Connectivity Cheat Sheet for DB2 Universal Database for z/OS (Part 2)

by Raul F. Chong IBM Toronto Lab September 2003

The Connection Database

The CDB Tables for a TCP/IP connection

SYSIBM.LOCATIONS		T INIT/NIANAT	IDMPEOD		PORT	TONE
LOCATION		LINKNAME	IBMREQD char(1)		char(32)	TPN varchar(64
char(8) Not Null		char(8) Not Null	Not Null with		ıll with default	Valcitat (64
Primary Key		Foreign Key	default 'N'	NOUNC	iii witii delault	Not Null
Timary Rey		1 oreign Rey	aciaait iv			with
						default
Name of database you v	vant to	Link to table	Use default	Port Numbe	er of DB2 Server	Use
connect from DB2 UDB	z/OS	SYSIBM.IPNAM	values	machine yo	u are trying to	default
client. This is a primary	key.	ES.		connect. If I	left blank, the	values
An alias of a database ye	ou want			default is 44	6. It can also	
to connect needs to be con	reated at			contain a se	rvice name as	
a given server if the nan					he services file of	
already being used in th	is table.			this client m	achine.	
SAMPLE		MYUDBLNK		50000		
SAMPLE2		MYUDBL2		50000		
TORISC6		MY400LNK		446		
MEXICO		MY390LNK		447		
SYSIBM.IPNAMES LINKNAME char(8)	SI	ECURITY_OUT char(1)	USERN. char		IBMREQD char(1)	IPADDR varchar(254)
Not Null	Not N	Iull with default 'A'	Not Null wi	` '	Not Null with	Not Null
Foreign Key					default 'N"	with default
Link to table	Security	Options	Outbound authorization 1		Use default	TD 4 1.1
SYSIBM.LOCATIONS.	- A = Security already				O SC CICICICITY	IP Address
verified		curity already	ID		values	or hostname
	verified			d user id is		
	verified (Only	user id is passed,	ID			or hostname
	verified (Only thus co	user id is passed, cresponding	ID - O = Outboun translated	per table		or hostname of the server
	verified (Only thus con USERN	user id is passed, rresponding AMES column	ID - O = Outboun translated SYSIBM.USER	per table		or hostname of the server you want to
	verified (Only thus co. USERN should	user id is passed, rresponding AMES column be blank)	ID - O = Outboun translated	per table		or hostname of the server you want to
	verified (Only thus con USERN should - R = RA	user id is passed, cresponding AMES column be blank) ACF Pass ticket	ID - O = Outboun translated SYSIBM.USER - Blank = No tr	per table		or hostname of the server you want to
	verified (Only thus co- USERN should - R = RA - P = Pa	user id is passed, rresponding AMES column be blank) ACF Pass ticket ssword (User id and	ID - O = Outboun translated SYSIBM.USER - Blank = No tr	per table		or hostname of the server you want to
	verified (Only thus co: USERN should - R = RA - P = Pa psw as	user id is passed, cresponding AMES column be blank) ACF Pass ticket ssword (User id and re passed;	ID - O = Outboun translated SYSIBM.USER - Blank = No tr	per table		or hostname of the server you want to
	verified (Only thus co: USERN should - R = RA - P = Pa psw an corresp	user id is passed, cresponding AMES column be blank) ACF Pass ticket ssword (User id and re passed; onding	ID - O = Outboun translated SYSIBM.USER - Blank = No tr	per table		or hostname of the server you want to
	verified (Only) thus co. USERN should - R = RA - P = Pa psw al corresp USERN	user id is passed, cresponding AMES column be blank) ACF Pass ticket ssword (User id and re passed; onding AMES column must	ID - O = Outboun translated SYSIBM.USER - Blank = No tr	per table		or hostname of the server you want to
MYUDBLNK	verified (Only thus co: USERN should - R = RA - P = Pa psw an corresp	user id is passed, cresponding AMES column be blank) ACF Pass ticket ssword (User id and re passed; onding AMES column must	ID - O = Outboun translated SYSIBM.USER - Blank = No tr	per table		or hostname of the server you want to connect to.
MYUDBLNK MYUDBL2	verified (Only thus co: USERN should - R = RA - P = Pa psw ar corresp USERN be set to	user id is passed, cresponding AMES column be blank) ACF Pass ticket ssword (User id and re passed; onding AMES column must	ID - O = Outboun translated SYSIBM.USER - Blank = No tr	per table		or hostname of the server you want to
	verified (Only thus co: USERN should - R = RA - P = Pa psw ar corresp USERN be set to	user id is passed, cresponding AMES column be blank) ACF Pass ticket ssword (User id and re passed; onding AMES column must	ID - O = Outboun translated SYSIBM.USER - Blank = No tr	per table		or hostname of the server you want to connect to. 9.26.93.234

