



# Sun GlassFish Enterprise Server 2.1 HADB Commands Reference Manual



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# Contents

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<b>Preface</b> .....	5
<b>Application Server 9.1 HADB Section 1: Administration Commands</b> .....	7
hadbm-addnodes(1) .....	8
hadbm-clear(1) .....	11
hadbm-clearhistory(1) .....	13
hadbm-create(1) .....	15
hadbm-createdomain(1) .....	22
hadbm-delete(1) .....	24
hadbm-deletedomain(1) .....	26
hadbm-deviceinfo(1) .....	27
hadbm-disablehost(1) .....	29
hadbm-extenddomain(1) .....	30
hadbm-get(1) .....	32
hadbm-help(1) .....	35
hadbm-list(1) .....	38
hadbm-listdomain(1) .....	39
hadbm-listpackages(1) .....	40
hadbm-ma(1) .....	42
hadbm-recoverhost(1) .....	44
hadbm-reducedomain(1) .....	45
hadbm-refragment(1) .....	47
hadbm-registerpackage(1) .....	49
hadbm-resourceinfo(1) .....	51
hadbm-restart(1) .....	53
hadbm-restartnode(1) .....	55
hadbm-set(1) .....	57
hadbm-setadminpassword(1) .....	60

hadbm-start(1) .....	61
hadbm-startnode(1) .....	63
hadbm-status(1) .....	65
hadbm-stop(1) .....	67
hadbm-stopnode(1) .....	69
hadbm-unregisterpackage(1) .....	71
hadbm-version(1) .....	72
<b>Application Server 9.1 HADB Section 1M: Utility Commands</b> .....	<b>73</b>
hadbm(1M) .....	74
<b>Index</b> .....	<b>77</b>

# Preface

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Both novice users and those familiar with Sun Java System Application Server can use online man pages to obtain information about the product and its features. A man page is intended to answer concisely the question “What does it do?” The man pages in general comprise a reference manual. They are not intended to be a tutorial.

## Overview

The following contains a brief description of each man page section and the information it references:

- Section 1 describes, in alphabetical order, the hadbm administration commands.
- Section 1M describes hadbm utility commands.

Below is a generic format for man pages. The man pages of each manual section generally follow this order, but include only needed headings. For example, if there are no bugs to report, there is no BUGS section.

NAME	This section gives the names of the commands or functions documented, followed by a brief description of what they do.
SYNOPSIS	This section shows the syntax of commands or functions.  The following special characters are used in this section:  [ ]            Brackets. The option or argument enclosed in these brackets is optional. If the brackets are omitted, the argument must be specified.                 Separator. Only one of the arguments separated by this character can be specified at a time.
DESCRIPTION	This section defines the functionality and behavior of the service. Thus it describes concisely what the command does. It does not discuss OPTIONS or cite EXAMPLES. Interactive commands, subcommands, requests, macros, and functions are described under USAGE.

OPTIONS	This section lists the command options with a concise summary of what each option does. The options are listed literally and in the order they appear in the SYNOPSIS section. Possible arguments to options are discussed under the option, and where appropriate, default values are supplied.
OPERANDS	This section lists the command operands and describes how they affect the actions of the command.
EXAMPLES	This section provides examples of usage or of how to use a command or function. Wherever possible a complete example including command-line entry and machine response is shown. Whenever an example is given, the prompt is shown as <code>example%</code> , or if the user must be superuser, <code>example#</code> . Examples are followed by explanations, variable substitution rules, or returned values. Most examples illustrate concepts from the SYNOPSIS, DESCRIPTION, OPTIONS, and USAGE sections.
EXIT STATUS	This section lists the values the command returns to the calling program or shell and the conditions that cause these values to be returned. Usually, zero is returned for successful completion, and values other than zero for various error conditions.
SEE ALSO	This section lists references to other man pages, in-house documentation, and outside publications.
NOTES	This section lists additional information that does not belong anywhere else on the page. It takes the form of an aside to the user, covering points of special interest. Critical information is never covered here.
BUGS	This section describes known bugs and, wherever possible, suggests workarounds.

REFERENCE

Application Server 9.1 HADB Section 1:  
Administration Commands

**Name** hadbm addnodes– adds new nodes to the named database, initializes devices for the new nodes, and refragments the schema

**Synopsis** hadbm addnodes [-no-refragment] [-spares=*spare\_count*]  
 [-historypath=*path*] [-devicepath=*path*] [-set=*attribute\_name\_value\_list*]  
 [ -dbpasswordfile=*filename*] [ -adminpasswordfile=*filename*]  
 [-agent=*ma\_url*] [-scrollprogress] -hosts=*host\_list*  
 [*dbname*]

**Description** Use the hadbm addnodes command to add new nodes to the named database, initialize the devices for the new nodes, and refragment the schema. The number of spares identified is the number of spares to be allotted from the host list as specified in the -hosts option. Hosts must be specified in pairs. All the active nodes in the database should be running when executing the hadbm addnodes command (this means the database has at least FaultTolerant or HAFaultTolerant state). If the database is not specified, the default database is used. The database is restarted without loss of service after adding the nodes.

Refragmentation, though time consuming, is needed to store the data on the newly created nodes. You can elect to perform refragmentation during node creation (default). However, if you have chosen -no-refragment, you can refragment later by using the hadbm refragment command. The database is available during refragmentation.

Data devices must have 50% free space to accommodate the old and new copies of the user data during refragmentation.

- Options**
- W --adminpasswordfile      The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.
  - m -agent                      Identifies the URL to the Management Agent(s) (hostlist:port).
  - r -no-refragment              If this option is specified or set to true, refragmentation is not performed on the database after adding the nodes. If the option is not specified, or set to false (default), the database is refragmented after adding the nodes. All tables are refragmented over all nodes; including the new nodes.
  - s -spares                      Identifies the number of hosts to be used as spares out of the new nodes that are added.
  - t -historypath                The path for the database history files.
  - d -devicepath                 The path for the data and log devices. The path to the device must already exist. To set the path differently for each node or device, use the -set option. There are three types of devices:
    - DataDevice
    - NiLogDevice (node internal log device)



	<ul style="list-style-type: none"> <li>▪ RelalgDevice (relational algebra query device)</li> </ul>
-P -dbpasswordfile	Identifies the file containing the password to be used for the system user of the database.
-S -set	Identifies the configuration parameters that will be set to the database. Must be specified as a comma-separated list of database configuration attributes in name=value format. See <code>hadbm set</code> command for a list of writable configuration attributes.
-H -hosts	<p>A comma-separated list of new host names for the new nodes in the database. Duplicates are allowed; this creates multiple nodes on the same machine with different port numbers. Keep the mirror nodes on separate DRUs for deployment. One node is created for each comma-separated item in the list. The number of nodes must be even.</p> <p>If the database is already created with double network configuration, the nodes being added should also support that same configuration. They should have two NIC cards and the <code>-hosts</code> option should define the IP addresses for them. See the <code>hadbm create</code> command for more details.</p>
-m -agent	Identifies the URL to the Management Agent(s) (hostlist:port).
-c -scrollprogress	If the <code>-scrollprogress</code> option is specified, the progress messages scroll down the screen, instead of being overwritten. The progress bar will not be displayed if the <code>---quiet</code> option is specified. By default, progress messages are not specified.
<b>Operands</b> <i>dbname</i>	The name of the database. The default database is <code>hadb</code> .

**Examples** EXAMPLE 1 Using `addnodes`

```
hadbm addnodes --dbpasswordfile=/home/hadb/dbpfile
--hosts host8,host9 mydatabase
Nodes successfully added to the database
```

EXAMPLE 2 Using `addnodes` with spares identified

```
hadbm addnodes --dbpasswordfile=/home/hadb/dbpfile
--spares=2 --hosts=host8,host9 mydatabase
Nodes successfully added to the database
```

**EXAMPLE 3** Using addnodes without a password

```
hadbm addnodes --hosts=host7,host8  
Please enter password for system user:  
Nodes successfully added to the database
```

<b>Exit Status</b>	0	command executed successfully
	1	error in executing the command
<b>Diagnostics</b>	22002	specified database does not exist
	22024	host unreachable
	22025	hosts not added in pairs
	22041	invalid database state
	22042	database could not be refragmented (if the option -no-fragment is not set)
	22043	specified number of spares could not be allocated
	22044	path on host does not exist
	22045	path on host needs write permissions
	22046	database state deteriorated
	22047	refragmentation cannot be done
	22201	database not refragmented (warning issued when the option -no-fragment is set)

**See Also** [hadbm-clear\(1\)](#), [hadbm-create\(1\)](#), [hadbm-delete\(1\)](#), [hadbm-list\(1\)](#), [hadbm-refragment\(1\)](#),  
[hadbm-restart\(1\)](#), [hadbm-set\(1\)](#), [hadbm-start\(1\)](#), [hadbm-status\(1\)](#), [hadbm-stop\(1\)](#)

**Name** hadbm clear– reinitializes all the dataspace on all nodes and starts the database

**Synopsis** hadbm clear [-fast] [-spares=*number\_of\_spare*s] [-adminpasswordfile=*filename*] [-dbpasswordfile=*filename*] [-scrollprogress] [-agent=*ma\_url*] [*dbname*]

**Description** Use the hadbm clear command to reinitialize all the data devices and start the database. The hadbm clear command can also be used in the following situations:

- Restarting the database after a disaster. A disaster refers to double failures, where one or more mirror node pairs are down simultaneously. For example, due to a power failure, machine reboot, or some other unforeseen disaster. The hadbm status command will indicate a database that is hit by a disaster as “non-functional”.
- The password provided at the time the database was created is lost during clear and the new password given in the -dbpasswordfile option will be used when accessing the database in the future. The cleared database will be in an HA Fault Tolerant or Fault Tolerant state.

In interactive mode, the hadbm clear command prompts for a confirmation before clearing the database.

<b>Options</b>	-W --adminpasswordfile	The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.
	-F -fast	Use this option to skip device initialization to save time. Do not use if the disk storage device is corrupted. The data devices must be initialized for the first time after the database is created.
	-s -spares	If specified, identifies the number of spares. The number must be such that there are at least two active nodes. This number of spares must be even and must be less than or equal to the number of active nodes in the database. If not specified, the original number of spare nodes found in the database instance earlier will be preserved. Spare nodes are optional, but having two or more ensures high availability.
	-P -dbpasswordfile	Identifies the file containing the password to be used for the system user of the database.
	-m -agent	Identifies the URL to the Management Agent(s) (hostlist:port).
	-c -scrollprogress	If the -scrollprogress option is specified, the progress messages scroll down the screen, instead of being overwritten. The progress bar will not be displayed if the --quiet option is specified. By default, progress messages

are not specified.

**Operands** *dbname*                    The name of the database. The default database is hadb.

**Examples** **EXAMPLE 1** Using clear with the default database

```
hadbm clear  
Type "yes" or "y" to confirm this operation, anything else to cancel: y  
Database successfully cleared
```

**EXAMPLE 2** Using clear with a database identified

```
hadbm clear mydatabase  
This command will clear the database.  
Type "yes" or "y" to confirm this operation, anything else to cancel: y  
Database successfully cleared
```

**Exit Status** 0                            command executed successfully  
              1                            error in executing the command

**Diagnostics** 22002                    specified database does not exist  
              22061                    database could not be cleared

**See Also** [hadbm-addnodes\(1\)](#), [hadbm-clearhistory\(1\)](#), [hadbm-delete\(1\)](#), [hadbm-list\(1\)](#),  
[hadbm-restart\(1\)](#), [hadbm-refragment\(1\)](#), [hadbm-start\(1\)](#), [hadbm-stop\(1\)](#)

**Name** hadbm clearhistory– clears the history files on the database

**Synopsis** hadbm clearhistory [-adminpasswordfile=*filename*]  
[-saveto=*path*] [-agent=*ma\_url*] [-scrollprogress] [*dbname*]

**Description** Use the hadbm clearhistory command to clear the history files on the database. The directory to which the history files are to be saved must exist and must be writeable. The history file of the named database will be truncated. You can verify by checking the size of the history file. The database state remains unchanged. If a database is identified, it should already exist. If a database is not named, the default database history files are cleared. The default database is hadb.

