



Cisco Database Connection Commands

Use the commands in this chapter to configure and monitor the Cisco Database Connection feature. For Cisco Database Connection configuration information and examples, refer to the “Configuring Cisco Database Connection” chapter in the *Bridging and IBM Networking Configuration Guide*.

clear dbconn connection

Use the **clear dbconn connection** privileged EXEC command to break a client connection.

clear dbconn connection *connection-id*

Syntax Description	<i>connection-id</i>	Client connection identification number.
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Command Modes	Privileged EXEC
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Command History	Release	Modification
	11.3(2)T	This command was introduced.

Examples In the following example, the client connection 786A7c is cleared:

```
Router# clear dbconn connection 786A7C
```

```
Connection 786A7C cleared
```

Related Commands	Command	Description
	show dbconn connection	Displays the status of connections made to Database Connection servers.

dbconn license

Use the **dbconn license** privileged EXEC command to configure the Database Connection license for StarSQL clients. Use the **no** form of this command to remove the license.

dbconn license *license-key*

no dbconn license

Syntax Description	<i>license-key</i>	License key obtained from StarQuest Software Inc. The license determines the maximum number of StarSQL connections to a Cisco router configured with Connection Database. The license key is a 32-character hexadecimal string and it is not case sensitive.
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Command Modes	Privileged EXEC.
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Command History	Release	Modification
	11.3(2)T	This command was introduced.

Usage Guidelines	A Database Connection license is required if you use StarSQL clients.
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Examples	In the following example, a StarSQL license is configured for StarSQL client connections: <pre>dbconn license F66F84ABF809AF020HE0RC33KJH0MQ89</pre>
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Related Commands	Command	Description
	show dbconn license	Displays the status of licensed StarSQL connections made to Database Connection servers.

dbconn ping

Use the **dbconn ping** EXEC command to check whether or not the Database Connection servers are connecting to the relational databases on the IBM systems.

dbconn ping *server-name* [**user** *user-id*] [**password** *password*] [**rdbname** *rdbname*]

Syntax Description		
	<i>server-name</i>	Name of the Database Connection server.
	<i>user-id</i>	(Optional) Userid used to connect to the IBM system. If no userid is specified, the ping connection is made without APPC security. The IBM system's security settings determine whether or not the ping can succeed.
	<i>password</i>	(Optional) Password used to connect to the IBM system.
	<i>rdbname</i>	(Optional) The name of the relational database. If RDB name is not specified, the RDB name configured for the server is used.

Command Modes EXEC

Command History	Release	Modification
	11.3(2)T	This command was introduced.

Examples The following is sample output from the **dbconn ping** command:

```
Router# dbconn ping canopus
```

```
RDB named NEVADA on database server CANOPUS successfully contacted!
Database server product id is QSQ03020, DB2 for OS/400 V3R2
Elapsed time was 00:00:00
```

Related Commands	Command	Description
	show dbconn server	Displays the status of Database Connection servers.

dbconn server

Use the **dbconn server** Privileged EXEC mode command to configure a Database Connection server in a Cisco router. Use the **no** form of this command to unconfigure and disable the server.

```
dbconn server server-name [ipaddress ip-address] [port port-number] [rdbname rdbname]
  [rlu remote-lu] [mode mode] [tpname tp-name] [idle-timeout minutes] [window-size bytes]
```

```
no dbconn server
```

Syntax Description	
server-name	Name of the Database Connection server. Server names are user-defined strings up to 16 characters.
ipaddress ip-address	(Optional) IP address used by the Database Connection server to receive a connection. When a connection arrives, this IP address is used for matching and selecting the server from multiple configured servers.
port port-number	(Optional) The port used to listen for connections. If no port is specified, the default is 446.
rdbname rdbname	(Optional) The remote database name on host. When a connection arrives, this name is used to identify and select the appropriate server from multiple configured servers. The string is used to match the RDB name sent by the client in the DRDA data stream at connect time. The default RDB name is an asterisk (*) which indicates that this Database Connection server serves any remote database.
rlu remote-lu	(Optional) APPC remote LU used to allocate the connection to the IBM system. An example is NETA.S103B345. If no remote LU is specified, the default is the configured server name which is set to uppercase and truncated to eight characters. An RLU need not be qualified with a NETID. If you omit the NET ID, the NET ID of the router's APPN control point is used to fully qualify the LU name.
mode mode	(Optional) APPC mode used to allocate the conversation to the IBM system. If no mode is specified, the default is #INTER.
tpname tp-name	(Optional) APPC remote transaction program name used to allocate the conversation to the IBM system. If no TP name is specified the default is the architected DRDA TP name \x076DB.

