

Recommended Technical Resolution to ksu.edu/k-state.edu Webserving Issues

Issue

The sole issue this recommendation addresses is the inconsistent handling of the two domain variants on Webservers, which has consequences for the ranking and findability of K-State Web pages. Currently, Webservers on campus use a variety of methods to handle the two domains, with unfortunate technical ramifications.

Recommendation

That all Webservers at Kansas State University declare one of the two variants as the canonical URL (while continuing to respond to all other variants) and rewrite all incoming requests to that canonical URL. It is suggested that this one canonical URL use k-state.edu, but what is essential that there be majority agreement on one or the other. (see attachment for suggested Apache method)

Benefits

Raise K-State results in major search engines. Currently, the confusion between the ksu.edu and k-state.edu variants leads to bifurcated indexing by various search engines, where a portion of the content is indexed as somesubdomain.ksu.edu, and some as somesubdomain.k-state.edu. This drives K-State content down in the rankings.

Better, more consistent results from search engines. Currently, domain restricted searches, which many K-Staters know how to use, as well as any tools such as Google Custom Search, will return inconsistent results given the division of content across the two variants in a search engine's index. As our internal paths change as various Web nodes change the way they handle the variants, the ratio of content at one or the other domain is in constant flux.

Make our sites more user-friendly. Whether a user enters

- www.somesubdomian.ksu.edu
- somesubdomian.ksu.edu
- www.somesubdomain.ksu.edu, or
- somesubdomain.k-state.edu

they will get the result they expect, namely, a Web page, not an error message or any of the oddness currently found on many K-State Webservers that improperly address the variant options.

What this does not mean

Thousands of Web documents must be edited to reflect this. By using simple, server-based rules to rewrite URLs, this change can be accomplished without any need to edit a single Web document. Moreover, complete backward compatibility is ensured, so URLs found on old print publications, legacy Web pages, in documents, etc. would continue to function.

One variant is 'better' than the other. Both will continue to work *ad infinitum*; only the URL that is served will change, not the requesting URL. The benefits, as listed above, outweigh a few characters in a browser address bar.

Attachment

Suggested Apache method for routing all traffic to one canonical domain while maintaining all other variants.

In the vhost for the domain, list all of the variants as follows:

```
ServerName www.subdomain.k-state.edu
ServerAlias www.subdomain.ksu.edu
ServerAlias subdomain.ksu.edu
ServerAlias subdomain.k-state.edu
```

In the same vhost, use the following rewrite rule (Apache module mod_rewrite must be installed; it's fairly common in most installs and can be easily added if not):

```
RewriteEngine On
RewriteCond %{HTTP_HOST} !^www\.lib\.k-state\.edu$ [NC]
RewriteRule ^/(.*) http://www.lib.k-state.edu/$1 [R=301,L]
```

This example assumes that one desires having the www part of the resulting canonical domain. If that is not the case, modify the code to fit the desired format. It also assumes that port 80 is being used. If not, consult <http://httpd.apache.org/docs/2.0/misc/rewriteguide.html> for extensive documentation.