#### Views

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### **Session Overview**

- •What are they?
- Options
- Manipulating Data
- Indexing Views
- Demos





#### What is a View?

- •A "virtual table" you can reference in a query.
- •Can be used as an abstraction layer between user and tables ("base" tables)
- Can have up to 1024 columns
- •Modifying:
  - Alter retains permissions (like other objects)
  - Drop/Create removes permissions





## **View Options**

- •Encryption Users can't:
  - Script out object
  - Use sp\_helpText 'object' to view source
- Schemabinding
  - Creates a dependency between Base tables and View
  - Can't alter referenced Base tables





# Manipulating Data

Can only happen against one base table at a time

- Updating
  - Only records that are returned in the view can be affected
- Inserting
  - Not allowed on a multi-table view
    - Use an "INSTEAD OF INSERT" trigger on view to re-route fields
- Deleting
  - Not allowed on a multi-table view





## **Indexing Views**

Only on Enterprise and Developer SQL Server

- Materialized View
  - Physically copies the base table(s) data
  - "Standard" views are instruction sets on how to pull data from base tables
  - "Partitioned" views have base tables in different databases





## **Indexing Views - Rules**

- First index must be UNIQUE & CLUSTERED
- SCHEMABOUND required
- Base tables only, no nested views

- Same schema and database as base tables
- Two-Part names required
- Fields must be deterministic





# DEMOS





#### Review

Presentation Recording, Slides and Scripts

– http://www.AaronBuma.com/2016/01/Views/

- Contact:
  - Aaron.Buma@EmergencyReporting.com





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