RIT Web Environment | Virtual Host / Subdomain Standard

Summary

ITS receives numerous requests from Web Developers or Website Owners for new subdomains on the RIT Web Environment. As the Administrator of the RIT Web Environment, ITS reserves the right to deny any subdomain request that does not meet the required, specific criteria outlined in this document.

If your subdomain request is denied, it is likely due to one or more of the following reasons:

- It violates established best practices in SEO
- It violates the guidelines of the University Communications & Marketing Strategy
- It does not meet the criteria outlined in this document.

1. Overview

A subdomain is located in front of the domain in a URL. An example of a subdomain for “ritchie” might look like: http://ritchie.rit.edu where “rit” is the domain and “ritchie” is the subdomain. A subdomain is configured in the university DNS servers and once it’s typed in by a visitor, it might redirect them to the complete (and typically longer) location.

The RIT domain and its subdomains are ways to communicate the University’s identity and reputation through its digital content and services. To protect the integrity of RIT and to limit the proliferation of unnecessary, redundant, inappropriate, time-limited, or ambiguous subdomains, ITS has created this standard around the appropriate usage of subdomains e.g. [subdomain].rit.edu.

1. This standard applies to all web sites and services relating to the normal business of the University produced and owned by Colleges, departments, or units within RIT
2. A consistent approach to the allocation, structuring and wording of subdomains brings a number of benefits to the University website:
   a. It creates cohesion among RIT websites, and supports the Communications and Marketing Strategy
   b. It mitigates against poor search engine optimization (SEO) as a result of subdomain conflict and cannibalization where multiple subdomains are focused on the same content or search terms
c. It mitigates against poor search engine optimization (SEO) by taking advantage of the established root domain and rankings in search engine algorithms

3. The standard also:
   a. Outlines the governance of subdomains for the University and the responsibilities of ITS in managing the allocation of subdomains
   b. Ensures a clear process for requesting a subdomain.

2. Virtual Host/Subdomain Standard

The university’s standard is that all University websites should be presented within the rit.edu domain.

To be approved for a subdomain your unit must meet one of the following criteria:
   1. Be a College, School or other degree-granting unit
   2. Be a University-level research entity
   3. Be a University-wide initiative or service that does not belong within an existing RIT subdomain, or is most appropriately represented as university wide initiative or service
   4. Be a service or application that is business-critical to the University
   5. An entity may be granted more than one subdomain if the website is representative or serves the interests of the entire university.

Your requested Subdomain must:
   6. Have a clear and meaningful connection to the business purpose of the site
   7. Avoid use of acronyms or ambiguous sets of characters, unless it’s an already recognizable part of your identity. For example: eihctir.rit.edu or itsewa.rit.edu
   8. Not be used indiscriminately as a vanity URL or redirect to subpages within other sites. Instead consider using the University’s URL shortener
   9. Be registered with ITS to ensure audit commitments are met
   10. Be unique enough to prevent confusion with other subdomains.

Subdomains hosted on the RIT Web Environment will be limited to one level. For example, [subdomain].rit.edu. To use our previous example, “ritchie.rit.edu” is a one-level subdomain. “ritchie.rit.edu/costume” is not supported by the RIT Web Environment architecture. That desired URL would be automatically redirected to “rit.edu/ritchie” and “rit.edu/ritchie/costume” when a visitor types “ritchie.rit.edu” into a web browser.

3. Subdomain to Subdirectory Redirect Alternative (Vanity URL)

A subdirectory is located after the domain in a URL. An example of a subdirectory for the Academic Calendar might look like: www.rit.edu/calendar. A subdirectory can be an actual file on the Web server or redirect a visitor to a deeper location in the site.
A university entity can request a subdirectory redirect on the rit.edu domain through ITS if it does not meet the criteria for requesting a subdomain. An rit.edu subdirectory redirect request is granted on a “first-come, first-served” basis. ITS reserves the right to refuse requests considered unnecessary, redundant, inappropriate, time-bound, or ambiguous or likely to be used in the future by RIT entities. For example, an rit.edu subdirectory redirect that includes common terms such as “apply,” “contact” and “academics” may be denied due to their potential use for university websites.

For example, an RIT entity is holding a yearly conference and wants a subdomain URL for advertising and promotional purposes. While conference2017.rit.edu would be denied under our criteria as time-bound (it only happens once a year) ITS will implement a Subdomain Redirect, which will allow websites visitors to type “conference2017.rit.edu” into their web browser, wherein the site will automatically redirect the visitor to your content at rit.edu/conference2017.

Subdomain Redirect Benefits
1. Search Engine Optimization Best Practices
2. If your event is time-limited (annual, or a one-time event), a vanity URL prevents you from having to request and be denied a subdomain every year, and lets you archive the previous year’s event webpages more easily.