In interactive mode, the hadbm clearhistory command prompts for a confirmation before clearing the history.

<b>Options</b> -W --adminpasswordfile	The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.
-o -saveto	The path to where the old history files are to be saved.
-W --adminpasswordfile	The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.
-m -agent	Identifies the URL to the Management Agent. The default is localhost:1862.
-c -scrollprogress	If the -scrollprogress option is specified, the progress messages scroll down the screen, instead of being overwritten. The progress bar will not be displayed if the --quiet option is specified. By default, progress messages are not specified.

**Operands** *dbname* The name of the database. The default database is hadb.

**Examples** EXAMPLE 1 Using clearhistory with a database identified

```
hadbm clearhistory mydatabase
```

This command will clear the history file of the database.

Type "yes" or "y" to confirm this operation,

anything else to cancel: y

Database history file successfully cleared

EXAMPLE 2 Using clearhistory with the saveto option

```
hadbm clearhistory --saveto=/var/tmp mydatabase
```

This command will clear the history file of the database.

Type "yes" or "y" to confirm this operation,

anything else to cancel: y

**EXAMPLE 2** Using clearhistory with the saveto option      *(Continued)*

Database history file successfully cleared

<b>Exit Status</b>	0	command executed successfully
	1	error in executing the command
<b>Diagnostics</b>	22002	specified database does not exist
	22111	directory does not exist
	22112	specified location is not a directory
	22113	directory is not writeable
<b>See Also</b>	<a href="#">hadbm-status(1)</a> , <a href="#">hadbm-list(1)</a> , <a href="#">hadbm-addnodes(1)</a> , <a href="#">hadbm-clear(1)</a> , <a href="#">hadbm-refragment(1)</a> , <a href="#">hadbm-delete(1)</a> , <a href="#">hadbm-start(1)</a> , <a href="#">hadbm-restart(1)</a> , <a href="#">hadbm-stop(1)</a>	

**Name** hadbm create– creates a database instance

**Synopsis** hadbm create [-package=*package\_name*] [-packagepath=*path*]  
 [-historypath=*path*] [-devicepath=*path*] [-datadevices=*number\_of\_devices\_per\_node*]  
 [-portbase=*base\_number*] [-spares=*number\_of\_spares*]  
 [-set=*attribute\_name\_value\_list*] [-agent=*ma\_url*] [-cleanup]  
 [-no-clear] [ [-devicesize=*size*] [--mimumsize] -dbpasswordfile=*filename*]  
 [ -adminpasswordfile=*filename* | -no-adminauthentication]  
 [-scrollprogress] -hosts=*host\_list* [*dbname*]

**Description** The hadbm create command creates the specified database in the HADB management domain. The create command implicitly maps the `hostlist` to node numbers in the given order (i.e., the first host in the host list maps to physical node 0). You can specify where to store data devices, log devices, and history files. An HADB instance must have at least two active nodes. The `hostlist` defines which interfaces (IP addresses) the HADB nodes communicates on. If the `hostlist` consists of DNS names, an IP address will be resolved using a resolve mechanism in the management agent.

The database system user will be assigned the password that is supplied in the `-dbpasswordfile` option.

All the paths used for the database should exist and should be writeable on the hosts.

If necessary, the create command will create or extend the HADB management domain, using the hosts in the `hostlist`. It also registers the HADB software package on all the hosts in the `hostlist` given for the create command. If a package has been registered on only some of the hosts in the domain, the create command will register the package on the remaining hosts with its current `packagepath`.

To easily create an HADB test system, use the `-minimumsize` option that will create a minimum configuration instance of HADB. This option will create a database with the following settings: `devicesize=64`, `logbuffersize=4`, `databufferpoolsz=16`, `internallogbuffersize=4`, `relalgdevicesize=32`.

Apart from the domain management issues, the create command is atomic. If it fails, use the `-cleanup` option to clean up all database resources.

If a failure occurs during the startup phase of the nodes, hadbm will report the error. However the database will not be removed by default to preserve HADB history files for analysis. The HADB history files are removed by default when the database is deleted. Always use the `-cleanup` option to perform a cleanup.

**Options** `-W -adminpasswordfile` The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.

- k -package                   The name identifying the software package. If the package is not found, a default package is registered.
  
- L -packagepath             Path to the HADB software package. Only used if the package is not registered in the domain. This option is deprecated. Use the `hadbm registerpackage` command to register a package in the domain.
  
- t -historypath             The full path to the history files. If the `historypath` option is not specified, the default path is set up by the management agent(s). The management agent uses the entries in the configuration file (`ma.server.dbhistorypath`).
  
- d -devicepath             The path for the data and log devices. The path to the device must already exist. To set the path differently for each node or device, use the `-set` option. There are four types of devices:
  - `DataDevice`
  - `NiLogDevice` (node internal log device)
  - `RelalgDevice` (relational algebra query device)
  - `NoManDevice` (node manager device)

If the `devicepath` option is not specified, the default path is set up by the management agent(s). The management agent uses the entries in the configuration file (`ma.server.dbdevicepath`).
  
- a -datadevices            The number of data devices. The number must be between 1 and 8, on each node.
  
- b -portbase                Port base number used for the nodes. If there are multiple nodes on the same host, the extra nodes will get their port bases incremented by 20. The table below shows how the port bases are set up on a four node database using two hosts (hostA and hostB) with port base 15000:

Node	Host	Portbase
0	HostA	15000
1	HostB	15000
2	HostA	15020
3	HostB	15020



- s -spares** The number of spares. The number must be less than the length of the host list and at least two active nodes should be there.
- S -set** Identifies the configuration parameters that will be set to the database. Must be specified as a comma-separated list of database configuration attributes in name=value format.
- Use this option to set a different `-devicepath` for each node or each device. The syntax for each name=value pair is:
- `Node-nodenumbe.r.device-devicenumber.DevicePath=path`
- Where: `-devicenumber` is only required if the device is a `DataDevice`.
- For example: `Node-0.DataDevice-0.DevicePath=/disk0`. Any device path that is not set for a particular node or device defaults to the `-devicepath` value.

The following table identifies the configuration attributes available.

Variable	Range	Default
ConnectionTrace	true/false	false
CoreFile	true/false	false
DataBufferPoolSize	16–2047	200 MB
DataDeviceSize	32–262144	1024 MB
DevicePath	n/a	n/a
EagerSessionThreshold	0–100	50 (% of NumberOfSessions)
EagerSessionTimeout	0–2147483647	120 seconds
EventBufferSize	0–2097152	0 MB
HistoryPath	n/a	n/a
InternalLogBufferSize	4–128	12 MB
LogBufferSize	4–2047	48 MB
MaxTables	200–1200	1200
NationalCollation	<collation>	binary

Variable	Range	Default
NumberOfDatadevices	1-8	1
NumberOfLocks	20000-1073741824	50000
NumberOfSessions	1-10000	100
Portbase	10000-63000	15000
RelalgDeviceSize	32-262144	128 MB
SQLTraceMode	none/short/full	none
SessionTimeout	0-214743647	1800 seconds
StartRepairDelay	0-100000	20 seconds
StatInterval	0-600	600
SyslogFacility	<facility>	local0
SyslogLevel	<level>	warning
SyslogPrefix	<string>	hadb-<db_name>
TakeoverTime	500-16000	10000 MS

Valid values for NationalCollation (<collation>) are: binary/en\_US/de\_DE/fr\_FR/zh\_CN/ja\_JA. Additionally, each of these values except "binary" may have a prefix "#ci", "#ai" or "#ci#ai" added to indicate case insensitivity, accent insensitivity or both.

Valid values for SyslogFacility are:  
local0/local1/local2/local3/local4/local5/local7/kern/mail/none

Valid values for SyslogLevel are:  
info/warning/error/alert/severe/none

Heterogenous attributes:

- Node-<nodeno>.HistoryPath=<path\_to\_history\_files>
- Node-<nodeno>.DevicePath=<default\_path\_for\_devices\_on\_node>
- Node-<nodeno>.<device>.DevicePath=<path\_for\_device\_on\_node>

Where <device> is one of:

- DataDevice-<datadevicenumber>
- RelalgDevice
- NiLogDevice
- NoManDevice

---

	<code>&lt;datadevicenumber&gt;</code> is a number in range of 0 to number of data devices specified in the <code>-datadevices</code> option.
<code>-m -agent</code>	Identifies the URL to the Management Agent(s) (hostlist:port).
<code>-cleanup</code>	Delete the database and its history files if the servers fails to start or if the <code>create</code> command fails.
<code>-no-clear</code>	By default the database is initialized and started. However, if this option is set, the database processes will not be started, the devices will not be initialized, and you must use the <code>clear</code> command to start the database for the first time.
<code>-z -devicesize</code>	The size of the data devices (specified in MB). A node may have multiple data devices, each <code>-devicesize</code> MB large.
<code>-M -minimumsize</code>	create a stripped down, bare minimum configuration instance of HADB. This is to simplify setup for users wanting a simple test system, or want to play with HADB in a development scenario.
	Unless overridden by other option settings, the <code>minimumsize</code> option will create a database with the following settings: <ul style="list-style-type: none"> <li>▪ <code>devicesize = 64</code></li> <li>▪ <code>logbuffersize = 4</code></li> <li>▪ <code>databufferpoolsize = 16</code></li> <li>▪ <code>internallogbuffersize = 4</code></li> <li>▪ <code>relalgdevicesize = 32</code></li> </ul>
<code>-P -dbpasswordfile</code>	Identifies the file containing the password to be used for the system user of the database.
<code>-W -adminpasswordfile</code>	The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.
<code>-U -no-adminauthentication</code>	Using this option eliminates the need of password identification.
<code>-c -scrollprogress</code>	If the <code>-scrollprogress</code> option is specified, the progress messages scroll down the screen, instead of being overwritten. The progress bar will not be displayed if the <code>---quiet</code> option is specified. By default, progress messages are not specified.

**-H -hosts**

A comma-separated list of all the host names or IP addresses used for all the nodes in the database. An HADB Management Agent must be running on each host. Using the IP address is recommended because there is no dependence on DNS lookups. Hostnames must be absolute. Do not use localhost or 127.0.0.1 as a hostname.

Configuring an HADB instance with double networks: To make HADB tolerate single network failures, the HADB server machines can be equipped with two NIC cards. The HADB instance must be configured to exploit these cards by specifying both IP addresses of the NIC cards for each node. The first IP address the HADB considers as “net-0,” the second is set to “net-a.” The syntax for a two-node configuration is: `-hosts=h0a+h0b,h1a+h1b`.

- h0a is host-0's IP address on net-0
- h0b is host-0's IP address on net-1
- h1a is host-1's IP address on net-0
- h1b is host-1's IP address on net-1

All nodes in a database instance must be connected to both networks. It is not allowed to have some nodes connected to both networks while others are connected to only one network. The IP address of each NIC card must be on separate IP subnets.

**Operands** *dbname*                      The name of the database. The default database is hadb.

**Examples** **EXAMPLE 1** Using create with two nodes on a single device

The following example creates a database with the default database name hadb with two active nodes, and a single data device. The system prompts you for the password twice. All paths are default paths and must be created before initiating this command.

```
hadbm create --devicesize=256 --hosts=host1,host2
Database successfully created and started
```

**EXAMPLE 2** Using create with two nodes on multiple devices

The following example creates a database named mydb with two active nodes, two spare nodes, two devices per node, and a specific port base number for some specific path.

```
hadbm create -H host1,host2 --packagepath=/home/hadb/install
--historypath=/export/home/hadb/history --devicepath =/export/home/hadb/device
--configpath /home/hadb/config --datadevices=2 --portbase=1500
--dbpasswordfile=/home/hadb/dbpfile --spares=2 --devicesize=512
```

**EXAMPLE 2** Using create with two nodes on multiple devices (Continued)

```
--set "Node-0.DataDevice-0.DevicePath=/disk0 Node-0.DataDevice-0.DevicePath=/disk1" mydb
Database successfully created and started
```

Node 0 gets two data devices: /disk0/mydb.data.0 and /disk1/mydb.data1.1. Since Node 1 is not specified with any specific device path in the -set option, and since the -datadevices option was set to 2, Node 1 gets both devices on the path given in the -devicepath option. The devices for Node 1 are then /export/home/hadb/device/mydb.data.1 and /export/home/hadb/device/mydb.data1.1.

