**Subscription Maintenance Best Practices**

v 0.2

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# Resource Groups

## General

1. All resource groups are to be named with the user alias and/or the specific project name unless created dynamically by Azure ( for example DefaultResourceGroup-EUS, fileserverrg-79533144-77f0-4fcb-a0e5-a11764800dc7, etc).
2. To remain in compliance with team standards, all resource groups must have the following tags added to the group in the Azure Portal
   1. alias : Microsoft alias of the owner/creator of the resource group
   2. project: Project name or “internal” for user specific resource groups.
   3. expires: Best guess date in format YYYY-MM-DD for when the resource group will become obsolete due to the project completing. For internal user specific resource groups apply the date 2030-01-01.
3. All resource groups that are not transient, i.e. will live longer than any period of time between the cleanup script that deletes unlocked resource groups runs, must have a ReadOnly or Delete lock applied to it or one of it’s child resources to ensure it is not inadvertently deleted during regular maintenance tasks.

## Project Resource Groups

Resource groups should contain ONLY the resources needed for the specific project whether that is internal or external.

Grouping all resources into a single resource group removes the possibility of cross contamination from other projects which leaves the possibility that certain resources are not cleaned up. Further, it makes cleaning up Azure resources trivial when a project is completed.

## User specific resource groups

There are times when a need arises that team members utilize a Virtual Machine across projects, use a Virtual Machine Long term, or simply want to have a personal repository of data/code.

This concept is completely normal and supported. What is asked of you is:

1. Resource group for Virtual Machine contain ONLY the virtual machine and its associated resources (IP, Network, Disks, etc)
2. Resources groups for an archive of data or code contain only these resources and no other, such as compute resources.

## Team Resource Groups

Teams may opt to have a resource group for any number of purposes:

1. Contain a private VPN connection for external connections.
2. Contain an archive of data/code.

These types of resource groups are also encouraged. Giving it a name that contains the group name and its general purpose is suggested.

## Resource Group Purging

A script can easily be crafted to purge resource groups based on team rules/policies. It is suggested that each team set policy then set up a recurring process to purge unwanted resources using something like Azure DevOps.

An example compliance script can be found here:

<https://github.com/grecoe/AzureSubscriptionMaintenance/blob/master/_ExampleCompliance.ps1>

## Resource Group Compliance

Whatever policy you decide on, it’s also worth running a script that will produce a list of groups that are not in compliance, for whatever reason, to let the team members know where the subscription stands.

The data can be shared either through email or posted to a website, such as this one set up for our team - <https://aka.ms/AICatSubscriptions>

This way, team members can easily find out what is going on in the subscription and if any of their resource are at risk.

# General Guidance

It is the responsibility of every team member to manage Azure resources in a prudent way. This really is a trivial task.

As projects come to completion, deleting unused resources and resource groups goes a long way. Similarly, deallocating compute resources when not currently being used relieves pressure on subscription costs and core usage.

Each team is adept at creating resources and reproducibility with its projects. This doesn’t mean you should intentionally delete groups from underneath team members, but accidents do and will happen.