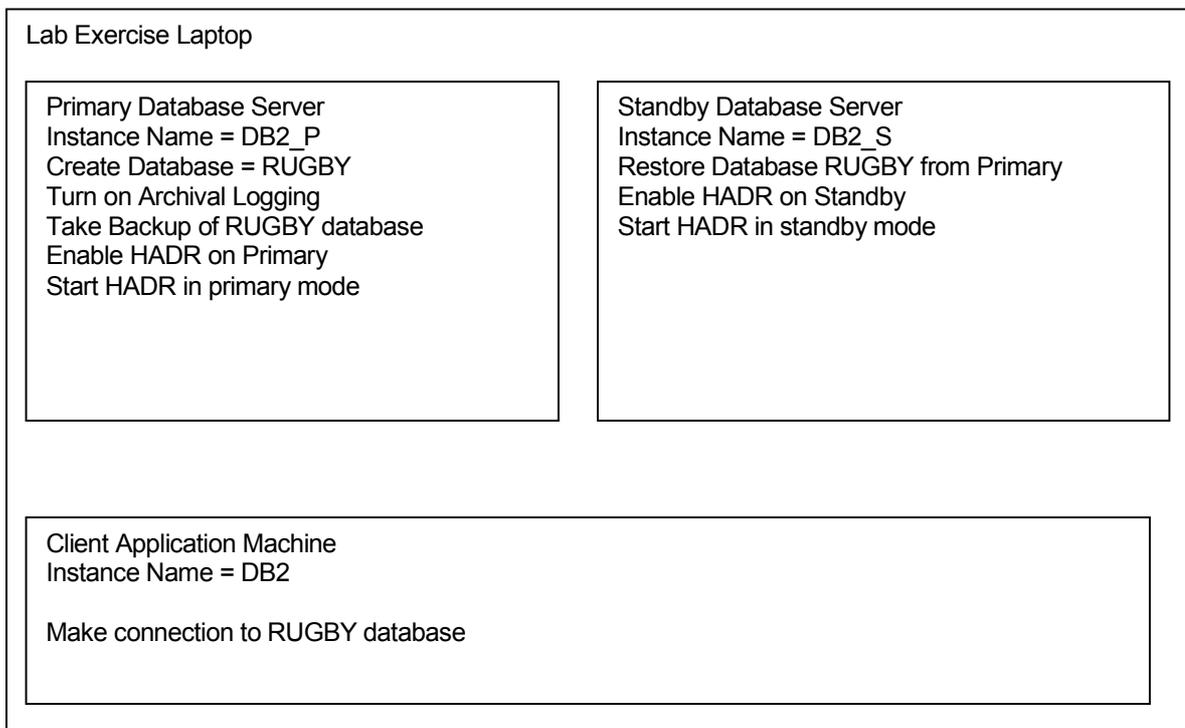


LAB13 – HIGH AVAILABILITY AND DISASTER RECOVERY

PURPOSE

In a normal situation, you will configure HADR on two separate machines. For the demonstration purpose on the practice laptop, we will create two separate instances and configure HADR on each database in both the instances. We will use default DB2 instance to make connections to the HADR database.



SETUP HADR

1. Get in a DB2 command window
2. Go to the directory `C:\POT\13 HADR`

3. Run the command `C:\POT\13 HADR\HADR13001`. This command does the following steps:
 - a. Create a DB2_P instance (Assume this to be an instance on a Primary database server).
 - b. Create a RUGBY database on DB2_P instance.
 - c. Turn-on Archival logging for this database.
 - d. Take back up of the RUGBY database.
 - e. Create a DB2_S instance (Assume this to be an instance on a Secondary database server).
 - f. Restore RUGBY database in DB2_S instance from the backup taken in previous step 'd'.
 - g. Catalog DB2_S node in DB2_P instance DB2_P node in DB2_S instance
 - h. On DB2_P instance, catalog local RUGBY database as RUGBYP and remote RUGBY database on DB2_S as RUGBYS.
 - i. On DB2_S instance, catalog local RUGBY database as RUGBYS and remote RUGBY database on DB2_P as RUGBYP.
 - j. Configure client re-route on DB2_P and DB2_S instances for RUGBYS and RUGBYP databases respectively.
 - k. Configure HADR on DB2_P and DB2_S instances for RUGBY database.
 - l. Start HADR on DB2_S database server in STANDBY mode
 - m. Start HADR on DB2_P database server in PRIMARY mode.

