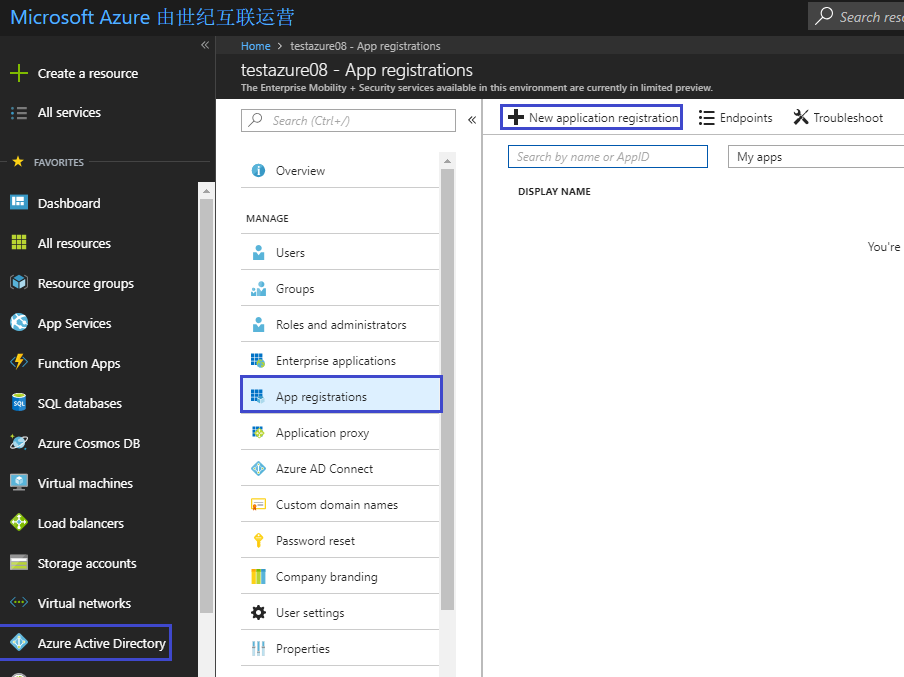
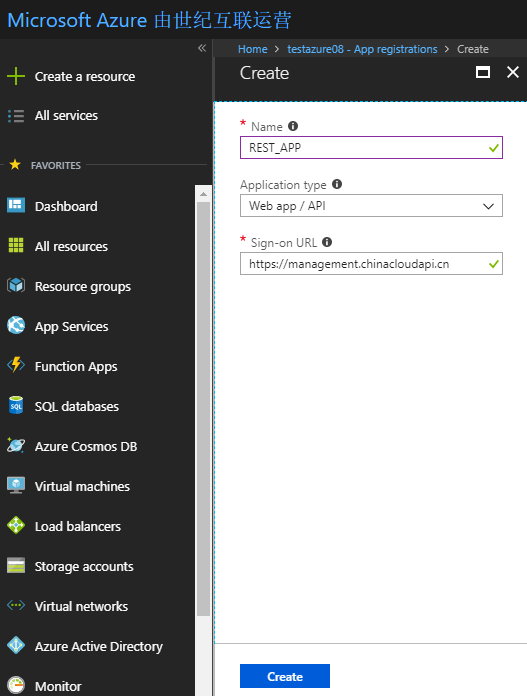
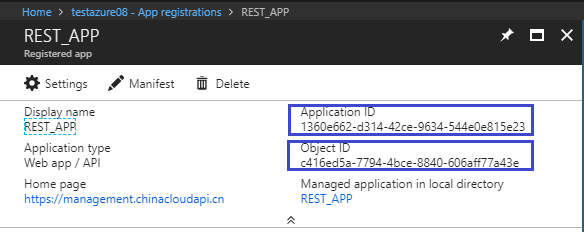
azure-resource-manager/resource-group-create-service-principal-portal.md

Step 1: Create app registration.





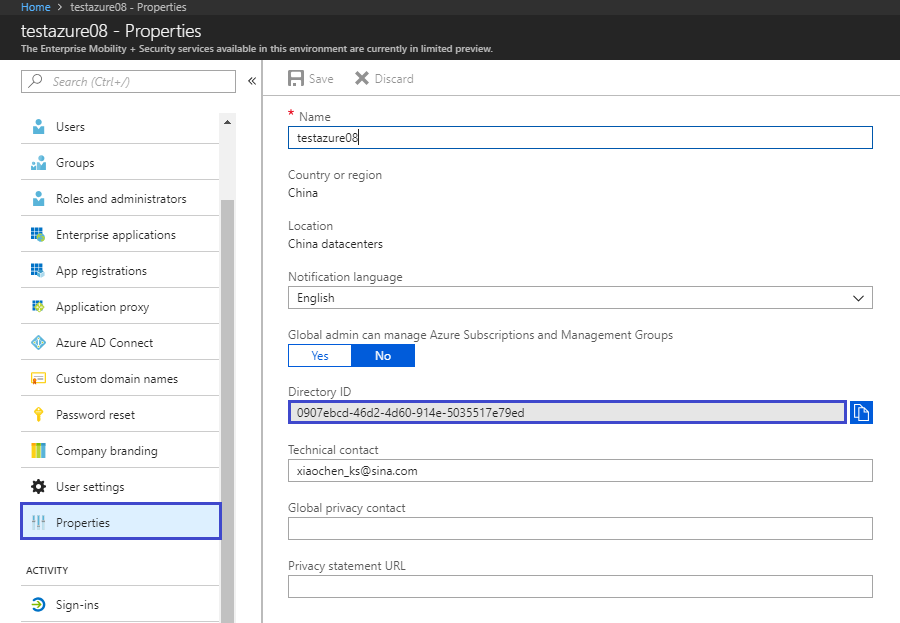


**name:** **REST\_CHENYE**

**root: https://management.chinacloudapi.cn**

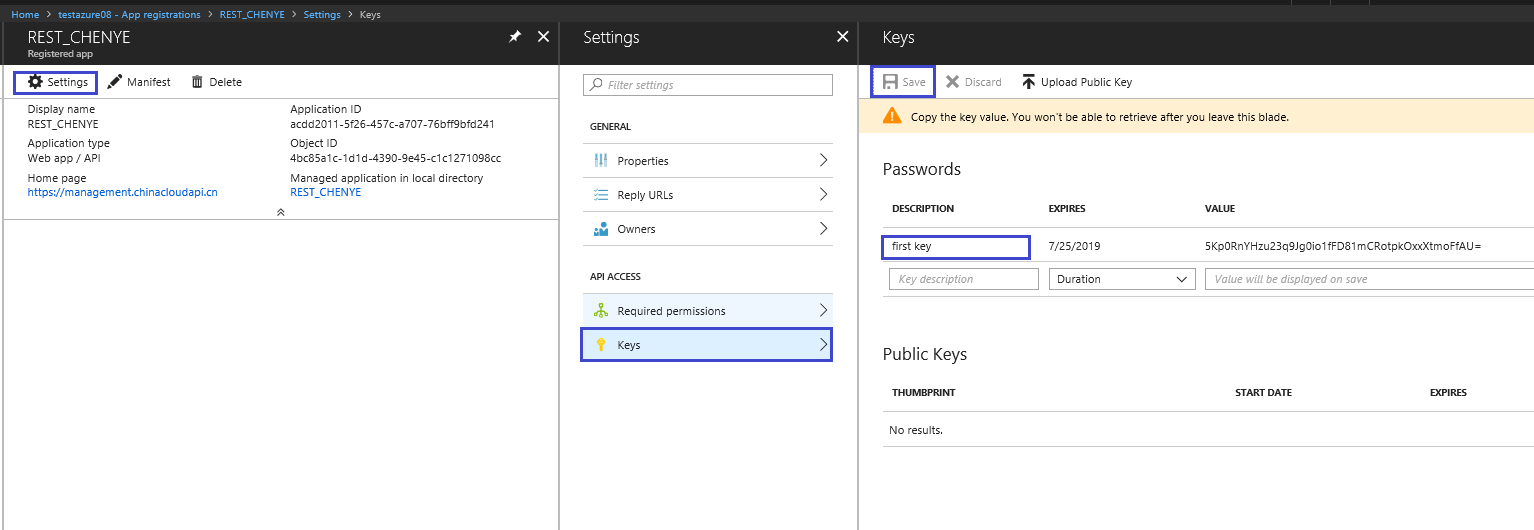
**applicationid: 1360e662-d314-42ce-9634-544e0e815e23s**

