Project Plan Presentation
Virtual Computer Service Enhancements

The Capstone Experience

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Functional Specifications

• Help Dow learn more about current DVC architecture
• Transition from persistent to non-persistent environment
• Automatically add user and location tag to DVC
• Migrate users from on-premises AD group to new Azure AD group
• Report on users with multiple DVCs
Design Specifications

• Help IT team
• With automatic tagging
• Location tagging for customer performance
• To find areas where less machinery is needed
Screen Mockup: Azure Active Directory Sign-In Logs
Screen Mockup: Automation of Jobs

<table>
<thead>
<tr>
<th>Runbook</th>
<th>Job created</th>
<th>Status</th>
<th>Ran on</th>
<th>Last status update</th>
</tr>
</thead>
</table>
Screen Mockup: 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>Example</td>
<td>tag-1</td>
</tr>
<tr>
<td>location</td>
<td>East Lansing, Michigan, USA</td>
</tr>
<tr>
<td>user</td>
<td>KM12412</td>
</tr>
</tbody>
</table>
Screen Mockup: User Report
Technical Specifications

- Microsoft Azure
  - Virtual Machines
- Azure Automation
  - Runbooks
- PowerShell Command Line and Scripts
System Architecture
System Components

• Software Platforms / Technologies
  ▪ Microsoft Azure
    o Virtual Machines
    o Resource Groups
    o Automation Accounts (Runbooks)
    o Azure Active Directory
    o Azure Virtual Desktop (Host Pools)
Risks

• Dow’s Azure Architecture
  ▪ Azure has many services that can be used to solve many problems and we need to use ones that are supported by Dow
  ▪ Constant communication with sponsor on what services we can use for the specific task

• Moving PowerShell Code to Azure runbooks
  ▪ After developing our local PowerShell solutions', we must transfer the code over to Azure runbooks so that the code can properly be deployed
  ▪ Make sure to test extensively locally so that there are no last-minute issues with the PowerShell code. After testing in our local Azure environments, we can then move to Dow's resource group that is used for development purposes.

• Dow's Sign-In Logs
  ▪ We need to use Dow's sign-in logs for producing the location of specific vms, currently the logs do not produce consistent locations of where a specific user signs in from.
  ▪ Try to find a different way to obtain sign-in logs of users. Also currently, Dow has two active directory groups within Azure which could be causing the error with the sign-in logs
Questions?