## Who is this guy?

- Using Postgres since 1999 or so
- Employer Bowman Systems
- Mainly a developer
- Sometimes a DBA
- Occasionally a Sys-Admin

# What is Bowman Systems?

- ASP
- HMIS
- Small Company (40-50 people)
- We are hiring

## How do we use PostgreSQL?

- We didn't at first, company was and currently is mostly a MS-SQL shop.
- Attempted ports in 2001 failed mainly by lack of support from management.
- Attempted port again in 2003, failed due to lack of set returning UDFs in Postgres.

#### **ART**

- Company decided in 2004 to integrate a BI tool
- Settled on data-warehouse approach
- No \$ for ETL of course
- MS and Oracles enterprise products prohibitively expensive
- PG 7 supported set functions (woot!)

#### Poor mans ETL

- MS BCP (Bulk Copy) dumps data to network share
- PostgreSQL COPY imports data
- Post-load scripts denormalize and aggregate
- BI Tool sits on top via ODBC

# Warehousing Challenges

- BCP is dumb
- \COPY to slow
- Slow Joins
- Function scan slow

- Handle during import
- Use COPY
- Denormalize in dump
- Use \$ saved to buy lots of RAM and processors

#### Now that the foot is in the door...

- ART was big success
- Core application aging, facing re-write
- MS Licensing upgrades estimated at \$500k+
- Lets try Postgres!

## OLTP Challenges

- Function scan still way too slow
- App must remain MS-SQL compatible
- Replication

- Hack optimizer to inline set functions
- ORM and lots of regression tests
- Not sure yet, ask me next year

### Fini

- Richard Rowell
- richard.rowell@gmail.com
- www.bowmansystems.com