**objectid: 4bc85a1c-1d1d-4390-9e45-c1c1271098cc**



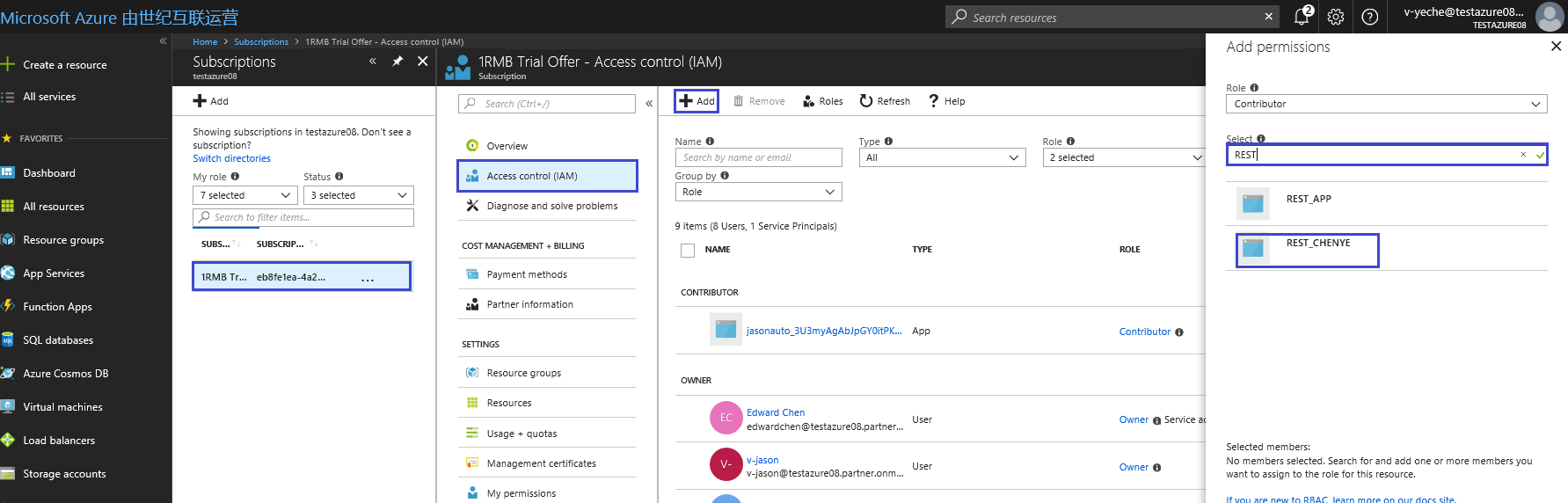
Directory ID: 0907ebcd-46d2-4d60-914e-5035517e79ed

Client ID: **1360e662-d314-42ce-9634-544e0e815e23s** should equal to Application ID in REST\_CHENYE.



Password: **5Kp0RnYHzu23q9Jg0io1fFD81mCRotpkOxxXtmoFfAU=**

<https://login.partner.microsoftonline.cn>



Get Access Token:

1. Post https://login.partner.microsoftonline.cn/0907ebcd-46d2-4d60-914e-5035517e79ed/oauth2/token

2. Add Http Head item

Content-Type: application/x-www-form-urlencoded

3. Add Body Content

grant\_type=client\_credentials&client\_id=**acdd2011-5f26-457c-a707-76bff9bfd241**&client\_secret=**5Kp0RnYHzu23q9Jg0io1fFD81mCRotpkOxxXtmoFfAU=**&resource= **https%3A%2F%2Fmanagement.chinacloudapi.cn%2F**

client\_credentials是固定值。

1. Post

https://login.partner.microsoftonline.cn/<DirectoryID or content ID>/oauth2/token

