## SQL Server Compact Edition

**Getting Started** 

Alabama Code Camp Arcane Code

#### About

- Robert C. Cain
- Last 2 years at Southern Nuclear
- 10 years as a consultant in the B'ham Market
- Wide range of .Net applications, ASP & Win
- SQL Server 2005 Data Warehouse
- http://arcanecode.com

#### Thank You

"The successful people do what the failures won't."



--Anthony Robbins

# SQL Server Compact Edition

- Lightweight and Compact Database
- Embedded
- Runs in-process
- Supported on multiple devices
- Securable
- It is not SQL Server Express
- It is not JET!

### History of SSCE

- SSCE is not new
- 2000 SQL Server CE 1.0
- 2003 SQL Server CE 2.0
- 2005 SQL Server Mobile 3.0
- 2006 Beta known as SQL Server Everywhere Edition
- 2007 SQL Server Compact Edition

# Compact Edition vs. Express Edition

	Express Edition	Compact Edition
Installed Size	197 MB	1.8 MB
Able to install with App	No	Yes
Admin rights needed to install	Yes	No*
Database File Format	Multiple Files	Single Files
Database Max Size	4 GB	4 GB
Transactions	Yes	Yes
Stored Procedures, Triggers	Yes	No
Views	Yes	No
Multi-User	Yes	No

# Valid Data Types for SSCE

Numbers	Characters / Strings	Other
Bigint*	nvarchar(n)	datetime
Integer*	ntext	binary(n)
smallint	nchar	varbinary(n)
tinyint		image
bit		Uniqueidentifier*
numeric (p,s)		identity[(s,i)]
money		rowguidcol
float		
real		

<sup>\*</sup> Can be used as Identity Columns

#### Identities

- Identity can serve as a Primary Key
- Int, BigInt can have Identity value
- Problem: Inserts generally need to have 2 trips to database to discover key
  - 1) Insert the new record
  - 2) Read the record to get the new key
- Uniqueidentifier uses a GUID
- Does not auto generate GUID for you
- Use System.Guid.NewGuid() to create

## Compact Edition is best suited for...

- Mobile Applications
- Single user applications run on the desktop (Windows Forms or Command Line)

### Compact Edition is not suited for...

- Multiuser applications
- Applications that need to run on the network

# What you need...

SQL Server Compact Edition 3.1

http://shrinkster.com/l9f

SQL Server Compact Edition Books on Line

http://shrinkster.com/lem

Visual Studio 2005 SP1

http://shrinkster.com/lel

#### Demos...

- 3 ways to create a database
- Creating a table
- Adding / Retrieving data

# Thanks Again!

- Questions?
- All material available at http://arcanecode.com
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