LTER Network Databases

Redesign motivations

Databases - motivation for redesign

Personnel - site, role, contact information, disciplinary, key - personid

   need to resolve issues related to:
      site membership - remove concept of primary site
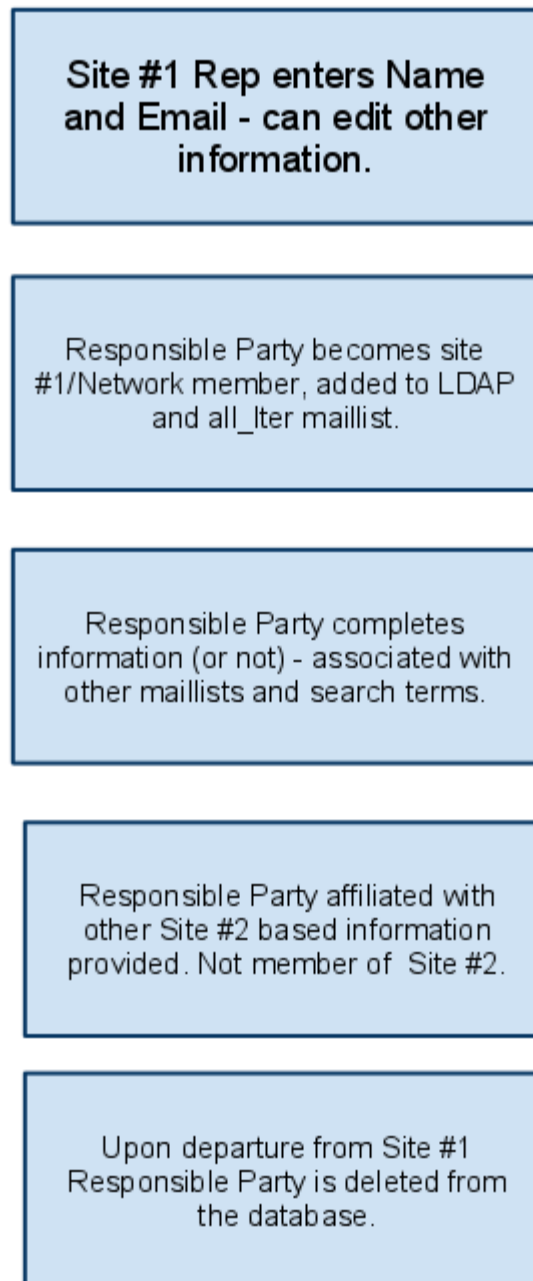   historical participation - keep historical records
      editorial responsibility - who can add/edit what?
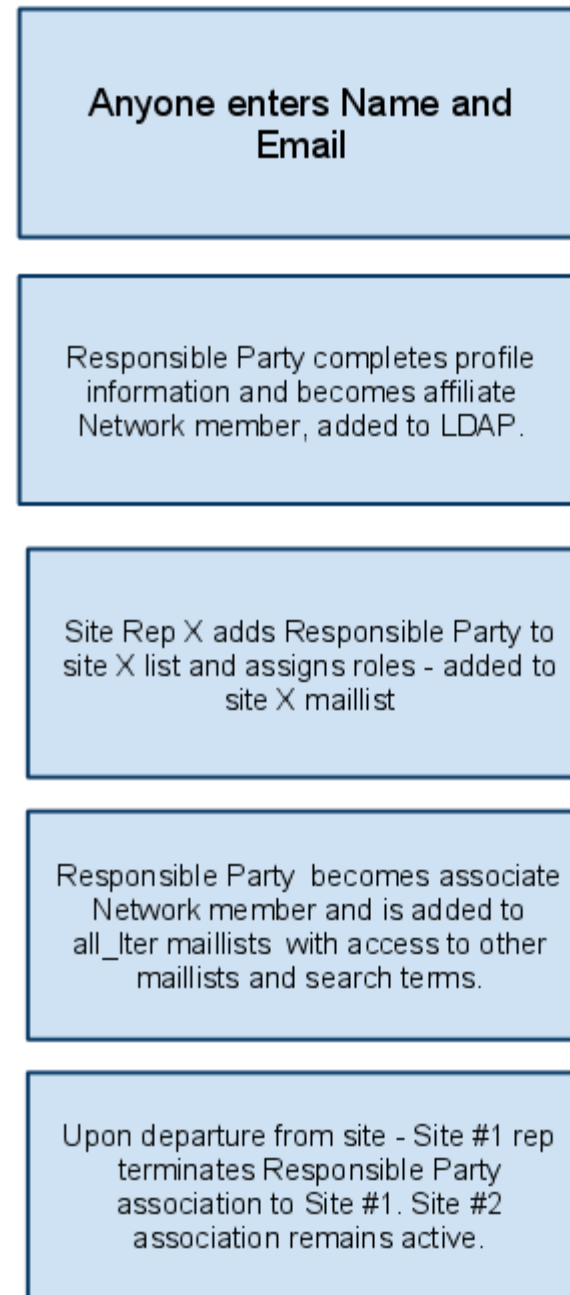   redundant information - roles vs groups (maillists)
      site/program access - add web services access for sites
      (see Figure 1)

Figure 1

Current Process

Site #1 Rep enters Name and Email - can edit other information.

Responsible Party becomes site #1/Network member, added to LDAP and all_lter maillist.

Responsible Party completes information (or not) - associated with other maillists and search terms.

Responsible Party affiliated with other Site #2 based information provided. Not member of Site #2.

Upon departure from Site #1 Responsible Party is deleted from the database.

A Use Case for Future Process

Anyone enters Name and Email

Responsible Party completes profile information and becomes affiliate Network member, added to LDAP.

Site Rep X adds Responsible Party to site X list and assigns roles - added to site X maillist

Responsible Party becomes associate Network member and is added to all_lter maillists with access to other maillists and search terms.

Upon departure from site - Site #1 rep terminates Responsible Party association to Site #1. Site #2 association remains active.

Databases - motivation for redesign(2)

Bibliography - site, standard bibliographic attributes, key - accession_number, cumulative - non-unique at the network level

    need to resolve issues related to:

        author information - integrate with personnel database

        uniqueness - accession numbering for the Network

        site/program access - add web services access for sites

SiteDB - site descriptions, research locations and coordinates, contacts, links, key - siteid

    need to resolve issues related to

        sitedb as the network point of entry for sites

        content management - adding new fields easily

Who's the site Lead PI? Easy? No.

Combined database motivation example:

Site Lead PI information exists in 3 places - each with different editing schemes.

Personnel role
Sitedb - Lead PI contact
lpi@lternet.edu mailing list

Other discussion topics

Content management system (CMS) as unifying system
    advantages and disadvantages

Databases managed independently or tightly integrated (Figure 2)

CMS as a consumer of web services

NIS as a consumer and producer of data and user of web services

The impact/role of social networking applications

Figure 2

Alternate Network Database Web Service Implementation Strategies