<b>Exit Status</b>	0	command executed successfully
	1	error in executing the command
<b>Diagnostics</b>	22021	database exists
	22022	specified path does not exist
	22023	specified path does not have write permissions
	22024	host unreachable
	22025	hosts not added in pairs
	22026	database name specified is not valid
	22027	port base number is not valid
	22028	specified number for data devices cannot be supported
	22029	specified device size cannot be supported
	22030	specified number of spares could not be allocated
	22031	attributes are not recognized
	22032	password string not valid
	22033	invalid value set for attributes

**See Also** [hadbm-clear\(1\)](#), [hadbm-delete\(1\)](#), [hadbm-list\(1\)](#)[hadbm-start\(1\)](#), [hadbm-restart\(1\)](#), [hadbm-status\(1\)](#)[hadbm-stop\(1\)](#)

**Name** hadbm createdomain– creates a management domain of the listed HADB hosts

**Synopsis** hadbm createdomain [-adminpasswordfile=*filename* | -no-adminauthentication]  
[-agent=*ma\_url*] *host\_list*

**Description** Use the hadbm c createdomain command to create the HADB management domains. All the hosts that will be part of the desired domain must be included in the hostlist; including the hosts retrieved through the hadbm listdomaincommand.

To form a domain, the hostlist must consist of valid network addresses. After the management domain is successfully completed, all the hosts in the domain are enabled and the management agents are ready to manage databases.

The following prerequisites must be met before using the hadbm c createdomain command:

- HADB management agents are running on the hosts.
- The management agents are not members of an existing domain.
- All the management agents are configured to use the same port.
- All the management agents can reach each other over UDP, TCP, and with IP multicast.

The adminpassword is different from the hadbm dbpassword command. You must use both passwords when using the following commands:

- hadbm create
- hadbm addnodes
- hadbm refragment

<b>Options</b> -W -adminpasswordfile	The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.
-w -adminpassword	The actual HADBM administration password. Using this option with the hadbm createdomain or hadbm create command requires that the password is entered each time any hadbm command is used.  The adminpassword is different from the hadbm dbpassword command. You must use both passwords when using the following commands: hadbm create, hadbm addnodes, hadbm refragment.
-U -no-adminauthentication	Using this option eliminates the need of password identification.
-m -agent	Identifies the URL to the Management Agent. The default is localhost:1862.

---

<b>Operands</b>	<i>host_list</i>	<i>hostlist[:port]</i>
	A comma-separated list of all the hosts that are part of the management domain. The port number is optional.	
<b>Examples</b>	<b>EXAMPLE 1</b> Creating an HADB management domain	
	hadbm <b>createdomain</b> <b>host1,host2,host3</b>	
	Domain host1,host2,host3 created	
<b>Exit Status</b>	0	command executed successfully
	1	error in executing the command
<b>Diagnostics</b>	22015	hosts specified in the hostlist contain duplicate host names
	22190	a domain with the specified hostlist already exists or the hosts are part of a management domain
	22196	the URL used to connect to the management agents spans hosts which are not in the management domain.
<b>See Also</b>	<a href="#">hadbm(1M)</a> <a href="#">hadbm-create(1)</a> , <a href="#">hadbm-listdomain(1)</a> , <a href="#">hadbm-extenddomain(1)</a> , <a href="#">hadbm-reducedomain(1)</a> , <a href="#">hadbm-deletedomain(1)</a>	

**Name** hadbm delete– removes the database

**Synopsis** hadbm delete [-adminpasswordfile=*filename*] [-agent=*ma\_url*]  
[-scrollprogress] [*dbname*]

**Description** Use the hadbm delete command to remove the database, configuration files, device files, history and log files. If a database is identified, it should already exist and should be in a stopped state. If a database is not named, the default database is used. The default database is hadb.

In interactive mode, the hadbm delete command prompts for a confirmation before removing the database.

**Options**

-W --adminpasswordfile	The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.
-m -agent	Identifies the URL to the Management Agent. The default is localhost:1862.
-c -scrollprogress	If the -scrollprogress option is specified, the progress messages scroll down the screen, instead of being overwritten. The progress bar will not be displayed if the --quiet option is specified. By default, progress messages are not specified.

**Operands** *dbname*                      The name of the database. The default database is hadb.

**Examples** EXAMPLE 1 Using delete

```
hadbm delete
```

```
This command will remove the database and all configuration,  
history and log files. Type "yes" or "y" to confirm this  
operation, anything else to cancel: y  
Database successfully deleted
```

EXAMPLE 2 Using delete with a database identified

```
hadbm delete mydatabase
```

```
This command will remove the database and all configuration,  
history and log files. Type "yes" or "y" to confirm this  
operation, anything else to cancel: y  
Database successfully deleted
```

**Exit Status**

0	command executed successfully
1	error in executing the command



**Diagnostics** 22002 specified database does not exist  
22065 database not in a stopped state  
22066 database could not be removed

**See Also** [hadbm-addnodes\(1\)](#), [hadbm-clear\(1\)](#), [hadbm-create\(1\)](#), [hadbm-list\(1\)](#),  
[hadbm-refragment\(1\)](#), [hadbm-restart\(1\)](#), [hadbm-start\(1\)](#), [hadbm-status\(1\)](#), [hadbm-stop\(1\)](#)

**Name** hadbm deletedomain– removes the HADB management domain

**Synopsis** hadbm deletedomain [-adminpasswordfile=*filename*]  
[-agent=*ma\_url*]

**Description** Before using the hadbm deletedomain command, the following prerequisites must be met:

- An HADB management domain must already exist
- All agents in the domain must be running
- No databases exist in the domain

After successfully executing , the hadbm deletedomain command, the management agents of the removed hosts are stopped, and the repository of the deleted hosts is cleaned up. If the agents are restarted, they will not be part of any domain. To have the restarted agents associated with a domain, create a new management domain using the hadbm createdomain command.

**Options**

-W --adminpasswordfile	The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.
-m -agent	Identifies the URL to the Management Agent. The default is localhost:1862.

**Examples** EXAMPLE 1 Deleting the Management Domain

```
hadbm deletedomain
```

```
This command will delete the domain host1,host2,host3.
```

```
Type "yes" or "y" to confirm this  
operation, anything else to cancel: y  
Domain hostlist has been deleted.
```

**Exit Status**

0	command executed successfully
1	error in executing the command

**Diagnostics**

22192	the management domain does not exist
22194	hosts cannot be removed because they contain databases
22196	the URL used to connect to management agents spans hosts which are not in the management domain

**See Also** [hadbm\(1M\)](#), [hadbm-create\(1\)](#), [hadbm-createdomain\(1\)](#), [hadbm-extenddomain\(1\)](#), [hadbm-listdomain\(1\)](#), [hadbm-reducedomain\(1\)](#)

**Name** hadbm deviceinfo– displays information about disk storage devices on each active data node

**Synopsis** hadbm deviceinfo [-details] [-adminpasswordfile=*filename*]  
[-agent=*ma\_url*] [*dbname*]

**Description** If a database is specified, the database should be existing as shown by the hadbm-list command. If the database name is not specified, the default database should exist as shown by the hadbm-list command.

The information displayed for each node of the database is:

- total device size allocated in MB
- free size in MB
- usage in percentage

The status of the database and the nodes are not changed.

**Options**

-d -details	This option displays detailed information about the named database.
-W --adminpasswordfile	The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.
-m -agent	Identifies the URL to the Management Agent. The default is localhost:1862.

**Operands** *dbname* The name of the database. The default database is hadb.

**Examples** EXAMPLE 1 Using deviceinfo without any options

```
hadbm deviceinfo
NodeNo    TotalSize    Freesize    Usage
3         1048         869         17%
4         1048         869         17%
5         1048         869         17%
6         1048         869         17%
```

EXAMPLE 2 Using deviceinfo with a database specified and quiet option

```
hadbm deviceinfo -q mydatabase
3         1048         869         17%
4         1048         869         17%
5         1048         869         17%
6         1048         869         17%
```

EXAMPLE 3 Using deviceinfo with details option

```
hadbm deviceinfo --details
NodeNo    TotalSize    FreeSize    Usage    NReads    Nwrites    DeviceName
3         1048         869         17%      0          42578     /export/home2/tmp/hadb.data
```

**EXAMPLE 3** Using deviceinfo with details option *(Continued)*

4	1048	869	17%	0	42554	/export/home2/tmp//hadb.data-0.4
5	1048	869	17%	0	42544	/export/home2/tmp//hadb.data-0.5
6	1048	869	17%	0	9828	/export/home2/tmp//hadb.data-0.6

**Exit Status** 0 command executed successfully

1 error in executing the command

**Diagnostics** 22002 specified database does not exist

22105 Database [hadb] is not running

**See Also** [hadbm-resourceinfo\(1\)](#)

- Name** hadbm disablehost– selectively disables a host in the management domain
- Synopsis** hadbm disablehost [`--adminpasswordfile=filename`]  
`[-agent=ma_url] hostname`
- Description** Use the `disablehost` command to remove an unresponsive host from the management domain. Since the majority of management agents in a management domain must be enabled and running to execute HADB management commands, unresponsive hosts reduce the number of active agents and therefore prevent operation of `hadbm` commands.
- A disabled host is automatically re-enabled when its management agent is restarted.
- Before using the `disablehost` command, ensure the host to be disabled is:
- registered in the management domain
  - enabled
  - the management agent for the host is not running
  - all database nodes configured to run on the host are stopped
- Options**
- |                                     |   |
|-------------------------------------|---|
| <code>-W --adminpasswordfile</code> | The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file. |
| <code>-m -agent</code>              | Identifies the URL to the Management Agent. The default is <code>localhost:1862</code> .  |
- Operands** `hostname`            The hostname for the host to be disabled.
- Examples** **EXAMPLE 1** Disabling a host named `host1`
- ```
hadbm disablehost host1
Host successfully disabled
```
- Exit Status**
- |   |                                |
|---|--------------------------------|
| 0 | command executed successfully  |
| 1 | error in executing the command |
- Diagnostics**
- |       |                                                                                                                                 |
|-------|---------------------------------------------------------------------------------------------------------------------------------|
| 22176 | the host is not registered in the HADB management domain                                                                        |
| 22180 | the host is already disabled                                                                                                    |
| 22181 | database nodes are running on the host. Use <code>hadbm stopnode</code> to stop the nodes before using <code>disablehost</code> |
| 22182 | the management agent is running on the specified host. Stop the management agent before disabling the host                      |
- See Also** [hadbm\(1M\)](#), [hadbm-create\(1\)](#), [hadbm-listpackages\(1\)](#), [hadbm-unregisterpackage\(1\)](#)

