IBM Lotus Domino 7 Meets IBM DB2

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ADMIN&2004
DEVELOPER

Who am I?

ADMIN&2004
DEVELOPER

Andrew Pollack

- Principal, Northern Collaborative Technologies
- Certified with Lotus Notes since version 2
- IBM Lotus Beacon Award
  - Finalist in 1999, Winner in 2003

☐ **Author of NCT Search for Lotus Domino**

☐ **Proud member of the The Penumbra Group**

☐ **Firefighter – When not driving a keyboard, I drive the big red truck**

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About this Presentation

- ***This is an exploration of specific features, its deep and focused, not a general overview***

- ***Focus is on what's Important about DB2 Integration with Domino 7***
  - What IBM says is Important
  - What I think is import

- ***Created in August based on "Milestone 2"***
  - Updates are likely, and will be posted
  - *BASED ON BETA – Things WILL change*

- ***I try to put the 'meat' on the slides, in this case, the is a lot of demo as well***

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The Obligatory Commercial

- **Most of the speakers at this conference are available to help you!**

  - That's the real reason we do this
  - Real experts guarantee results

- **Catch up with me during the conference if you want expert help**

If this was TIVO I could fast forward…

Major Release

 Now, on with the show…

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IBM want Domino and DB2 closely coupled

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- ☐ **Customers are asking for it.**
  - ■ Major investment in DB2 already
  - ■ Prospect of a single data storage farm

- ☐ **Leverage between products increases revenue and overall market share**

- ☐ **In the future, performance and scale**
  - ■ Domino 7 with DB2 8 is just a start
  - ■ DB2 is evolving toward more non traditional data structures like XML and Rich Data
  - ■ As the technology improves, scale and performance will eventually outstrip the limits of a local NSF file on disk

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So Do Developers

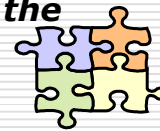**ADMIN 2004 DEVELOPER**

- ☐ **It grants some long standing Domino programmer wish list items**

  - ■ Live Views of Relational Data

  - ■ Single Views with Data from Multiple Databases

  - ■ View indexes generated on the fly based on changing selection criteria

    - ☐ @Username
    - ☐ Current Time
    - ☐ Specific Keyword Choice

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What do you get with DB2 Integration

- ☐ **Store Domino Data within DB2**

- ☐ **Controlled Access to Specific Domino Data from DB2 Applications**

- ☐ **Create a Notes view of DB2 Data**

- ☐ **Using DB2 to store your Lotus Domino database does not automatically make the data open to other DB2 applications!**

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Storing Domino Data in DB2

- ☐ **For Beta 2, Requires DB2 on the Same Box**
- ☐ **Classic NSF or DB2NSF on a per database basis**
- ☐ **Servers Only, clients continue to use NSF files**
- ☐ **Transparent to users**
- ☐ **Mostly transparent to administrators**
- ☐ **Using a DB2NSF _does not_ imply sharing data**

- ☐ **_Not presently being represented as a performance gain_**

NOT BETA's Certificatio certlog.nsf	f:\domino\data\certlog.nsf	R6 (43:0)	282,144
Server Certificate Admin certsrv.nsf	f:\domino\data\certsrv.nsf	R6 (43:0)	1,050,624
DB2TEST	db2test.nsf	f:\domino\data\DB2TEST.nsf	R6 (43:0)	0
Domino Directory Cache dbdirman.nsf	f:\domino\data\dbdirman.nsf	R6 (43:0)	589,824
Event Resolution Cente ddm.nsf	f:\domino\data\ddm.nsf	R6 (43:0)	2,138,112

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Give DB2 Access to Domino Data

- ☐ *Design Element called a "DB2 Access View"*

  - ■ Defines data in Domino as a Table to DB2

    - ☐ Not the same as a Notes View

    - ☐ No access from Notes Client
      - ■ Exception: SQL Views see it as DB2 Data

- ☐ *Domino Security Is Fully Enforced*
  - ■ Including Reader Names

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Lotus Domino Security is Enforced within DB2

- ☐ **From the Administration Help File --**

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Adding an Integrated Server to your Domain

- **Lotus Domino 7 is 100% Backward Compatible with your existing Domino Domain!**

