[P20 - Virtual Hack #3 - Infra as Code](https://teams.microsoft.com/_#/teamDashboard/P20%20-%20Virtual%20Hack%20%233%20-%20Infra%20as%20Code/19%3A25cc07a829404f369b359eb0371e8063%40thread.skype/td.members)

**General**

Private

|

Confidential

* Conversations
* Files
* Challenges
* Shared Cheats



Saved: 3/21

What's this for?!

As you solve the challenges, and find information that helps, paste it in here!  One liners?  Template code snippets?  Links to an article that explains something?   Let's collect them here as a team.  Then this page can be shared as a resource after the event!

Cheats...

Top level documentation for ARM template syntax:

<https://docs.microsoft.com/en-us/azure/templates/>

If you know what resource you're looking for, you can build the URL in the browser and skip right to the syntax for that resource type!

Leverage parameters / outputs -- see sample video <https://www.youtube.com/watch?v=A4vN5N_NhPA>

If you have downloaded the Visual Studio Azure plugins you can get a basic shell inside any JSON file, start typing arm! to see a list of snippets available. Select the snippet to insert and update any required values.

Here's a link that shows the syntax rules for a basic template:

[https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-authoring-templates](https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-authoring-templates?toc=%2fazure%2ftemplates%2ftoc.json&bc=%2Fazure%2Ftemplates%2Fbreadcrumb%2Ftoc.json)

This should help with hello world!

Here its a clean template for the schema:

<https://github.com/Azure/azure-quickstart-templates/blob/master/100-blank-template/azuredeploy.json>

Azure CLI tips to get going:

az login   (then follow the instructions to log in via the web page)

az configure  (choose 3 for table output)

az account list (to see which account "is default")

az account set --subscriptionID <sub id you want to use here>

Command to run a template:

<https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-manager-create-first-template?toc=%2fazure%2ftemplates%2ftoc.json&bc=%2Fazure%2Ftemplates%2Fbreadcrumb%2Ftoc.json>

Command to run a template with a parameters file:

az group deployment create --name HelloWorldDeployment --resource-group p20testrg --template-file armdeploy.json --parameters azuredeploy.parameters.json -o json

Sample Parameters file:  (convention is to name it "azuredeploy.parameters.json")

(additional convention is to prefix it for environment if you have multiple param files:

ie:

"prod.azuredeploy.parameters.json"

"dev.azuredeploy.parameters.json"

{

"$schema": "https://schema.management.azure.com/schemas/2015-01-01/deploymentTemplate.json#",

"contentVersion": "1.0.0.0",

"parameters": {

"environmentName": {

"value": "p20"

},

"subnetAddressPrefix": {

"value": "10.0.0.0/24"

}

}

}

Azure will complain about exposing SSH traffic from all sources. This is how I was able to get my own IP

We can't expose traffic from all internet addresses.

So this is my IP address that I retrieved from https://aka.ms/getmyip

Your IP will be different from time to time

To run your deployment scripts...  keep them handy in a .sh file you have in VS Code.  For example the line of Azure CLI code to deploy a template & parameter file!

Highlight the code, then Ctrl-Shift-P, and select "Terminal: Run Selected Text in Active Terminal" from the drop down.

**Custom Script Extention tip!**

When filling in the name property for the custom script extension resource, it must be formatted:

"<vmname>/<yourcustomextensionname>"

If not, you will get a non-intuitive ARM error complaining about incorrect segment lengths.