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|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>        | hadbm extenddomain– extends the current HADB management domain by adding the specified hosts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Synopsis</b>    | hadbm extenddomain [-adminpasswordfile= <i>filename</i> ]<br>[-agent= <i>ma_url</i> ] <i>host_list</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Description</b> | Use the hadbm extenddomain command to add hosts to an existing management domain. All the hosts that will be part of the desired domain must be included in the hostlist. The following prerequisites must be met before using the hadbm extenddomain command: <ul style="list-style-type: none"> <li>▪ An HADB management domain must already exist.</li> <li>▪ HADB management agents are running on the hosts.</li> <li>▪ The management agents on the hosts to be added are not members of an existing domain.</li> <li>▪ All the management agents are configured to use the same port.</li> <li>▪ All the management agents can reach each other over UDP, TCP, and with IP multicast.</li> </ul> |
| <b>Options</b>     | <p><b>-W --adminpasswordfile</b> The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.</p> <p><b>-m -agent</b> Identifies the URL to the Management Agent. The default is localhost:1862.</p> <p><b>-U -no-adminauthentication</b> The -no-adminauthentication option allows the administrator to use all hadbm commands without providing the administrator's password.</p>                                                                                                                                                                                                                                          |
| <b>Operands</b>    | <i>host_list</i> A comma-separated list of all the hosts that are part of the management domain.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Examples</b>    | <p><b>EXAMPLE 1</b> Adding hosts to an HADB management domain</p> <pre>hadbm extenddomain host4,host5,</pre> <p>Hosts added, domain is now host1,host2,host3,host4,host5</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Exit Status</b> | <p>0 command executed successfully</p> <p>1 error in executing the command</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Diagnostics</b> | <p>22015 the hostlist contains duplicate host names</p> <p>22016 the host 3 and host 4 are registered in different management domains. Domains cannot be merged. Use hadbm reducedomain to remove one of the hosts from a domain and then restart the agent</p> <p>22191 the specified hosts are already part of the management domain</p>                                                                                                                                                                                                                                                                                                                                                              |

- 22192 the management domain does not exist
- 22196 the URL used to connect to management agents spans hosts which are not in the management domain

**See Also** [hadbm\(1M\)](#), [hadbm-create\(1\)](#), [hadbm-createdomain\(1\)](#), [hadbm-deletedomain\(1\)](#), [hadbm-listdomain\(1\)](#), [hadbm-reducedomain\(1\)](#)

**Name** hadbm-get– gets the value of the specified configuration attribute

**Synopsis** hadbm get -all | *attribute\_name\_list* [--adminpasswordfile=*filename*]  
[-agent=*ma\_url*] [*dbname*]

**Description** Use the get command to get the value of the named configuration attribute. If the command is run without any attributes, and with the -all option, all the supported variables and their values are retrieved. If an attribute is unrecognized, an exception is thrown on the unrecognized attribute name, and the variables and values of the recognized attributes are returned.

The readable configuration attributes are as follows:

| Variable              | Range            | Default                    |
|-----------------------|------------------|----------------------------|
| ConnectionTrace       | ture/false       | false                      |
| CoreFile              | true/false       | false                      |
| DatabaseName          |                  | hadb                       |
| DataBufferPoolSize    | 16–2047          | 200 MB                     |
| DataDeviceSize        | 32–262144        | 1024 MB                    |
| DevicePath            | n/a              | n/a                        |
| EagerSessionThreshold | 0–100            | 50 (% of NumberOfSessions) |
| Eager SessionTimeout  | 0–2147483647     | 120 seconds                |
| EventBufferSize       | 0–2097152        | 0 MB                       |
| HistoryPath           | n/a              | n/a                        |
| InternalLogBufferSize | 4–128            | 12 MB                      |
| JdbcUrl               | n/a              | n/a                        |
| LogBufferSize         | 4–2047           | 48 MB                      |
| MaxTables             | 200–1200         | 1200                       |
| NationalCollation     | <collation>      | binary                     |
| NumberOfDataDevices   | 1–8              | 1                          |
| NumberOfLocks         | 20000–1073741824 | 50000                      |
| NumberOfSessions      | 1–10000          | 100                        |
| PackageName           | n/a              | V4.x.x.x                   |
| PortBase              | 10000–63000      | 15000                      |



| Variable         | Range           | Default        |
|------------------|-----------------|----------------|
| RelalgDeviceSize | 32-262144       | 128 MB         |
| SQLTraceMode     | none/short/full | none           |
| SessionTimeout   | 0-2147483647    | 1800 seconds   |
| StartRepairDelay | 0-100000        | 20 seconds     |
| StatInterval     | 0-600           | 600 seconds    |
| SyslogFacility   | <facility>      | local0         |
| SyslogLevel      | <level>         | warning        |
| SyslogPrefix     | <string>        | hadb-<db_name> |
| TakeoverTime     | 500-16000       | 10000 MS       |

Heterogenous attributes:

- Node-*nodeno*.HistoryPath=*path\_to\_history\_files*
- Node-*nodeno*.DevicePath=*default\_path\_for\_devices\_on\_node*
- Node-*nodeno.device*.DevicePath=*path\_for\_device\_on\_node*

Where *device* is one of:

- DataDevice-*datadevicenumber*
- RelalgDevice
- NiLogDevice
- NoManDevice

|                 |                            |                                                                                                                                         |
|-----------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Options</b>  | -all                       | If specified, gets all the supported variables and their values.                                                                        |
|                 | -W --adminpasswordfile     | The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file. |
|                 | -m -agent                  | Identifies the URL to the Management Agent. The default is localhost:1862.                                                              |
| <b>Operands</b> | <i>attribute_name_list</i> | A comma or space separated list of variables whose values have been retrieved.                                                          |
|                 | <i>dbname</i>              | The name of the database. The default database is hadb.                                                                                 |

**Examples** EXAMPLE 1 Using get

```
hadbm get "takeoverTime numberOfLocks jdbcURL" mydatabase
Attribute      Value
takeoverTime   10000
numberOfLocks  10000
JdbcUrl        com:sun:hadb:royal:15000,polo:15020
```

**Exit Status** 0 command executed successfully

1 error in executing the command

**Diagnostics** 22002 specified database does not exist

22071 attribute names are not recognized

**See Also** [hadbm-addnodes\(1\)](#), [hadbm-clear\(1\)](#), [hadbm-delete\(1\)](#), [hadbm-list\(1\)](#), [hadbm-refragment\(1\)](#),  
[hadbm-restart\(1\)](#), [hadbm-set\(1\)](#), [hadbm-start\(1\)](#), [hadbm-stop\(1\)](#)

**Name** hadbm help– displays a list of all the subcommands to administer HADB

**Synopsis** hadbm help or hadbm *command\_name* -help

**Description** The following is a list of all the hadbm subcommands:

addnodes

adds nodes to the named database

clear

reinitializes all the data space on all nodes and starts the database

clearhistory

clears the history files on the database

create

creates a database instance

createdomain

creates a management domain of the listed HADB hosts

delete

removes the database

deletedomain

deletes the HADB management domain

deviceinfo

displays information about disk storage devices on each active data node

disablehost

selectively disables a host in the management domain

extenddomain

extends the current HADB management domain

get

gets the value of the specified configuration parameter

help

displays all the subcommands for the hadbm utility

list

lists all the existing databases

listdomain

lists all hosts defined in the management domain

listpackages

lists the packages registered in the management domain

reducedomain

removes hosts from the HADB management domain

refragment  
    refragments the schema

registerpackage  
    registers the HADB packages in the management domain

resourceinfo  
    displays database resource information

restart  
    restarts the database

restartnode  
    restarts the specified node

set  
    sets the value of the specified configuration attributes to the identified values

setadminpassword  
    sets the adminpassword for the management domain

start  
    starts the database

startnode  
    starts the specified node

status  
    shows the state of the database

stop  
    gracefully stops the database

stopnode  
    gracefully stops the specified node

unregisterpackage  
    removes registered HADB packages from the management domain

version  
    displays the hadbm version information

|                       |             |                                                                                                                       |
|-----------------------|-------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>Common Options</b> | -q -quiet   | Performs the operation silently without any descriptive messages.                                                     |
|                       | -? -help    | Displays a brief description of the hadbm utility and all the supported commands.                                     |
|                       | -v -version | Displays the version details of the hadbm utility.                                                                    |
|                       | -y -yes     | Launches the command in non-interactive mode.                                                                         |
|                       | -f -force   | Launches the command in non-interactive mode, and does not return an error if the post condition is already achieved. |

-e -echo                    Displays the commands with all the options and their user-defined values or the default values; then launches the command.

**Examples**    **EXAMPLE 1**    Executing an hadbm command

```
hadbm clear
```

```
This command will clear the database
```

```
Type "yes" or "y" to confirm this operation, anything else to cancel: y
```

```
Database successfully cleared
```

**Exit Status**    0                                    command executed successfully  
                  1                                    error in executing the command

**See Also**    [hadbm\(1M\)](#)

**Name** hadbm list– lists all the existing databases

**Synopsis** hadbm list [-adminpasswordfile=*filename*] [-agent=*ma\_url*]

**Description** Use the hadbm list command to get a listing of all the existing database instances known to the management client running this command. If the list could not display the database instance, see the hadbm command if you are sure you have created it earlier.

**Options**

|                         |                                                                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| -W - -adminpasswordfile | The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file. |
| -m -agent               | Identifies the URL to the Management Agent. The default is localhost:1862.                                                              |

**Examples** EXAMPLE 1 Using list

```
hadbm list
Database
hadb
mydatabase
```

**Exit Status**

|   |                                |
|---|--------------------------------|
| 0 | command executed successfully  |
| 1 | error in executing the command |

**Diagnostics** 22002 specified database does not exist

**See Also** [hadbm-clear\(1\)](#), [hadbm-clearhistory\(1\)](#), [hadbm-delete\(1\)](#), [hadbm-get\(1\)](#), [hadbm-restart\(1\)](#), [hadbm-resourceinfo\(1\)](#), [hadbm-set\(1\)](#), [hadbm-start\(1\)](#), [hadbm-stop\(1\)](#)

**Name** hadbm listdomain– lists all hosts defined in the management domain

**Synopsis** hadbm listdomain [-adminpasswordfile=*filename*]  
[-agent=*ma\_url*]

**Description** Use the hadbm listdomain command to list all hosts defined in the management domain and the status of the management agents.

**Options** -W -adminpasswordfile      The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.

-m -agent                              Identifies the URL to the Management Agent. The default is localhost:1862.

**Examples** EXAMPLE 1 Using the hadbm-listdomain

The following command lists all participating members of a previously created domain.

```
hadbm listdomain
Hostname    Enabled?   Interfaces
HostA      Yes       10.0.5.70
HostB      Yes       10.0.5.72
HostC      Yes       10.0.5.73
HostD      Yes       10.0.5.74
```

**Exit Status** 0                              command executed successfully

1                                          error in executing the command

**See Also** [hadbm-create\(1\)](#), [hadbm-createdomain\(1\)](#), [hadbm-deletedomain\(1\)](#),  
[hadbm-extenddomain\(1\)](#), [hadbm-reducedomain\(1\)](#)

**Name** hadbm listpackages– lists the packages registered in the management domain

**Synopsis** hadbm listpackages [-adminpasswordfile=*filename*]  
[-agent=*ma\_url*] [[*package*]\*]

**Description** Use the listpackages command to display a list of the packages registered in the management domain and the hosts to which they are registered.

**Options** -W --adminpasswordfile The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.

-m -agent Identifies the URL to the Management Agent. The default is localhost:1862.

