

**DB2 Version 8 Connectivity Cheat Sheet**  
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**Scenario 1**

From DB2® Linux/Unix®/Windows® machine to DB2 Linux/Unix/Windows machine.

Machine 1 ('libra') Linux/UNIX/Windows	Machine 2 ('mpower') Linux/Unix/Windows
Commands to run on this machine:	Information you need to obtain from this machine, to perform the commands on machine 1:
<pre>db2 catalog tcpip node mpwrnode remote mpower.ca.ibm.com server 50000</pre> <p>Notes:  - 'mpwrnode' is an arbitrary name chosen for the node.  - The IP address can be used instead of the hostname</p>	<p>For this example:</p> <ul style="list-style-type: none"> <li>• mpower.ca.ibm.com = Host name of machine 2.</li> <li>• 50000 = The port used for DB2.</li> </ul> <p>To find out the port used, go to file /etc/services (UNIX) and grep for your DB2 instance name. For example, if your instance name is 'db2inst1', you will normally find entries like this:</p> <pre>db2cdb2inst1 50000/tcp db2idb2inst1 50001/tcp</pre> <p>Pick the port associated with db2cdb2inst1 (note 4th letter 'c')</p> <p>For Windows, review  X:\WINNT\System32\drivers\etc\services</p>
<pre>db2 catalog db a42ds1 at node mpwrnode</pre>	a42ds1 = Name of the database you want to access in machine 2.
<pre>db2 terminate</pre>	
<pre>db2 connect to a42ds1 user &lt;userid&gt; using &lt;password&gt;</pre>	

**What to check if you cannot connect:**

Client machine 'libra'	Database server 'mpower'
<pre>ping mpower.ca.ibm.com</pre>	mpower.ca.ibm.com = Host name of Database Server If you cannot ping there may be problems with the DNS. Try pinging the IP address
<pre>ping 158.228.20.100</pre>	158.228.20.100 = IP address of Database Server This will confirm if there are problems or not with the network.
	<ul style="list-style-type: none"> <li>• Is DB2 started? If not run db2start</li> <li>• Is DB2COMM set to TCPIP?</li> </ul> Check by executing: db2set -all. If this registry variable is not set, you should execute: db2set db2comm=tcPIP

- Is SVCENAME set to the port number or service name in /etc/services?  
Check this parameter by issuing: `db2 get dbm cfg`

## Scenario 2

From DB2 Linux/Unix/Windows machine to DB2 for OS/390® and z/OS™ machine. (DB2 Connect™ *must* be installed on Linux/Unix/Windows machine.)

Machine 1 ('aries') Linux/Unix/Windows	Machine 2 ('bigblue') DB2 for OS/390 and z/OS
Commands to run on this machine:	Information you need to obtain from this machine, to perform the commands on machine 1:
<pre>db2 catalog tcpip node   bigbnode   remote bigblue.ca.ibm.com   server 446</pre> <p>Note:</p> <ul style="list-style-type: none"> <li>- 'bigbnode' is an arbitrary name chosen for the node.</li> <li>- The IP address can be used instead of the hostname.</li> </ul>	<p>For this example:</p> <ul style="list-style-type: none"> <li>• bigblue.ca.ibm.com = Host name of machine 2.</li> <li>• 446 = The port used for DB2.</li> </ul> <p>Port 446 is normally the default value. To find out the port used, contact your DB2 for OS/390 and z/OS DBA who can check the MVS syslog for message DSNL004I. "TCPPORT" in that message contains the port to use. Also, the -DISPLAY DDF command provides this info.</p>
<pre>db2 catalog db d42d1   at node bigbnode   authentication dcs</pre>	'd42d1' is the name you will use to connect to the DB2 for z/OS and OS/390 subsystem. This name is chosen arbitrarily.
<pre>db2 catalog dcs db d42d1   as s390loc</pre>	<p>s390loc = The LOCATION NAME of the DB2 subsystem you want to access on machine 2.</p> <p>To find out the LOCATION NAME, contact your DB2 for OS/390 DBA who can check the MVS syslog for message DSNL004I. "LOCATION" in that message contains the LOCATION NAME to use. Also, the -DISPLAY DDF command provides this info.</p>
<pre>db2 terminate</pre>	
<pre>db2 connect to d42d1   user &lt;userid&gt;   using &lt;password&gt;</pre>	

