

ILTER



*Long Term Ecological Research  
Network Office*

# **Network Information System**

Mark Servilla

&

Duane Costa

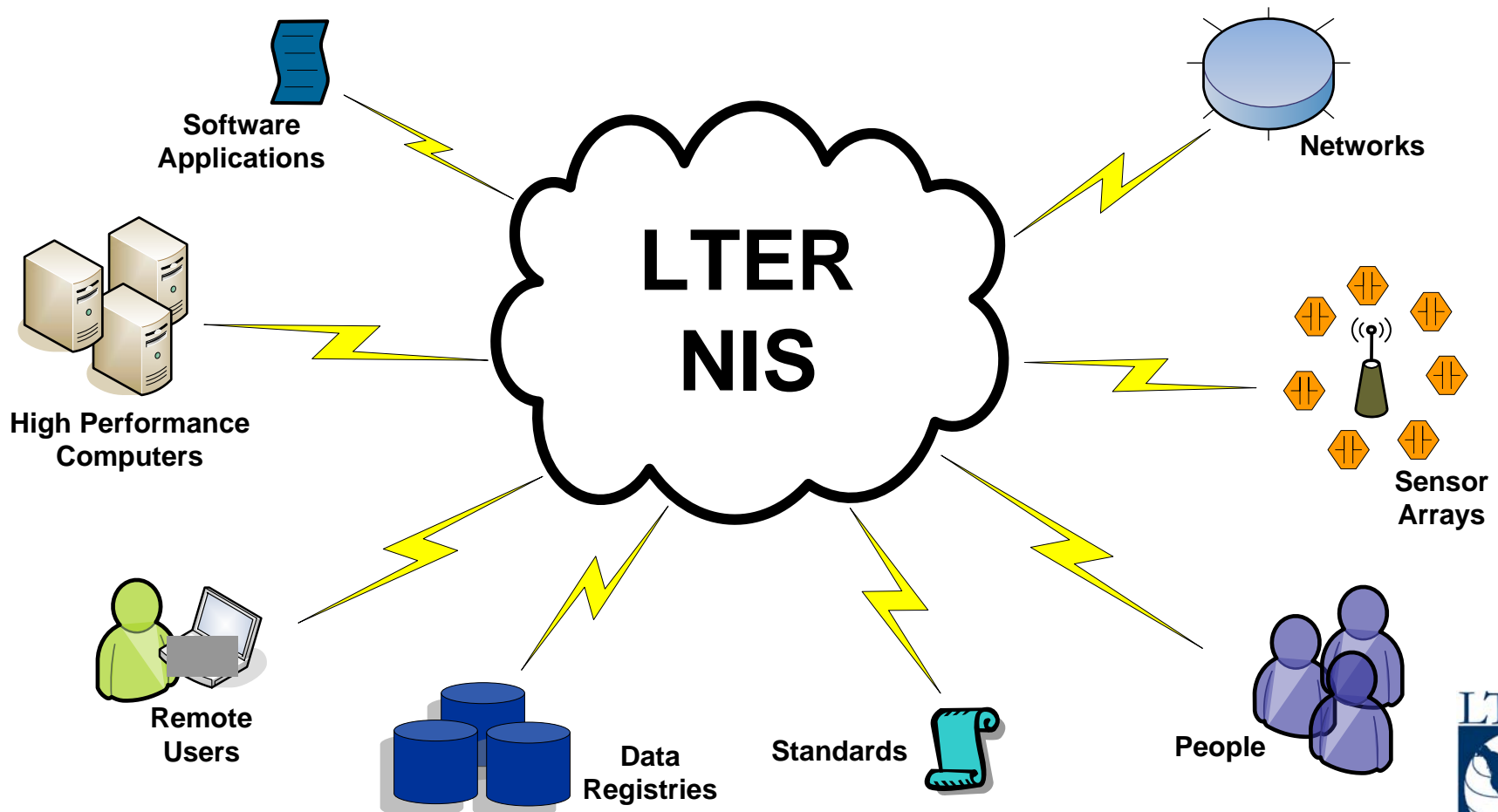


# NIS Development Team

- Mark Servilla, Lead Scientist
  - May 2004
- Duane Costa, Programmer Analyst
  - October 2003

# Network Information System

Data and synthesis products resulting from research activities across the Network of LTER sites





# NIS Advisory Committee

- Created in 2003; first meeting Spring 2004
- Members
  - 5 Scientists
  - 4 Information Managers
  - 5 LNO
- Mission – “...provide the Information Management and Information Technology to facilitate and promote advances in collaborative and synthetic ecological science at multiple temporal and spatial scales.”
- NIS Strategic Plan – adopted Sept 2005 by LTER CC
- Guidance to the NIS Development Team
  - Vetting process to review new tasks
  - Sets priorities for new tasks
  - Sets target dates for new tasks



