# **Access to Microsoft SQL Server 2005**

# **Scope of Project**

**Goal:** Allow simultaneous access to an Access database, ensuring frequent backups of the data and allowing for near real-time replication to minimize downtime.

**Design:** SQI Server database as the back-end, using Access as the client application (front-end)(due to their familiarity of the tool.) Done as a VMWare Virtual Machine with a 15 GB C: partition housing SQL Server and Windows Server 2003 Standard and a 65 GB E: partition housing the database and database backups. Virtual machine chosen for rapid restoration in the event of physical machine hardware failure - backup VMWare is the IT-Shop PC. Second Virtual machine is for Replication purposes, allowing for near real-time access to the data. Full Backups are done once daily at noon and a second full backup is done every hour. The backups are copied to another server (TFC-Server\dubdb) via a scheduled task on the Virtual Machine.

Database is split into 8 tables, to allow for normalization and integrity of the data. Dub\_Request\_form writes data to the Dub\_Request\_tbl, while all other support tables write to their respective tables. Queries and Reports are written against a view created using multiple joins, combining all of the data back into a single object that the users can write queries against without involving me. This allows for much faster response time for their query/reporting needs. Training is delivered to certain members on how to write the queries and reports.

### **Timeline of work- Phase 2**

as of COB 070710

**0** min total / **0** hrs total so far @\$85 per hour = \$0 / \$0 (or about 21.5% of cost-(18.27 vs 85))

- -Some dates being earlier than other dates (Dub date can't be earlier than Request Date)
- -Need to automate the refresh process so that it works
- -Need to set up Replication to be continuous (Can I access the other SQL server if the primary goes down, meaning, is it like clustering or what?)
- -Need to group the queries/forms/reports by job role so that they can hide the other crap that they don't need OR have 2 dif version of the DB with different queries and reports in each one

### **Timeline of work- Phase 1**

as of COB 070710

**6030** min total / **100.5** hrs total so far @\$85 per hour = \$8542.50 / \$1836.14 (or about 21.5% of cost-(18.27 vs 85))

- --**Jan 19th** Met with FL Channel for initial meeting about converting their dub db from Access to MS SQL-they actually want a new fresh DB instead-60 min
- --Jan 20th- Started planning Dub DB-30 min

- --Jan 21st- Resumed design of database- 8 support tables and 1 main table- 195 min --Jan 26th- Met with FL Channel regarding their Dubbing DB- fold the Tape Op table into
- Dub Request table- 120 min
- --Jan 27<sup>th</sup>- Starting building Dub db-85 min
- --Jan 29th- Entered more fields into Dub DB (24 left) -will test relationships on Monday
- --**Feb 1st** Put rest of fields in Access ran migration tool (SQL Server Migration Assistant 2005)-60 min
- --**Feb 3rd** entered data into 7 support tables using Access table view- verified via SQL query on SQL server-copied the current work just in case- 120 min
- --**Feb 4th**-Created forms using the forms wizard in Access-Tested other Access forms-work fine-Dubs form is displaying integer instead of title- no other fields with foreign keys are doing this-10 min
- --**Feb 5th**-Modified form design on Dub Request form column count 2, column widths 0",1"-modified SQL Payment Method- need 21 chars, not the 20 I put in for Payment Method-90 min
- --**Feb 9th**-worked on setting up autobackup for SQL server-will need to manually backup msdb db and Master db after I put the dub db in-240 min
- --**Feb 10th**-Started installing SQL server on a VM -issues installing Server 2003- started 1100 stopped 1430- 210 min
- --**Feb 11th** Installed Server 2003 on VM, copying the VM for easier install later for other VM servers (will have to run sysprep to remove SID)- installed MS SQL Server-started 1015 stopped 1530- 315 min
- --**Feb 12th**-worked from home- started 0800-stopped 1100-started 1330-changed IP address to be the one it will use- set up a dsn on laptop to make it easier to connect to it-will copy to new PC to test- why does the DB think that it's still going to .194 vs. .90 on dif subnet- ODBC error- copied DSN to pc- no change-also not synched up- possibly result of previous issue?-stopped 1630-started 1730 stopped 1830-researching issues\_making a system DSN vs a file DSN seems promising-420 min total
- --Feb 13th-set up System DSN on laptop to see (removed file DSN)- changed records-still not synching (although it displays correctly when reopened), although no ODBC errors yet-Access still hitting the "Not Responding" bit but comes back in a min -got ODBC error 3151 (says that can't connect to SQI server- they rec verifying network connectivity- useless-two new approachs- 1) make existing db usable by more than 1 user or 2) keep existing db on SQL and redo Access app to eliminate ODBC error-deleted the SSMA tables- started over from scratch-abandoned idea- changed OBDC refresh value from 1500 (25 min) to 300 (5 min)- removed SSMA tables on client 2- no change-confirmed ODBC settings correct on the Registry (HKEY Local Machine > Software > ODBC > ODBC.ini > dub > Server=10.1.10.90) as it should be- couldn't find an reference to .194 anywhere-second test failed-reference to .194 is in the Machine table-put checkmark ini "Always prompt for new location" in Linked Table Manager, then pointed to Machine DSN (System) and selected dub- modified for all 8 tables- confirmed by hovering over each linked table- can refresh the data w/out ANY ODBC errors-testing ODBC refresh now-still failed, but "Refresh" works- will fix this lateraccording to Todd, this sometimes happens in Access dbs anyway-started 0900 stopped 1100 started 1400 stopped 1700- 300 min total
- --**Feb 15th** Deleted the text boxes where the check boxes were and recreated in Access, can set Control Source Under Data tab in Properties of checkbox-Forgot to add Dub\_Made\_by field- modified Format\_Test field on the db- relinked tables- DIDN'T cause me to start over- left notes at home-working off of diagram that I drew on brown paper-finished design of Dub Request Form -opened Queries in Design View then opened in SQL view- copied and pasted to text file- will modify tomorrow- exported Reports-started 0800 stopped 1230 started 1400 stopped 1600- 390 min total (6.5 hrs)
- --**Feb 17th** working on modifying the reports (changing the fields that it is pulling from), started on putting the queries in- stopped maybe a third of the way through- need to start from queries first- may be easier to recreate them-issues with query- only displays the first