USERNAMES column has a value of 'O', use SYSIBM.USERNAMES SYSIBM.USERNAMES If NEWAUTHID column is blank, don't use SYSIBM.USERNAMES							
rype char(1) Not Null O = Outbound translation - I = Inbound translation (Not applicable for TCPIP, so value of this column set it to 'O' always)	AUTHID char(8) Not Null with default Auth ID to be translated. If blank, all Auth IDs will be translated	LINKNAME char(8) Not Null Link to table SYSIBM.IPNAM ES. If blank, it applies to all TCPIP partners	newauthid char(8) Not Null with default Translated auth ID If Blank there is no translation	PASSWORD char(8) Not Null with default Non encrypted password accompanying outbound request	IBMREQD char(1) Not Null with default 'N' Use default values		
0	TS56692	MYUDBL2	db2admin	mypsw			
0	TS56692	MY400LNK	john01	psw400			
0	TS56692	MY390LNK	tso1234	tsopsw			

In Figure 1, we have highlighted in color a few rows to briefly explain two common cases which will help you understand how to populate the CDB tables.

Let's make this explanation as simple as possible. In the first case, the DB2 UDB for z/OS client is trying to connect to the SAMPLE database. DB2 for z/OS will first join the first row of _SYSIBM.LOCATIONS with the first row of SYSIBM.IPNAMES given that the LINKNAME column is the same (cell in yellow):

	SYSI	BM.LOCATION	IS			SYSIBM.IPNAMES	3		
	LOCATION	LINKNAME	IBMR	PORT	TPN	SECURITY_OUT	USERNAMES	IBMR	IPADDR
			EQD					EQD	
l	SAMPLE	MYUDBLNK		50000		A			9.26.93.234

Thus, DB2 UDB for z/OS client will use IP address 9.26.93.234 and port 50000. Also, because SECURITY_OUT = 'A' (already verified), it will only pass the user id to the server given that authentication has already been performed at the client when logging on to TSO. Note as well that the USERNAMES column is blank. This should normally be the case when_SECURITY_OUT = 'A' (therefore we have colored both cells in green), and it means there is no need to look into the SYSIBM.USERNAMES table. At the DB2 UDB for Linux, UNIX and Windows server, the database manager configuration parameter AUTHENTICATION must be set to CLIENT in order for these settings to work.

For the second case, when the DB2 UDB for z/OS client is trying to connect to the SAMPLE2 database, DB2 for z/OS will join the second row of SYSIBM.LOCATIONS, the second row of SYSIBM.IPNAMES and the first row of SYSIBM.USERNAMES given that the LINKNAME column is the same (cell in orange):

SYSIBM.L	OCATIONS		SYSI	BM.I	PNAN	MES	SYS	IBM.USERNA	ME	S			
LOCATIO	LINKNAME	Ι	PORT	T	SE	USERN	Ι	IPADDR	T	AUTHID	NEWAU	PASS	Ι
N		В		P	CU	AMES	В		Y		THID	WOR	В
		M		N	RI		M		P			D	M
		R			TY		R		Е				R
		E			_O		E						E
		Q			UT		Q						Q
		D					D						D
SAMPLE2	MYUDBLN2		50000		P	О		9.23.190.25	О	TS56692	db2admin	mypsw	

