Postgres 8.3 Improvements and Changes 2/3/2011

- improved performance with sequential scans
- server configuration parameters can be set for each function
 this allows user to give more memory to a particular function
- reduced overhead on tables
- new SQL feature: ORDER BY ... NULLS FIRST/LAST
- support for the SQL/XML standard
 - new built in xml datatype
 - includes function to produce a value of xml type from char and other XML related functions
 - new configure option "- with-libxml"
 - new functions like "table_to_xml" map contents of tables to XML values
 - previous versions of postgres had xml functions in a contrib module which had to be built and installed separately
- cursors now support "WHERE CURRENT OF ..." (Informix had this feature)
- database owners can now create "trusted" languages such as plpgsql
 previously had to be user postgres to do this
- non-character datatypes are no longer automatically cast to text
 - in previous versions of postgres, if a non-character value was passed to an operator or function which required text input, an automatic cast to text was done
 - change was made because the automatic cast could cause strange behavior
 - this change can break previously working code!
 - causes a "type rematch" error
 - users report that these errors occur throughout their code
- psql command syntax change
 - to copy records from the height.unl flat file to the height table

\copy height from height.unl with delimiter '|' null ''

Vacuum

auto_vacuum is ON by default (previously was OFF by default) and uses multiple (3 by default) concurrent worker processes.

How do you disable and reenable auto vacuuming for a select table?

```
--disable auto vacuum
ALTER TABLE sometable SET (
```

```
autovacuum_enabled = false, toast.autovacuum_enabled = false
);
--enable auto vacuum
ALTER TABLE sometable SET (
autovacuum_enabled = true, toast.autovacuum_enabled = true
);
```

Large Objects

pg_largeobject table was introduced (Section 44.22 of the doc) for storing large objects. Max is 2Gb.

AWIPS 2 will use Version 8.3.x of postgres