record out of 2- when change the data to force records 2 and 3 to match- doesn't display at all-started 1030 stopped 1200 started 1300 stopped 1500- 210 min

- --**Feb 18th** changed request date to today for all three records- only pulling first one-changed date of first record-no records found-db reflects correct dates -query not looping-changed INNER to RIGHT- query didn't pull staff names, BUT did pull records 2 and 3 (modified 1 to be dif date)- will have to work out how the JOINS are supposed to be (joining 3 dif tables to get results)- while explaining issue to Abi, noticed that the relationship for Staff table was on Dub made by and not Staff Taking Request- modified relationship (had to delete the first one) and it worked exactly as it should-deleted other test queries-started 1100 stopped 1130 started 1315 stopped 1415- 90 min
- --**Feb 19th** will try to create complex queries in SQL rather than Access, then save as a view, then run the simple query in Access from that view-can use the Query Designer in MS SQL (sim to Access Query Designer)- started 0930 stopped 1130-120 min
- --**Feb 20th** met with Amy, some guy, Valerie, Terry and Danny reg dub db- suggested moving the record ID to above the Other field, copying the Other field to all six locations vs creating 5 more Other fields, having the dub\_request Form open automatically, getting rid of the underscore in Fees\_Payment, and making the Cost field have a dollar sign in the report-180 min
- --Feb 22nd- clearing space off of working book drive (burning DVDs) to copy data from laptop on it to copy MSSQL01 VM to it so I only have to haul laptop instead of computer and laptop-60 min-started reading ch on JOINs before I call Chad / CT (did NOT have to call)-started 0900-Mastering SQL ch was worthless-copied joindb to SQL server to work through samples in book (MOC)-60 min- got the items in dub\_tbl to appear- got single item support tbls(format, request type etc)) to appear- got machine tbl items (2) to appear-got staff tbl items (6) to appear-working one is dub10 query- got JOINs to work-saved as a view-test querying the view in SQL copied dub db files w/in VM, then copied VM files on book drive and onto HD-210 min- 330 min total
- --Feb 23rd had to import the view from external data to be able to query on a single table (and keep them from having to learn about JOINs when they make their own queries)-made modifications to form based on Danny's suggestions- reason Dubs Made By wasn't displaying (and the reason Beth was listed as the record in every case) was b/c the datatype in SQL was set to bit, not int- modified SQL field- tested fine- copied DubDB (SQL) to VM, then copied VM, then copied Dub DB (Access) called Danny at 1551 to let her know I would be over there tomorrow-I/m with Valerie-started 0830 stopped 1430 Ron called:VM ware installed on a PC around the corner from Tigger office Macintosh on one wall and next Machine (GX 620)
- **--Jun 19th** created rest of queries based on existing ones- one or two gave me issuestested all queries- tested fine (with exceptions)- started on reports based on queries- ran into some issues with some reports already being there (they don't seem to work right)-will finish reports at FL Ch- 255 min total
- --**Jun 21st** Copied 80 GB VM HD to Promotions-2 (other side of Tigger desk) and to IT-Shop)- tested DB to verify connectivity (150 min)
- --**Jun 24th** Demoed the db and fielded questions- list of users is Jim, Valerie, Nathan, Sarah, Amy and Danni- Danni gave me list of required fields- wrote up ODBC connection steps for Ron/ Terry-Researched backup methods-300 min
- --**Jun 25th** Replication: On MSSQL01
- 1) Expand Replication > Local Publications