Scenario 1

From DB2 UDB for z/OS client (machine 1) to DB2 UDB for Linux, UNIX and Windows server (machine 2)

DB2 UDB for z/OS client to DB2 UDB for Linux, UNIX, Windows Server

Machine 1 ('tlba22me') DB2 UDB for z/OS client	Machine 2 ('aries') DB2 UDB for Linux, UNIX and
	Windows server
Commands to run on this machine:	Information you need to obtain from this machine,
	to perform the commands on machine 1:
Part I: Configuring the CDB (Communications Da	atabase)
Option 1:	1) SAMPLE is the database in this machine 2 that
insert into SYSIBM.LOCATIONS	you want to connect from the z/OS client machine.
(location, linkname,_port) values	If you don't remember the database name, you can
(' SAMPLE ',''MYUDBLNK', ' 50000 ')	issue from the CLP the command:
	list db directory
insert into SYSIBM.IPNAMES	and look for any entries with a Directory entry
(linkname, security_out, ipaddr)	type of 'indirect'. These entries would correspond
values ("MYUDBLNK', 'A', '9.26.93.234')	to local databases in your server-machine.
Note:	2) For this example:
MYUDBLNK is an arbitrary name used to link	9.26.93.234 = IP address of machine 2.
table SYSIBM.LOCATIONS with table	50000 = The port used for DB2.
SYSIBM.IPNAMES	
	To find out the port used, issue this command
A value of 'A' for the security_out column	from the CLP: get dbm cfg
implies that authentication has already been	Then, look for the parameter SVCENAME
verified at this machine.	
Option 2:	If the value of SVCENAME is not the port number
insert into SYSIBM.LOCATIONS	but a string, then look in your system for the file
(location, linkname,_port) values	'services' an grep for this string, which is
('SAMPLE','MYUDBLNK', '50000')	normally based on your DB2 instance name. For
	example, if your instance name is 'db2inst1', you
insert into SYSIBM.IPNAMES (linkname,	will normally find a corresponding entry like this:
security_out, usernames, ipaddr) values	db2cdb2inst1 50000/tcp
('MYUDBLNK', ' P ', 'O ', ' 9.26.93.234 ')	
	The 'services' file can be found at:
insert into SYSIBM.USERNAMES	/etc/services (in UNIX)

(type, authid, linkname, newauthid, password) values ('O', 'TS56692', ''MYUDBLNK',

'db2admin','mypsw')

Note:

MYUDBLNK is an arbitrary name used to link tables SYSIBM.LOCATIONS,—SYSIBM.IPNAMES and SYSIBM.USERNAMES.

A value of- 'P' for the security_out column implies that authentication will be performed at the server machine 2.

TS56692 is the TSO id on this mainframe machine 1 client.

To make sure the changes to the CDB take effect, restart DDF (-stop ddf -start ddf)

This may not be necessary if you have entered a

X:\WINNT\System32\drivers\etc\services (in Windows)

3) dbm cfg AUTHENTICATION should be set to CLIENT for option 1, when column 'security_out' is set to 'A'. It should be set to SERVER for option 2, when this column is set to 'P'.

4)

db2admin = user id as defined on machine 2 **mypsw** = password as defined on machine 2

new entry in the CDB. Part II: Bind SPUFI

BIND PACKAGE (SAMPLE.DSNESPCS)
MEMBER(DSNESM68)
LIBRARY
('SHARE.DSN710.PROD.SDSNDBRM')
ACTION(REPLACE)
ISOLATION (CS)
SQLERROR(NOPACKAGE)
VALIDATE(BIND)

BIND PACKAGE (**SAMPLE**.DSNESPRR) MEMBER(DSNESM68) LIBRARY ('SHARE.DSN710.PROD.SDSNDBRM')

ACTION(REPLACE)
ISOLATION (CS)
SQLERROR(NOPACKAGE)

ACTION (REPLACE)

SQLERROR(NOPACKAGE VALIDATE(BIND)

BIND PLAN (DSNESPCS)
PKLIST (*.DSNESPCS.DSNESM68)
ISOLATION(CS)

BIND PLAN (DSNESPRR)
PKLIST (*.DSNESPRR.DSNESM68)
ISOLATION(CS)
ACTION(REPLACE)

Note:

DSNESPCS is the package to bind for the SPUFI application with isolation Cursor Stability.
DSNESPRR would be for isolation Repeatable Read.