idle-timeout <i>idle-timeout</i>	(Optional) Time in minutes to wait for an idle client. If there is no activity from the client for this amount of time, the connection is forcibly broken. The time spent in waiting for a response from the IBM system is not counted, only idle time in between client requests is counted. The maximum is 1440 minutes (24 hours). If no idle timeout is specified, the default is 0 (zero) for no timeout.
window-size <i>bytes</i>	(Optional) This value is used for the TCP receive window size. If no window size is specified, the default is 4K (4096 KB).

Command Modes

Privileged EXEC.

Command History

Release	Modification
11.3(2)T	This command was introduced.

Usage Guidelines

You can configure more than one Database Connection server per router. There is no limit on the number of Database Connection servers. For each IBM database system in your network, you can configure a Database Connection server in the router configuration.

If you do not specify a port number, DRDA clients in a TCP/IP network expect to use port 446 by default.

Examples

In the following example, a Database Connection server is configured:

```
dbconn server coffee rdbname COFFEE rlu PARIS.COFFEE match idle-timeout 20 window-size 16
```

Related Commands

Command	Description
clear dbconn connection	Breaks a client connection.
dbconn ping	Checks whether the Database Connection servers are connecting to the relational databases on the IBM systems.
show dbconn server	Displays the status of Database Connection servers.
show dbconn ports	Displays information on all ports that are being used by Database Connection to receive connections.

show dbconn connection

Use the **show dbconn connection** EXEC command to display the status of connections made to Database Connection servers.

```
show dbconn connection [connection-id] [server server-name] [user user-id] [rdbname
rdb-name]
```

Syntax	Description
<i>connection-id</i>	(Optional) Display status for specified connection.
server <i>server-name</i>	(Optional) Display connection information for specified server.
user <i>user-id</i>	(Optional) Display connections for specified user ID.
rdbname <i>rdb-name</i>	(Optional) Display connections for specified RDB name.

Defaults Displays all connections if you do not specify *connection-id*.

Command Modes EXEC

Command History	Release	Modification
	11.3(2)T	This command was introduced.

Examples

```
Router# show dbconn connection
```

```
ID      Server      Userid      ClientIPAddress  Connect  Idle
6127E428 SERVERA    ALLIE       198.999.989.36   00:01:26 00:01:12
6127D34C SERVERB    BRIAN       198.999.989.84   00:00:48 00:00:41
```

The following is sample output from the **show dbconn connection** command for a specified connection:

```
Router# show dbconn connection 6127E428
```

```
connection id 6127E428
connection state is active
server is WILLOW
rdbname is KINGSTON
userid is JSMITH
client name is ARIES
local ip-address is 198.999.999.5
local port is 446
client ip-address is 198.999.999.53
client port is 1067
connect time 00:03:51
idle time 00:03:37 (client)
508 bytes received from client
9644 bytes received from host
client is licensed StarSQL
```

Table 57 describes significant fields shown in the display

Table 57 *show dbconn Field Descriptions*

Field	Description
connection id	Identification number of the connection made by a StarSQL client to the Database Connection server.
connection state	Status of the connection made by a StarSQL client.
server	Name of the Database Connection server.
rdbname	Name of the relational database on the IBM system.
userid	Userid of the user connected through a port to the Database Connection server.
client name	Name of the client system.
local ip-address	IP address of the Database Connection server in the router to which the client connects.
local port	Port in the Database Connection server through which the client connects.
client ip-address	IP address of the client connected to the Database Connection server.
client port	Port used by the client to connect to the Database Connection server.
connect time	Time when connection was made by the client to the Database Connection server.
idle time	Amount of time that the active client connection has been idle.

Related Commands

Command	Description
show dbconn license	Displays the status of licensed StarSQL connections made to Database Connection servers.
show dbconn ports	Displays information on all ports that are being used by Database Connection to receive connections.
show dbconn server	Displays the status of Database Connection servers.

show dbconn license

Use the **show dbconn license** EXEC command to display the status of licensed StarSQL connections made to Database Connection servers.

show dbconn license

Syntax Description This command has no arguments or keywords

Command Modes EXEC

Command History	Release	Modification
	11.3(3)T	This command was introduced.

