

STATE OF MINNESOTA GUIDELINES

From the Office of the State Chief Information Officer

DNS Naming Guidelines

These guidelines are for the 2010-11-18 edition of the standard, and are informative and not normative.

The standard is that all DNS information offered to the Internet as a whole (*i.e.*, public facing), by an Executive Branch State government organization be available under one or all of these domain name suffixes:

- `state.mn.us`
- `mn.gov`
- `minnesota.gov`

This statement does not preclude organizations from offering information through other domains.

The standard states that these domains will be used only for Minnesota government purposes. Any organizations that are not Minnesota government will be migrated to alternate names. The use of the term Minnesota government allows Minnesota to have an integrated set of names covering all government with minimal overhead.

The contents of all three domains as visible from the Internet should be kept identical through automated means.

Timeline

As of November 18, 2010, new DNS names must follow the Domain Name System Usage standard.

Preferred Form

For new names in the DNS, we recommend that the `mn.gov` form be advertised unless there is a reason to prefer one of the other forms.

Exception Criteria

As a general guide, any exception request should show that the following were considered:

- Is this exception for content that you control, or are you requesting an exception for an outside organization (*e.g.*, a non-profit) for them to use for content that they control?
- What is it about your strategy or business that is important to your audience that the entry point name not end in `state.mn.us`, `mn.gov`, or `minnesota.gov`?
- What will the effect be if the same information is also available through an entry point ending in `state.mn.us`, `mn.gov`, or `minnesota.gov`?
- How will the strategy or business be improved by allowing an identity separate from the State's?
- How will this strategy or business be harmed by not allowing a separate identity?
- How important is it that this strategy or business not be connected with state government?

- In particular, what steps do you think your audience may take in trying to determine whether it is a state government site and what would the effect be if your audience determines that it is, in fact, a state government site?

Email Addresses

Existing email addresses use the `@state.mn.us` form and hence their usage fully complies with the standard. The question of recommending a change to the `@mn.gov` or `@minnesota.gov` forms was considered, however, as all three comply with the standard, the choice is outside our scope.

That said, we observed the following:

- We currently accept mail for `@state.mn.us` only: mail sent to the other domains is rejected.
- The standard states that all three forms are acceptable and, in fact, the `state.mn.us` and `mn.gov` forms will both be used for quite some time. Thus, changing to `mn.gov` doesn't mean that the email addresses are in line with the web addresses: it only changes which ones.
- Many states that use the `XX.gov` form for their web sites continue to use the `@state.XX.us` form for their email addresses.
- The difficulty of making a change in email address is not what address is used for sending to, but rather what address is used for sending from.

Many systems use email address as a primitive form of identification or authentication,¹ and a change in email address may have to be coordinated among all of these systems at the time of the change. Such an undertaking would be complex at best and no one could see any reason for recommending a change.

A change might be warranted when these conditions are met:

- The number of systems across the web using email addresses for identification or authentication has been substantially reduced. This reduces the cost and complexity of making the change.
- The number of uses of the `state.mn.us` form for web sites has been substantially reduced. This increases the benefit of making the change.
- The number of uses by other states of the `state.XX.us` form for their email addresses has been substantially reduced. This slightly increases the benefit of making the change.
- Other changes in the environment favor a change.

We did consider recommending adding support for `mn.gov` and/or `minnesota.gov` as alternate domains for receiving email messages. Again, adding such support may increase confusion with no visible material benefits.

Impact

It is implicit in the standard that future DNS domain registrations be handled by a single provider. In other words, in the case where a domain outside the above three is required, organizations would request that domain through a central provider.

¹ Consider how many web sites ask for your email address as a username.

The central provider is the Office of Enterprise Technology (OET). Requests are made through OET's service desk.

Organizations may register alternate domain names (using the central provider) for the purposes of preventing outside parties from registering names that would be confused with a state brand. Such domains would have no content other than the master SOA and NS records.

Web Site Names

Current Internet convention for web sites is that the leading "www." is optional. Thus, putting everything together, the following names should all bring the user to the same place ("agency" in this example):

- `agency.state.mn.us`
- `www.agency.state.mn.us`
- `agency.mn.gov`
- `www.agency.mn.gov`
- `agency.minnesota.gov`
- `www.agency.minnesota.gov`

Typically, the agency would advertise the `agency.mn.gov` version.

Mobile Site Names

Current Internet convention for mobile versions of web sites is that they can lead with "m." or "mobile." Thus, putting everything together, the following names should all bring the user to the same place ("agency" in this example):

- `m.agency.state.mn.us`
- `mobile.agency.state.mn.us`
- `m.agency.mn.gov`
- `mobile.agency.mn.gov`
- `m.agency.minnesota.gov`
- `mobile.agency.minnesota.gov`

Typically, the agency would advertise the `m.agency.mn.gov` version.

