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|  | * **Transaction Logs** | |
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|  |  | * [Explicit & Implicit Transactions](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33541) |
|  |  | * [Location, Location, Location](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33541) |
|  |  | * [Advantages Of Using Transactions Logs](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33541) |
|  |  | * [Transaction Log Options](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33541) |
|  | * **Data Storage** | |
|  |  | * [How SQL Server Stores Data](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33542) add each row total bytes for rowsize page is basis for storage in SQL Server and holds 8192 bytes less housekeeping leaves around 8,060 bytes one row and fill page, generally don’t cross pages SQL groups pages into groups of 8 or and Extent an Extent is 8 – 8192 pages for a total of 64K **now .. how big is a row, how many fit on a page** |
|  |  | * [Fillfactor](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33542) how full is each datapage. When rebuilding indexes leave room if db is write intensive or pack em if mostly read only fillfactor only set at index creation / update |
|  |  | [DBCC Showcontig](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33542)  use TaCsms  dbcc showcontig ('dbo.sms\_InboundReceipts') with tableresults |
|  | * **SQL Profiler** | |
|  |  | * [Profiler](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33543) |
|  |  | * [Using SQL Profiler Part1](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33543) |
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|  | * **Automating SQL Server** | |
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|  |  | * [Creating Operators](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33544) |
|  |  | * [Creating Jobs Pt.1](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33544) |
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|  | * **Database Backups** | |
|  |  | * [Backup Strategy](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33545)   + Have one   + Specific person, specific responsibility   + Verify backups completed successfully   + Test restores how bu, differentials, ets ..written plan |
|  |  | * [Database Recovery Models](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33545)   + Simple     - Transactions are deleted from the transaction log as they are committed into the database     - Transaction log ***cannot*** be used to restore data     - Useful for development/test servers   + Bulk logged     - Minimally logs most bulk operations       * bcp       * Insert … select       * Bulk Insert       * WRITETEXT & UPDATETEXT       * Select Into       * Create/Alter/DBCC DBREINDEX Index commands       * Does not keep details       * Can be used for restores but look in docs for docs   + Full     - All transactions are fully logged     - All transactions are retained until a transaction log backup occurs     - Microsoft recommendation for production databases     - Not the best choice for large data imports     - … or turn off logs first? |
|  |  | * [Which Files and When](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33545)   + Master   + Model   + msdb- holds jobs operators alerts   + Individual databases |
|  |  | * [Performing A Backup](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33545) |
|  |  | * [SQL Backup Statement](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33545) |
|  |  | * [Transaction Log Backups](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33545) |
|  |  | * [Backup Types](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33545)   + Full     - Aka ‘database backup’     - Backs up entire database and enough of the transaction log to provide recovery (doesn’t truncate tx log   + Differential     - Must be used in conjunction with a full backup     - Captures only data that has changed since last full backup     - To restore .. restore full then most recent differential   + Transaction Log     - Similar to incremental backup     - Only gets the day     - To restore, restore full then EACH tx log bu IN ORDER     - Captures only changes since last transaction log backup     - Clears committed transactions from the log |
|  | * **Restoring Data** | |
|  |  | * [SQL Server Recovery Process](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33546)   + Backup Current Log File   + Restore Full Backup   + Restore Differentials   + Restore Log Files     - With NORECOVERY on all but last     - With RECOVERY on the last log file * Checking Database Status   + Databasepropertyex     - Select databasepropertyex(‘dbname’, ‘status’) |
|  |  | * [Restoring A Database](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33546) |
|  |  | * [The Restore Statement](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33546) |
|  | * **High Availability** | |
|  |  | * [SQL Server High Availability](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33547) |
|  |  | * [Clustering](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33547) |
|  |  | * [Standby Servers](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33547) |
|  |  | * [Log Shipping](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33547)   + Done on db by db process (for each db)   + Rclick db >properties   + Click tx log shipping   + Enable this as primary database   + Set up backup settings   + [\\networkpath\sharedbackupfolder](file:///\\networkpath\sharedbackupfolder) ???? |
|  |  | * [Database Mirroring](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33547)   + New in sql 2005 kinda combo standby/clustering   + Automatic standby server failover   + 3 servers –     - Principal (source server) auto pump data to mirror     - Mirroring (destination server)     - Witness (tracking server)   + Near instantaneous (1 step up from Warm Standby in that last logs are done automatically)   + Like getting into clustering w/o getting into clustering |
|  | * **Database Maintenance** | |
|  |  | * [Memory Management Basics](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33548)   + SQL 2005 on 2003 Server use AWE (Address Windowing Extensions)   + eC |
|  |  | * [Maintenance Plan Creation](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33548) |
|  | * **Course Wrap-Up** | |
|  |  | * [Course Wrap-Up](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33549) |
|  | * **Credits** | |
|  |  | * [About The Author](file:///C:\Documents%20and%20Settings\Randy\Local%20Settings\Temp\Rar$EX00.656\MicrosoftSQLServer2005Administration.html#33550) |