2) R/C > New Publication >Act as own distributor >leave default folder for snapshot >select dub DB > chose merge publication >

#### On MSSQL02

- 1) Expand Replication > Local Subscriptions
- 2) R/C > New Subscription > ISSUES says that Replication is not installed in that instance (tried to reinstall- no dice- uninstalled and reinstalled- NEED TO DO- copy VM to other server- change IP 10 .12, change computer name to mssql02, uninstall sql server and reinstall- set up up publication on mssql01- set up subscription on mssql02 STILL DOESN'T WORK RIGHT
- -240 min total

#### --**Jun 26th** - (Ver 12)

- -To populate the Exception list for Spellcheck (Office Button > Access Options > Proofing > Custom Dictionaries)
- -Modified Request form to create different Other fields, instead of displaying the same one over and over all six times (Done as Requestor\_other, Tape\_Op\_Other, Ship\_Other, Office\_Other, Followup\_Other and Replacement\_Other (text, null)- tested just fine- had to modify dub dbo.dub\_db\_alldata view as well- tested query on SQL Server- tested fine-tested on Access- tested fine)
- -Made certain field required as per Danni- (Under Requestors info: Req Date, staff, first, last, city, st, zip, phone,email, org, address- under dubinfo:format, req type, date1, event1 and #dubs1- under Fees:payment method and cost)- done in SQL Server, not in Access-modified Form to reflect the required fields as \* and in RED text
- -Wrote a Record\_Number\_Search query to find and display a specific record (use a [ ] parameter query for the ID field)- displays EVERY Field in the db- can modify by using specific fields once we know what they want
- -150 min total

#### --Jun 28th - (Ver13)

- -Started at 0930 on backup
- -full backup occurs at noon every day using backup Device called Fullbackup and using SQL Server Agent Job called fullbackupplan- both of these are scripted as a SQL query (saved in MyDocs-SQL Server Management Studio-Projects)- created an HourlyDifferentialBackup saved same way in same place-worked just fine
- -started on date created and date modified fields- made the 2 fields and their labels visible in the form (Ver 13)- started working on Insert and Update triggers in SQL (can't do in Access)- very very close MOC pg 6-6 and 6-11 have sample code -stopped 1530- 240 min total

#### --Jun 29th -

- -Started at 0830
- -Tested whether or not it would still do differential backup (it did one at 9am)
- \_Tested restore process (take dub db offline, then r/c on Database object (NOT dub database) and select Restore Database, (Select dub for To Database and From Device and select elipses, from there Backup Media is File and click on "Add"- select the right path and click on "All Files under Files of Type- select "FullBackup"-MUST DO Fullbackup restore first, then Differential (CANNOT daisy chain these together)-under Options, MUST choose "WITH NO RECOVERY" for the Differential restore to work (it's NOT the default choice btw- its the second choice)-doing this kicks off the differential restore with the most recent one- tested just fine
- process for Differential restore is same as for Fullbackup restore (two exceptions- 1) don't take db offline- must be online for differential restore to work and 2) it shows EVERY dif backup by the hour, so you can restore back to just prior to a deletion- otherwise, just

choose latest one)- testing this last item- deleted record ID 3- can't seem to do JUST differential restore (according to 70-431 Training Kit pg 429- also GREAT not on pg 431 regarding transaction log backup)-test of restore on .12 froze up- can run "exec sp\_who2" in SQL query to find all running SPIDs (all processes)- tried to kill the stuck process ("kill 53"- got an error message saying I couldn't kill my own process- reran the restore of dub Full backup (with recovery)- dub is back on .12

