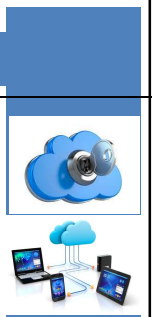
TCSS 562: SOFTWARE ENGINEERING FOR CLOUD COMPUTING

MS Azure Demo - III
Cloud Technology Sharing - III

Wes J. Lloyd
Institute of Technology
University of Washington - Tacoma



OUTLINE – 5/4

- Midterm Thursday 5/11
  - Open book, notes, laptop
  - Topic list on Tuesday 5/9
- Amazon class visit Tuesday 5/16
  - Please submit questions and presentation requests on daily surveys
- Cloud paper presentations
- Technology sharing presentations
  - Team 5: Google Cloud SQL
  - Team 6: AWS Relational Database Service (RDS)
  - Team 7: AWS Dynamo DB (NoSQL DB)

CLOUD RESEARCH PAPER PRESENTATIONS

- Objective is to review and critique one research paper related to your term project topic
- Each team will make one presentation
- Team can search and submit a paper to review up to 7-days before the presentation (via email)
- Paper will be approved, or another paper recommended
- If no paper is provided, a paper will be recommended
- Will post format writeup which describes how to review the paper and prepare the presentation
- Wes will present a paper critique on 5/16 as a demo
- Research paper presentations will begin on Thursday May 18

AZURE IAAS DEMO

RESTARTING A DEALLOCATED VM

- Recall the commands
- We run these from a second VM's Azure CLI:

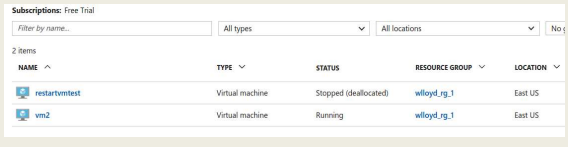
```
az vm list
az vm deallocate --resource-group myResourceGroup --name myVM
az vm generalize --resource-group myResourceGroup --name myVM
az image create --resource-group myResourceGroup --name myImage --source myVM
```

- Create a new VM from the image:

```
az vm create --resource-group myResourceGroup --name myVMDeployed --image myImage --admin-username azureuser --ssh-key-value ~/.ssh/id_rsa.pub
```

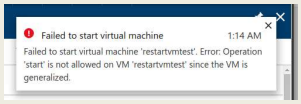

RESTARTING A DEALLOCATED VM - 2

- When a VM has been stopped and deallocated for imaging it appears as follows:

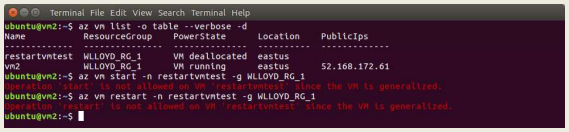


RESTARTING A DEALLOCATED VM - 3

- VM start button fails



- CLI fails to start and restart



RESTARTING A DEALLOCATED VM - 4

- Short answer: azure command line to not expose enough functionality to ***ungeneralize*** a VM.
- Therefore the easiest thing to do, is delete it, and create a new VM based on your new image.
- But using the Window's powershell, it is possible to manually ***ungeneralize*** the VM. This requires redefining the OS boot disk, the network, the user account, etc.
- See this blog:
- https://social.msdn.microsoft.com/Forums/en-US/b242455b-c02b-4e61-940f-b6ac48da36a1/what-to-do-with-a-generalized-vm?forum=WAVirtualMachinesforWindows

WINDOWS POWERSHELL ENVIRONMENT

- PowerShell is a task automation and configuration management framework from MS, consisting of a command-line shell and scripting language built on the .NET Framework.
- PowerShell was made open-source and cross-platform in Aug 2016
- Administrative tasks are performed by cmdlets (pronounced command-lets), specialized .NET classes that implement specific operations.
- Sets of cmdlets are combined into scripts, executables, or by instantiating regular .NET classes (or WMI/COM Objects).
- Cmdlets access data in different data stores (e.g. file system or registry made available to the PowerShell runtime via PowerShell providers.

QUESTIONS