CREATE OBJECTS IN PRIMARY DATABASE

We created a blank database RUGBY and enabled it for HADR. Let us create a table in RUGBY primary database and switch the role of the databases. We will see the table in secondary database.

1. Run the command `C:\13 HADR\HADR13003`. This command will create a HORSEMAN table in RUGBY database on Primary server.

```
C:\13 HADR\HADR13003
```

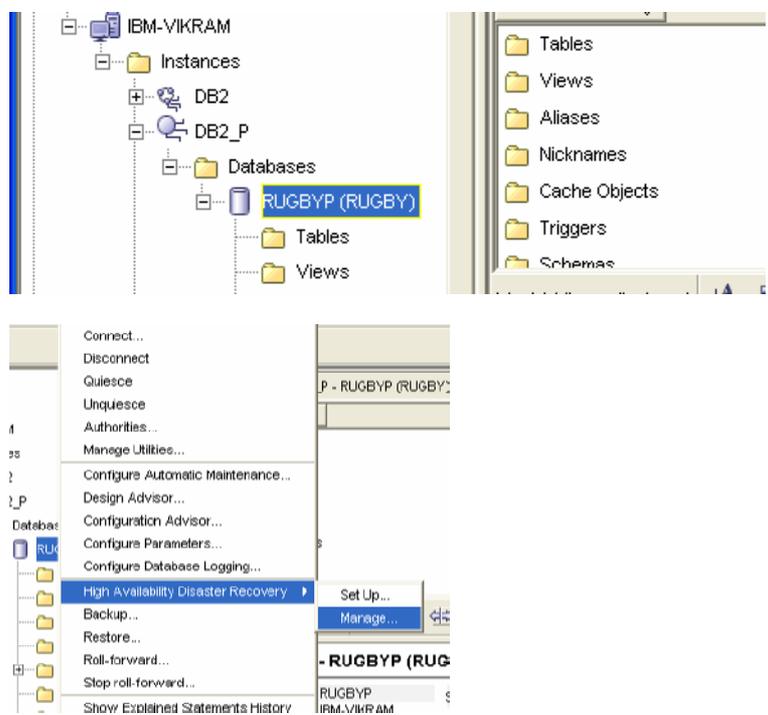
Switch Role of Databases

We can now switch the role of the databases and check the table in Standby database.