SAMPLE is the database in this server machine 2 that you want to connect from the z/OS client machine.

The user id performing the bind should have been granted the appropriate authorization/privileges.

The library specified in the bind package command, contains DBRM member DSNESM68 (for the SPUFI application). This library location will vary depending on how DB2 was set up in your system. After the packages have been bound against the server machine 2, the PLAN has to be bound. Using * in the package list guarantees the plan is bound in all locations. Part III: Testing the connection from SPUFI Make sure to specify: When configuring the CDB using option 1 (when - Connect Location field: SAMPLE column 'security_out' is set to 'A'), you would be passing the TSO id to the DB2 UDB for Linux, Unix Then issue: select * from db2admin.employee and Windows server. For this example the TSO id is TS56692. Thus in order to access a table for

'select', you would need to do this:

user TS56692

GRANT select on db2admin.employee to

Typical errors

Note:

1 ypicai errors	
Error Message	Resolution
SQLCODE = -805, ERROR: DBRM OR PACKAGE NAME SAMPLEDSNESM68.149EEA 901A79FE48 NOT FOUND IN PLAN DSNESPCS. REASON 02	You need to bind the package <i>and</i> the plan for SPUFI as explained in table 1
SQLCODE = -551, SQLSTATE = 42501, SYNTAX ERROR OR ACCESS RULE VIOLATION FROM OS/2 TOKENS TS56692 SELECT DB2ADMIN EMPLOYEE	For option 1 of the CDB setup, your are passing only the user id (TSO id), which for this example is TS56692. You need to grant authorization to this user to query the db2admin.employee table. From the CLP issue: grant select on db2admin.employee to user ts56692

Besides the typical errors shown above, other things to check are mentioned in the table below.

What to check if you cannot connect:

There is no connect statement issued from SPUFI, but there is a specific field where you put the

location you want to connect to. Note as well

that the userid and psw are stored in the CDB.

Client Machine 'tlba22me'	Database Server 'aries'
ping aries.xyz.com	• aries.xyz.com = Host name of Database Server
(Assuming the hostname was used	If cannot ping, there may be problems with the DNS. Try
instead of the ip address itself in the	pinging the IP address
SYSIBM.IPNAMES table. This	
command can be performed from the	
TSO Command Processor	
ping 9.26.93.234	• 9.26.93.234 = IP address of Database Server
This command can be performed from	This will confirm if there are problems or not with the
the TSO Command Processor	network.

	• Is DB2 started? If not run db2start
	• Is DB2COMM set to TCPIP?
	Check by executing: db2set -all. If this registry
	variable is not set, you should execute:
	db2set db2comm=tcpip
	and then issue a db2stop/db2start to make sure the change
	takes effect.
	• Is SVCENAME set to the port number or service name
	specified in the 'services' file of this server machine?
	Check this parameter from the CLP by issuing:
	get dbm cfg
If you used a service name instead of	
the port number in your table	
SYSIBM.LOCATIONS, make sure the	
entry is correct in the 'services' file at	
the <i>client</i> machine.	
netstat	netstat -a -n
Shows all connections and port	Shows all connections and port numbers and their status.
numbers and their status.	Issue this from your command prompt.
This command can be performed	
from the TSO Command Processor.	

Notes:

- 1. DB2COMM and SVCENAME are set up automatically during the installation of DB2 UDB for Linux, UNIX and Windows for the default instance. Any other new instance created after installation with the db2icrt command, will not have these parameters set up.
- 2. DB2 will check the 'services' file in the machine where the DB2 command is issued.