- -stopped 1100
- -started 1200
- -Changed direction to no differential backup- instead doing a full backup every hour (called HourlyFullBackup) so that we have 2 restore points to choose from- copied SQL statements to create both the HourlyFullBackup device and the HourlyFullBackup SQL Server Agent job -overwrote the 3:07pm job at 4pm
- -stopped 5pm
- -300 min total

#### --Jun 30th -

- -Started 0900
- Looked at triggers again (70-431 Training Kit pg 370 has sample code) modified update\_trigger.sql- works fine created dreat\_trigger- tested fine as well- switched the order of the two records as it displays in the form (Created is first, then Modified)- triggers are in the Triggers folder for the dbo.Dub\_Request\_Tbl itself
- -Stopped 1030 90 min total

## --Jul 1st -

- -Started 1030
- -Installed VMWare on icommand-server (.9)- copied vm files from it-shop over to new permanent server-fired up test machine (tigger) again to test restore and do demo while files are copying over to production (.9)-turned off .90 on tigger machine to start up production vm- ip address conflict- turned off tigger machine- restarted .9 per vmware installation-
- -Restored db from backup-tested fine (although stop services, copy db files and restart-much faster) and ran sql scripts to insert the auto backups (triggers were already there-part of the dub db)-tested fine- HourlyFullbackup job ran fine-copybackup.bat works when run manually, but not in scheduled tasks-fixed- had to modify the file
- -Tested copybackup.bat -copied fullbackup and hourlyfullbackup to c:\database\_backups\autobackup and ran script- failed- had to remove the \e\$ from the path- new path is \\tfc-server\dubdb- tested fine- may have to modify script on MSSQL01 to reflect 10.1.10.15 instead of tfc-server (or add in hostname file)-
- -stopped 1700 360 min total

#### --Jul 2nd -

- -Started 1030
- -Setting the case of characters entered- in Design view of the form, go to Format property (<= lower case, >=UPPER case- cannot set to Sentence case w/out VB Code)- would need list of specific fields- for input mask, SQL will store whatever was typed, not what input mask shows (e.g. input mask only shows lowercase, user types w/ CAPS LOCK on, user sees lowercase, SQL stores UPPERCASE)-tested with First field- may have to change this back
- -Changed Staff Listing order
- -Fixed typos in the form
- -Set input mask for phone and alt phone fields (storing only raw numbers)
- -Cannot set input mask for email- instead put in a default value explaining the format

- -Set input mask for Urgent\_Time field "99:00 $\$ >LL;0;\_" (without quotes)- this is a longtime format- for 1:15 pm they will have to skip the first character in the mask; otherwise, it won't like the format
- -Need the order of Payment methods (mine is the exact same as the old one)
- -Added VHS to the Format table (when you modify a support table- need to go into Database Tools > Linked Table manager > Select the table and click OK, THEN, close and re-open the Access db so that changes will apply)
- -Added Date\_Record\_Created and Date\_Record\_Modified to dbo.dub\_db\_alldata View tested- get different results when querying the view vs the table
- -Stopped 1230
- 120 min total

#### --Jul 6th -

- -Started 1015
- -worked on Dub Request Table report- have to select what you want in Design view and then go to Arrange tab under Report Design Tools and click on Stacked- then you can move the elements-Tabular option under format in the wizard doesn't work right- choose columnar
- -Stopped 1215
- -Started 1315 on Tapes Dub Request Report- had to set the name for the tab- done by clicking on the blank part of the form itself, then in the Properties page, change the caption (underneath the Record Source)
- -Stopped 1645- done with all except for Tapes received Box not checked- check on the query
- -270 min total

#### --Jul 7th -

- -Started 0830
- -worked on last query/report-query works fine- no checkbox to look for so queried on date tapes rec request being null
- -Stopped 0900- delivered database to FL CH- went over changes with Danny-changed First field back-modified Contacted Notes to make it bigger- modified order of Payment method (as per Valerie)-deleted all test data (using "delete from dbo.dub\_request\_table;") (after making a copy of the sample data on both MSSQL01 and on tfc-server)- copied ver14 to everyone's machine- explained about hitting limits in Access knowledge- recommended Todd Woodward from CreativePeopleConsulting.com for custom class for Nathan and Valerie- not in budget at this time, but explained why this would be good vs. Computer Tutors doing the Access class