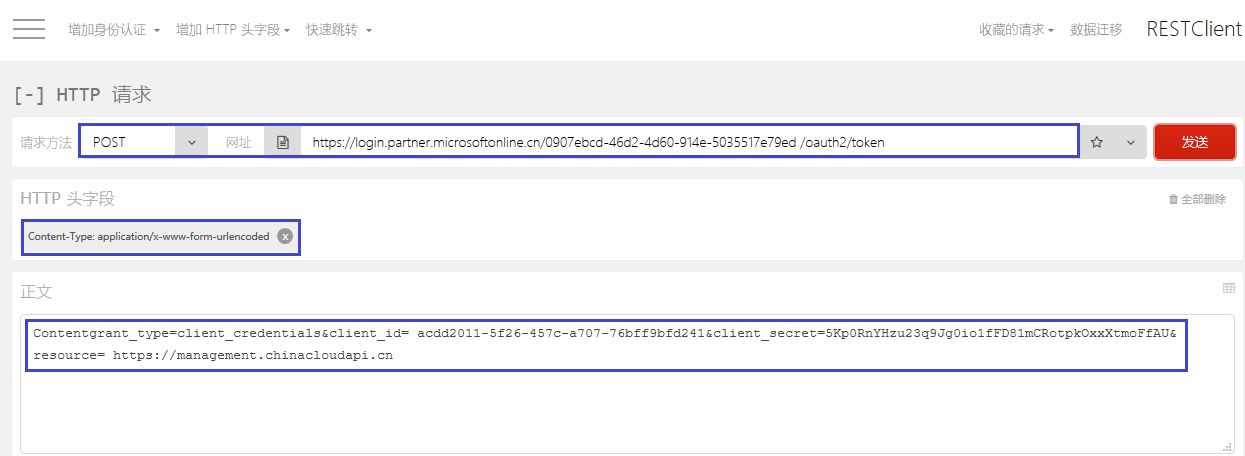
2. Add Http Head item

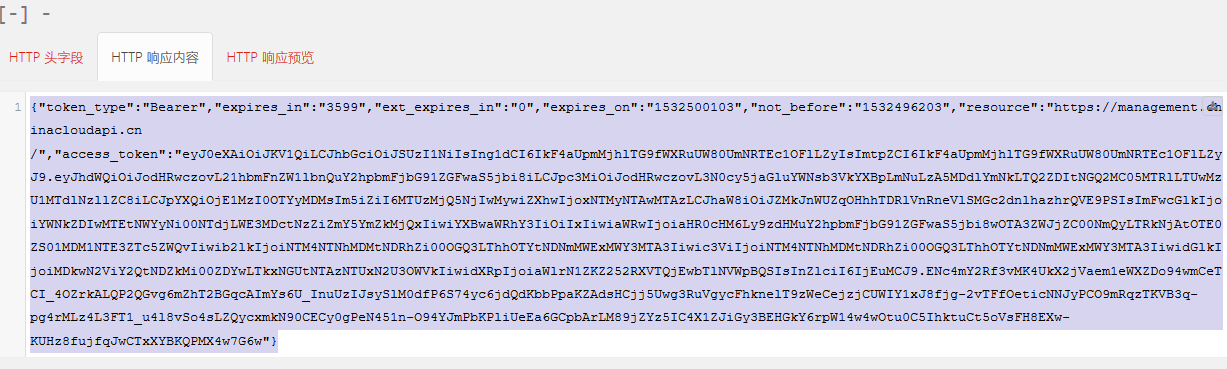
Content-Type: application/x-www-form-urlencoded

3. Add Body Content

grant\_type=client\_credentials&client\_id=<applicationid>&client\_secret= <Your Saved Secret>&resource=<root URL>

client\_credentials是固定值。



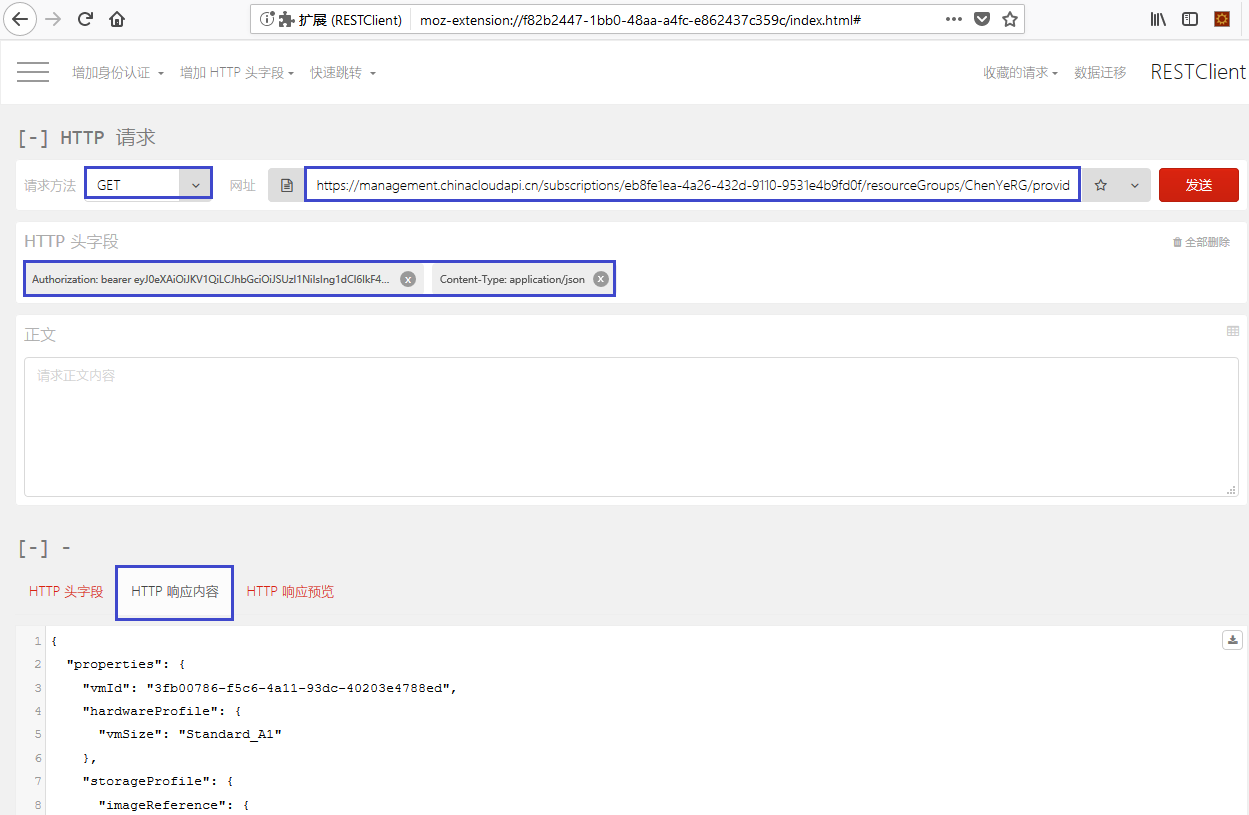


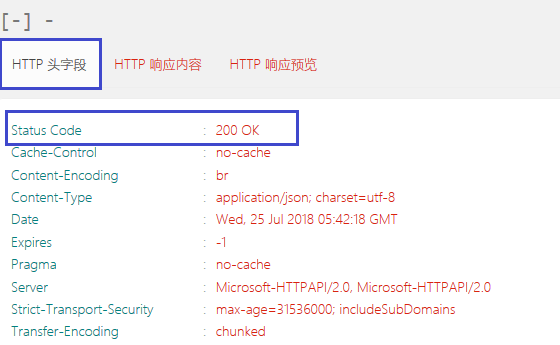
{"token\_type":"Bearer","expires\_in":"3599","ext\_expires\_in":"0","expires\_on":"1533030904","not\_before":"1533027004","resource":"https://management.chinacloudapi.cn/","access\_token":"eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiIsIng1dCI6IkF4aUpmMjhlTG9fWXRuUW80UmNRTEc1OFlLZyIsImtpZCI6IkF4aUpmMjhlTG9fWXRuUW80UmNRTEc1OFlLZyJ9..Bpu7B01TzOap8mbILAjMz7L2vOFxLUbF3sRhTTwV-7wYsjGuxkczanJipyNQLIBJ\_hptdw59lfJp5umKjeB7qyC\_1IRE5F95vW7BZJiAJpjCzVxe2fmvloPKG8lv31W4zWC1YHxBCusbOnSg\_b8Fsu0RWMeWGjbTavE9rlFsga5PRdA2NkV-oQGbQ1Yttg\_4rB73u-ChIHe0ReLRQaPuaZLlVktMbgI0tpuaSkXuUE4w4hkCNPCa\_0eieWeGmkrKA6poF9YkYMa3pmINj9f4AVefw6BFd8zKF6akvakxvjQk6tv4M8aKuDR7am-Dwwpte5kQzPPyb\_98Xrp\_7zb4wg"}

