BNZ Data Management 2010

Jason Downing

February 27, 2010

Accomplishments

(an annual exercise in self reflection)

- It has been a busy year as we are continually evolving and adapting to provide a high quality data management system.

- Highlight Topics
  - Network Activities
  - Business Items
  - Data
  - Web Development

Network Activities

- LNO Stimulus Funding
  - Programmers, Network Data Manager, Training

- Working Groups
  - Keywords, EML, GIS

- Data Bits Editorship

  Fall 2008, Spring 2009, Fall 2009

- Eco-Trends Participation

  Book Publication 2010

Reports and Proposals

(annual chores and maintainance)

- Annual USFS Report
- Annual NSF Report

- 2010 NSF Proposal Materials

  – Publications Database
    - Adding recent publications
    - PDF availability
  – Data file list

Data

- **Data Growth**
  - 119 New Datasets (Since 2007 Site Review)
    - 31 Core Data Sets
      - TDR Archive, NPP, etc.
    - Projects
      - Log Decomposition, APEX, moisture gradient, high latitude model data, vegetation, nitrogen cycling, carbon dynamics, scenarios of climate change,
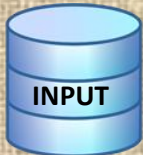
- **Streaming Data Quantity**
  - 660 measurements each hour at
    19 sensor stations translates to
    12540 new data points each hour,
    300,960 new data points each day,
    which totals more than **100 million** records last year alone!

Data Pathways

(the chronicles of BNZ data)

Data User

(see next slide)

CLIMDB

EcoTrends
CALM

NADP

INPUT

OUTPUT

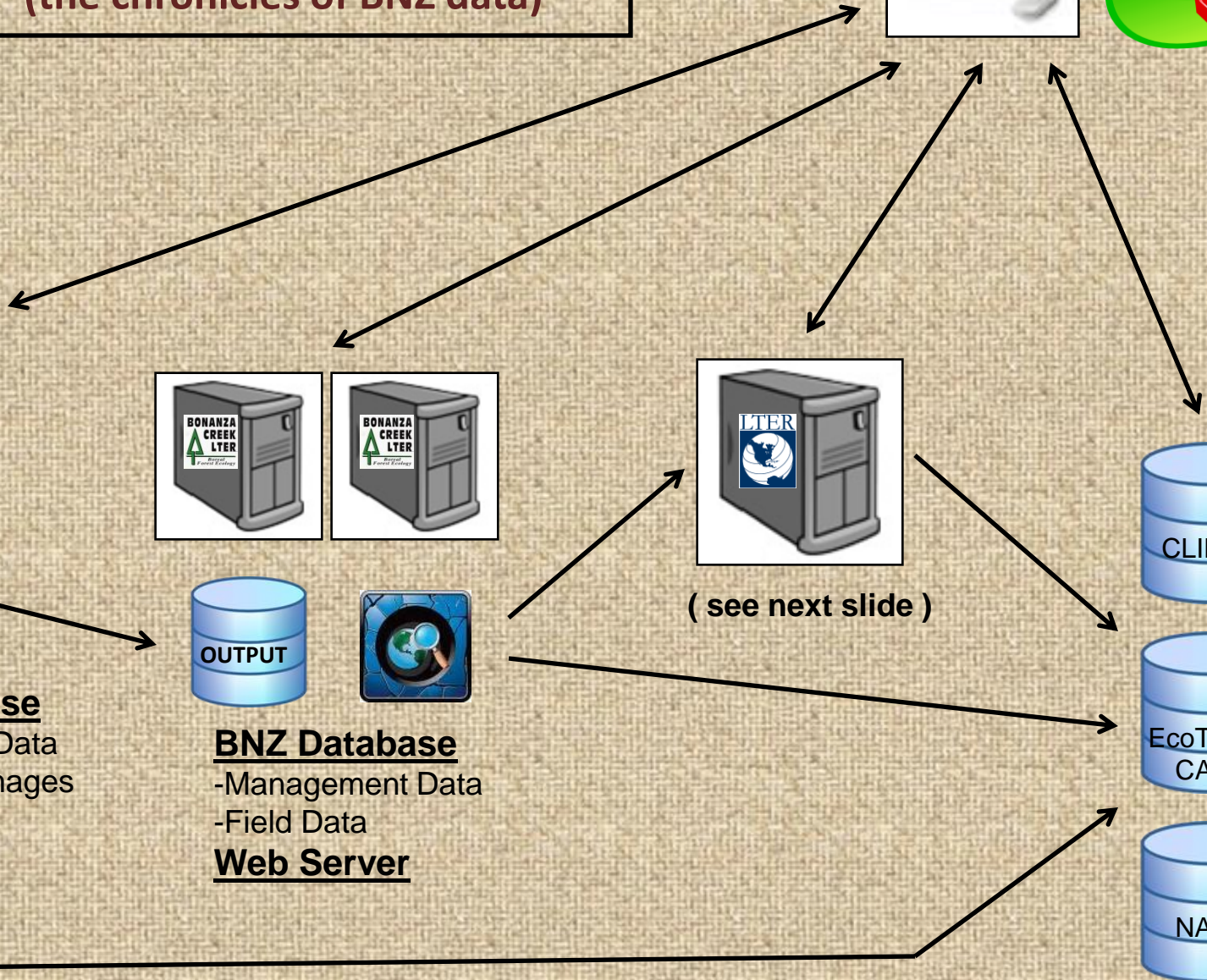**VDV – Database**
-Climate StationData
-Web Camera Images