**Operands** *package* Specify the package(s) to display. If the operand not specified, all packages will be displayed.

**Examples** EXAMPLE 1 Using hadbm-listpackages with single package operand

```
hadbm listpackages v4-3
Package      Path                HostsPackage  Hosts
v4-3         /var/opt/SUNWHadb/V4-3  host1, host2
```

EXAMPLE 2 Using hadbm-listpackages with multiple package operands

```
hadbm listpackages v4-3 v4-4
Package      Path                Hosts
v4-3         /var/opt/SUNWHadb/V4-3  host1, host2
v4-4         /var/opt/SUNWHadb/V4-4  host1, host2
```

EXAMPLE 3 Using hadbm-listpackages to show heterogenous paths

```
hadbm listpackages v4-5
Package      Path                Hosts
v4-5         /var/opt/SUNWHadb/V4-5  host4,host5
v4-5         /sunwhadb/           host6
```

EXAMPLE 4 Using hadbm-listpackages without operands

```
hadbm listpackages
Package      Path                Hosts
v4-3         /var/opt/SUNWHadb/V4-3  host1, host2
v4-4         /var/opt/SUNWHadb/V4-4  host1, host2
v4-5         /var/opt/SUNWHadb/V4-5  host4,host5
v4-5         /sunwhadb/           host6
```

**Exit Status** 0 command executed successfully  
1 error in executing the command



**See Also** [hadbm\(1M\)](#), [hadbm-create\(1\)](#), [hadbm-registerpackage\(1\)](#), [hadbm-registerpackage\(1\)](#)

**Name** ma— configures and starts the HADB Management Agent

**Synopsis** ma *HADB\_install\_path*/bin/ma [-define=*assignment*]  
[-javahome=*JAVA\_HOME*] [-systemroot=*root\_path*] [-version]  
[-help] [-install] [--remove] [-service]  
[-name=*name\_of\_service*] [*AGENT\_CONFIG\_PATH*]

**Description** Use the ma command to configure and start the HADB Management Agent on a host that will belong to an HADB management domain. The configuration is defined in the AGENT\_CONFIG file. In addition you can register the Management Agent as a Windows service by using the service options -install, --service, and -name. The Management Agent ensures the availability of the HADB nodes on the host it runs by restarting them if there is a failure during startup, or during normal operation. To ensure the availability of the Management Agent you should register it as a Windows service so it is restarted automatically if it fails or when the computer reboots.

An HADB management domain consists of a set of hosts that are capable of running HADB database nodes. A Management Agent runs on each host belonging to a management domain. hadbm management clients communicate with Management Agents to perform the hadbm management commands like create, start, stop, and so on.

The Management Agent must be configured and started on all hosts before a database instance can be created. All hosts in a domain run a Management Agent at the same port number. All agents are aware of each other and their participation in the management domain. Agents communicate with each other, and may forward requests to other agents when they perform management commands specific to a host. For example, when an agent is requested to stop a node, it checks whether the mirror host is up and running. To get that information, it communicates with the agent running on the mirror host.

The Management Agent maintains a repository where the database configuration is stored. A majority of agents in the management domain must be available to make changes in the repository.

The AGENT\_CONFIG file contains the configuration information for the Management Agent. A sample file named mgt.cfg is located in the *HADB\_install\_path*/lib directory. Use this sample file to assist you in defining your configuration files. In addition to the configuration variables, the AGENT\_CONFIG file also contains the default path information for the history files, and the data device files for the HADB instances managed by this agent. If you have NOT specified the history and device path information using the create command, the default values located in the AGENT\_CONFIG file will be used.

**Options** The following options identify common setup information for the Management Agent:

-D -define                      The agent property assignment in the format of  
*property=value*

|                |                                                                                                           |
|----------------|-----------------------------------------------------------------------------------------------------------|
| -j -javahome   | The full path to the Java runtime installation. The default value is the value of the JAVA_HOME variable. |
| -y -systemroot | An alternate specification of the Windows system root path.                                               |
| -V -version    | Displays the version information and exits.                                                               |
| -? -help       | Displays this help page and exits.                                                                        |

The following options identify service configuration information for the Management Agent:

|             |                                                                                                           |
|-------------|-----------------------------------------------------------------------------------------------------------|
| -i -install | Registers a service for the agent and starts the service.                                                 |
| -r -remove  | Stops and unregisters the agent service.                                                                  |
| -s -service | This option is for internal use by the service control program.                                           |
| -n -name    | Identifies the name to use when registering and operating the service. The default name is HADBMgmtAgent. |

**Operands** *AGENT\_CONFIG\_PATH* The full path to the AGENT\_CONFIG file.

**Examples** EXAMPLE 1 Sample AGENT\_CONFIG file

The following sample file can be edited for your particular installation:

```
ma.server.jmxmp.port=31108 #this can be any port not currently being used#
ma.server.dbconfigpath=/etc/opt/SUNWhadb/MA
repository.dr.path=/var/opt/SUNWhadb/REP
```

|                    |   |                                |
|--------------------|---|--------------------------------|
| <b>Exit Status</b> | 0 | command executed successfully  |
|                    | 1 | error in executing the command |
| <b>Diagnostics</b> | 0 | error message                  |
|                    | 1 | error message                  |

**See Also** [hadbm\(1M\)](#)

**Name** hadbm recoverhost– recover a host in the management domain

**Synopsis** hadbm recoverhost [`—adminpasswordfile=filename`]  
`[-agent=ma_url] hostname`

**Description** Use the recoverhost command to recover a host in the management domain which has lost its repository, e.g. caused by a diskcrash.

Before using the recoverhost command, ensure the host to be recovered is:

- registered in the management domain
- the management agent for the host is running
- all the needed paths is created
- ensure that the repository directory is empty.

**Options**

|                                     |                                                                                                                                         |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <code>-W --adminpasswordfile</code> | The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file. |
| <code>-m -agent</code>              | Identifies the URL to the Management Agent. The default is localhost:1862. The agent it will be recovered from.                         |

**Operands** *hostname*                    The hostname for the host to be recovered.

**Examples** EXAMPLE 1 Recovering a host named host1

```
hadbm recoverhost host1
Host host1 successfully recovered
```

**Exit Status**

|   |                                |
|---|--------------------------------|
| 0 | command executed successfully  |
| 1 | error in executing the command |

**Diagnostics**

|       |                                                          |
|-------|----------------------------------------------------------|
| 22176 | the host is not registered in the HADB management domain |
| 22027 | The agent is not running.                                |
| 22028 | The agent is unreachable.                                |
| 22002 | Authentication failed.                                   |
| 22006 | Failed to reach the agents                               |
| 22023 | Lost Connection to management agent                      |
| 21526 | The agent is not ready                                   |

**See Also** [hadbm\(1M\)](#), [hadbm-disablehost\(1\)](#),

---

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                         |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>        | hadbm reducedomain- removes hosts from the HADB management domain                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                         |
| <b>Synopsis</b>    | hadbm reducedomain [-adminpasswordfile= <i>filename</i> ]<br>[-agent= <i>ma_url</i> ] <i>host_list</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                         |
| <b>Description</b> | <p>The following prerequisites must be met before using the hadbm reducedomain command:</p> <ul style="list-style-type: none"> <li>▪ An HADB management domain must already exist.</li> <li>▪ The hosts to be removed are registered in the domain. No database nodes are configured to be used on the hosts to be removed.</li> <li>▪ The HADB management repository is writable.</li> <li>▪ Software packages that are in use are not registered on the hosts which are to be removed.</li> <li>▪ The hostlist must not contain all agents in the domain. To remove all agents, use the hadbm deletedomain command.</li> </ul> <p>After successfully executing the hadbm reducedomain command, the management agents of the removed hosts are stopped and the repository of the deleted hosts is cleaned up.</p> |                                                                                                                                         |
| <b>Options</b>     | -W -adminpasswordfile                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file. |
|                    | -m -agent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Identifies the URL to the Management Agent. The default is localhost:1862.                                                              |
| <b>Operands</b>    | <i>host_list</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | A comma-separated list of all the hosts that are part of the management domain.                                                         |
| <b>Examples</b>    | <p><b>EXAMPLE 1</b> Removing hosts from a management domain</p> <pre>hadbm reducedomain host4,host5</pre> <p>Hosts removed, domain is now host1,host2,host3</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                         |
| <b>Exit Status</b> | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | command executed successfully                                                                                                           |
|                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | error in executing the command                                                                                                          |
| <b>Diagnostics</b> | 22015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | the hostlist contains duplicate host names                                                                                              |
|                    | 22192                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | the management domain does not exist                                                                                                    |
|                    | 22193                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | the specified hosts are not part of the domain and cannot be removed                                                                    |
|                    | 22194                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | hosts cannot be removed because they contain databases                                                                                  |
|                    | 22195                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | cannot remove all hosts from the domain                                                                                                 |
|                    | 22196                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | the URL used to connect to management agents spans hosts which are not in the management domain                                         |

**See Also** [hadbm\(1M\)](#), [hadbm-create\(1\)](#), [hadbm-createdomain\(1\)](#), [hadbm-deletedomain\(1\)](#), [hadbm-extenddomain\(1\)](#), [hadbm-listdomain\(1\)](#)

**Name** hadbm refragment– refragments the database schema

**Synopsis** hadbm refragment [-passwordfile=*passwordfilename*]  
 [-adminpasswordfile=*filename*] [-agent=*ma\_url*] [-scrollprogress]  
 [*dbname*]

**Description** Refragmentation is needed to store the data on a newly created node. Run the hadbm refragment command after adding a node using the hadbm addnodes command with the -no-refragment option specified. If the hadbm refragment command fails, it can be retried. If it continues to fail, the database must be cleared, and the product-specific schemas must be reloaded. All the user tables are refragmented.

If a database is specified, the database must already exist and must be in an HA Fault Tolerant or Fault Tolerant state. If the database is not named, the default database is refragmented. The default database is hadb.

In interactive mode, the hadbm refragment command prompts for a confirmation before refragmenting the data.

|                |                        |                                                                                                                                                                                                                                                     |
|----------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Options</b> | -W --adminpasswordfile | The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.                                                                                                             |
|                | -P -dbpasswordfile     | Identifies the file containing the password to be used for the system user of the database.                                                                                                                                                         |
|                | -W --adminpasswordfile | The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.                                                                                                             |
|                | -m -agent              | Identifies the URL to the Management Agent. The default is localhost:1862.                                                                                                                                                                          |
|                | -c -scrollprogress     | If the -scrollprogress option is specified, the progress messages scroll down the screen, instead of being overwritten. The progress bar will not be displayed if the --quiet option is specified. By default, progress messages are not specified. |

**Operands** *dbname* The name of the database. The default database is hadb.

**Examples** EXAMPLE 1 Using refragment

```
hadbm refragment --dbpasswordfile=/home/hadb/dbpfile mydatabase
This command will refragment the data on all active nodes.
Type "yes" or "y" to confirm this operation, anything else to cancel:y
Database successfully refragmented
```

|                    |                                                                                                                                                                                                                                                                         |                                    |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| <b>Exit Status</b> | 0                                                                                                                                                                                                                                                                       | command executed successfully      |
|                    | 1                                                                                                                                                                                                                                                                       | error in executing the command     |
| <b>Diagnostics</b> | 22002                                                                                                                                                                                                                                                                   | specified database does not exist  |
|                    | 22041                                                                                                                                                                                                                                                                   | invalid database state             |
|                    | 22042                                                                                                                                                                                                                                                                   | database could not be refragmented |
|                    | 22051                                                                                                                                                                                                                                                                   | node not responding                |
| <b>See Also</b>    | <a href="#">hadbm-clear(1)</a> , <a href="#">hadbm-create(1)</a> , <a href="#">hadbm-delete(1)</a> , <a href="#">hadbm-list(1)</a> <a href="#">hadbm-restart(1)</a> ,<br><a href="#">hadbm-start(1)</a> , <a href="#">hadbm-status(1)</a> <a href="#">hadbm-stop(1)</a> |                                    |



- Name** hadbm registerpackage— registers HADB packages in the management domain
- Synopsis** hadbm registerpackage —packagepath=*path*  
 [-hosts=*host\_list*] [-adminpasswordfile=*filename* ]  
 [-agent=*ma\_url*] [*package\_name*]
- Description** Use the hadbm registerpackage command to register the HADB packages that are installed on the hosts in the management domain. Registering packages can also be done when creating a database with the hadbm create command. The default package name is a string starting with V and containing the version number of the hadbm program. If the -hosts option is omitted, the package is registered on all enabled hosts in the domain.
- Before using the hadbm registerpackage command, ensure that all management agents are configured and running on all the hosts in the hostlist, the repository of the management agent is available for updates, and no software package is already registered with the same package name.
- Options**
- |                        |                                                                                                                                         |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| -W --adminpasswordfile | The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file. |
| -L -packagepath        | The full path to the HADB software package.                                                                                             |
| -H -hosts              | A comma-separated or double quote enclosed list of hosts to register the package on.                                                    |
| -m -agent              | Identifies the URL to the Management Agent. The default is localhost:1862.                                                              |
- Operands** *package\_name* The name of the package you are registering. If a package name is not specified, the default name of the software package is used. For example, if you are using the software release V4–4–02, the default package name is V4.4.
- Examples**
- EXAMPLE 1** Registering a software package named v4
- ```
hadbm registerpackage --packagepath=hadb_install_dir/SUNWhadb/4.4/v4
Package successfully registered
```
- EXAMPLE 2** Registering a software package name v4 on a specific host in the domain
- ```
hadbm registerpackage --packagepath=hadb_install_dir/SUNWhadb/4.4
--hosts=host1,host2,host3 v4
Package successfully registered
```
- Exit Status**
- |   |                                |
|---|--------------------------------|
| 0 | command executed successfully  |
| 1 | error in executing the command |

**Diagnostics** 22170 the software package could not be found at the specified path on the host

22171 the software package already exists or is registered with the same name

**See Also** [hadbm\(1M\)](#)[hadbm-create\(1\)](#), [hadbm-set\(1\)](#), [hadbm-unregisterpackage\(1\)](#)

**Name** hadbm resourceinfo– gives information about the database resources

**Synopsis** hadbm resourceinfo [**—databuf**] [**—locks**]  
 [-logbuf] [-nilogbuf] [-adminpasswordfile=*filename*]  
 [-agent=*ma\_url*] [*dbname*]

**Description** Use the hadbm resourceinfo command to get information about the various database resources. If a database is named, it must already exist. If a database is not named, the default database is used. The default database is hadb.

