SQL Server Compact Edition

Getting Started

Arcane Code

About

- Robert C. Cain
- Southern Nuclear since 2005
- 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

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



--Anthony Robbins

BSDA

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 | | |

* Can be used as Identity Columns

http://shrinkster.com/lij

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/19f

• Visual Studio 2005 SP1

http://shrinkster.com/lel

SQL Server Compact Edition Books on Line

http://shrinkster.com/lem

 SQL Server Compact Edition Tools for Visual Studio 2005 Service Pack 1

http://shrinkster.com/oam



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

Thanks Again!

- Questions?
- All material available at <u>http://arcanecode.com</u>
- arcanecode@gmail.com