Web sites should be configured to auto-detect the main site to automatically divert known mobile devices to the mobile version. However, err on the side of caution: the plethora of smart phones and other devices with full browsers and zooming screens should not be diverted. Clients accessing the mobile site should not be diverted to the main site, regardless of the browser characteristics.

Assigning Names at the State.mn.us, Mn.gov, and Minnesota.gov Levels

These guidelines cover the assignment of names within the `state.mn.us` domain. As the standard requires that the contents of the `mn.gov` and `minnesota.gov` domains be the same as for `state.mn.us`, one set of guidelines covers all three domains.

Domain Organization

The `state.mn.us` domain has four types of entries: organization, organization transition, citizen, historical and other.

Organization

These names designate departments, agencies or any other state level organization. All state-level organizations are eligible, including the legislature, the courts and other non-executive branch organizations.

For the executive branch, eligible organizations include those that report directly to the Governor. Names of organizations are intended to be meaningful for citizens.

Examples are:

- `revenue.state.mn.us`
- `admin.state.mn.us`
- `courts.state.mn.us`

Organizations are expected to have only one organization entry at the fourth level in the `state.mn.us` domain, which implies the same entry at the third level in the `mn.gov` and `minnesota.gov` domains. For example, the three domains are considered “one entry” for these purposes:

- `org.state.mn.us`
- `org.mn.gov`
- `org.minnesota.gov`

There are no restrictions on the number or text of name components to the left of the `org` in domain.

Offices, groups and other parts of organizations are expected to register within their containing organizations. For example:

- `www.buildingcodes.admin.state.mn.us`

or, for a complete URL,

- `www.admin.state.mn.us/buildingcodes`

Organization Transition

In the event that the organization’s name changes, OET will work with the organization to handle the transition to the new name in a smooth fashion, whether the change is due to legislation, an organization electing to change its historic domain name to comply with this standard or for any other reason. Both the previous name and the new name will be in the DNS for the transition time.

Citizen

Citizen names are those that are communicated directly to citizens. They are “aliases” for organizations that present the organization in a more citizen-centric way. An example of a good citizen name is:

- `taxes.state.mn.us`

Part of the request for a citizen name should be a plan for communicating the name directly to citizens. Such a plan may well include billboard, the side of a bus and similar types of advertising.

Examples of names that do not qualify as citizen level are:

- Services used within an organization, even if the organization is physically spread around the state: those services should be entered under the organization name.
- Services provided by an organization and used by other organizations: those services should be entered under the name of the organization that operates the application(s) or one of the shared domains (see below).
- Services operated jointly by multiple organizations: these services should be entered under the name of one of the organizations or one of the shared domains (see below).
- Services offered by an organization and used by businesses may qualify as a citizen name so long as the number of businesses is very large (*e.g.*, in the tens of thousands).
- Services offered by an organization and used by only a business sector (*e.g.*, locksmiths) probably do not qualify as good uses but could be placed in one of the shared domains (see below).

When a citizen name is requested, it should be chosen with a view to how the general public would view it and not based on how the entity wishes to be viewed. As a hypothetical example: `meat.state.mn.us` would likely be viewed by the public as something to do with meat inspections or quality and hence be part of the Agriculture Department. A request from a meat inspectors' licensing board for that name would likely be found to be confusing.

The above notwithstanding, web-based usages should have a solid, overriding reason to create a distinct entry point. It is generally better to direct people to a single web point and use web technology to direct them to their desired content.

Historical

Historical entries are those that were in place as of 2010-11-18. These entries may remain unchanged. Over time, OET will work with the organizations who have such entries to migrate to this standard.

Other

Other names are those that do not fall into any of the above categories. They may be requested by any state government organization to be at the `state.mn.us` level.

Shared Names

These domains are available for shared projects:

- `excellence.state.mn.us`
- `intergov.state.mn.us`

Local Government Names

Currently, local Minnesota government (city and county) have names under the `.us` domain (RFC 1480). These names

are of the form:

- *entity.ci.mn.us* for cities
- *entity.co.mn.us* for counties

To make it easy for local government to use *.gov* names, the State will permit registrations of names of the forms:

- *ci.entity.state.mn.us* for cities
- *co.entity.state.mn.us* for counties

These names will of course be automatically set up as follows:

- *ci.entity.mn.gov* for cities
- *co.entity.mn.gov* for counties

This is an easy way for cities and counties to obtain *.gov* names at no charge and with minimal paperwork

Implementation Notes

By applying only to Internet-visible names, the internal names used by Microsoft domains remain compliant.

It is useful to be able to designate names as internal. Such names will not be visible from the Internet as a whole and need not be duplicated among all three domains. An example is the *r.state.mn.us* domain, which has in the vicinity of 15,000 A records (roughly half of the total): replicating those names has no benefit. OET will support the ability to designate a complete domain (and all sub-domains) as internal (and therefore not be visible from the Internet as a whole) and not be replicated among all three domains.²

² For ease of support, the preference will be to have these names in the *state.mn.us* domain.