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Moving Toward Network Identity

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A research site's internet address includes its domain name and establishes a site's online identity. An appropriate web site address provides a measure of recognition and understanding as well as improved access when the path name is easily remembered. Two technologies used together create alternate identities for a web server - DNS aliases and virtual servers. If you have only one web server and manage it yourself then any number of DNS aliases can be added to that server. Virtual servers today can be name-based instead of IP-based so provide a method to create alternate web identities for a web server for sites that don't host their own web sites or that build their website as a sub-site of another organization. Although a Web site's success depends on a variety of elements including content, design, functionality and server power, issues of identity and memorability are equally important.

Currently, with the many Long-Term Ecological Research (LTER) sites, there are a variety of internet address forms reflecting each site's local context. For instance,

PAL: <http://www.icesb.ucsb.edu/lter>
SEV: <http://sevilleta.unm.edu/>
SBC: <http://mistral.lscf.ucsb.edu/>

Since the LTER sites are partnered together into a research network supported by the LTER Network Office (lternet.edu) and early on established the tradition of identifying each site with a 3 letter code, there exists a natural naming schema for a set of virtual servers:

PAL: <http://pal.lternet.edu/>
SEV: <http://sev.lternet.edu/>
SBC: <http://sbc.lternet.edu/>

These three are examples of sites that have already established their complementary identities. As a result, either of their above addresses brings up the site's web home page.

The LTER Network Office is ready to help each interested LTER site to establish their 'LTER network' identity. To establish name-based virtual servers where sites are

managed as sub-site or by someone else, there are two sides to configure: the network server-side and the site host-side configuration. On the network server-side an entry is made to the DNS table with an alias for the virtual server in the form site.rootname.edu (i.e. pal.lternet.edu) pointing to the host-side server (guardian.icess.ucsb.edu). Each alias (i.e. pal.lternet.edu) can have a virtual server entry associated with it in the host-side web server configuration file. Thus, site implementation is a straightforward procedure requiring an individual with system privileges to place a few lines of code in their site's web server configuration file.

When someone asks 'What's in a name?', the answer may be 'network identity'. When a site is part of several differing contextual domains, it need not be limited to a single web identity represented by a single domain name. The ability to establish virtual servers and hosts provides flexibility today in terms of network identity that can benefit loosely federated partnerships.