# Scope of Work and Strategic Plan Goals

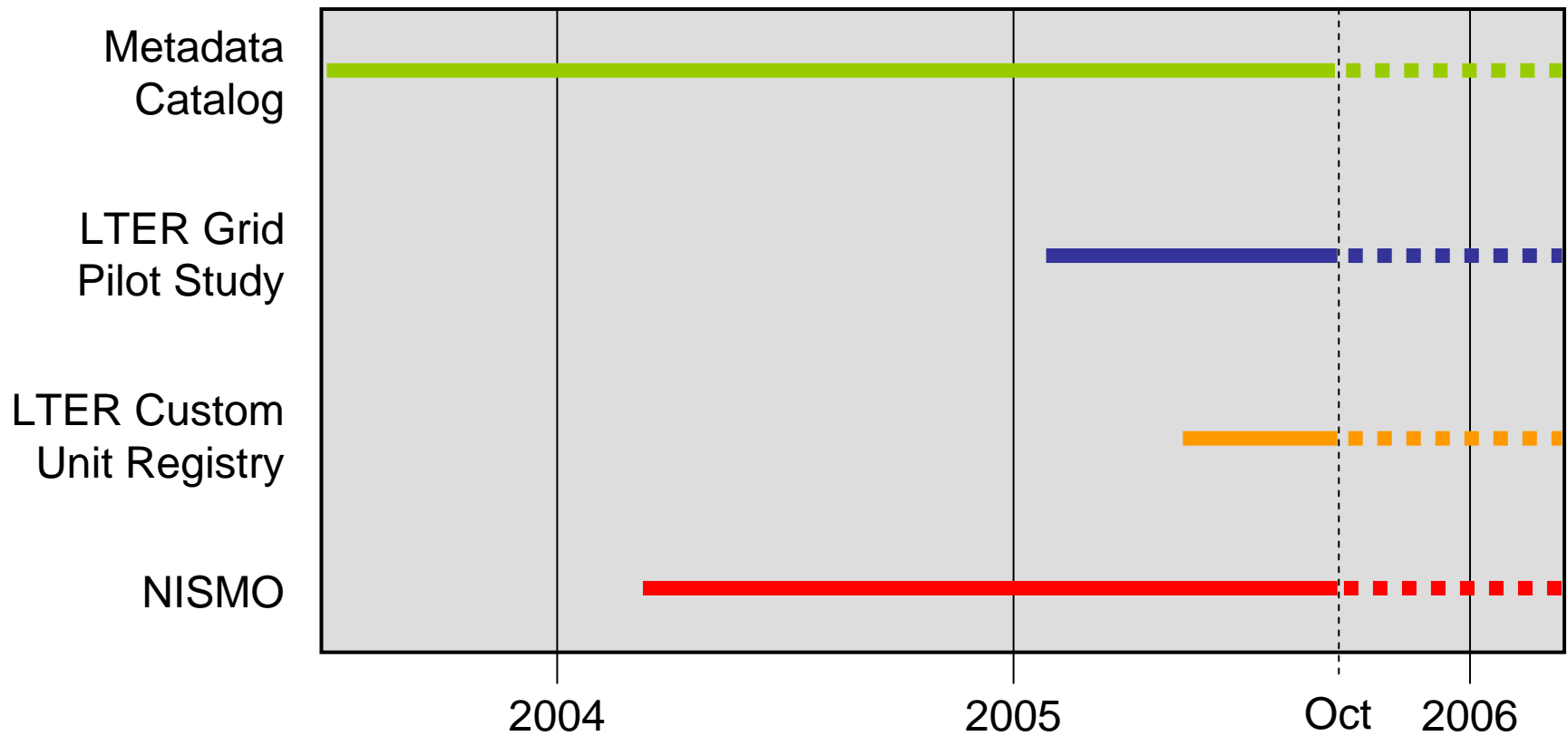
- NIS Scope of Work per Cooperative Agreement
  - Distributed data network
    - Metadata catalog
    - Web-services model
  - Community collaboration and standardization
  - Promote and support synthetic research
  - Coordinating, supervision, and reporting
    - NISAC
    - IM Meeting
- NIS Strategic Plan Goals
  - Increase data quality through standard approaches
  - Increase data available for synthetic activities
  - Increase knowledge discovery through synthesis



# Accomplishments to Date

- **Metadata Catalog – 5,000 docs; 3,000 from LTER**
  - LTER Metacat
  - Harvester
  - Advanced Query Interface
  - Site support tools for EML
  - Remote Sensing Archive
- **LTER Grid Pilot Study**
  - Collaboration with NCSA and SEEK
  - Efficacy of Grid middleware to IT and Science users
  - Requirements for a production LTER Grid
- **LTER Custom Unit Registry**
  - STMML cut and paste
  - LTER site collaboration
- **NIS Modus-operandi**
  - Feedback and prioritization process with NISAC
  - Reporting
  - Software and management process
  - Concurrent Versions System (CVS)

# Accomplishments Time-line



Scope of Work: NIS Goals								
NIS Accomplishments to date		Distributed Data Network		Community Collaboration and Standardization	Promoting and Supporting Synthetic Research	Coordination, Supervision, and Reporting		
		Metadata Catalog	Web-services Model			NISAC	IM Meeting	
	Metadata Data Catalog	Metacat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
		Harvester	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
		Advanced Query Interface	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
		Legacy Conversion Tools	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
		Remote Sensing Data	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Custom Unit Registry	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
	Grid Pilot Study	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
NIS Modus-operandi	Feedback and Prioritization Process					<input checked="" type="checkbox"/>		
	Reporting			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Software Process and Management			<input checked="" type="checkbox"/>				



# Future Goals

- **Distributed Data Network**
  - Fully flesh out LTER Web-services model; support sites in deployment of clients
  - Develop production version of LTER Grid
  - Continue integration and support of Metacat and associated tools
  - Investigate Life Science ID Authority for LTER
- **Community Collaboration and Standardization**
  - Continue site support tools for EML
  - Continue development of LTER Custom Unit Registry
  - Development of a Metadata Management Model for LTER sites
  - Contribute to the design and structure of EML as an eml-developer member

# Future Goals

- Promoting and Supporting Synthetic Research (at the Network scale)
  - Metadata standards and tools
  - Interoperability standards (Grid middleware)
- Coordinating, Supervision, and Reporting
  - NIS Project web-site
- Reconcile Scope of Work with Strategic Plan