- **1. Prepare a DB2 Database Instance for storing the data.**

  - May already exist, or you may create a new one

  - Detailed instructions in the Lotus Domino Administrator 7 Help file

  - NOTE: For this current beta, DB2 must be on the same machine

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Adding an Integrated Server
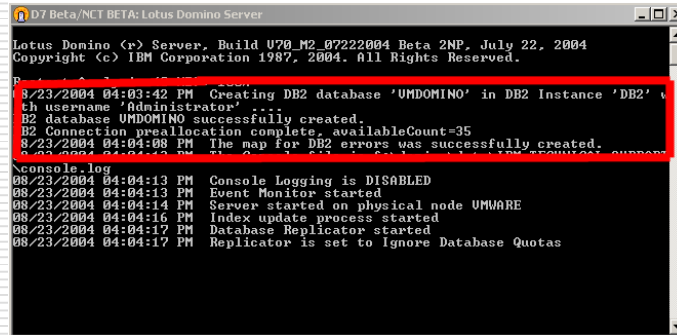
- **2. Make sure you have transaction logging turned on. This is a requirement.**

- **3. Run the wizard from the Admin client**

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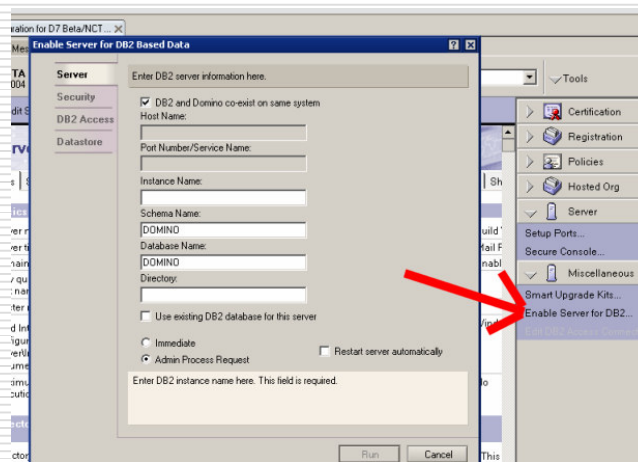
Adding an Integrated Server

☐ **The server will restart and you're all done!**

How databases will be created

☐ **Check your server document – you may want to change a setting here...**
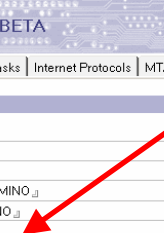
If you set this to "DB2" then all databases created will end up stored in DB2.

If you set this to "NSF" then all databases created will end up stored as NSF

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Move databases between the data stores

☐ **Adminp does the real work here**
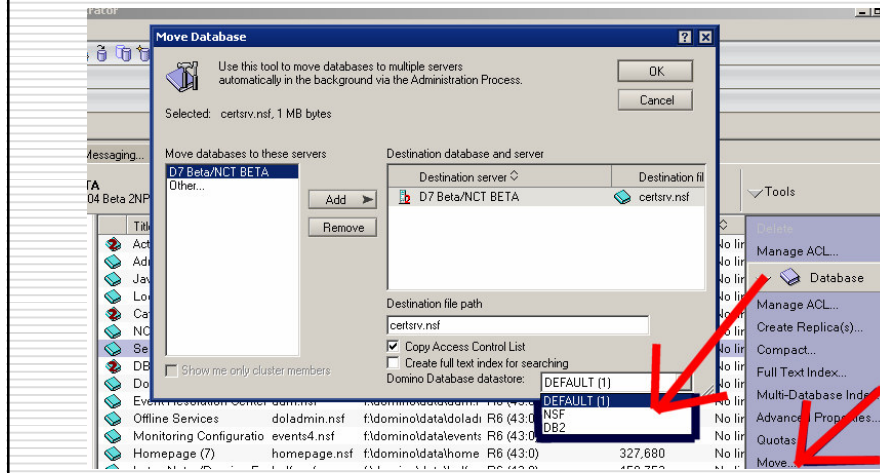
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Move databases within DB2
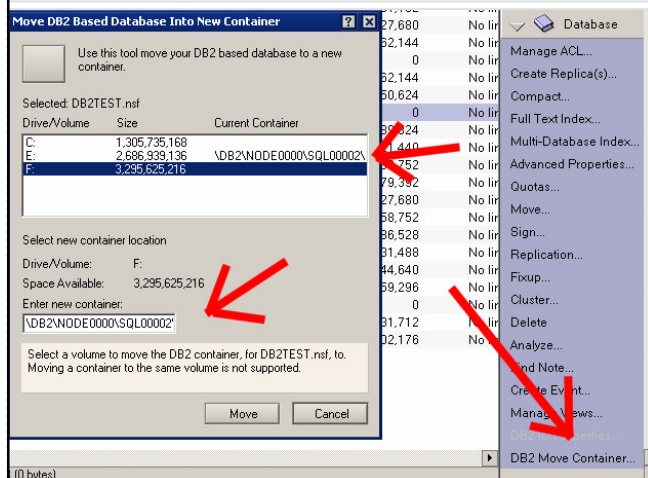
Even create new storage containers within DB2 to place your databases (if you have access rights)