Scenario 2

From DB2 UDB for z/OS client (machine 1) to DB2 UDB for iSeries server (machine 2). For this scenario, we only tested with one configuration for the CDB, however you are encouraged to try other setups.

DB2 UDB for iSeries client to DB2 UDB z/OS Server

Machine 1 ('tlba22me') DB2 UDB for z/OS	Machine 2 ('big400') DB2 UDB for iSeries			
Commands to run on this machine:	Information you need to obtain from this machine,			
to perform the commands on machine 1:				
Part I: Configuring the CDB (Communications Database)				

insert into SYSIBM.LOCATIONS (location, linkname,port) values ('TORISC6','MY400LNK', '446')

insert into SYSIBM.IPNAMES (linkname, security_out, usernames, ipaddr) values ('MY400LNK', 'P', 'O', '9.89.168.6')

insert into SYSIBM.USERNAMES (type, authid, linkname,newauthid, password) values ('O', 'TS56692', 'MY400LNK', 'john01', 'psw400')

Note:

MY400LNK is an arbitrary name used to link tables SYSIBM.LOCATIONS, -SYSIBM.IPNAMES and SYSIBM.USERNAMES.

A value of 'P' for the security_out column implies that authentication will be performed at the server machine 2.

TS56692 is the TSO id on this mainframe machine 1 client.

To make sure the changes to the CDB take effect, restart DDF (-stop ddf -start ddf)
This may not be necessary if you have entered a *new* entry in the CDB.

1) **TORISC6** is the local RDB Name.

In order to determine the local RDB name contact your iSeries administrator who can issue the command:

WRKRDBDIRE

When the 'Work with Relational Database Directory Entries' panel appears, he can find the desired value in column 'Relational Database' that maps to the column 'Remote Location' with a value of '*LOCAL'.

2) For this example:

9.89.168.6 = IP address of machine 2. **446** = The port used for DB2.

Port 446 is the default value for the drda service, it is very unlikely this port is changed.

3)

john01 = user id as defined on machine 2
psw400 = password as defined on machine 2

Part II: Bind SPUFI

BIND PACKAGE (TORISC6.DSNESPCS)
MEMBER(DSNESM68)
LIBRARY
('SHARE.DSN710.PROD.SDSNDBRM')
ACTION(REPLACE)
ISOLATION (CS)
SQLERROR(NOPACKAGE)
VALIDATE(BIND)

BIND PACKAGE (TORISC6.DSNESPRR)
MEMBER(DSNESM68)
LIBRARY

('SHARE.DSN710.PROD.SDSNDBRM')
ACTION(REPLACE)

ISOLATION (CS)
SQLERROR(NOPACKAGE)

SQLERROR (NOPACKAGE VALIDATE (BIND)

BIND PLAN (DSNESPCS)
PKLIST (*.DSNESPCS.DSNESM68)
ISOLATION(CS)
ACTION(REPLACE)

TORISC6 = The local RDB Name.

In order to bind the packages, you first need to create the collections:

CREATE COLLECTION DSNESPCS CREATE COLLECTION DSNESPRR

And grant iSeries user john01 the appropriate authorization/privileges against the collection.

BIND PLAN (DSNESPRR)
PKLIST (*.DSNESPRR.DSNESM68)
ISOLATION(CS)
ACTION(REPLACE)

Note:

DSNESPCS is the package to bind for the SPUFI application with isolation Cursor Stability.
DSNESPRR would be for isolation Repeatable Read.

The library specified in the bind package command, contains DBRM member DSNESM68 (for the SPUFI application). This library location will vary depending on how DB2 was set up in your system.

After the packages have been bound against the server machine 2, the PLAN has to be bound. Using * in the package list guarantees the plan is bound in all locations.