DONE 1130- 180 min total- PHASE ONE COMPLETE

#### **Current issues**

- -DONE020510-Title field in the form is displaying the ID not the title -set column length to 2 set column width to 0";1"- add [Title\_tbl].[Title] to select statement- MUST do this every time a change is made in the linking (not sure why)
- -DONE021210-Payment Method field needs to be longer (21 chars min for Purchase Order Number vs the 20 chars I have now)-modified to 25 chars- relinked tables- added the "r" in the payment form-modified column length to 0";1.5" vs. 0";1"
- -DONE022310-Staff form field only displays first name, not first and last names (done that way by design- Access only displays the FIRST nonzero length column)

- -DONE021210-Urgent Time field needs to be a text datatype, not a Date datatype
- -DONE021510-Need to start making the Dub Request Form look like they want it-had issues with synching and ODBC errors
- -DONE021210-Need to copy the Format field over in the Dub Request (it's the only repeating field otherwise)-copy and paste in Access- works fine
- -DONE021110-Need to create a VM for SQL Server and move the database over to it
- -DONE062810-Need to fix the backup (it's not overwriting, it's creating a new file each time)
- -DONE021510-Need to recreate the queries and reports (use the old DB as a guide)opened queries in Design view, then SQl view and copy to text file and will modify- exported the reports to another Access DB (chose Ver8 after making a copy just in case)-scrappedfor doing Access gueries from a SQL VIEW
- -DONE021110-Need to figure out how to move the databases (Detach- Move files-ReAttach)
- -DONE021210-Need to figure out how to allow them to put Other in for the Staff positions (Staff, Dub Operator[missing], Sent\_by,Shipped\_by, Contacted\_by, Completed\_by)- Put the Other column back in for Staff and only displayed 3 columns in form- this removed the error of Access looking for a parameter-
- -DONE021510-All check boxes turned into text boxes
- -DONE022210-Need to figure out JOINS, then create views so that they can run simpler queries on them-e.g. create a SQL query with JOINS that pulls which staff member, which format etc (vs. the integer that is actually stored in the db)- save as a view, then create Access query to pull out certain fields and filter and order etc.
- -DONE062610-Need to modify Request form to create different Other fields, instead of displaying the same one over and over all six times
- -Need 1 license for SQL Server (Ron/Terry to provide)
- -Possibly need 2 physical hosts running VMWare (need to be servers- the backup for these can be the IT-Shop machine (Terry/Ron to provide) (icommand-server (.9))
- -DONE062410-Need list of Users (Danni, Amy, Sarah, Nathan, Jim and Valerie)
- -Need to get Automated backup that will backup to a different server(script this as a batch file and put in scheduled tasks to go to \TFC-Server\dubdb -do this on site)
- -DONE062410-Need a spot on the file server for the master copy of the Access DB (on \\tfc-server\dubdb)
- -DONE063010-Need to create a Date Created and Date Modified field look at DB triggers in SQL- place on the form itself (Fields already exist in the DB as DateTime fields- )
- -DONE022610-Can we populate the Exception list for Spellcheck? (Yes- Office Button > Access Options > Proofing > Custom Dictionaries)
- -DONE022610-Need a query to find and display a specific record (use a [ ] parameter query for the ID field)
- -DONE070710-Need to remove dummy data when it goes live July 1 (do onsite)
- -DONE062410-Need list of required fields (Under Requestors info: Req Date, staff, first, last, city, st, zip, phone,email, org, address- under dubinfo:format, req type, date1, event1 and #dubs1- under Fees:payment method and cost)
- -DONE062410-Need to know who will be primary person for creating changes to queries/reports (Valerie and Nathan with Danni as the backup for both)- set up training on how to do that maybe the 29th?- Danni will email me on this-

### **SQL Server setup**

- -Create an acct called SQLman on the SQL server- this will be the acct the dub db uses
- -Assign all rights to Dub db for SQLman (sysadmin and dbcreator)
- -Use SSMA tool (retrieve the license for it from my machine)