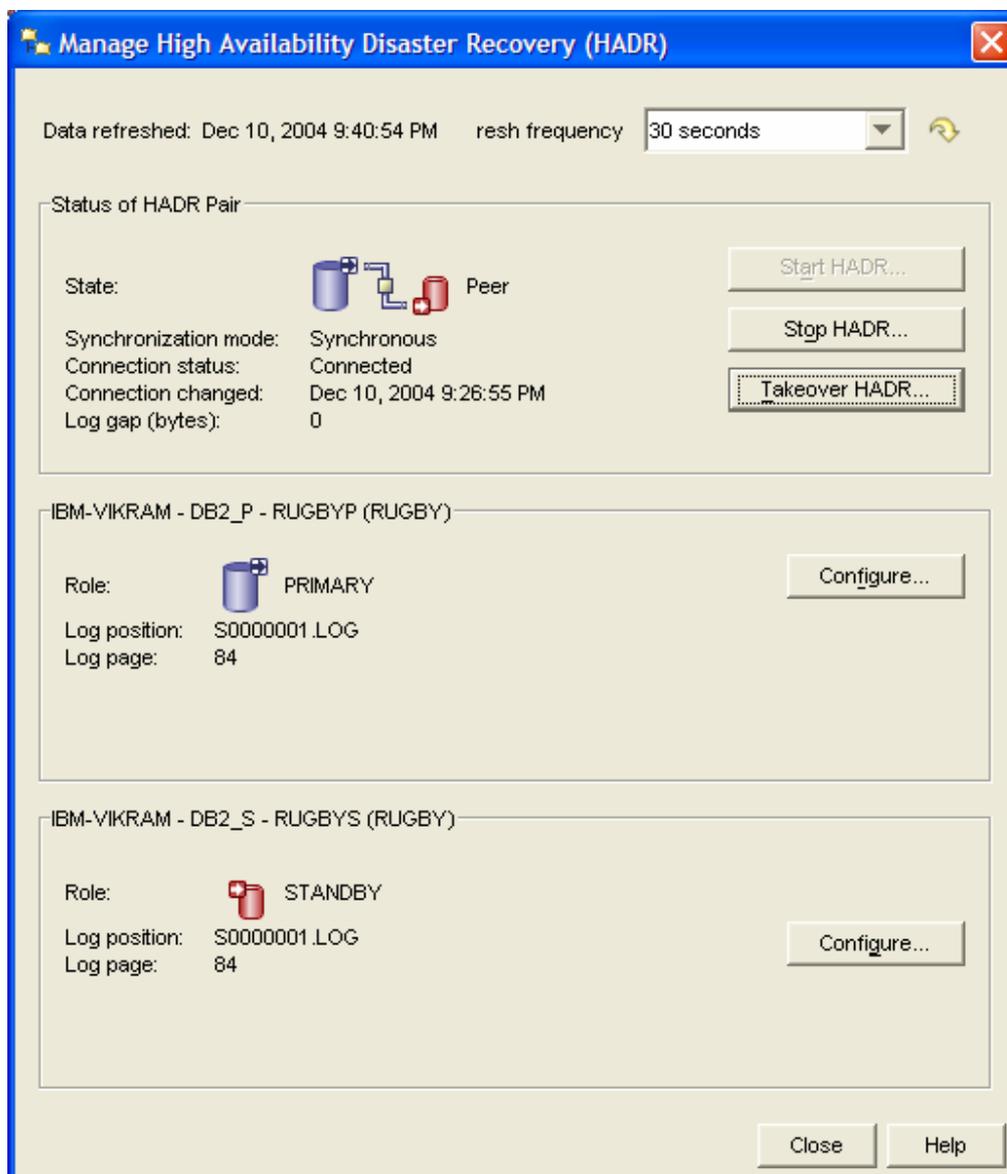
Launch the Control Center as shown below:

C:\13 HADR\db2cc

Right Click on the RUGYP database.



Click on High Availability Disaster Recovery ⇒ Manage

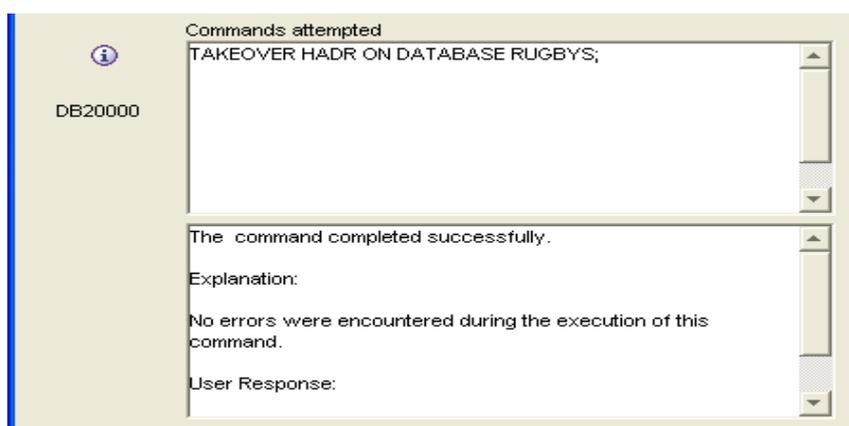


Click on “Takeover HADR...” button. You will see a following screen.