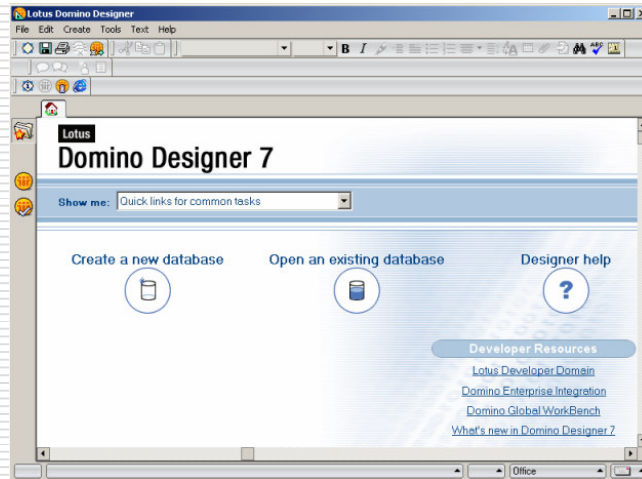Andrew_Pollack@TheNorth.com http://www.thenorth.com

Now lets develop something!

- ☐ **If you're playing the home game, its DEMO time**

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DB2 Integration in Designer

- ☐ *Two sides of the coin*

  - ■ Query Views
    - ☐ Data from DB2
    - ☐ Displayed in Notes

  - ■ DB2 Access Views (DAVs)
    - ☐ Data from Domino
    - ☐ Accessed in DB2
    - ☐ Obeys Domino Security

Domino Data

Access View → DB2

Query View ←

O D B C

Traditional RDB applications

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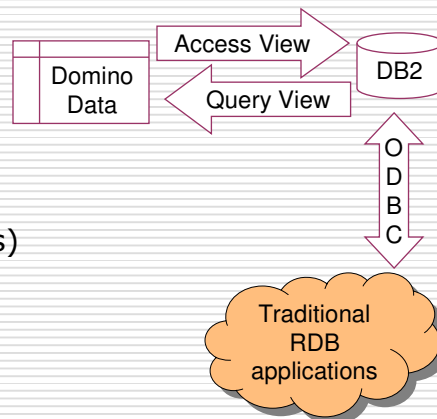
Use a "Query View" to access DB2 Data

- **Data may be from a Domino DB2 Access View**
  - To open the note, you must include the noteid in the SQL select statement

- **Query can be dynamic**
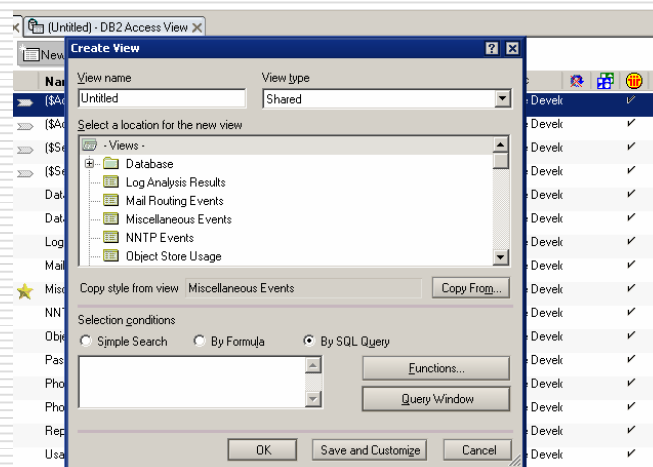 - Example: @Prompt() popup to determine view content