**Options**

- W - -adminpasswordfile      The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.
- d -databuf                    This option displays the data buffer pool information.
- l -locks                        This option displays the locks information.
- b -logbuf                       This option displays the log buffer information.
- n -nilogbuf                    This option displays the node internal log buffer information.
- m -agent                        Identifies the URL to the Management Agent. The default is localhost:1862.

**Operands** *dbname*              The name of the database. The default database is hadb.

**Examples** EXAMPLE 1 Using resourceinfo

```
hadbm resourceinfo
```

```
Databuffer pool:
```

| NodeNo | Avail | Free | Access | Misses | Copy-on-write |
|--------|-------|------|--------|--------|---------------|
| 3      | 198   | 198  | 201    | 0      | 0             |
| 4      | 198   | 198  | 217    | 0      | 0             |
| 5      | 198   | 198  | 194    | 0      | 0             |
| 6      | 198   | 198  | 43     | 0      | 0             |

```
Locks:
```

| NodeNo | Avail | Free  | Waits |
|--------|-------|-------|-------|
| 3      | 50000 | 50000 | na    |
| 4      | 50000 | 50000 | na    |
| 5      | 50000 | 50000 | na    |
| 6      | 50000 | 50000 | na    |

```
Log buffer:
```

| NodeNo | Avail | Free |
|--------|-------|------|
| 3      | 44    | 11   |
| 4      | 44    | 11   |
| 5      | 44    | 11   |

**EXAMPLE 1** Using resourceinfo (Continued)

6 44 22

Node internal log buffer:

| NodeNo | Avail | Free |
|--------|-------|------|
| 3      | 11    | 11   |
| 4      | 11    | 11   |
| 5      | 11    | 11   |
| 6      | 11    | 11   |

**Exit Status** 0 command executed successfully

1 error in executing the command

**Diagnostics** 22002 specified database does not exist

22105 Database [hadb] is not running

**See Also** [hadbm-clear\(1\)](#), [hadbm-clearhistory\(1\)](#), [hadbm-delete\(1\)](#), [hadbm-deviceinfo\(1\)](#), [hadbm-status\(1\)](#), [hadbm-restart\(1\)](#), [hadbm-start\(1\)](#), [hadbm-status\(1\)](#), [hadbm-stop\(1\)](#),

**Name** hadbm restart— restarts the database

**Synopsis** hadbm restart [-adminpasswordfile=*filename*] [-agent=*ma\_url*]  
[-scrollprogress] [-no-rolling] [*dbname*]

**Description** Use the hadbm restart command to restart the database. Once the database is restarted, it returns to the previous state or better. If the database name is specified, the database must exist. If the database name is not specified, the default database is restarted. The default database is hadb.

In interactive mode, the hadbm restart command prompts for a confirmation before restarting the database.

|                                       |                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Options</b> -W --adminpasswordfile | The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.                                                                                                                                                                                                       |
| -m -agent                             | Identifies the URL to the Management Agent. The default is localhost:1862.                                                                                                                                                                                                                                                                    |
| -g -no-rolling                        | This option restarts all nodes in the HADB at once with possible loss of service. If this option is not specified, the hadbm restarts the nodes one by one and maintains the availability of the HADB. If the option is specified, it stops all nodes in parallel and starts them in parallel. During this period, the HADB is not available. |
| -c -scrollprogress                    | If the -scrollprogress option is specified, the progress messages scroll down the screen, instead of being overwritten. The progress bar will not be displayed if the --quiet option is specified. By default, progress messages are not specified.                                                                                           |

**Operands** *dbname* The name of the database. The default database is hadb.

**Examples** EXAMPLE 1 Using restart with a database identified

```
hadbm restart mydatabase
This command will restart the named database.
Type "yes" or "y" to confirm this operation, anything else to cancel: y
Database successfully restarted
```

EXAMPLE 2 Using restart with no rolling

```
hadbm restartnode --no-rolling mydatabase
This command will restart the named database.
Type "yes" or "y" to confirm this operation, anything else to cancel: y
Database successfully restarted
```

|                    |                                                                                                                                                                                                                                                                              |                                               |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>Exit Status</b> | 0                                                                                                                                                                                                                                                                            | command executed successfully                 |
|                    | 1                                                                                                                                                                                                                                                                            | error in executing the command                |
| <b>Diagnostics</b> | 22002                                                                                                                                                                                                                                                                        | specified database does not exist             |
|                    | 22105                                                                                                                                                                                                                                                                        | database is not running                       |
|                    | 22106                                                                                                                                                                                                                                                                        | database could not be restarted               |
|                    | 22107                                                                                                                                                                                                                                                                        | database could not return to a previous state |
|                    | 22108                                                                                                                                                                                                                                                                        | invalid database state                        |
| <b>See Also</b>    | <a href="#">hadbm-addnodes(1)</a> , <a href="#">hadbm-clear(1)</a> , <a href="#">hadbm-delete(1)</a> , <a href="#">hadbm-list(1)</a> <a href="#">hadbm-refragment(1)</a> ,<br><a href="#">hadbm-start(1)</a> , <a href="#">hadbm-status(1)</a> <a href="#">hadbm-stop(1)</a> |                                               |

**Name** hadbm restartnode– restarts the specified node

**Synopsis** hadbm restartnode [-adminpasswordfile=*filename*]  
 [-agent=*ma\_url*] [-startlevel=*level*] [-scrollprogress]  
*node\_number* [*dbname*]

**Description** Use the hadbm restartnode command to restart the node. The node is restarted by running the startup procedure on the node. The mirror node of the node to be restarted must be up. The node is restarted in the specified start level. The start level indicates the environmental conditions the node should take into consideration while starting. The valid start levels are:

| Start Level      | Description                                                                                                |
|------------------|------------------------------------------------------------------------------------------------------------|
| normal (default) | This start level is used when the node has been stopped earlier in a controlled way (default).             |
| repair           | This start level forces an active node to repair data from its mirror node.                                |
| initialize       | This start level reinitializes the devices for the node, and forces a repair of data from its mirror node. |

In interactive mode, the hadbm restartnode command prompts for a confirmation before restarting the node.

**Options**

- W - -adminpasswordfile      The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.
- m -agent                      Identifies the URL to the Management Agent. The default is localhost:1862.
- l -startlevel                indicates the start level to be used to start the specified node. The default start level is normal.
- c -scrollprogress            If the -scrollprogress option is specified, the progress messages scroll down the screen, instead of being overwritten. The progress bar will not be displayed if the --quiet option is specified. By default, progress messages are not specified.

**Operands**

- node\_number*                A positive integer. The node number must be an existing node that is in a running state in the database.
- dbname*                      The name of the database. The default database is hadb.

**Examples** EXAMPLE 1 Using restartnode on the default database

```
hadbm restartnode 2
```

This command will restart the node.

Type "yes" or "y" to confirm this operation, anything else to cancel: y

Node successfully restarted

## EXAMPLE 2 Using restartnode with a database identified

```
hadbm restartnode 2 mydatabase
```

This command will restart the node.

Type "yes" or "y" to confirm this operation, anything else to cancel: y

Node successfully restarted

|                    |       |                                                  |
|--------------------|-------|--------------------------------------------------|
| <b>Exit Status</b> | 0     | command executed successfully                    |
|                    | 1     | error in executing the command                   |
| <b>Diagnostics</b> | 22002 | specified database does not exist                |
|                    | 22082 | start level is not a recognized level            |
|                    | 22087 | mirror node of the specified node is not running |
|                    | 22088 | node is not running                              |
|                    | 22091 | node could not be restarted                      |

**See Also** [hadbm-addnodes\(1\)](#), [hadbm-list\(1\)](#)[hadbm-startnode\(1\)](#), [hadbm-stopnode\(1\)](#)



**Name** hadbm set– sets the value of the specified configuration attributes to the identified values

**Synopsis** hadbm set [ -adminpasswordfile=*filename*] [-agent=*ma\_url*]  
[-scrollprogress] {*attribute\_name\_value\_list*} [*dbname*]

**Description** The hadbm set command is used to reconfigure the database. Multiple configuration attributes can be modified in one single set operation. You can use a comma or space separated list of name=value pairs. If using a space separated list, use quotation marks to preserve the spaces. The writeable configuration attributes are as follows:

| Variable              | Range            | Default                    |
|-----------------------|------------------|----------------------------|
| ConnectionTrace       | ture/false       | false                      |
| CoreFile              | true/false       | false                      |
| DataBufferPoolSize    | 16–2047          | 200 MB                     |
| DataDeviceSize        | 32–262144        | 1024 MB                    |
| DevicePath            | n/a              | n/a                        |
| EagerSessionThreshold | 0–100            | 50 (% of NumberOfSessions) |
| Eager SessionTimeout  | 0–2147483647     | 120 seconds                |
| EventBufferSize       | 0–2097152        | 0 MB                       |
| HistoryPath           | n/a              | n/a                        |
| InternalLogBufferSize | 4–128            | 12 MB                      |
| LogBufferSize         | 4–2047           | 48 MB                      |
| MaxTables             | 200–1200         | 1200                       |
| NationalCollation     | <collation>      | binary                     |
| NumberOfDataDevices   | 1–8              | 1                          |
| NumberOfLocks         | 20000–1073741824 | 50000                      |
| NumberOfSessions      | 1–10000          | 100                        |
| PackageName           | n/a              | V4.x.x.x                   |
| RelalgDeviceSize      | 32–262144        | 128 MB                     |
| SQLTraceMode          | none/short/full  | none                       |
| SessionTimeout        | 0–2147483647     | 1800 seconds               |
| StartRepairDelay      | 0–100000         | 20 seconds                 |
| StatInterval          | 0–600            | 600 seconds                |

| Variable       | Range      | Default        |
|----------------|------------|----------------|
| SyslogFacility | <facility> | local0         |
| SyslogLevel    | <level>    | warning        |
| SyslogPrefix   | <string>   | hadb-<db_name> |
| TakeoverTime   | 500-16000  | 10000 MS       |

Valid values for NationalCollation (<collation>) are: binary/en\_US/de\_DE/fr\_FR/zh\_CN/ja\_JA. Additionally, each of these values except "binary" may have a prefix "#ci", "#ai" or "#ci#ai" added to indicate case insensitivity, accent insensitivity or both.

The values of the configuration attributes will be set into the database configuration. Use the `hadbm get` command to get the new value of an attribute. When the value part of an attribute is missing, an error message will be returned. Use the `hadbm get` command to view the list of default values.

