SQL Server has default directory locations for where to place backups, data files, and log files. In the case of backups, this allows you to specify a backup with just a file name (from T-SQL), and the backup will go to this directory. When using the GUI tool, it will use this as the default directory. For data/log files, new databases will default to this location unless specified otherwise. Here is how you find and change these default locations in SQL Server:

1. Default data file / log file location.
   1. SQL 2008, SQL 2005
      1. Connect to the server in SSMS.
      2. In the Object Explorer window, right-click the server and select “Properties”.
      3. Under “Select a page”, click on “Database properties”.
      4. The default data/log file locations can now be set.
   2. SQL 2008
      1. Connect to the server in SSMS.
      2. In the Object Explorer window, right-click the server and select “Facets”.
      3. Change the Facet to “Server Settings”
      4. The default data/log file locations can now be set.
   3. SQL 2000
      1. Connect to the server in Enterprise Manager.
      2. Right-click the server, and select “Properties”.
      3. Click on the “Database Properties” tab.
      4. The default data/log file locations can now be set.
   4. SQL 2008, SQL 2005, SQL2000
      1. Open the registry editor (regedit.exe)
      2. Navigate to HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Microsoft SQL Server\MSSQL10.MSSQLSERVER\MSSQLServer (the next-to-last level will vary based on the version of sql, the number of instances, and the instance name, but it will be similar)
      3. Edit and save the DefaultData / DefaultLog keys.
2. Default backup directory.
   1. SQL 2008
      1. Connect to the server in SSMS.
      2. In the Object Explorer window, right-click the server and select “Facets”.
      3. Change the Facet to “Server Settings”
      4. The default data/log file locations can now be set.
   2. SQL 2008, SQL 2005, SQL2000
      1. Open the registry editor (regedit.exe)
      2. Navigate to HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Microsoft SQL Server\MSSQL10.MSSQLSERVER\MSSQLServer (the next-to-last level will vary based on the version of sql, the number of instances, and the instance name, but it will be similar)
      3. Edit and save the BackupDirectory key.

So, you like doing everything in T-SQL? Since all of these are stored in the registry, you can use the xp\_RegRead / xp\_RegWrite extended stored procedures to read/write these values. Here is an example for reading all three locations from the registry for the instance that you are running on. This script has been tested on a default instance of SQL 2000, SQL 2005 and SQL 2008. I’ll leave it to you to figure out how to use xp\_RegWrite to save values to the registry.

declare @ServerName sysname,

@RegRootPath varchar(250),

@InstanceKeysPath varchar(250),

@InstanceKeyPath varchar(250),

@BackupDir varchar(1000),

@DefaultDataDir varchar(1000),

@DefaultLogDir varchar(1000),

@HKLM varchar(20),

@SQLVer varchar(250),

@iSQLVer tinyint;

set @SQLVer = CONVERT(varchar(250), SERVERPROPERTY('ProductVersion'));

set @iSQLVer = CONVERT(tinyint, left(@SQLVer, CharIndex('.', @SQLVer)-1));

--@iSQLVer = 8 -->> SQL 2000

--@iSQLVer = 9 -->> SQL 2005

--@iSQLVer = 10 -->> SQL 2008

set @HKLM = 'HKEY\_LOCAL\_MACHINE';

set @RegRootPath = 'SOFTWARE\Microsoft\';

if @iSQLVer > 8 set @RegRootPath = @RegRootPath + 'Microsoft SQL Server\';

set @InstanceKeysPath = @RegRootPath + 'Instance Names\SQL';

-- get the instance name. If default, use MSSQLSERVER

set @ServerName = @@SERVERNAME;

if CHARINDEX('\', @ServerName) > 0

set @ServerName = SUBSTRING(@ServerName, CharIndex('\', @Servername), 250)

else set @ServerName = 'MSSQLSERVER';

if @iSQLVer > 8 begin

-- get the path for this instance

execute master..xp\_regread @HKLM, @InstanceKeysPath, @ServerName, @InstanceKeyPath OUTPUT;

set @InstanceKeyPath = @RegRootPath + @InstanceKeyPath + '\MSSQLServer'

end else begin

set @InstanceKeyPath = @RegRootPath + @ServerName + '\MSSQLServer'

end;

-- read the directory locations

execute master..xp\_regread @HKLM, @InstanceKeyPath, 'BackupDirectory', @BackupDir OUTPUT;

execute master..xp\_regread @HKLM, @InstanceKeyPath, 'DefaultData', @DefaultDataDir OUTPUT;

execute master..xp\_regread @HKLM, @InstanceKeyPath, 'DefaultLog', @DefaultLogDir OUTPUT;

select @BackupDir, @DefaultDataDir, @DefaultLogDir;