Install AzureStack on VM:

<https://github.com/yagmurs/AzureStack-VM-PoC>

ACS on AzureStack

<https://docs.microsoft.com/en-us/azure/azure-stack/user/azure-stack-solution-template-kubernetes-deploy>

Add a Kubernetes Cluster to the Azure Stack Marketplace

<https://docs.microsoft.com/en-us/azure/azure-stack/azure-stack-solution-template-kubernetes-cluster-add> <<--- 问题：不能创建plan？

<https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-create-service-principal-portal#check-azure-active-directory-permissions>

微信公众号文章：

在Azure Stack上部署Kubernetes

<https://mp.weixin.qq.com/s?__biz=MzA3NTM1MzE4Nw==&mid=2649617738&idx=1&sn=72e614800b05450390348b290a5b13e7&chksm=87688846b01f015006aeeaa32850fd7d2c8660599e026738b0845e4c908bb0ec98b135408ae9&mpshare=1&scene=1&srcid=0801r6UviPLPMgo9oEcOpUMD#rd>

有关中国Azure Stack部署K8S的疑难解答

<https://mp.weixin.qq.com/s?__biz=MzA3NTM1MzE4Nw==&mid=2649617746&idx=1&sn=8d110646120244bbab6b55e252fc744e&chksm=8768885eb01f014824a130cb4148cd9c8648e20d155549a1d09df7d88b3dceeec64821ee09dd#rd>

AzureStack K8S templates：

<https://github.com/radhikagupta5/AzureStack-QuickStart-Templates/tree/radhikgu-acs/101-acsengine-kubernetes-1803>

<https://github.com/radhikagupta5/AzureStack-QuickStart-Templates/tree/radhikgu-acs/101-acsengine-kubernetes-1804>

<https://github.com/ahpeng/K8SOnAzureStack>

步骤参考:

<https://github.com/Azure/acs-engine/tree/master/docs>

\* <https://github.com/radhikagupta5/AzureStack-QuickStart-Templates/tree/radhikgu-acs/101-acsengine-kubernetes-1804>

\* <https://mp.weixin.qq.com/s?__biz=MzA3NTM1MzE4Nw==&mid=2649617738&idx=1&sn=72e614800b05450390348b290a5b13e7&chksm=87688846b01f015006aeeaa32850fd7d2c8660599e026738b0845e4c908bb0ec98b135408ae9&mpshare=1&scene=1&srcid=0801r6UviPLPMgo9oEcOpUMD>

\* <https://github.com/radhikagupta5/AzureStack-QuickStart-Templates/tree/radhikgu-acs/101-acsengine-kubernetes-1803>

\* <https://docs.microsoft.com/en-us/azure/azure-stack/user/azure-stack-solution-template-kubernetes-deploy>

错误参考：

<https://github.com/Azure/acs-engine/issues/2591>

<https://github.com/Azure/acs-engine/issues/1806>

ToDo：

\* <https://docs.microsoft.com/en-us/azure/azure-stack/user/azure-stack-version-profiles-azurecli2> （connect az cli to azs)

MTC Astack access：

[login.microsoftonline.com](https://login.microsoftonline.com/common/oauth2/authorize) / demomtc@niuyuxiaogmail.onmicrosoft.com / bjastack123@

EmergencyConsoleIPAddresses":  [

                                        "10.12.142.224",

                                        "10.12.142.225",

                                        "10.12.142.226"

登陆ercs :   bjmtc\demomtcercs  , 密码: bjastack123!

ERCS hostname: bjmtcv-ercs01

Astack aks:

*App id (service principal client id):*

*c0d7dc0b-fa39-4e1f-a002-b21d103b59a0*

*Key (service principal client secret):*

*l3e1go2NILfWHrSs1CQ/iyCdQp3I1GcmODwwgbiCkLE=*

**Client ID: a095d8d1-9c02-425e-a0cb-fd7b0f3c34a1**

**Client Secret: kwyV+r1ja+bYFj/KzBJg9mMWaACr86bmpUuLbfNmrUE=**

**Tenant ARM endpoint: t:** [**https://management.bj.mtccn.microsoft.com**](https://management.bj.mtccn.microsoft.com)

Import-Module d:\MSFT\Azure-Study\AKS\azurestack\mtc\AzureStack.AcsEngine.psm1 -Force -Verbose

$namingSuffix = 12345

$masterDnsPrefix = "k8s-" + $namingSuffix

$namingSuffix = 10000..99999 | Get-Random

$masterDnsPrefix = "k8s-" + $namingSuffix

$tenantSubscriptionId = "f3bd3976-e7c2-4307-9ae3-0976b4bc867b"

$CloudAdminPass = ConvertTo-SecureString "bjastack123!" -AsPlainText -Force

$cloudAdminCredential = New-Object System.Management.Automation.PSCredential ("bjmtc\demomtcercs", $CloudAdminPass)

$serviceAdmin = "demomtc@niuyuxiaogmail.onmicrosoft.com"

$AdminPass = ConvertTo-SecureString "bjastack123@" -AsPlainText -Force

$serviceAdminCredential = New-Object System.Management.Automation.PSCredential ($serviceAdmin, $AdminPass)