Sample: Get the specific VM details with following

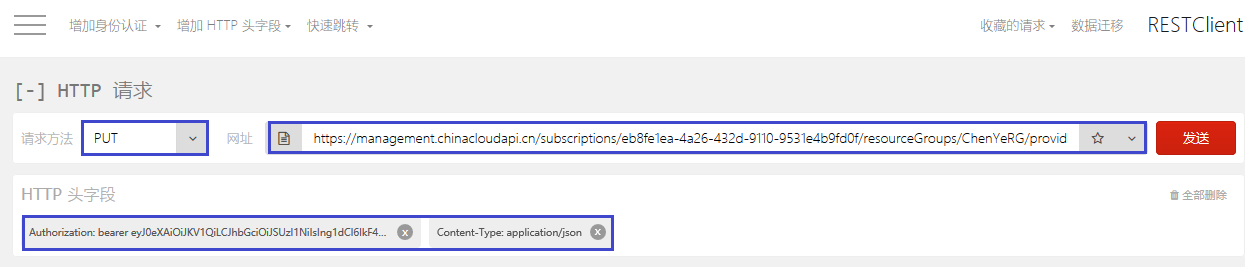
1. Get <https://management.chinacloudapi.cn/subscriptions/eb8fe1ea-4a26-432d-9110-9531e4b9fd0f/resourceGroups/ChenYeRG/providers/Microsoft.Compute/virtualMachines/ChenYeUbuntu?api-version=2017-12-01>
2. Add the http header.
3. Body is empty







Sample 2 : Create the new VM with json format



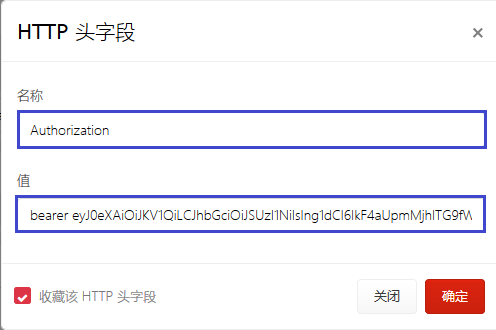
Parameter:

1. PUT
2. <https://management.chinacloudapi.cn/subscriptions/eb8fe1ea-4a26-432d-9110-9531e4b9fd0f/resourceGroups/ChenYeRG/providers/Microsoft.Compute/virtualMachines/myVM?api-version=2017-12-01>
3. Content-Type

application/json

1. Authorization

bearer eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiIsIng1dCI6IkF4aUpmMjhlTG9fWXRuUW80UmNRTEc1OFlLZyIsImtpZCI6IkF4aUpmMjhlTG9fWXRuUW80UmNRTEc1OFlLZyJ9..ENc4mY2Rf3vMK4UkX2jVaem1eWXZDo94wmCeTCI\_4OZrkALQP2QGvg6mZhT2BGqcAImYs6U\_InuUzIJsySlM0dfP6S74yc6jdQdKbbPpaKZAdsHCjj5Uwg3RuVgycFhknelT9zWeCejzjCUWIY1xJ8fjg-2vTFfOeticNNJyPCO9mRqzTKVB3q-pg4rMLz4L3FT1\_u4l8vSo4sLZQycxmkN90CECy0gPeN451n-O94YJmPbKPliUeEa6GCpbArLM89jZYz5IC4X1ZJiGy3BEHGkY6rpW14w4wOtu0C5IhktuCt5oVsFH8EXw-KUHz8fujfqJwCTxXYBKQPMX4w7G6w







Content List following:

Notice: even on the windows to put the request. The ssh path is the same with linux server.( /home/azureadmin/.ssh/authorized\_keys).

{

"location": "chinanorth",

"properties": {

"hardwareProfile": {

"vmSize": "Standard\_A1"

},

"storageProfile": {

"imageReference": {

"sku": "16.04-LTS",

"publisher": "Canonical",

"version": "latest",

"offer": "UbuntuServer"

},

"osDisk": {

"caching": "ReadWrite",

"managedDisk": {

"storageAccountType": "Standard\_LRS"

},

"name": "myVMosdisk",

"createOption": "FromImage"

}

},

"osProfile": {

"adminUsername": "azureadmin",

"computerName": "myVM",

"linuxConfiguration": {

"ssh": {

"publicKeys": [

{

"path": "/home/azureadmin/.ssh/authorized\_keys",

"keyData": "ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQC7K19Cqt9T3n7TN7lc6I7nFWkl0A8+aKtfN3UPIReiEf8gPg3qww5XgMgRzl5+Qg243n4ej+0RR3GCADmr0DWHiKqj6saKrbEqsy0M3vFbZmrijbVld7vaS7FUDAcvc6lRyb+2ZhFiLcG2Pes/dQ2Sf5RqWZ7BxrXJgAb3jfDzY0akixZcnW5SE4Xb4j+TrjcWF8iJNnbO0/2vmEg9oZkff4gWHMBL8+v96JfVk2+x2r5cS4gSw/pX9tkBg+3Zwz23i97d35bJ+dWlp15raCZPpyqTERhBM927D2W4OlyuN9er53BnOyQ8x74tuHMvNTebt+b3ZUSExrA9JmHb4911 edwardch@ws-wuxipc-0090"

}

]

},

"disablePasswordAuthentication": true

}

},

"networkProfile": {

"networkInterfaces": [

{

"id": "/subscriptions/eb8fe1ea-4a26-432d-9110-9531e4b9fd0f/resourceGroups/ChenYeRG/providers/Microsoft.Network/networkInterfaces/chenyenewinterface",

"properties": {

"primary": true

}

}

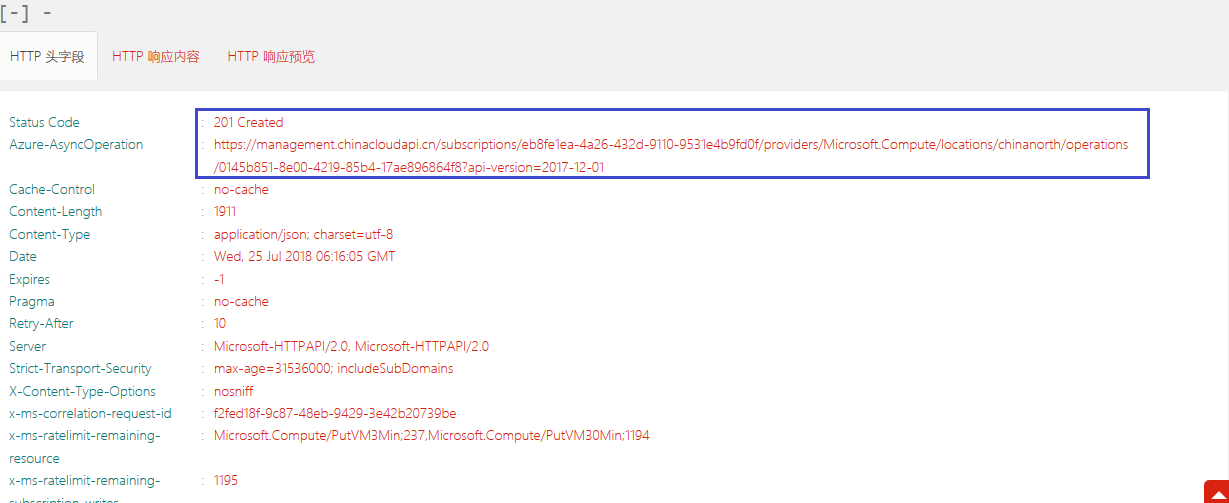
]