Setting the database attribute may require the system to do a rolling restart of the `hadb` nodes. The database must be in Fault Tolerant or HA Fault Tolerant state before using the `hadbm set` command.

The `JdbcUrl` cannot be set with either the `hadbm set` or `hadbm create` commands. However, the `hadbm create` or `hadbm addnodes` commands derive the `JdbcUrl` value from values given for `--hosts` and `-portbase` options. So, there is no need to set this variable.

The `set` command can be used to do an online upgrade of the database. A pre-condition for online upgrade is that the new version of the HADB software has been installed on all the hosts, and is registered in the domain.

To do an online upgrade, modify the `packagename` attribute and set it to the name of the new package.

|                |                                      |                                                                                                                                                                                                                                                                               |
|----------------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Options</b> | <code>-W - -adminpasswordfile</code> | The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.                                                                                                                                       |
|                | <code>-m -agent</code>               | Identifies the URL to the Management Agent. The default is <code>localhost:1862</code> .                                                                                                                                                                                      |
|                | <code>-c -scrollprogress</code>      | If the <code>-scrollprogress</code> option is specified, the progress messages scroll down the screen, instead of being overwritten. The progress bar will not be displayed if the <code>--quiet</code> option is specified. By default, progress messages are not specified. |

---

**Operands** *attribute\_name\_value\_list*      A list of variables with values to be set. All the attribute names must be supported attributes.

*dbname*      The name of the database. The default database is hadb.

**Examples** EXAMPLE 1 Using set

```
hadbm set "connectiontrace=true numberOfLocks=110000"
Database attributes successfully set.
```

**Exit Status** 0      command executed successfully

1      error in executing the command

**Diagnostics** 22002      specified database does not exist

22033      invalid value set for attributes

22071      attributes are not recognized

22072      attribute is not writeable

**See Also** [hadbm-addnodes\(1\)](#), [hadbm-get\(1\)](#), [hadbm-clear\(1\)](#), [hadbm-delete\(1\)](#),  
[hadbm-list\(1\)](#), [hadbm-start\(1\)](#), [hadbm-restart\(1\)](#), [hadbm-status\(1\)](#), [hadbm-stop\(1\)](#)

- Name** hadbm setadminpassword– sets the adminpassword for the management domain
- Synopsis** hadbm setadminpassword [ -adminpasswordfile=*filename*]  
[-newadminpasswordfile=*filename*] [-agent=*ma\_url*]
- Description** Use the hadbm setadminpassword command to change the admin password for a management domain. If no options are provided with the command the user will be prompted for both the old and new passwords interactively. Passwords less than 8 characters long are assumed unsafe passwords, and the user will be warned. However, unsafe passwords will be accepted.
- Options**
- W -adminpasswordfile The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.
  - Z -newadminpasswordfile Use the adminpasswordfile option to provide the new password as a path to a file that contains the password. It is also possible to specify the new password interactively.
  - U -no-adminauthentication Use this option to enable access to a management domain without a password.
  - m -agent Identifies the URL to the Management Agent. The default is localhost:1862.
- Examples**
- EXAMPLE 1** Using setadminpassword to change admin password
- ```
hadbm setadminpassword --agent=host1,host2:41108
Please type current password for admin system user: *****
Please type new password for admin system user: *****
Please retype new password for admin system user: *****
Password successfully updated.
```
- EXAMPLE 2** Using setadminpassword to not require a password
- ```
hadbm setadminpassword --no-adminauthentication --agent=host1,host2:41108
Please type current password for admin system user: *****
This command will now update the admin password. Type "yes" or "y" to update the password for the ad
Password successfully updated.
```
- Exit Status**
- 0 command executed successfully
  - 1 error in executing the command
- Diagnostics**
- 22005 Authentication failed
  - 22006 The agents specified could not be reached
- See Also** [hadbm-addnodes\(1\)](#), [hadbm-get\(1\)](#), [hadbm-clear\(1\)](#), [hadbm-delete\(1\)](#), [hadbm-list\(1\)](#), [hadbm-start\(1\)](#), [hadbm-restart\(1\)](#), [hadbm-status\(1\)](#), [hadbm-stop\(1\)](#)

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                     |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>        | hadbm start– starts the database                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                     |
| <b>Synopsis</b>    | hadbm start [-adminpasswordfile= <i>filename</i> ] [-agent= <i>ma_url</i> ]<br>[-scrollprogress] [ <i>dbname</i> ]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                     |
| <b>Description</b> | Use the hadbm start command to start the database. Only the nodes that were running before the database was stopped will be started. If the database name is specified, it should be an existing database. If the database name is not specified, the default database is used. If one or more mirror node pairs have stopped simultaneously due to a power outage, machine reboot or some other disaster (i.e., the hadb instance is in a non-functional state), then the database instance cannot be started. In such a case, use the hadbm clear command to start the database and recreate the schema. |                                                                                                                                                                                                                                                     |
| <b>Options</b>     | -W -adminpasswordfile                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.                                                                                                             |
|                    | -m -agent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Identifies the URL to the Management Agent. The default is localhost:1862.                                                                                                                                                                          |
|                    | -c -scrollprogress                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | If the -scrollprogress option is specified, the progress messages scroll down the screen, instead of being overwritten. The progress bar will not be displayed if the --quiet option is specified. By default, progress messages are not specified. |
| <b>Operands</b>    | <i>dbname</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | The name of the database. The default database is hadb.                                                                                                                                                                                             |
| <b>Examples</b>    | <p><b>EXAMPLE 1</b> Using start with a database identified</p> <pre>hadbm start mydatabase Database successfully started</pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                     |
| <b>Exit Status</b> | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | command executed successfully                                                                                                                                                                                                                       |
|                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | error in executing the command                                                                                                                                                                                                                      |
| <b>Diagnostics</b> | 22002                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | specified database does not exist                                                                                                                                                                                                                   |
|                    | 22095                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | database could not be started                                                                                                                                                                                                                       |
|                    | 22096                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | database is already running                                                                                                                                                                                                                         |
|                    | 22097                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | some nodes could not be started                                                                                                                                                                                                                     |
|                    | 22098                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | database (hadb) could not be started. The stopstate cannot be determined. In case of uncontrolled stop of the database, use the hadbm clear command to start the database.                                                                          |

**See Also** [hadbm-addnodes\(1\)](#), [hadbm-clear\(1\)](#), [hadbm-delete\(1\)](#), [hadbm-list\(1\)](#),  
[hadbm-refragment\(1\)](#), [hadbm-restart\(1\)](#), [hadbm-status\(1\)](#)[hadbm-stop\(1\)](#)

**Name** hadbm startnode– starts the specified node

**Synopsis** hadbm startnode [-adminpasswordfile=*filename*] [-agent=*ma\_url*]  
 [-startlevel=*level*] [-scrollprogress] *node\_number*  
 [*dbname*]

**Description** The hadbm startnode command starts the node by running the startup procedure on the node. The node is started in the specified start level. The start level indicates the environmental conditions the node should take into consideration while starting. The valid start levels are as follows:

| Start Level | Description                                                                                               |
|-------------|-----------------------------------------------------------------------------------------------------------|
| normal      | This start level is used when the node was earlier stopped in a controlled way (default).                 |
| repair      | This start level forces an active node to repair data from its mirror node.                               |
| initialize  | This start level reinitializes the devices for the node, and force a repair of data from its mirror node. |

**Options**

- w --adminpasswordfile      The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.
- m -agent                      Identifies the URL to the Management Agent. The default is localhost:1862.
- l -startlevel                Indicates the start level to be used to start the specified node(s). The default start level is normal.
- c -scrollprogress            If the -scrollprogress option is specified, the progress messages scroll down the screen, instead of being overwritten. The progress bar will not be displayed if the --quiet option is specified. By default, progress messages are not specified.

**Operands** *node\_number*                      A positive integer. The node number specified must be an existing node that is in a running state in the database.

*dbname*                                      The name of the database. The default database is hadb.

**Examples** **EXAMPLE 1** Using startnode on the default database

```
hadbm startnode 1
Node successfully started
```

**EXAMPLE 2** Using startnode with the startlevel and database identified

```
hadbm startnode --startlevel=normal 1 mydatabase
```

Node successfully started

|                    |       |                                       |
|--------------------|-------|---------------------------------------|
| <b>Exit Status</b> | 0     | command executed successfully         |
|                    | 1     | error in executing the command        |
| <b>Diagnostics</b> | 22002 | specified database does not exist     |
|                    | 22081 | node is already running               |
|                    | 22082 | start level is not a recognized level |
|                    | 22083 | node could not be started             |

**See Also** [hadbm-addnodes\(1\)](#), [hadbm-list\(1\)](#), [hadbm-restartnode\(1\)](#), [hadbm-stopnode\(1\)](#)



---

**Name** hadbm status– shows the state of the database

**Synopsis** `hadbm status [-nodes] [-adminpasswordfile=filename] [-agent=ma_url] [dbname]`

**Description** Use the `hadbm status` command to get the current state of the database. The state can be one of the following:

|                          |                                                                                                     |
|--------------------------|-----------------------------------------------------------------------------------------------------|
| HA Fault Tolerant (HAFT) | The database has at least one spare node on each DRU.                                               |
| Fault Tolerant (FT)      | All mirrored node pairs are up and running.                                                         |
| Operational (O)          | One node in each mirrored node pair is up and running.                                              |
| Non-operational (NO)     | One or more mirrored node pair is missing both nodes. An arbitrary SQL transaction may not succeed. |
| Stopped (S)              | No nodes are running.                                                                               |
| Unknown (U)              | Unable to determine the state of the database.                                                      |

If a database is named, it must already exist. If a database is not named, the default database is used. The default database is `hadb`.

**Options**

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <code>-n -nodes</code>             | If specified, displays the node status information. The following information is displayed for each node in the database: <ul style="list-style-type: none"> <li>▪ Node number</li> <li>▪ Name of the machine where the node is running</li> <li>▪ Port number of the node</li> <li>▪ Role of the node</li> <li>▪ State of the node</li> <li>▪ Number of the corresponding mirror node</li> </ul> |
| <code>-W -adminpasswordfile</code> | The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.                                                                                                                                                                                                                                                           |
| <code>-m -agent</code>             | Identifies the URL to the Management Agent. The default is <code>localhost:1862</code> .                                                                                                                                                                                                                                                                                                          |

**Operands** *dbname* The name of the database. The default database is `hadb`.

**Examples**

```
EXAMPLE 1 Using status
hadbm status
Database Status
hadb HAFaultTolerant
```

**Exit Status** 0 command executed successfully  
1 error in executing the command

**Diagnostics** 22002 specified database does not exist

**See Also** [hadbm-clear\(1\)](#), [hadbm-clearhistory\(1\)](#), [hadbm-delete\(1\)](#), [hadbm-status\(1\)](#),  
[hadbm-restart\(1\)](#), [hadbm-resourceinfo\(1\)](#), [hadbm-start\(1\)](#), [hadbm-stop\(1\)](#),

**Name** hadbm stop— gracefully stops the database

**Synopsis** hadbm stop [-adminpasswordfile=*filename*] [-agent=*ma\_url*]  
[-scrollprogress]] [*dbname*]

**Description** Use the hadbm stop command to stop the database gracefully. It is a good practice to stop the database if some maintenance activity is planned that affects the mirror nodes simultaneously. The data is intact in a database that is stopped gracefully, in contrast to the one that has not been stopped gracefully. Once you stop the database using the hadbm stop command, use the hadbm start command to start the database. If the database name is specified, the named database must exist. If the database name is not identified, the default database is used. The default database is hadb.

In interactive mode, the hadbm stop command prompts for a confirmation before stopping the node.

