

# Building the LTER Network Information System

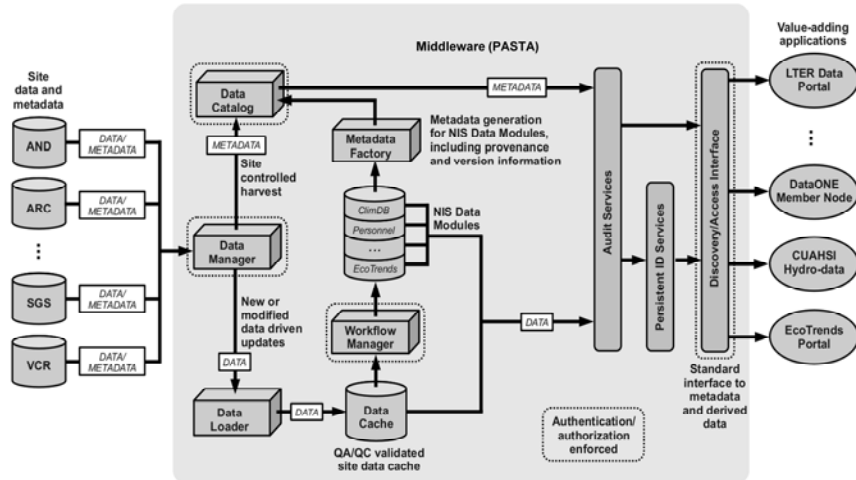
Mark Servilla



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None

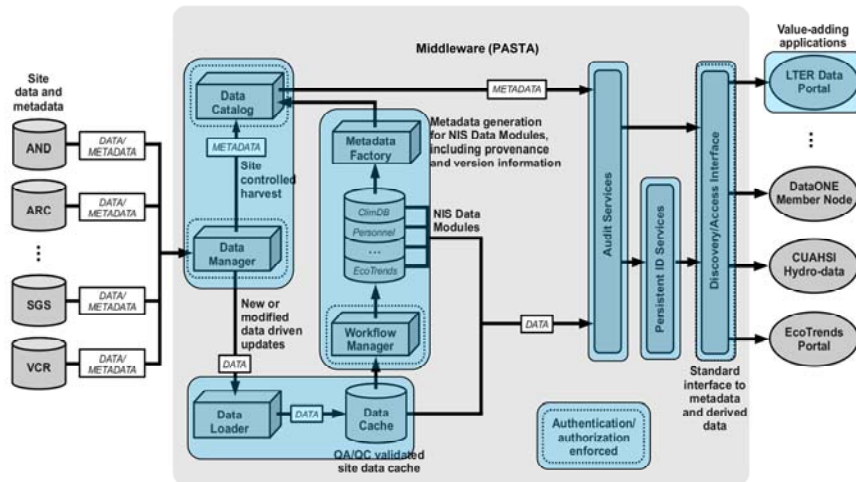
## LTER Network Information System



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Point 2: The component diagram represents a more detailed view of “data flow” from left-to-right through the NIS. Sites are found on the left-side. The box in the middle represents the Provenance Aware Synthesis Tracking Architecture (PASTA) that is being developed by the LNO. External value-adding applications are on the right-side. New applications can be developed by discovering and accessing data through a standard programming interface.

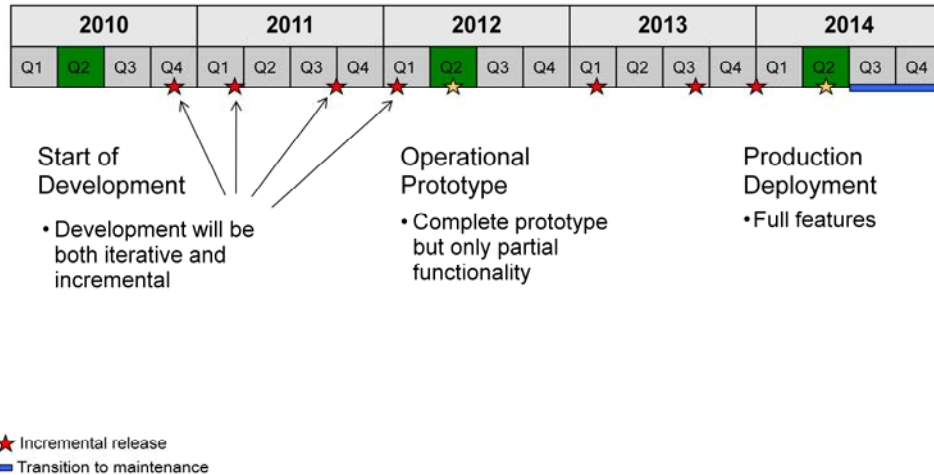
## LTER Network Information System



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## NIS Development Timeline



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Point 1: Development will be both iterative (using a cyclic process) and incremental, with public releases occurring early and often that will add new features with each release.

Point 2: There will be two major releases of the NIS. The first, an operational prototype, will be released to the community in April 2012. The second and final production release will be in April 2014.

Operational prototype - Integrated into current web portal; Basic programming interface for discovery/access of data; System-based workflow execution for creation of derived data; Automated metadata/data harvesting with QA/QC for tabular data; Partial provenance capture for data life-cycle

Production deployment - Full featured web portal; Advanced programming interface for building external applications; Support for user-created workflows and creation of derived data; Automated metadata/data harvesting with QA/QC of tabular and complex data; Full provenance capture for data life-cycle

## Tiger Teams

*"Referring to a team set up solely in response to a specific situation or problem, without considering any wider or longer-term issues." - Wikipedia*

### Roles & Responsibilities

- **2-3 individuals**
  - Information Managers
  - Scientists
  - Graduate Students
- **Scope of work**
  - Direct input to requirements and design
  - Intermediate and final acceptance testing of software
- **Commitment**
  - A couple of hours per week
  - 4-8 months
  - Rapid feedback



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To ensure bi-directional communication with stakeholders without jeopardizing timelines our external advisors and NISAC suggested that we enlist the concept of small 'Tiger Teams' to focus on specific component development cycles. We're looking for 2-3 individuals on each component/sub-component to provide rapid feedback when needed, direct input to requirements and design, and do acceptance testing. The task won't be horribly onerous and the tenure is short. Some groups will be better suited to technical folks and others for non-technical folks in either category we would like to engage domain scientists.

## Tiger Team Sign Up

| Date                | Subsystem                      | Codename | Member Count |
|---------------------|--------------------------------|----------|--------------|
| May 2010 - Sep 2010 | Metadata Management Suite      | Aragon   | 2            |
| Jun 2010 - Dec 2010 | Workflow Suite                 | Boromir  | 0            |
| Sep 2010 - Mar 2011 | Data Management Suite          | Frodo    | 0            |
| Jan 2011 - Jun 2011 | Identity Management Services   | Gandalf  | 0            |
| Apr 2011 - Sep 2011 | Discovery/Access API           | Gimli    | 0            |
| Sep 2011 - Feb 2012 | NIS Data Portal                | Legolas  | 0            |
| Oct 2011 - Mar 2012 | Persistent Identifier Services | Merry    | 0            |
| Dec 2011 - Apr 2012 | Audit Services                 | Pippin   | 0            |
| TBD                 | System Monitor                 | Sam      | 0            |

**<https://nis.lternet.edu>**

## **For Additional Information or Comments**

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*or*

**<https://nis.lternet.edu>**