- -Authentication mode on SQL is "mixed" not "Windows"
- -SQL Server Agent Service needs to be running to use the maintenance plans
- -Need sep HD for transaction logs (pg 188)
- -May need to set up Database Mail under Management in order to send e-mail
- -Set up an operator under SQL Server agent
- -Set Recovery mode of db (under Properties >Options) to Full (default anyway, but check)
- -Need to create another task to clear the Transaction log (pg 3-8) (pg 3-10- do a transaction log backup every 4 hrs)
- -Backup the master and msdb databases after installing Dub db (pg 3-66)
- -If I have to change the table on SQL server, I can go to Database Tools>Linked Table Manager and select Update-it will make the changes in the form automatically (changed the Urgent Time from datetime to chars(10))
- -VM ware installed on a PC around the corner from Tigger office Macintosh on one wall and next Machine (GX 620)
- -Services to stop to make an offline copy of databases is :SQL Server (it will also stop SQL Server Agent)
- -Online Backup occurs at 12 noon (called FullBackup) and full backup every hour (called HourlyFullBackup)-
- -IP addresses are 10.1.10.90 for Primary (MSSQL01) and 10.1.10.12 for Secondary (MSSQL02)- backup will be 10.1.10.90
- -Set up a batch file to copy the SQL Server backups to \\TFC-Server\dubdb scheduled to run every hour at the 15 minute mark (DO ONSITE)

-CopyBackup.bat-

net use m: \\10.1.10.15\\dubdb /user:flch\\administrator [password]

cd E:\database\_backups\autobackup

copy \*.\* m: net use m: /delete

### **VMWare Setup**

(VMWare Server Serial Number for FL Ch SQL database A2N8R-FYHA5-VAME5-43JV4)

-VMWare Server setup -MUST be running in IE (Firefox doesn't work properly) https://VMWareMACHINENAME:8333/ui/# (to start the VM and manage it)

-Need to put the System (or File DSN on the machine- found in the Current Working Version folder)

# Replication -(still in progress)

On MSSQL01

- 1) Expand Replication > Local Publications
- 2) R/C > New Publication >Act as own distributor >leave default folder for snapshot >select dub DB > chose merge publication >

On MSSQL02

- 1) Expand Replication > Local Subscriptions
- 2) R/C > New Subscription > ISSUES says that Replication is not installed in that instance (tried to reinstall- no dice- uninstalled and reinstalled- NEED TO DO- copy VM to other server- change IP 10 .12, change computer name to mssql02, uninstall sql server and

### **Client Setup**

- ODBC setup instructions for client machines is stored in My Docs folder on IT-Shop pc under byagnini profile at FL CH
- -Copy Access db from \tfc-server\dubdb (This is the Master copy of this file- all changes need to be made here- better yet- copy the file from here to desktop, then modify- only let one primary modify at a time, or else we can have 2 dif versions of same file)

#### **Restore Process**

- If necessary, turn off bad server VM and turn on other Virtual machine located on another physical host(IT-Shop is the backup) (VM will have same name and IP)
- Open SQL Server Management Console and connect to the SQL server (just click OK)
- Take dub db offline (expand the Databases object, expand Dub, R/C on Dub and select Tasks > Take Offline)
- R/C on Database object (NOT dub database)
- Select Restore Database
- Select dub for To Database
- Select From Device and select elipses
- The Backup Media is File and click on "Add"
- Select the right path and click on "All Files under Files of Type
- Select either "FullBackup" or "HourlyFullBackup"
- Click OK, then OK and Place a checkmark in the Restore column
- Under Options, choose "Overwrite" and "Prompt"
- Run a query to confirm the data is present (select \* from dbo.Dub\_Request\_tbl;)you should see results
- YAY!

# **Engineers/IT/Consultants**

local administrative for icommand server (10.1.10.9) : see Ron/Terry local administrative for VMWare VM MSSQL01 server (10.1.10.90) : administrator:lcnrd32f6 local SQL Server account : SQLMan: Password1

# First Delivery at the FI CH

- -Turn off services and copy over latest db, then turn back on- OR do restore process from HourlyFullbackup
- -Run create\_trigger, update\_trigger, the HourlyFullBackup\_Device, the FullBackupDevice and the two SQL server Agent jobs associated with them
- -Copy ver13 of the Access DB then test
- -Test out copybackup script from the SQL Server (.90)
- -Wait at least an hour and a half to verify the HourlyFullBackup and the CopyBackup scripts are working

### **Misc Notes / Resources**

In Velsoft Courseware, Access Foundations pg 229 is beginning of Form design section Pg 230 in Beginning SQL Server 2005 for Developers book starts the db backup process Mod 3 is the Disaster Recovery module in MOC 2780B Maintaining SQL Server book(back half of unbound zip-tied book- front half is MOC 2071B Querying SQl Server) Mod7 is the Views Module in MOC 2779B Implementing SQL Server book (Blue MS binder)