4. Prefixes
The “www” and “http://” prefixes in a domain were initially used to direct an application to the appropriate service (Web, mail, FTP, etc) on the correct server but it is no longer necessary. A visitor will still access your site if you use the prefix or omit it. However, using the prefix inconsistently may negatively impact search engine rankings because the search engine may see “www.rit.edu” and “rit.edu” as two separate sites. Do not include the “www” prefix when linking to a Web site from electronic formats such as e-mail, Web site, etc. Refrain from using the “www” prefix in printed formats, such as postcards, promotional giveaways (pens, mugs), brochures, etc., unless you feel it has an aesthetic value or makes the URL more recognizable as a Web address. Contact ITS for more information on unique prefix needs such as Secure Socket Layers (SSL), https://.

5. Naming Conventions
Make the URL memorable, intuitive and search engine friendly by using keywords familiar to your visitors. Search engine optimization (SEO) tools, such as Google’s Keyword Tool, are a great way to find keyword ideas for a URL. Refrain from using acronyms and abbreviated words in the URL unless the acronym or abbreviation is a keyword familiar to your visitors.

A single word URL may not be as meaningful or specific as multiple words. When using multiple words in a URL, do not separate words with a space or underscore. Spaces may cause the link
to break and underscores are indistinguishable from spaces when the link is underlined. Acceptable word separators include hyphens.

1. Names must be clear, unambiguous, easy to read, easy to type and easy to share
2. Names must not imply university-wide activity when in reality it is focused on or limited to a unit/project responsibility or activity
3. Names must:
   a. contain only standard ASCII alphanumeric characters A to Z; numerals 0 to 9 and/or hyphens (not underscore)
   b. not begin or end with a hyphen (-)
   c. not coincide with internet protocols, such as www, ftp, dns, whois
   d. not contain more than 64 characters
4. Internationalized subdomain names are currently not supported. Where names contain letters that cannot be reproduced in standard ASCII, the conventionally accepted spelling should be used
5. When selecting any name you should be aware of the need to avoid infringing existing trademarks, trade names and third party business names. These can sometimes mistakenly be used as generic terms e.g. Apple. Apart from giving unnecessary publicity, there is a risk of it being illegal. Where a trade name, trademark or business name is to be used then written proof of your authority to use the name or mark must be submitted
6. To the broad majority of users acronyms are meaningless. Web managers should favor a user-centered approach and name accordingly
7. 3 and 4-letter abbreviations or acronyms should only be used if:
   a. this abbreviation is understood within the higher education or industry sector and by the wider public (eg STEM)
   b. there is no reasonable and meaningful alternative.

Please contact ITS for additional resources or assistance with selecting RIT-approved URL naming conventions.

6. Process for Requesting a Subdomain

1. Any department, faculty, unit institute or other grouping within the University which wishes to request a subdomain, please submit an ITS Work Request (authentication required)
2. You will hear from an ITS staff member as to the approval and status of your request
3. When making the request, be sure to indicate the business case for the subdomain and where the subdomain should resolve (usually a domain or ip address)
4. Requests will be considered on a case-by-case basis according to the following general criteria:
   a. Impact on integrity of overall University information architecture and technical infrastructure
   b. Size and composition of target audience
   c. Potential negative impact if subdomain is used
d. Media to be used to promote URL

e. Timeframes

5. As the Administrator of the RIT Web Environment, ITS reserves the right to deny any subdomain request that does not meet the required, specific criteria outlined in this document.

6. Any appeals against decisions made by the Domain Working Group should be addressed to the Digital Engagement mailbox, who, in turn, will forward the appeal to the Chief Architect, IT and Head of Digital Engagement, Communications for their consideration.

7. Retiring a Subdomain

The following summarizes conditions that may result in retirement of an rit.edu subdomain name:

1. Failure to adhere to the ITS Web Hosting Environment Policies
2. A persistent failure to maintain an accessible and functional website (e.g. obsolete and de-commissioned domains where a code 404 page is consistently appearing)
3. Failing to ensure the website remains resistant to existing and emerging security compromises: if an rit.edu website is found to be compromised by third parties, the relevant DNS administrator will be instructed to point the subdomain in question to a safe landing page while the security issues are addressed
4. Persistently failing to comply with ITS Usability & Design Guidelines or University Communications & Marketing Strategy, including accessibility and coding standards
5. Changing the status of the organisation or project that the subdomain name represents.

8. Grandfather Clause Subdomains

Any subdomains in the production RIT Web Environment as of January 1, 2017 will be retained until further notice. Subdomain requests after January 1, 2017 will be subject to review by ITS according to the policies outline in this document.