Part III: Testing the connection from SPUFI

Make sure to specify:

- Connect Location field: TORISC6

Then issue:

SELECT * FROM QIWS.QCUSTCDT

Note:

There is no connect statement issued from SPUFI, but there is a specific field where you put the location you want to connect to. Note as well that the userid and psw are stored in the CDB.

Issue this query for testing purposes. The sample table QIWS.QCUSTCDT is normally available after installation of iSeries unless it was removed or not set up by your iSeries administrator.

GRANT select on QIWS.QCUSTCDT to user john01

Also most tables in iSeries are automatically journalled, but QCUSTCDT sample table is not, so make sure to journal it.

Typical errors

Typical cirois	
Error Message	Resolution
SQLCODE = -204, SQLSTATE = 42704, SQLERRMT = OSYS.DSNESPRR:	If you get this error when binding the package, you first need to create the collection in iSeries. From STRSQL issue: CREATE COLLECTION DSNESPRR
COLLECTION	and CREATE COLLECTION DSNESPCS (for the other package)
SQLCODE = -7008, SQLSTATE = 55019, OBJECT NOT IN PREREQUISITE STATE FROM	Table QCUSTCDT needs to be journalled.

What to check if you cannot connect:

Client Machine 'tlba22me'	Database Server 'big400'
ping big400.ca.ibm.com	• big400.ca.ibm.com = Host name of Database Server
	If cannot ping, there may be problems with the DNS. Try
	pinging the IP address
ping 9.89.168.6	• 9.89.168.6 = IP address of Database Server
	This will confirm if there are problems or not with the
	network.
	Since the Database server is DB2 UDB for iSeries, check:
	Is DDM started? If not, execute:
	STRTTCPSVR SERVER(*DDM)
If you used a service name instead of	
the port number in your table	
SYSIBM.LOCATIONS, make sure the	
entry is correct in the 'services' file at	
the <i>client</i> machine.	
netstat	netstat
Shows all connections and port	Shows all connections and port numbers and their status.
numbers and their status.	This command can be performed from the OS/400® Main
This command can be performed	menu, options 6 -> 5 -> 10 -> 7 -> 3
from the TSO Command Processor.	

Scenario 3

From DB2 UDB for z/OS client (machine 1) to DB2 UDB for z/OS server (machine 2). For this scenario, we only tested with one configuration for the CDB, however you are encouraged to try other setups.

DB2 UDB for z/OS client to DB2 UDB for z/OS Server

Machine 1 ('tlba22me') DB2 UDB for z/OS	Machine 2 ('tlba23me') DB2 UDB for z/OS	
Commands to run on this machine:	Information you need to obtain from this machine,	
	to perform the commands on machine 1:	
Part I: Configuring the CDB (Communications Database) .		

insert into SYSIBM.LOCATIONS (location, linkname, port) values ('MEXICO','MY390LNK', '447')

insert into SYSIBM.IPNAMES (linkname, security_out, usernames, ipaddr) values ('MY390LNK', 'P', 'O', '158.228.20.3')

insert into SYSIBM.USERNAMES (type, authid, linkname, newauthid, password) values ('O', 'TS56692',"MY390LNK', 'tso1234','tsopsw')

Note:

MY390LNK is an arbitrary name used to link tables SYSIBM.LOCATIONS, SYSIBM.IPNAMES and SYSIBM.USERNAMES.

A value of 'P' for the security_out column implies that authentication will be performed at the server machine 2.

TS56692 is the TSO id on this mainframe machine 1 client.

To make sure the changes to the CDB take effect, restart DDF (-stop ddf -start ddf)
This may not be necessary if you have entered a *new* entry in the CDB.

1) **MEXICO** is the location name for the DB2 UDB for z/OS subsystem in this machine 2 that you want to connect from the other DB2 UDB for z/OS client.

2) For this example:

158.228.20.3 = IP address of machine 2. **447** = The port used for DB2.

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.