**Options**

|                        |                                                                                                                                                                                                                                                     |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -W --adminpasswordfile | The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.                                                                                                             |
| -m -agent              | Identifies the URL to the Management Agent. The default is localhost:1862.                                                                                                                                                                          |
| -c -scrollprogress     | If the -scrollprogress option is specified, the progress messages scroll down the screen, instead of being overwritten. The progress bar will not be displayed if the --quiet option is specified. By default, progress messages are not specified. |

**Operands** *dbname*                      The name of the database. The default database is hadb.

**Examples** EXAMPLE 1 Using stop with a database identified

```
hadbm stop mydatabase
This command will stop the named database.
Type "yes" or "y" to confirm this operation, anything else to cancel: y
Database successfully stopped
```

**Exit Status**

|   |                                |
|---|--------------------------------|
| 0 | command executed successfully  |
| 1 | error in executing the command |

**Diagnostics**

|       |                                        |
|-------|----------------------------------------|
| 22002 | specified database does not exist      |
| 22101 | database could not be stopped          |
| 22102 | database is already in a stopped state |
| 22103 | database is not fully stopped          |

**See Also** [hadbm-addnodes\(1\)](#), [hadbm-clear\(1\)](#), [hadbm-delete\(1\)](#), [hadbm-list\(1\)](#)[hadbm-refragment\(1\)](#), [hadbm-restart\(1\)](#), [hadbm-start\(1\)](#), [hadbm-status\(1\)](#)

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                     |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>        | hadbm stopnode– gracefully stops the specified node                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                     |
| <b>Synopsis</b>    | hadbm stopnode [-adminpasswordfile= <i>filename</i> ] [-agent= <i>ma_url</i> ]<br>[-no-repair] [-scrollprogress] <i>node_number</i> [ <i>dbname</i> ]                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                     |
| <b>Description</b> | <p>The hadbm stopnode command stops the node gracefully. The mirror node of the node that is to be stopped must be running. If a node's mirror node is not up, the node will not be stopped and an error message is displayed. By default, a spare node can replace the stopped node by copying the data from the stopped node's mirror. If there is no spare available, an error message is displayed.</p> <p>In interactive mode, the hadbm stopnode command prompts for a confirmation before stopping the node.</p>             |                                                                                                                                                                                                                                                     |
| <b>Options</b>     | -W --adminpasswordfile                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file.                                                                                                             |
|                    | -m -agent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Identifies the URL to the Management Agent. The default is localhost:1862.                                                                                                                                                                          |
|                    | -R -no-repair                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | If specified, a spare will not replace the stopping node.                                                                                                                                                                                           |
|                    | -c -scrollprogress                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | If the -scrollprogress option is specified, the progress messages scroll down the screen, instead of being overwritten. The progress bar will not be displayed if the --quiet option is specified. By default, progress messages are not specified. |
| <b>Operands</b>    | <i>node_number</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | A positive integer. The node number of the node to be stopped.                                                                                                                                                                                      |
|                    | <i>dbname</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | The name of the database. The default database is hadb.                                                                                                                                                                                             |
| <b>Examples</b>    | <p><b>EXAMPLE 1</b> Using stopnode</p> <pre>hadbm stopnode 1</pre> <p>This command will stop the node.<br/>Type "yes" or "y" to confirm this operation, anything else to cancel: y<br/>Node successfully stopped</p> <p><b>EXAMPLE 2</b> Using stopnode with no-repair option</p> <pre>hadbm stopnode --no-repair 1 mydatabase</pre> <p>This command will stop the node.<br/>Type "yes" or "y" to confirm this operation, anything else to cancel: y<br/>hadbm:Info 22202 Repair was not initiated while stopping the node {0}.</p> |                                                                                                                                                                                                                                                     |
| <b>Exit Status</b> | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | command executed successfully                                                                                                                                                                                                                       |
|                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | error in executing the command                                                                                                                                                                                                                      |

|                    |       |                                                               |
|--------------------|-------|---------------------------------------------------------------|
| <b>Diagnostics</b> | 22002 | specified database does not exist                             |
|                    | 22085 | no spare to pickup (if <code>--no-repair</code> is specified) |
|                    | 22086 | node could not be stopped                                     |
|                    | 22087 | no mirror node                                                |
|                    | 22088 | node is not running                                           |
|                    | 22202 | repair not initiated                                          |

**See Also** [hadbm-get\(1\)](#), [hadbm-clear\(1\)](#), [hadbm-addnodes\(1\)](#), [hadbm-restartnode\(1\)](#), [hadbm-start\(1\)](#), [hadbm-startnode\(1\)](#), [hadbm-stop\(1\)](#)

- Name** hadbm unregisterpackage– removes registered HADB packages from the management domain
- Synopsis** hadbm unregisterpackage [-hosts=*hostlist*] [-adminpasswordfile=*filename*] [-agent=*ma\_url*] [*package\_name*]
- Description** Use the hadbm unregisterpackage command to remove the HADB packages that are registered with the management domain. The default package name is a string starting with V and containing the version number of the hadbm program. If the -hosts option is omitted, the hostlist defaults to the enabled hosts where the package is registered.
- Before using the hadbm unregisterpackage command, ensure that all management agents are configured and running on all the hosts in the hostlist, the management agent's repository is available for updates, the package is registered in the management domain, and no existing databases are configured to run on the package about to be unregistered.
- Options**
- |                        |                                                                                                                                         |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| -W --adminpasswordfile | The file from which the administrator user password is read. Passwords can only be supplied interactively or through the password file. |
| -H -hosts              | A comma-separated or double quote enclosed space separated list of hosts to register the package on.                                    |
| -m --agent             | Identifies the URL to the Management Agent. The default is localhost:1862.                                                              |
- Operands** *package\_name* The name of the package you wish to remove from the domain.
- Examples**
- EXAMPLE 1** Unregistering a software package named v4
- ```
hadbm unregisterpackage v4
Package successfully unregistered
```
- EXAMPLE 2** Unregistering a software package named v4 from specific hosts in the domain
- ```
hadbm unregisterpackage --hosts=host1,host2,host3 v4
Package successfully unregistered
```
- Exit Status**
- |   |                                |
|---|--------------------------------|
| 0 | command executed successfully  |
| 1 | error in executing the command |
- Diagnostics**
- |       |                                                                             |
|-------|-----------------------------------------------------------------------------|
| 22172 | the software package is not registered in the domain                        |
| 22173 | the software package is in use by a database instance and cannot be removed |
- See Also** [hadbm\(1M\)](#), [hadbm-registerpackage\(1\)](#), [hadbm-listpackages\(1\)](#)

**Name** hadbm version– displays the hadbm version information

**Synopsis** hadbm version

**Options** -V -version Displays details of the HADB version.

**Description** The hadbm version command to display the HADB version information.

**Examples** EXAMPLE 1 Using version

```
hadbm version
```

```
Sun Java System High Availability Database 4.4 Management Client <version> (<platform>)  
Copyright 2006 Sun Microsystems, Inc. All rights reserved
```

**Exit Status**

|   |                                |
|---|--------------------------------|
| 0 | command executed successfully  |
| 1 | error in executing the command |

**See Also** [hadbm-help\(1\)](#)



REFERENCE

Application Server 9.1 HADB Section 1M:  
Utility Commands

**Name** hadbm- utility for managing the High Availability Database (HADB)

**Synopsis** hadbm *command* [*-short-option option\_argument* | *-short-option=option\_argument* *-long\_option=option\_argument* [*operand*]\*

hadbm *command\_name* -help |hadbm help

**Description** The hadbm command identifies the operation or task to perform. Commands are case-sensitive. One or more command options can be specified in one of the following formats:

*-option=value*  
*-option value*  
*-short-option=value*  
*-short-option value*

Options, like commands, are case-sensitive. Options require argument values except boolean options which toggle to switch a feature ON or OFF. Operands appear after the argument values and are set off by a space or an equal sign (=). Optional options and operands are identified in enclosed square brackets [ ]. For commands that take a database name operand, if a database is not specified, the default database is used. The default database is hadb.

**Commands**

addnodes

adds nodes to the named database

clear

initializes all the data space on all nodes and starts the database

clearhistory

clears the history files on the database

create

creates a database instance

createdomain

creates a management domain of the listed HADB hosts

delete

removes the database

deletedomain

deletes the HADB management domain

deviceinfo

displays information about disk storage devices on each active data node

disablehost

selectively disables a host in the management domain

extenddomain

extends the current HADB management domain

`get`  
gets the value of the specified configuration parameter

`help`  
displays all the subcommands for the hadbm utility

`list`  
lists all the existing databases

`listdomain`  
lists all hosts defined in the management domain

`listpackages`  
lists the packages registered in the management domain

`reducedomain`  
removes hosts from the HADB management domain

`refragment`  
refragments the schema

`registerpackage`  
registers the HADB packages in the management domain

`resourceinfo`  
displays database resource information

`restart`  
restarts the database

`restartnode`  
restarts the specified node

`set`  
sets the value of the specified configuration attributes to the identified values

`setadminpassword`  
sets the adminpassword for the management domain

`start`  
starts the database

`startnode`  
starts the specified node

`status`  
shows the state of the database

`stop`  
gracefully stops the database

`stopnode`  
gracefully stops the specified node

unregisterpackage

removes registered HADB packages from the management domain

version

displays the hadbm version information

|                       |              |                                                                                                                            |
|-----------------------|--------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Common Options</b> | -q -quiet    | Performs the operation silently without any descriptive messages.                                                          |
|                       | -? -help     | Displays a brief description of the hadbm utility and all the supported commands.                                          |
|                       | -v -version  | Displays the version details of the hadbm utility.                                                                         |
|                       | -y -yes      | Launches the command in non-interactive mode.                                                                              |
|                       | -f -force    | Launches the command in non-interactive mode, and does not return error if the post condition is already achieved.         |
|                       | -e -echo     | Displays the commands with all the options and their user-defined values or the default values; then launches the command. |
|                       | -j -javahome | Path to the Java installation to be used for running hadbm.                                                                |

# Index

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## A

adds new nodes to the named database, initializes devices for the new nodes, and refragments the schema, 8

## C

clears the history files on the database, 13  
configures and starts the HADB Management Agent, 42  
creates a database instance, 15  
creates a management domain of the listed HADB hosts, 22

## D

displays a list of all the subcommands to administer HADB, 35  
displays information about disk storage devices on each active data node, 27  
displays the hadbm version information  
  hadbm-version, 72

## E

extends the current HADB management domain by adding the specified hosts, 30

## G

gets the value of the specified configuration attribute, 32  
gracefully stops the specified node, 69

## H

hadbm, 74  
  hadbm addnodes, 8  
  hadbm clear, 11  
  hadbm clearhistory, 13  
  hadbm create, 15  
  hadbm createdomain, 22  
  hadbm delete, 24  
  hadbm deletedomain, 26  
  hadbm deviceinfo, 27  
  hadbm disablehost, 29  
  hadbm extenddomain, 30  
  hadbm-get, 32  
  hadbm help, 35  
  hadbm list, 38  
  hadbm listdomain, 39  
  hadbm listpackages, 40  
  hadbm recoverhost, 44  
  hadbm reducedomain, 45  
  hadbm refragment, 47  
  hadbm registerpackage, 49  
  hadbm restart, 53  
  hadbm set, 57  
  hadbm setadminpassword, 60  
  hadbm start, 61

hadbm startnode, 63  
hadbm status, 65  
hadbm stopnode, 69  
hadbm version displays the hadbm version  
information, 72

## L

lists all hosts defined in the management domain, 39  
lists all the existing databases, 38  
lists the packages registered in the management  
domain, 40

## M

ma, 42

## R

recover a host in the management domain, 44  
refragments the database schema, 47  
registers HADB packages in the management  
domain, 49  
reinitializes all the dataspace on all nodes and starts the  
database, 11  
removes hosts from the HADB management  
domain, 45  
removes the database, 24  
removes the HADB management domain, 26  
restarts the database, 53

## S

selectively disables a host in the management  
domain, 29  
sets the adminpassword for the management  
domain, 60  
sets the value of the specified configuration attributes to  
the identified values, 57  
shows the state of the database, 65  
starts the database, 61

starts the specified node, 63

## U

utility for managing the High Availability Database  
(HADB), 74