}

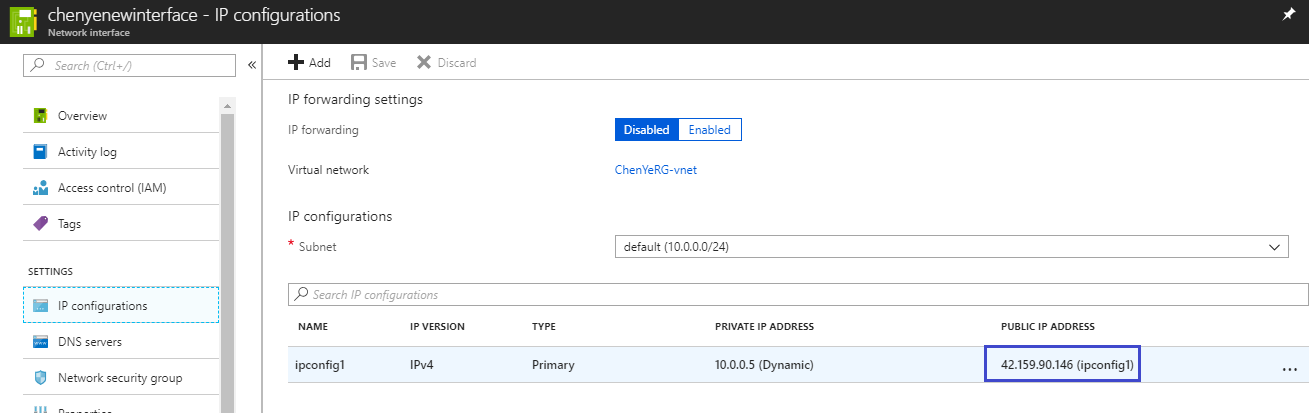
},

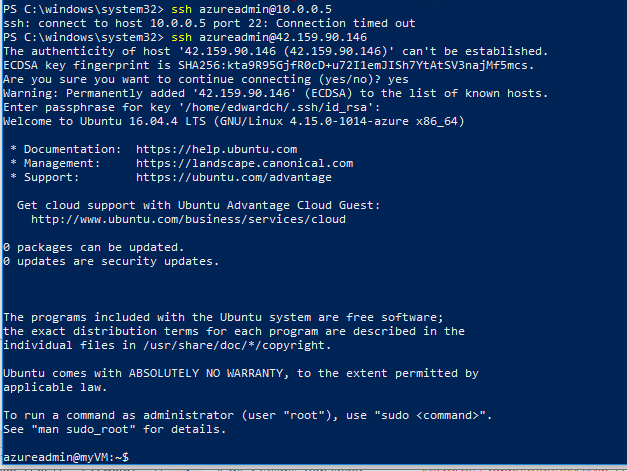
"name": "myVM"

}



When we create the myVM successfully, we should update the network interface to get the public ip address following, or we can not connect the VM via SSH

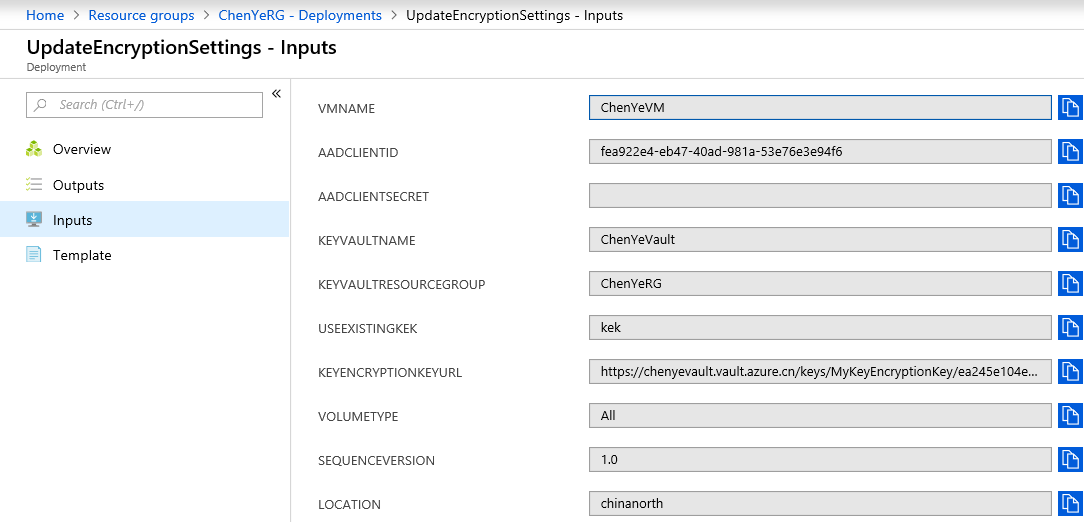


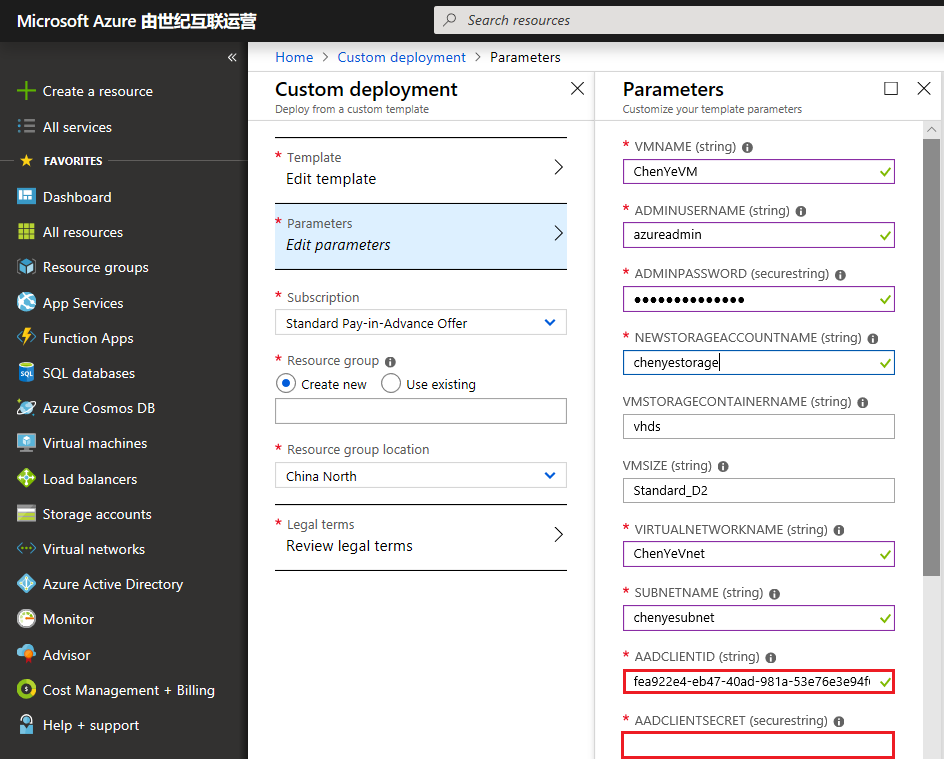


**How to encrypt the managed disk in Windows server?**

Deployment Link:

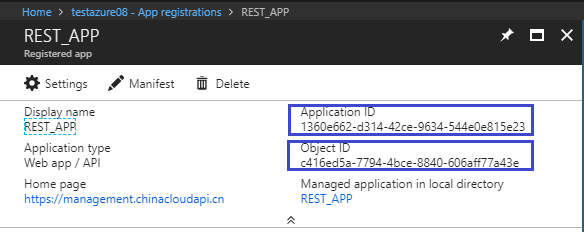
<https://portal.azure.cn/#create/Microsoft.Template/uri/https%3A%2F%2Fraw.githubusercontent.com%2Fazure%2Fazure-quickstart-templates%2Fmaster%2F201-encrypt-create-new-vm-gallery-image%2Fazuredeploy.json>





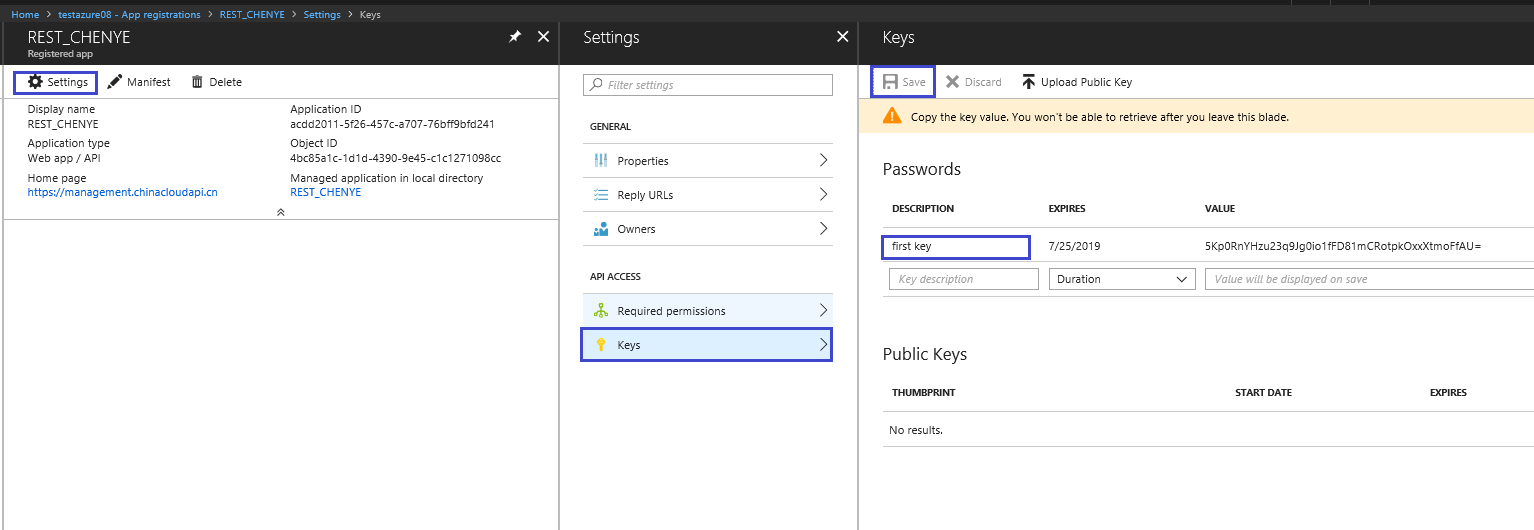
Notice:

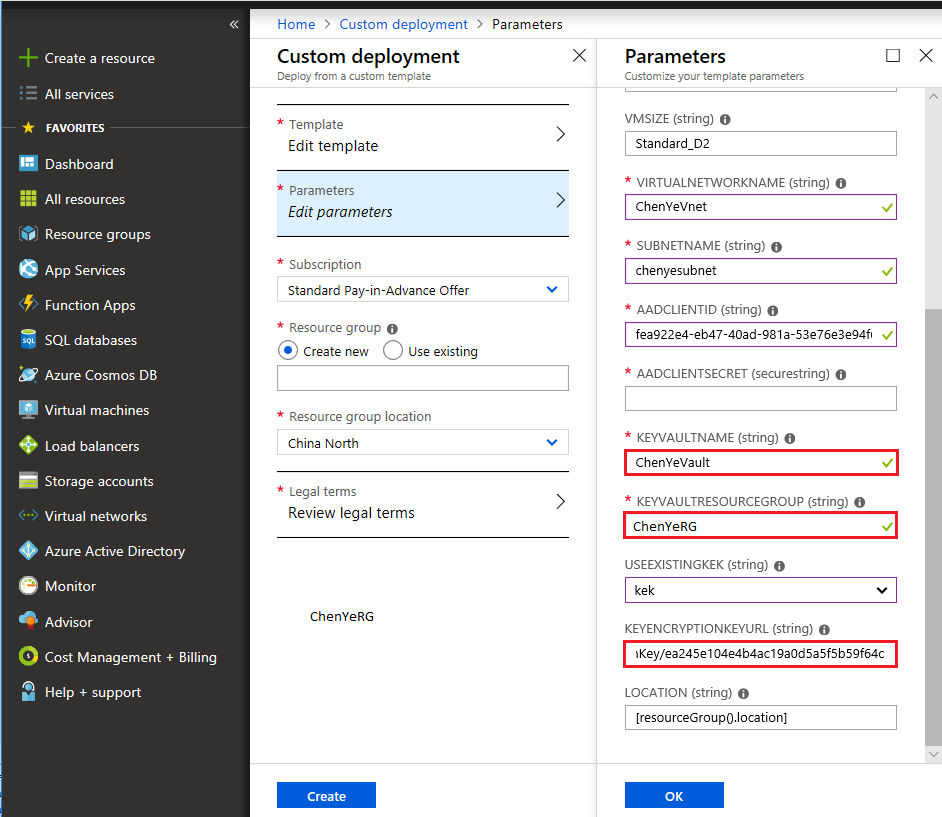
AADClinetID is Application ID when we create app registray.



