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Document Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| Revision | Date | Authors | Description |
| 1.01 | 10/08/2019 | Mark Teson | Update to reflect Azure Expert MSP requirements |
| 1.02 | 2/11/2020 | John Taylor | Edited Formatting |
| 1.03 | 3/16/2020 | Matt Sherwood | Filled out template with details for Encino Energy |

# 1. Customer Use Case – Context

CDW has worked with the client to setup their solution and is actively managing their environment.

* Encino Energy requested a full deployment of all their infrastructure in Azure, mixing both IaaS and SaaS resources. This demonstration is only a sample of the full solution deployed for Encino Energy. This use case shows a full deployment of ArcGIS into a single resource group, including virtual network, network security groups, standard Windows VMs, and a Windows with SQL VM. An Azure Automate resource has also been deployed per the customer’s request. They will be using this to automate the process of starting up and shutting down their VMs based on a schedule.

Key Azure services that are part of their solution:

* Compute-Infrastructure: Azure Virtual Machines – Windows
* Compute-Infrastructure: Azure Managed Disks
* Networking: Network Security Groups
* Networking: Virtual Network
* Management Tools: Azure Automation

Portal/Service Catalog/UI or CLI/Scripting and ARM Templates used

* Scripting/ARM Templates

Policy Definitions available/applicable in template form

* Non-applicable

# 2. CDW Solution - Reference Architecture Encino Energy

The diagram below describes the overview of the Encino Energy architecture and highlights the different components of the solution.



This is a high level view of the various resources that are deployed with this solution. There is a resource group, a virtual network, four standard Windows VMs, and a Windows with SQL VM. These VMs share a single network security group.

# 3. Provision Solution

The solution was setup using the following process

* Create Resource Group and deploy solutions using PowerShell and ARM Templates
  + Templates and Scripts are hosted in the following GitHub repository: <https://github.com/cdwlabs/azure-services/tree/master/customer-solutions/encino-energy>

# 4. Configure Solution

The solution was configured using the following process

* Applications were installed on each server, as outlined in the application vendor documentation.
* Any configurations to the NSG can be performed based on customer needs. If necessary, application security groups can be created for various groups of servers.
* The customer is planning on configuring the Azure Automate resource to start-up and shut-down their VMs based on a schedule.

# **5. Change/Update**

The change/update process is as follows

* When changes or updates are needed, it will be scheduled with Encino Energy to ensure the work will not interrupt their end users.

# 6. Delete Encino Energy - ArcGIS Solution

The solution is deleted by using the following process

* Remove Resource Group using the PowerShell script
  + Templates and Scripts are hosted in the following GitHub repository: <https://github.com/cdwlabs/azure-services/tree/master/customer-solutions/encino-energy>

# 7. References

* ARM Template Documentation: <https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/>