### What to check if you cannot connect:

Client Machine 'aries'	Database Server 'bigblue'
<pre>ping   bigblue.ca.ibm.com</pre>	bigblue.ca.ibm.com = Host name of Database Server If you cannot ping, there may be problems with the DNS. Try pinging the IP address
<pre>ping 158.228.20.3</pre>	158.228.20.3 = IP address of Database Server

	This will confirm if there are problems or not with the network.
Make sure you have DB2 Connect Software installed by issuing the command 'db2licm -l' from the CLP	
	Because the Database server is DB2 UDB for OS/390 and z/OS, check the following: <ul style="list-style-type: none"> <li>• Is DB2 started? If not, execute <code>-start db2</code></li> <li>• Is DDF started? If not, execute <code>-start ddf</code></li> </ul>

### Scenario 3

From DB2 Linux/Unix/Windows machine (client, machine 0) to DB2 Linux/Unix/Windows machine (with DB2 Connect as a gateway, machine 1) to DB2 for OS/390 and z/OS machine (machine 2).

From machine 1 to machine 2, follow the same instructions as in [Scenario 2](#).

Machine 0 ('raven') Linux/Unix/Windows	Machine 1 ('aries') Linux/Unix/Windows
Commands to run on this machine:	Information you need to obtain from this machine, to perform the commands on machine 0:
<pre>db2 catalog tcpip node gatewayn remote aries.xyz.com server 50010</pre> <p>Notes: - 'gatewayn' is an arbitrary name chosen for the node. - The IP address can be used instead of the hostname</p>	<p>For this example:</p> <ul style="list-style-type: none"> <li>• aries.xyz.com = Host name of machine 1.</li> <li>• 50010 = The port used for DB2.</li> </ul> <p>To find out the port used, go to file <code>/etc/services</code> and grep for your DB2 instance name (same as scenario #1).</p>
<pre>db2 catalog db d42d1 at node gatewayn authentication dcs_encrypt</pre>	<ul style="list-style-type: none"> <li>• d42d1 = Name of the database you want to access as specified in the "catalog dcs" command in this gateway machine (machine 1).</li> </ul>
<pre>db2 terminate</pre>	
<pre>db2 connect to d42d1 user &lt;userid for DB2 OS/390 and z/OS&gt; using &lt;password DB2 OS/390 and z/OS&gt;</pre>	

### What to check if you cannot connect:

Client machine 'raven'	Gateway (DB2 Connect Server) 'aries'
ping aries.xyz.com	aries.xyz.com = Host name of Gateway Server If you cannot ping, there may be problems with the DNS. Try pinging the IP address
ping 9.82.24.10	9.82.24.10 = IP address of Gateway (DB2 Connect Server)

	This will confirm if there are problems or not with the network.
	Try connecting from the Gateway to the Database Server (as shown in Scenario 2). If you can connect, then the problem is definitively from the Client to the Gateway. If you cannot connect, then review the setup according to Scenario 2.

Other related commands that you may want to use (These commands are not applicable to the DB2 for OS/390 and z/OS server):

Command	Command description	Where to execute the command
db2 list db directory	Lists the databases you have cataloged	At all machines
db2 list node directory	Lists the node directories you have cataloged	At the DB2 UDB Client and DB2 Connect Server
db2 list dcs directory	Lists the dcs databases you have cataloged	At the DB2 Connect Server
uncatalog database <dbname>	Uncatalogs a database entry (in case you incorrectly cataloged a database)	At all machines
uncatalog dcs database <dbname>	Uncatalogs a dcs database entry	At the DB2 Connect Server
uncatalog node <node name>	Uncatalogs a node entry	At the DB2 UDB Client and DB2 Connect Server
db2licm -l	Lists which DB2 products you have installed and licensed	At all machines
db2 ? <command name>	Displays the syntax to use for <command name> Eg: db2 ? catalog Will show the syntax of the 'catalog' command	At all machines

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