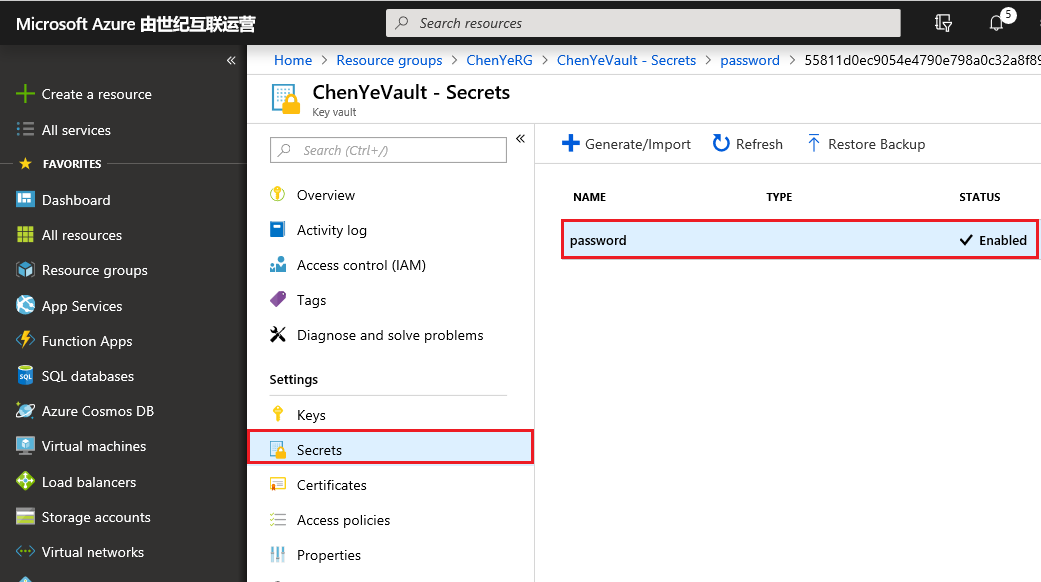
AADClientSecret is q5F3lsYVWu5LZztRZk5s7oNon7hURBk48XCJz/gqKeM=

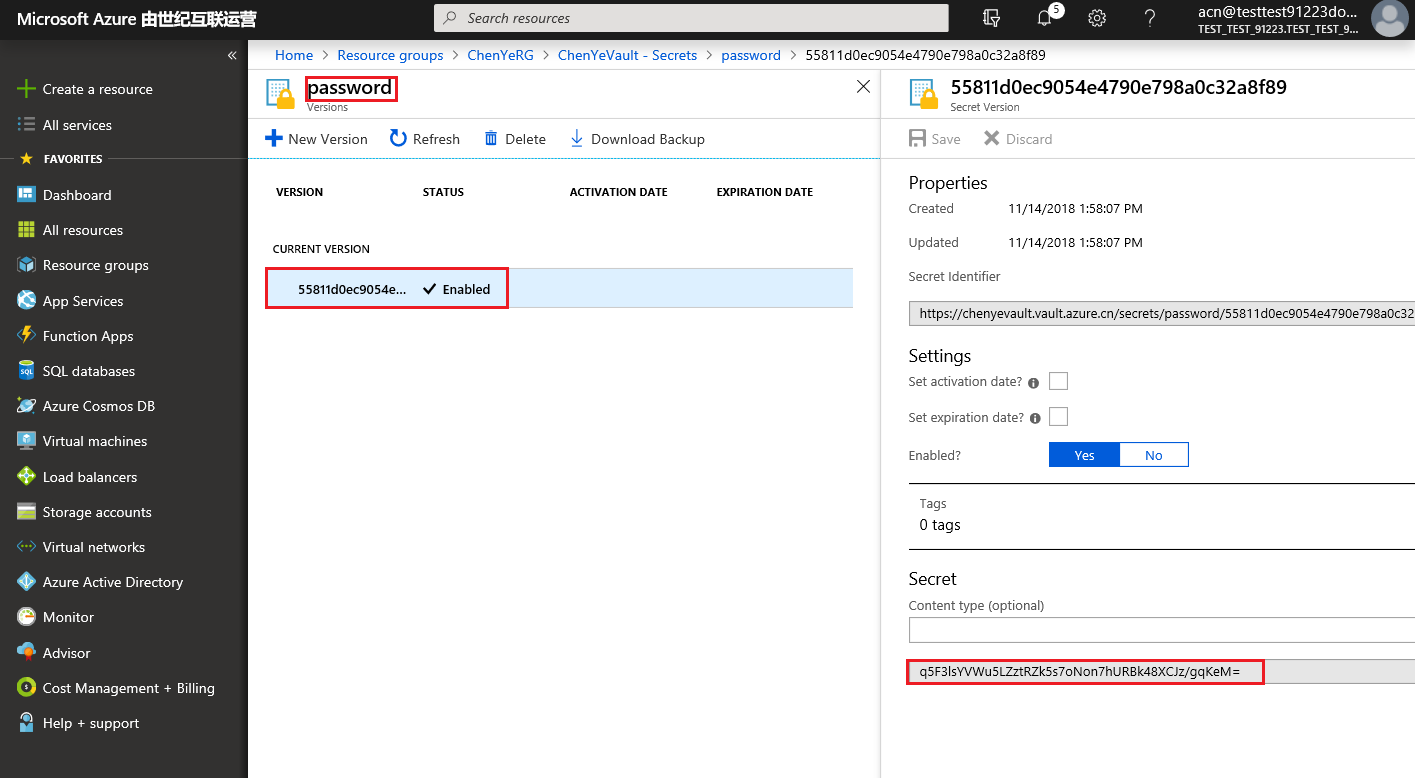
We create the secret keys in App registration. We use the secrets value to create a secret in Key Vault.

