

Die Versant-DB

Die Versant-DB ist ein wesentlicher Bestandteil von CADISON.

Die Software wurde von einem in den USA gegründeten Unternehmen mit Niederlassung in Hamburg entwickelt.

Die Versant Datenbank gibt es für die Betriebssysteme Windows, Linux und Solaris. Eingebunden werden kann die Versant-DB in verschiedene Programmiersprachen wie z.B. C++- oder Java.

Im Gegensatz zu einem relationalen Datenbanksystem können mit der Versant-DB komplexe logische Modelle direkt gespeichert, gelesen und modelliert werden, ohne diese in relationalen Tabellen abbilden zu müssen.

Dadurch können erhebliche Performancevorteile erzielt werden.

In Verbindung mit CADISON wird die Versant-DB in der Regel über die Kommandozeile administriert. Dazu gibt es eine überschaubare Anzahl von Befehlen, die von einigen nützlichen ITFTools Befehlen ergänzt werden.

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addvol parameters [options] <dbname>

parameters:	
-n volName	logical name for volume
-p volPath	path of volume device/file
options:	
-s volSize	volume size, default to 128M
e extSize	extent size, default to use backend profile
-i	pre-allocate and initialize volume
-noprint	suppress display messages
dbname:	database name

createdb [options] <dbname>

options:	
-i	pre-allocate and initialize the database
-il	pre-initialize the physical and logical logs to logvolma
xsize	
-noprint	suppress display messages
dbname:	database name

dbinfo <options> <dbname>

options:	
[-m -0 -1 -d]	
-m	set multi-user mode
-0	set unstartable mode
-1	set DBA-only single-connection mode
-d	set DBA-only multi-connection mode
-p	print existing database mode
-c	create a new lock file
-r	set read-only mode
dbname:	database name

dbid [options] <dbname>

options:	
-N	Create an osc-dbid file. <dbname> is not specified
-c	Create an entry in osc-dbid file for database <dbname>
-C <dbid>	Create an entry in osc-dbid file for database <dbname> and database id as <dbid>
-t <type>	Specify the type of database (group or personal) Must be used with -c or -C options. Default database type is group.
-d	Remove the database <dbname> entry from the osc-dbid file
-r	Print the database id of the database <dbname>
-noprnt	Suppress display messages
dbname:	database name
type:	database type
1: personal database	
2: group database	
dbname:	database name

dblist [options]

options:	
-all	list all db in the system (default)
-owner owner	list db owned by owner
-d dbName	list only the named database
-dir	list all databases and empty database directories
-noprnt	suppress display messages

dbtool [-offline | -nosession] <module> [options] <dbname>

where module is one of:	
-AT	AT table
-class	class
-schevol	schema evolution
-cluster	class clustering
-index	index
-object	object
-space	free space
-volume	database volume
-partition	partition
-trans	transaction
-rep	replication related
-event	event
-locks	locks
-sys	overall database system
-trace	tracing
-dbalog	dba logging
-offline	Stop database and go into single connection mode
-nosession	print the information without doing a beginsession
dbname:	database name

NOTE:

To see a detailed listing of options for each of the above modules type "dbtool <module>".

To see a short listing of options available for all modules as well as their usage, type "dbtool -help". For a detailed listing type "dbtool -help -long".

For the options, it is not necessary to specify the full flag as long as enough is specified to be unambiguous.

In case of the "-sys" module, you can directly specify the options and skip the "-sys" flag. The options will implicitly be taken to be a part of the "-sys" module in case the module is not specified. e.g "dbtool -check <dbname>" is the same as "dbtool -sys -check <dbname>"

dbuser <command> [options] <dbname>

command:	
-list	list database user access list (default)
-add	add user to database access list '-n' or '-P' options required , '-passwd', '-role DBA' options maybe specified
-delete	delete user from access list '-n' or '-P' options required
-chpasswd	change the password for an existing user '-n' options required '-opasswd' and '-passwd' options may be specified
options:	
-n name	user name
-passwd password	password
-partition	partition
-opasswd old-password	old password
-P	public access
-m r rw	access mode
-noprint	suppress display messages
-role DBA	give the user DBA rights
dbname:	database name

dropinst [-options....] class1 class2 ...

options:	
-D db	database: use database db (or use O_DBNAME environment)
-n	no: make no changes
-y	yes: make any changes
-i	interactive (default): ask yes or no (stdin must be tty)
-u	user: run as this DB user
-p	password: enter password for the DB user entered in -u

makedb [options] <dbname>

[-g -p]	
-g	group database
-p	personal database
-owner user	make user as owner of database directory
-cpprofile db	copy profiles from the specified db directory
-nofeprofile	do not create front-end profile
-logging	turn logging on
-locking	turn locking on
-sglatch	turn multi_latch off
-noprint	suppress display messages
-promptpasswd	prompt for DBA's password
-beprofile filepath	copy server profile file from specified location
-feprofile filepath	copy application profile file from specified location
-feprofile and -nofeprofile cannot be specified together	
-feprofile and -beprofile cannot be used with -cpprofile	
dbname:	database name

oscp [options]

options:	
-d	database path
-i	environment information
-l	product version number with patch
-n	dbid node name
-o	osc-dbid path
-p	Versant runtime path
-r	Versant root path
-v	product version number
-b	ODBMS and cxx patch information

removedb [options] <dbname>

options:	
-f	force removing database
-rmdir	remove database directory
-noprint	suppress display messages
dbname:	database name

reorgdb options <dbname>

options:	
-noprint	suppress display messages
dbname:	database name

startdb <dbname>

dbname:	database name
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stopdb [options] <dbname>

options:	
[-f -s -st]	
-f	force killing all active transactions
-s	wait for update RPCs to be done
-st	wait for all active transactions to be done
-noprnt	suppress display messages
dbname:	database name

stopalldbs <options>

options:	
-all	stop all databases
-local	only local databases
-f	stop database(s) in use, too
-d <dbname>	Stop only database <dbname>
-s	silent mode

setdbid [options] <dbid> <dbname>

parameters:	
-noprint	suppress display messages
dbid:	new dbid number
dbname:	name of the database

StartAllDBs <options>

parameters:	
-all	start all databases
-local	only local databases
-d <dbname>	start only database <dbname>
-s	silent mode
dbname:	name of the database

vbackup [options] command

where options are one or more of:	
-level	<level>
-device	<filename>
-position	<position>
-capacity	<capacity>
-blocking	<blocking>
-comment	<comment>
-rollforward	
-startsync	
-aggression	<aggression>
-script	<script>
and command is one of:	
-backup	<database-names>
-restore	{ <database-name> [-rename <new-database-name> [-overwrite]] [-resume] } ...
-off	<database-names>
-log	<database-names>
-info	<database-names>
-list	[-getbeprofile [-odir <path-to-save-profile>]]

vcopydb [options] <dbname> <replica-dbname>

options:	
-nolock	ignore locks in source db
-i	pre-allocate and initialize the database
-noprint	suppress display messages
-nocreate	copy to existing database
-threads N	fork N threads for copying
-batchsize M	copy M objects per transaction (default = 1000)
-progress	report overall copy progress on the console
dbname:	name of database to replicate
replica-dbname:	database name for replica -nocreate and -i cannot be used together
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