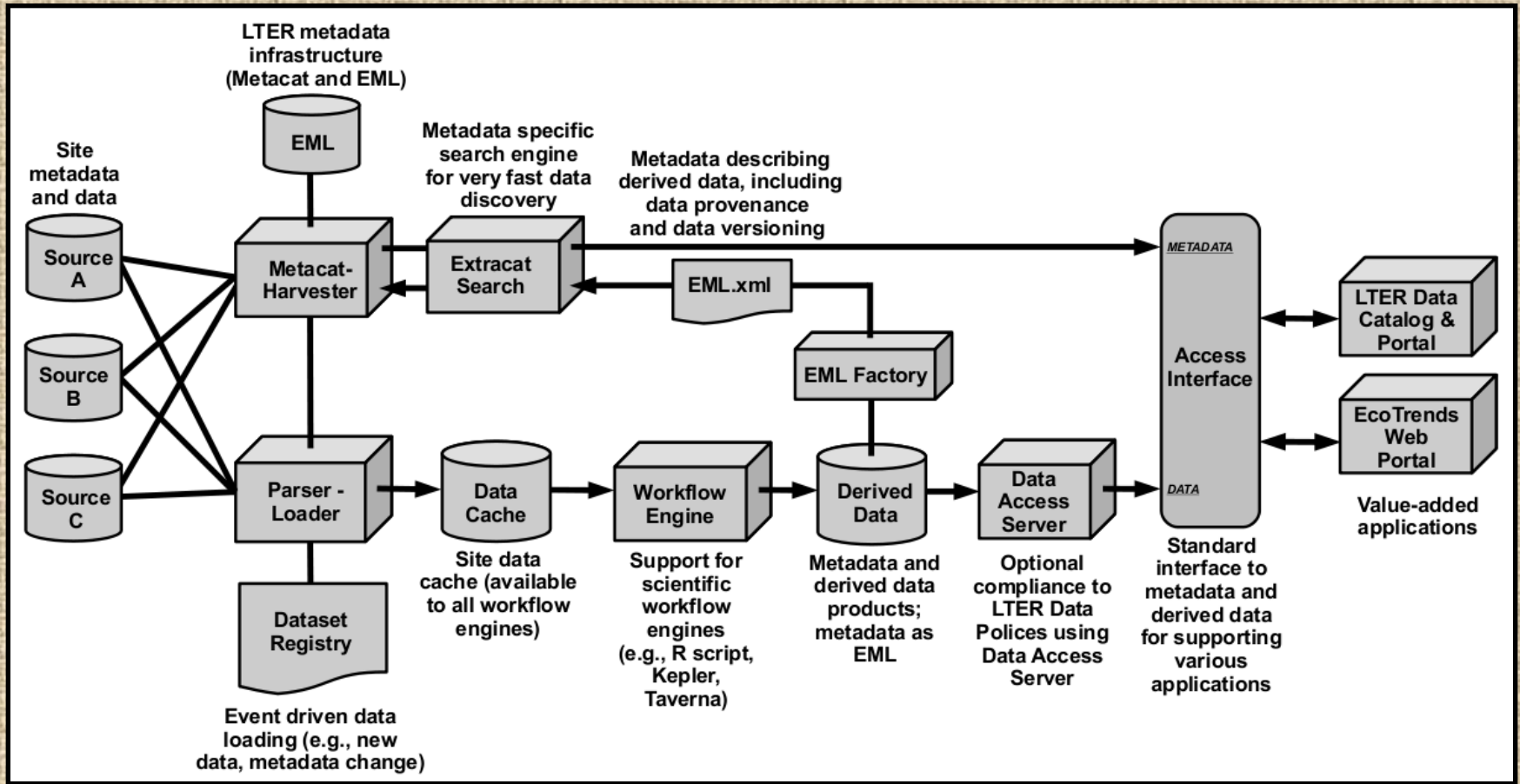**BNZ Database**
-Management Data
-Field Data
Web Server

LTER PASTA Diagram

(pass the sauce and breadsticks)

Data Quality

**(the devil is always in the details
OR earning the gold star)**

- QA/QC of Historical Core Data
  - Finishing stages of data project with Joy Clein
- Streaming Data Quality
  - Automatic Filters
    (for simple out of range type issues)
  - Manual Review by technician
    (for more complex data logger/sensor issues)
- VDV Database Reports

Metadata

(the gold plated widgets of my trade)

- EML Script Enhancements

- Keywords Project

- Updating Historical Documentation

Web Site Renovations

- Re-Organization of the MENU items
- Enhanced research content
  - New text and graphics
- Enhanced Capabilities & Display
  - Site, Data, Personnel, Searching
- Added Features
  - Image Search, Google maps

Transitions
(in a time of change...in more ways then one)

- Thanks to those individuals that have contributed substantially to the BNZ LTER program but have moved on to new opportunities and challenges.

  - Rebecca Koskela
  - Joy Clein

Future Plans
(look into the crystal ball)

- Continued improvements to the web content and services

- Continued education and professional development for the data manager

- Stay involved and aware of partnership opportunities at UAF and beyond