# VUMC Cloud Standardized Naming Convention (VUMC-CSNC)

## Assumptions:

* Non-sandbox resources are created using IAC and not the portal
  + Sandbox/Experimentation resources may be excluded.
  + Portal naming defaults may interfere with CSNC.
* Applies to new resources/solutions

## Out of Scope

### Discussion of Naming Convention Enforcement

We recommend a breakout working session team to discuss that topic.

## Overall Guidance

* DO NOT do the following:
  + End names with a period, hyphen, underscore or a space/tab.
  + Use the following characters: ~ ! @ # $ % ^ & \* ( ) = + [ ] { } \ | ; : ' " , < > / ?
  + Use control characters.
  + Use reserved words in the names.
    - [Reserved Word list](https://learn.microsoft.com/en-us/azure/azure-resource-manager/troubleshooting/error-reserved-resource-name#cause)
  + Use names for monitoring/alerting
    - i.e. Anything with prod in the name should not be a sev 1 ticket.
* DO the following:
  + Use lowercase
  + Always start with a letter.
  + Check the existing naming convention documentation before creating a new named resource.

## Resources

* ***resourceTypePrefix-workload-region-environment-instance***
  + resourceTypePrefix
    - An abbreviation that represents the type of Azure/Cloud resource or asset.
    - Use the MS recommended list [Abbreviation examples for Azure resources - Cloud Adoption Framework | Microsoft Learn](https://learn.microsoft.com/en-us/azure/cloud-adoption-framework/ready/azure-best-practices/resource-abbreviations)
  + workload
    - The type of work the resource is responsible for. Note: this could be multiple parts, for example App1 may have a database component and a cache component and as such would read app1cache, app1db.
  + region
  + The Azure region name, and in the case of global resources use the word global.environment
    - The level of environment the resource is used for. (dev/test/prod/etc.)
    - NOTE: resources used for management purposes should be marked as prod.
  + instance
    - A two-digit numeric to identify when more than one of a particular resource would be created.

## Name Constrained Resources

Some Azure/Cloud resources have naming restrictions that include but are not limited to character limits, global uniqueness, etc. Additionally, there are some resources where having a dedicated naming convention will convey important information and is recommended.

As such these resources may not be able to follow the above convention. Note: this is not an exhaustive list as cloud resources are constantly changing, but before creating a new type of resource it should be examined to determine naming standards.

* Key Vault
  + - kv<freeform><EnvLetter/EnvWord>Suggest using vumc in the freeform section as these need to be globally unique
* Storage Accounts
  + st<freeform><EnvLetter/EnvWord>
    - Suggest using vumc in the freeform section
    - Suggest using vumc in the freeform section as these need to be globally unique
* Private Endpoints
  + Following convention but recommend in the workload section include the Source and then Destination.
* Networking Peerings
  + Following convention but recommend in the workload section include the Source and then Destination.
* Policies
  + Resource Names limited to 24 characters at mgmt group scope
  + Remove hyphens to save character space
  + Be descriptive
* Private DNS
  + Default MS standard
* Front Door WAF Policies
  + Alphanumeric only
  + Remove hyphens from SCNC
  + Suggest using Camel Case here
* Customer Insights
  + No hyphens
  + Replace Hyphens with underscores in SCNC
* Container Registries
  + Alphanumeric only
  + Remove hyphens from SCNC
  + Suggest using Camel Case here
* Virtual Machines/Virtual Machine Scale Sets
  + Follow on-premises naming conventions for VM’s.

## Exclusions

Some Azure/Cloud resources are not managed directly by VUMC but are instead managed by Azure/Cloud itself. These resources tend to be ephemeral in nature and not customizable, as such these types of resources should be excluded from any VUMC-CSNC policies.

### Examples:

* Databricks
* Terra
* VUMC Developed Systems
* Containers
* Others...