- **Query can "Join" DB2 data**
  - Join two Domino DB2 Access Views to see data from more than one Domino database in a single view

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Defining a Query View

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Query Views – RDB Data in Notes

□ **No pre-built indexes in the NSF**

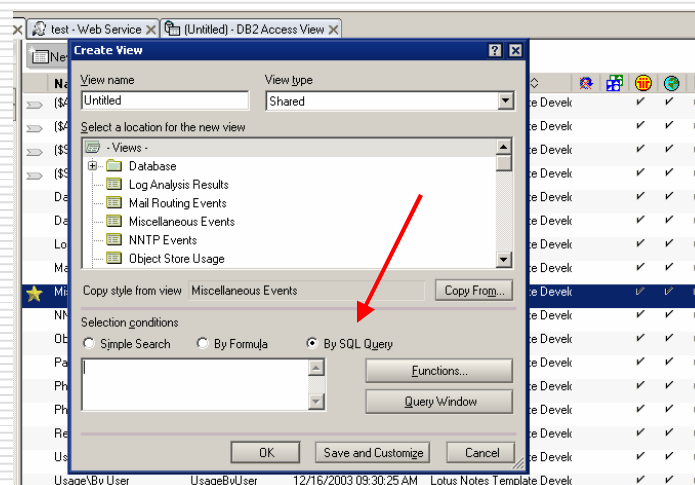■ Possible storage and performance boost for databases that change frequently

□ **Selection can be changed on the fly per user**

■ Use @Prompt narrow selection
■ Complex SQL can fit different kinds of data into the same view design
    □ Does this make the Notes client a reporting tool?
■ Finally, use @Username to select data

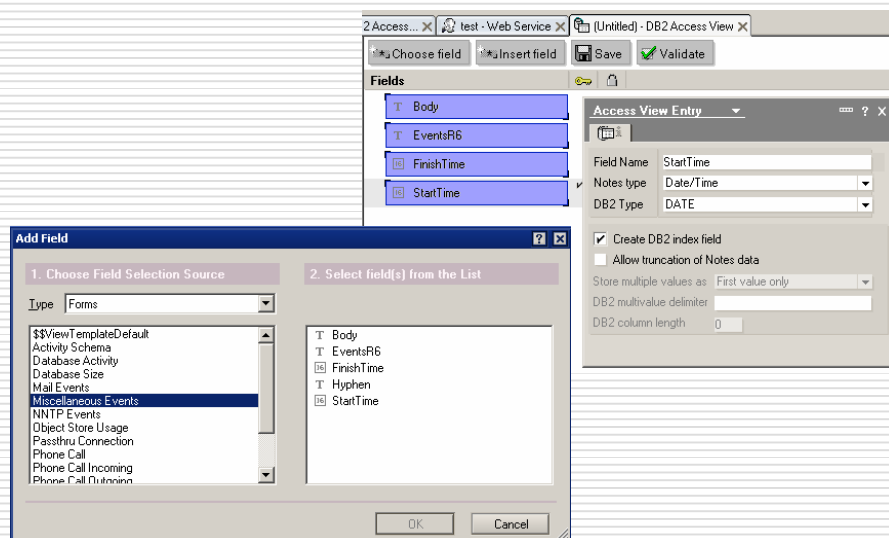## Use SQL right in the selection formula

DB2 Access Views – Share Domino Data

☐ **Distinct Design element**
- *not just a view type*

☐ **Not visible in the client**
- *except through Query Views*

☐ **Defines Lotus Notes "Information" in a Relational Data model**

☐ **Enforces Domino Security**

Creating a DB2 Access View

Like Chocolate & Peanut Butter

- ***Or Beer and Pretzels -- They go well together***

    - DAVs from two Notes databases can make up a single Query View – breaking the .NSF barrier!

- ***If a valid NOTEID from a DAV is selected, the referenced document can be opened from the view***

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Thank you for playing!

- **We're all trying to figure this stuff out together-- please ask your questions so others can here the answers**

- **We might even get some IBM people from the audience here to speak up with answers**

- **You may also contact me directly if you like**

- **Please fill out your evaluations**

- **The latest copy of this presentation will also be available at my website: http://www.thenorth.com**

- **For those playing the home game, direct questions & comments to:**

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