Examples The following is sample output from the **show dbconn license** command:

```
Router# show dbconn license
```

```
Database Connection is licensed for unlimited connections, 2 licensed connections in use
```

Related Commands	Command	Description
	dbconn license	Configures the Database Connection license for StarSQL clients.
	show dbconn connection	Displays the status of connections made to Database Connection servers.
	show dbconn ports	Displays information on all ports that are being used by Database Connection to receive connections.
	show dbconn server	Displays the status of Database Connection servers.

show dbconn ports

Use the **show dbconn ports** EXEC command to display information on all ports that are being used by Database Connection to receive connections.

show dbconn ports

Syntax Description This command has no arguments or keywords.

Command Modes EXEC

Command History	Release	Modification
	11.3(2)T	This command was introduced.

Examples The following is sample output from the **show dbconn ports** command:

```
Router# show dbconn ports
```

```
Port  State
446   listening
447   listening
```

Table 58 describes significant fields shown in the display.

Table 58 *show dbconn ports Field Descriptions*

Field	Description
Port	Port number.
State	Listening or disabled status.

Related Commands	Command	Description
	show dbconn connection	Displays the status of connections made to Database Connection servers.
	show dbconn license	Displays the status of licensed StarSQL connections made to Database Connection servers.
	show dbconn server	Displays the status of Database Connection servers.

show dbconn server

Use the **show dbconn server** EXEC command to display the status of Database Connection servers.

```
show dbconn server [server-name]
```

Syntax Description	
<i>server-name</i>	(Optional) Specific server for which status should be displayed.

Command Modes	
EXEC	

Command History	Release	Modification
	11.3(2)T	This command was introduced.

Examples

The following is sample output from the **show dbconn server** command:

```
Router# show dbconn server
Server      Port  IPAddress      RDBName      State  NumConn
SERVERA    446   0.0.0.0        MATTY        enabled 0
SERVERB    446   0.0.0.0        SCU_DSNM     enabled 4
SERVERC    446   0.0.0.0        DSN4         enabled 0
SERVERD    446   0.0.0.0        MKTG         enabled 0
SERVERE    446   0.0.0.0        ABBY         enabled 6
SERVERF    446   0.0.0.0        DB2510       enabled 0
SERVERG    446   0.0.0.0        ELLE         enabled 3
SERVERH    446   0.0.0.0        SUNSET       enabled 0
SERVERI    446   0.0.0.0        NELL         enabled 1
SERVERJ    446   198.989.999.32 SAMPLE       enabled 0
SERVERK    446   0.0.0.0        DB2410       enabled 0
SERVERL    446   0.0.0.0        SQLDS        enabled 0
SERVERM    446   0.0.0.0        STELLA       enabled 1
SERVERN    446   10.10.19.4    OAK          enabled 2
SERVERO    447   0.0.0.0        DB2510       enabled 0
```

The following is sample output from **show dbconn server** command where the database server willow is specified:

```
Router# show dbconn server willow

server willow
  server state is enabled (accepting connections)
  ip-address is 10.10.11.4
  port is 446
  rdbname is MATTY
  rlu is STARW.MATTY
  mode is LU62STAR
  tpname is DB2
  idle-timeout is 1 minute
```

show dbconn server

```

window-size is 4096 bytes
database server name is DB2
database product id is SQL05000
number of connections is 2000
number of licensed StarSQL connections is 200

```

Table 59 describes significant fields shown in the display.

Table 59 show dbconn server Field Descriptions

Field	Description
server	Server name.
server state	Current state of the server (enabled or disabled).
ip-address	IP address accepted by the Database Connection server.
port	Port number through which the Database Connection server accepts a client connection.
rdbname	Name of the remote database accessed by the Connection Database server.
rlu	Remote SNA LU used when connecting to the database server.
mode	SNA mode used when connecting to the database.
tpname	SNA transaction program name used for DRDA server on the database system.
idle-timeout	Maximum length of time allowed for inactive connections to the Database Connection server.
window-size	TCP receive window size.
database server name	System name returned by the database server. Field shows <i>none</i> until first contact.
database product ID	Database product ID. Field shows <i>none</i> until first contact.
number of connections	Number of all ODBC clients currently connected to the Database connection server.
number of StarSQL connections	Number of licensed StarSQL clients currently connected to the Database connection server.

Related Commands

Command	Description
show dbconn connection	Displays the status of connections made to Database Connection servers.
show dbconn ports	Displays information on all ports that are being used by Database Connection to receive connections.