3) **tso1234** = user id as defined on machine 2 **tsopsw** = password as defined on machine 2

Part II: Bind SPUFI

BIND PACKAGE (MEXICO.DSNESPCS)
MEMBER(DSNESM68)
LIBRARY
('SHARE.DSN710.PROD.SDSNDBRM')
ACTION(REPLACE)
ISOLATION (CS)
SQLERROR(NOPACKAGE)
VALIDATE(BIND)

BIND PACKAGE (MEXICO.DSNESPRR)
MEMBER(DSNESM68)
LIBRARY
('SHARE.DSN710.PROD.SDSNDBRM')
ACTION(REPLACE)
ISOLATION (CS)
SQLERROR(NOPACKAGE)
VALIDATE(BIND)

BIND PLAN (DSNESPCS)
PKLIST (*.DSNESPCS.DSNESM68)
ISOLATION(CS)
ACTION(REPLACE)

MEXICO is the location name for the-DB2 UDB for z/OS subsystem in this machine 2 that you want to connect from the other DB2 UDB for z/OS client.

The user should have the appropriate authorization to bind.

This may also be required to run the packages:

GRANT all on package
DSNESPCS.DSNESM68 to <user id>

GRANT all on package DSNESPRR.DSNESM68 to <user id> BIND PLAN (DSNESPRR)
PKLIST (*.DSNESPRR.DSNESM68)
ISOLATION(CS)
ACTION(REPLACE)

Note:

DSNESPCS is the package to bind for the SPUFI application with isolation Cursor Stability.
DSNESPRR would be for isolation Repeatable Read.

The library specified in the bind package command, contains DBRM member DSNESM68 (for the SPUFI application). This library location will vary depending on how DB2 was set up in your system.

After the packages have been bound against the server machine 2, the PLAN has to be bound. Using * in the package list guarantees the plan is bound in all locations.

Part III: Testing the connection from SPUFI

Make sure to specify:

- Connect Location field: MEXICO

Then issue:

select * from dsn8810.emp

Note:

There is no connect statement issued from SPUFI, but there is a specific field where you put the location you want to connect to. Note as well that the userid and psw are stored in the CDB.

Issue this query for testing purposes. The sample table dsn8810.emp is normally available after installation of DB2 for OS/390 and z/OS unless it was removed or not set up by your mainframe DBA. The example uses version 8 'emp' table. If connecting to a DB2 UDB for OS/390 and z/OS version 7 subsystem, use table dsn8710.emp instead.

Make sure the user executing the query has the appropriate authorization/privilege. Eg:

GRANT select on dsn8810.emp to user tso1234

What to check if you cannot connect:

···		
Client Machine 'tlba22me'	Server Machine 'tlba23me'	
ping tlba23me.torolab.ibm.com	• tlba23me.torolab.ibm.com = Host name of Database Server	
(Assuming the hostname was used	If cannot ping, there may be problems with the DNS. Try	
instead of the ip address itself in the	pinging the IP address	
SYSIBM.IPNAMES table. This		

command can be performed from the	
TSO Command Processor	
ping 158.228.20.3	• 158.228.20.3 = IP address of Database Server
This command can be performed from	This will confirm if there are problems or not with the
the TSO Command Processor	network.
•	• Is DB2 started? If not, execute -start db2
	• Is DDF started? If not, execute -start ddf
If you used a service name instead of	
the port number in your table	
SYSIBM.LOCATIONS, make sure the	
entry is correct in the 'services' file at	
the <i>client</i> machine.	
netstat	netstat
Shows all connections and port	Shows all connections and port numbers and their status.
numbers and their status. This	This command can be performed from the TSO Command
command can be performed from the	Processor.
TSO Command Processor.	

Note:

DB2 for OS/390 and z/OS supports two protocols:

DRDA: This is the recommended protocol, and the one for which the instructions of this article apply. The application uses a CONNECT statement, a three-part name, or an alias (if bound with DBPROTOCOL (DRDA) to access the server.

DB2 private protocol: This protocol is being phased out and can only be used among DB2 UDB for OS/390 and z/OS client and servers. The application must connect using an alias or three-part name to direct the SQL statement to a given location.

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