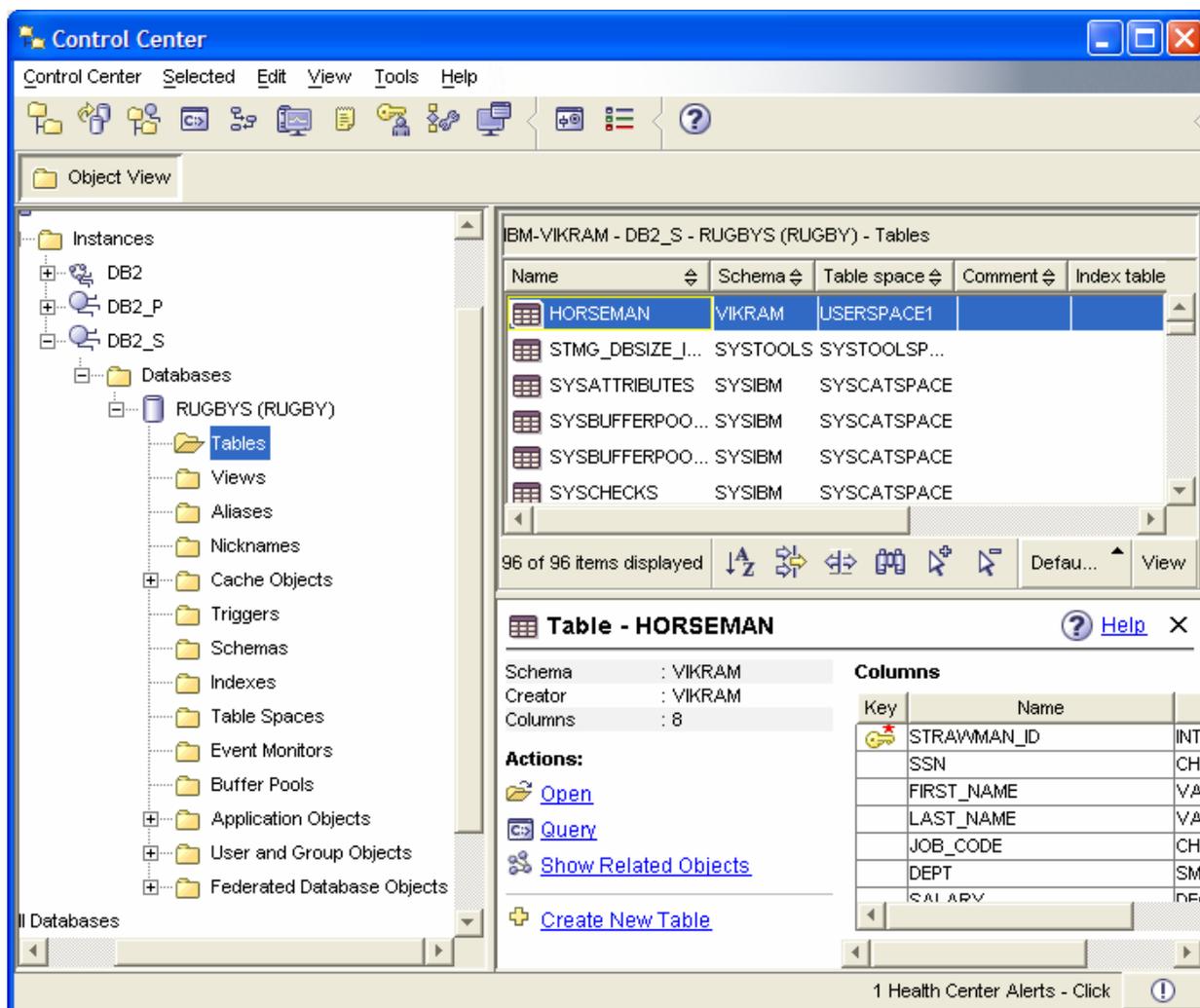


Select option “Switch roles”.

The role of the database server changes after you click on the “OK” button. You should see the following message.



You can see the table in the Standby server through the control center.



Double click on the HORSEMAN table and you can browse through the data.