From Students…
…to Professionals

The Capstone Experience

Beta Presentation
Virtual Computer Service Enhancements

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Project Overview

• Transition from persistent to non-persistent state
• Automate tagging of virtual machines
• Report on users with multiple virtual machines
System Architecture

Local Resources

Hybrid Runbook Worker Group

Azure

Resource Group

Runbooks delivered to on-premise

Returns results

On-Premises

Azure Active Directory

Authentication
Sign-on

Users

Runbooks

Runs on cloud resources

Automation

Created with

PowerShell

Virtual Desktop

Azure Resources

Virtual Machines (Host pools)
Virtual Machine Tags

Tags are name/value pairs that enable you to categorize resources and view consolidated billing by applying the same tag to multiple resources and resource groups. Tag names are case insensitive, but tag values are case sensitive. Learn more about tags. Do not enter names or values that could make your resources less secure or that contain personal/sensitive information because tag data will be replicated globally.

<table>
<thead>
<tr>
<th>Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>DVC</td>
</tr>
<tr>
<td>Location</td>
<td>East Lansing, Michigan, US</td>
</tr>
<tr>
<td>Owner</td>
<td>Dow</td>
</tr>
<tr>
<td>Project</td>
<td>Development Only</td>
</tr>
<tr>
<td>Status</td>
<td>Green</td>
</tr>
<tr>
<td>User</td>
<td>KellyD</td>
</tr>
</tbody>
</table>
Runbook Output Logs

```
Environments
----------------
([AzureChinaCloud, AzureChinaCloud], [AzureCloud, AzureCloud], [AzureGermanCloud, AzureGermanCloud], [AzureUSGovernment,...

Account: ffe6e8d4-7ade-45c8-a3ec-98511b0763e8
Environment: AzureCloud
Tenant: 4d7efed6-a7d4-4e3e-bd06-76999e4af6f2
TenantID: 4d7efed6-a7d4-4e3e-bd06-76999e4af6f2
TenantDomain: mscap.onmicrosoft.com

Location tagging on machine vm5-0 in progress...
Successfully updated location on machine vm5-0 with No Location Found

Location tagging on machine vm6-0 in progress...
Successfully tagged location on machine vm6-0 with Haslett, Michigan, US

Location tagging on machine vm7-0 in progress...
Successfully updated location on machine vm7-0 with No Location Found

Location tagging on machine vm2-0 in progress...
Successfully updated location on machine vm2-0 with No Location Found

Location tagging on machine vm3-0 in progress...
Successfully updated location on machine vm3-0 with Haslett, Michigan, US

Location tagging on machine vm4-0 in progress...
Successfully updated location on machine vm4-0 with No Location Found

Location tagging on machine vm5-0 with No Location Found

Environments
----------------
([AzureChinaCloud, AzureChinaCloud], [AzureCloud, AzureCloud], [AzureGermanCloud, AzureGermanCloud], [AzureUSGovernment,...

Begin looking over vms for tagging
No new changes were needed for vm5-0
No "user" tag exists. Tag was added to vm5-0
No new changes were needed for vm6-0
No new changes were needed for vm7-0
No new changes were needed for vm2-0
Updated "user" tag because it was null for vm5-0
"user" tag value was incorrect. Added correct value for vm6-0
```
SharePoint VM Report

**VM_Report**

<table>
<thead>
<tr>
<th>UserID</th>
<th>VMs</th>
<th>Name</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>user1</td>
<td>vm5-0, vm2-0</td>
<td>Darren Kelly</td>
<td>2</td>
</tr>
<tr>
<td>doylep9</td>
<td>vm6-0, vm3-0</td>
<td>Patrick Doyle</td>
<td>2</td>
</tr>
</tbody>
</table>
# SharePoint Runbook Log Report

## Runbook Report

<table>
<thead>
<tr>
<th>RunbookName</th>
<th>CreationTime</th>
<th>Status</th>
<th>LastModifiedTime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beta_User_Tagging</td>
<td>11/14/2021 6:11 PM</td>
<td>Completed</td>
<td>11/14/2021 6:12 PM</td>
</tr>
<tr>
<td>Beta_Location_Tagging</td>
<td>11/14/2021 6:03 PM</td>
<td>Completed</td>
<td>11/14/2021 6:04 PM</td>
</tr>
<tr>
<td>Beta_User_Tagging</td>
<td>11/14/2021 5:51 PM</td>
<td>Completed</td>
<td>11/14/2021 5:53 PM</td>
</tr>
<tr>
<td>Beta_User_Tagging</td>
<td>11/14/2021 5:38 PM</td>
<td>Completed</td>
<td>11/14/2021 5:44 PM</td>
</tr>
<tr>
<td>Beta_User_Tagging</td>
<td>11/14/2021 5:33 PM</td>
<td>Completed</td>
<td>11/14/2021 5:34 PM</td>
</tr>
</tbody>
</table>
Microsoft Power App Assigned VMs Per User
Microsoft Power App Runbook Logs

Runbook Details

Beta_User_Tagging

Runbook Status

Failed
Completed
Stopped

Status
Failed
Completed
Stopped

Sum of Values
2
8
1

Logs
What’s left to do?

• Stretch Goals
  ▪ Finishing AD user migration script
  ▪ Adding/Removing of AD owners

• Other Tasks
  ▪ Finish migration from local to Dow environment
Questions?