dbspace and blobpages. Entries in the bit-map pages are checked against the pages to verify mapping <i>database [:table]</i> Specifies a database to be checked—you can specify a table as well if you want to limit the check	None available
Validate system catalog tables for Universal Server database	oncheck -cc [<i>database</i>] -cc Performs check of each system catalog table available in the database <i>database</i> Specifies the database—if you do not specify a database, the system catalog tables of all databases are checked	None available

Monitoring Universal Server	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
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 are also displayed	Status menu / Spaces option	Query sysdbspaces , syschunks , and syschkio tables

Monitoring Universal Server	From Command Line	Using ON-Monitor	Using SMI Tables
Monitor configuration information	onstat -c Displays contents of ONCONFIG file	Status menu / Configuration option	Query sysconfig table
Monitor databases	None available	Status menu / Databases option	Query sysdatabases table
Monitor dynamic libraries	onstat -g dll Displays list of loaded dynamically linked libraries	None available	None available
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
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 message logs	onstat -m Displays the most recent lines of the system message log	None available	None available

Monitoring Universal Server	From Command Line	Using ON-Monitor	Using SMI Tables
Monitor Universal Server blocking	onstat All onstat options display the reason Universal Server is blocking immediately after the banner line	None available	None available
Monitor optical memory cache and staging-area blobspace	onstat -O Displays information about the optical system-cache and user-cache totals	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
Monitor threads	onstat -g ath Displays information about all threads onstat -g act Displays information about active threads	Status menu / Userthreads option	Query syssessions and sysesprof tables
Monitor transactions	onstat -x Displays transaction information	None available	None available

Monitoring Universal Server	From Command Line	Using ON-Monitor	Using SMI Tables
Monitor userthreads	onstat -u Displays information about each userthread	Status menu / Userthreads option	Query syssessions and sysseprof tables
Monitor virtual processors	onstat -g glo Displays information about each virtual processor currently running	None available	Query sysvppprof table

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