$TenantAdmin = "demomtc@niuyuxiaogmail.onmicrosoft.com"

$TenantAdminPass = ConvertTo-SecureString "bjastack123@" -AsPlainText -Force

$tenantAdminCredential = New-Object System.Management.Automation.PSCredential ($TenantAdmin, $TenantAdminPass)

$acsSshKey = "ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQDT59HdrzOj5zJawLXjuoKeMjw1zdXtMuNnon70/I+N9Tl56O8kcltRBUgX0bcBpnb0bTDHlVQmi2xZcsR8srKSRS1uQo4WRfRlwFtGioHsiBfpBeyS4ZONPjKjBH5ar5/6RB0kvyDnI1TD502nIwYMAgLqw/EUoIcl+hATiCe0dxODWgg8W4wK5X6Jvs/ekII1JPUZRXYFSaQ1OvSnBWf3SnX4C41yG6CXPAfCvQgZaInl5aCE4hijj6aBS6kmlAx8ItLr7B5L63mLKhqBz0MJhpVwKhNJrNlHBdJfD/eMeJ4t54IQElADW1W3SEYtI3N8hCZZwXQPuvoAoeJQw/af azureuser@azconsole"

$apiModelParameters = @{'ErcsComputerName' = "10.12.142.224"; 'CloudAdminCredential' = $cloudAdminCredential; 'ServiceAdminCredential' = $serviceAdminCredential; 'TenantAdminCredential' = $tenantAdminCredential; 'TenantSubscriptionId' = $tenantSubscriptionId; 'MasterDnsPrefix' = $masterDnsPrefix; 'LinuxVmSshKey' = $acsSshKey; 'NamingSuffix' = $namingSuffix;}

$apiModelParameters = @{'ErcsComputerName' = "bjmtcv-ercs01"; 'CloudAdminCredential' = $cloudAdminCredential; 'ServiceAdminCredential' = $serviceAdminCredential; 'TenantAdminCredential' = $tenantAdminCredential; 'TenantSubscriptionId' = $tenantSubscriptionId; 'MasterDnsPrefix' = $masterDnsPrefix; 'LinuxVmSshKey' = $acsSshKey; 'NamingSuffix' = $namingSuffix;}

$apiModel = Prepare-AcseApiModel @apiModelParameters

$aadTenantId = "db4351a3-ccce-4f9a-ad30-c25f05f3a5cc"

$tenantArmEndpoint = "<https://management.bj.mtccn.microsoft.com>"

$spnApplicationId = "*c0d7dc0b-fa39-4e1f-a002-b21d103b59a0*"

Assign-AcseServicePrincipal -TenantArmEndpoint $tenantArmEndpoint -AadTenantId $aadTenantId -TenantAdminCredential $tenantAdminCredential -TenantSubscriptionId $tenantSubscriptionId -ApplicationId $spnApplicationId

DNS Name = k8s-12345.bj.cloudapp.mtccn.microsoft.com

azureuser@k8s-master-72943816-0:~/tools$ kubectl cluster-info

Kubernetes master is running at <https://k8s-23456.bj.cloudapp.mtccn.microsoft.com>

Heapster is running at <https://k8s-23456.bj.cloudapp.mtccn.microsoft.com/api/v1/namespaces/kube-system/services/heapster/proxy>

KubeDNS is running at <https://k8s-23456.bj.cloudapp.mtccn.microsoft.com/api/v1/namespaces/kube-system/services/kube-dns:dns/proxy>

kubernetes-dashboard is running at <https://k8s-23456.bj.cloudapp.mtccn.microsoft.com/api/v1/namespaces/kube-system/services/https:kubernetes-dashboard:/proxy>

Metrics-server is running at <https://k8s-23456.bj.cloudapp.mtccn.microsoft.com/api/v1/namespaces/kube-system/services/https:metrics-server:/proxy>

tiller-deploy is running at <https://k8s-23456.bj.cloudapp.mtccn.microsoft.com/api/v1/namespaces/kube-system/services/tiller-deploy:tiller/proxy>

azureuser@k8s-master-72943816-0:~/tools$ kubectl proxy --address 0.0.0.0 --accept-hosts '.\*' &

[1] 54830

azureuser@k8s-master-72943816-0:~/tools$ Starting to serve on [::]:8001

Copy .kube/config 文件到本地

kubectl proxy

<http://localhost:8001/api/v1/namespaces/kube-system/services/https:kubernetes-dashboard:/proxy/>

azureuser@k8s-master-72943816-0:~$ kubectl get svc --namespace=kube-system

NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE

heapster ClusterIP 10.0.195.77 <none> 80/TCP 1h

kube-dns ClusterIP 10.0.0.10 <none> 53/UDP,53/TCP 1h

kubernetes-dashboard NodePort 10.0.197.253 <none> 443:32599/TCP 1h

metrics-server ClusterIP 10.0.137.145 <none> 443/TCP 1h

tiller-deploy ClusterIP 10.0.218.220 <none> 44134/TCP 1h

Use az cli with azure stack

<https://docs.microsoft.com/en-us/azure/azure-stack/user/azure-stack-version-profiles-azurecli2>