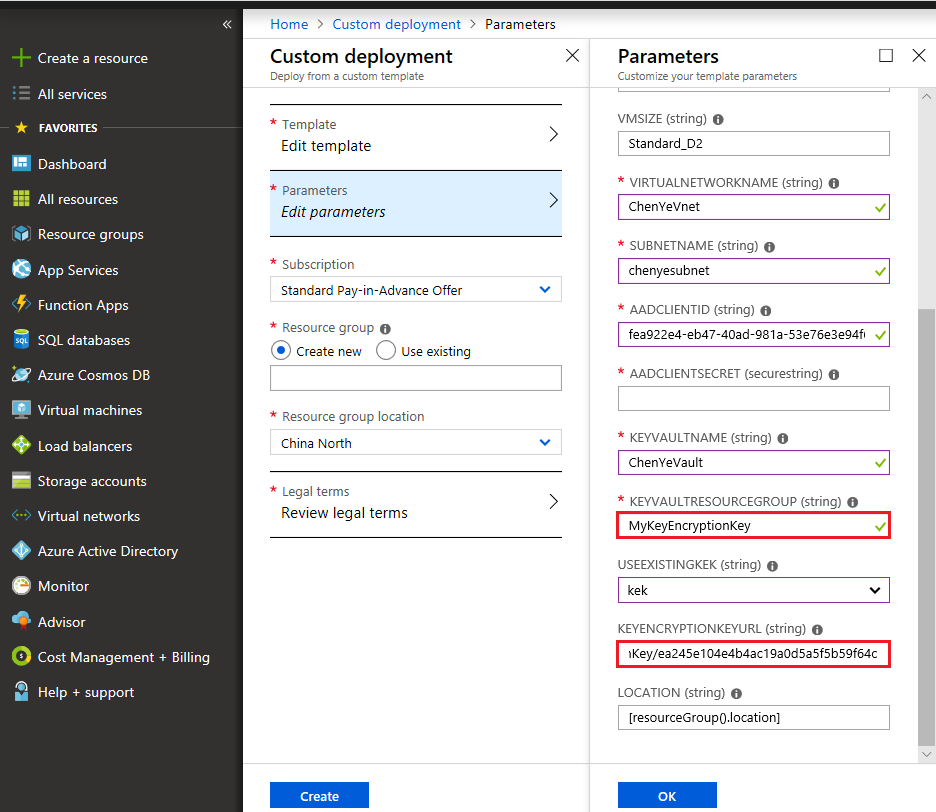


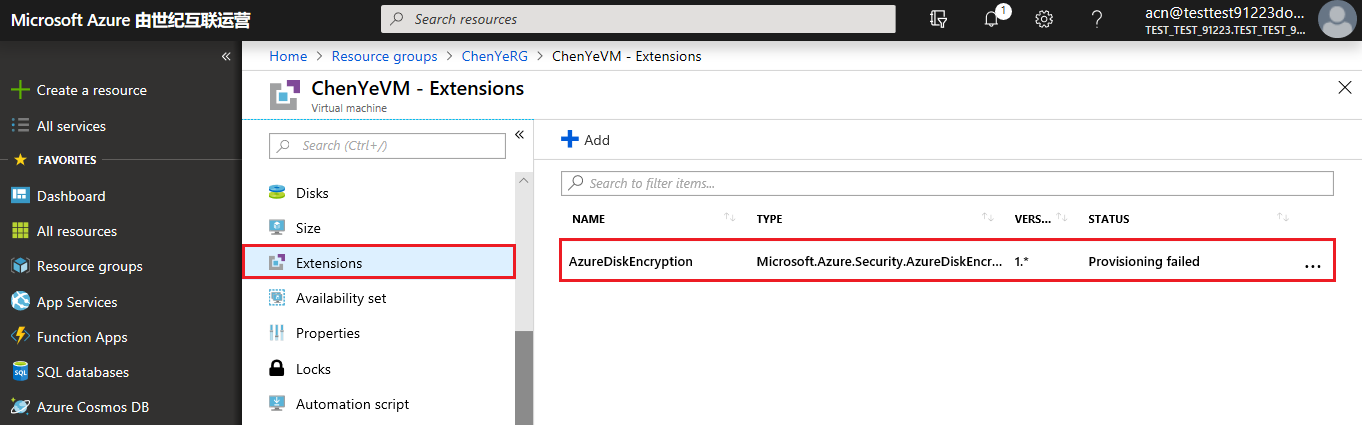


We create Key Vault and Key in advanced like following snapshot to show.



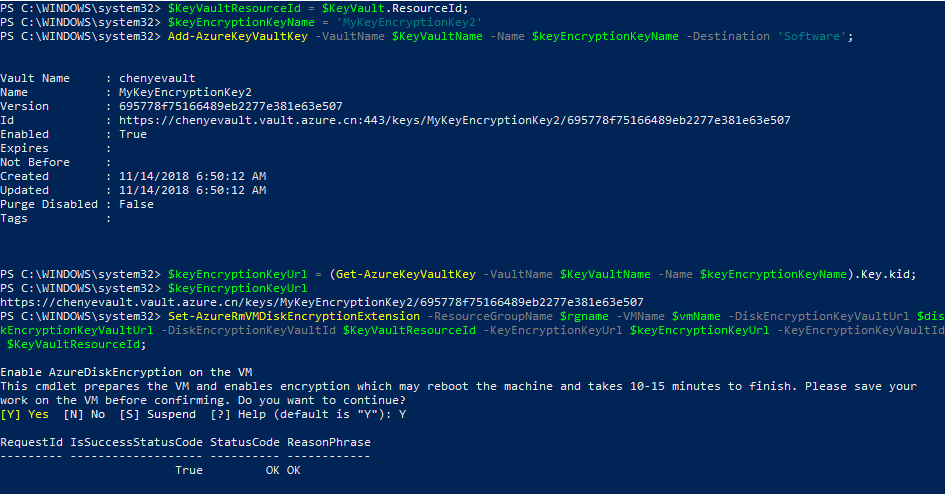






But failed when use template to create.

We use the following powershell is successfully on mooncake.



$rgName = 'ChenYeRG';

$vmName = 'ChenYeVM';

$aadClientID = 'fea922e4-eb47-40ad-981a-53e76e3e94f6';

$aadClientSecret = 'q5F3lsYVWu5LZztRZk5s7oNon7hURBk48XCJz/gqKeM=';

$KeyVaultName = 'ChenYeVault';

$KeyVault = Get-AzureRmKeyVault -VaultName $KeyVaultName -ResourceGroupName $rgname;

$diskEncryptionKeyVaultUrl = $KeyVault.VaultUri;

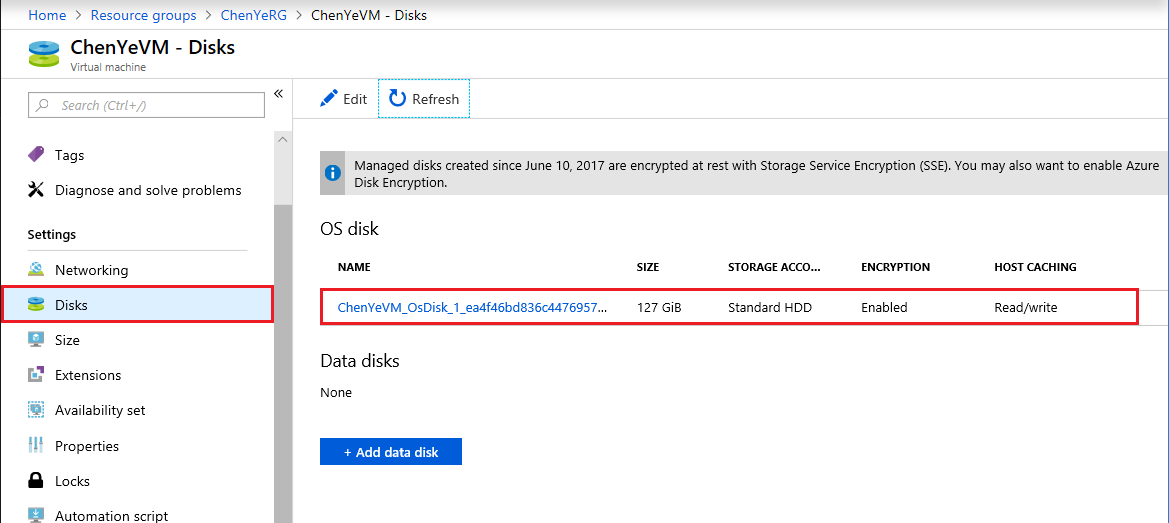
$KeyVaultResourceId = $KeyVault.ResourceId;

$keyEncryptionKeyName = 'MyKeyEncryptionKey2';

Add-AzureKeyVaultKey -VaultName $KeyVaultName -Name $keyEncryptionKeyName -Destination 'Software';

$keyEncryptionKeyUrl = (Get-AzureKeyVaultKey -VaultName $KeyVaultName -Name $keyEncryptionKeyName).Key.kid;

Set-AzureRmVMDiskEncryptionExtension -ResourceGroupName $rgname -VMName $vmName -DiskEncryptionKeyVaultUrl $diskEncryptionKeyVaultUrl -DiskEncryptionKeyVaultId $KeyVaultResourceId -KeyEncryptionKeyUrl $keyEncryptionKeyUrl -KeyEncryptionKeyVaultId $KeyVaultResourceId;



Reason: The template use 1.0 version of AzureDiskEncrypton while the powershell 2.0 version.

