|  |  |
| --- | --- |
| **Function** | **APIs** |
| Create Capacity Reservation Group | PUT  [https://management.azure.com/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/CapacityReservationGroups/{CapacityReservationGroupName}&api-version=2020-06-01](https://management.azure.com/subscriptions/%7bsubscriptionId%7d/resourceGroups/%7bresourceGroupName%7d/providers/Microsoft.Compute/CapacityReservationGroups/%7bCapacityReservationGroupName%7d&api-version=2020-06-01)  URI Parameters   |  |  |  | | --- | --- | --- | | **Name** | **Required** | **Type** | | subscriptionId | True | String | | resourceGroupName | True | String | | capacityReservationGroupName | True | String | | api-version | True | String |   **Request Body**   |  |  |  |  | | --- | --- | --- | --- | | **Name** | **Required** | **Type** | **Description** | | location | True | String | Azure region | | tags | False | Map <String, String> |  | | zones | False | String[] | Availability Zones(s) |   For regional reservation group, only pass the Azure region and for zonal reservation group, pass the region along with zone(s).  Regional  {  "location":"eastus",  }  Zonal  {  "location":"eastus",  "zones": ["1", "2", "3"]  } |
| Create Capacity Reservation | PUT  [https://management.azure.com/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/CapacityReservationGroups/{CapacityReservationGroupName}/CapacityReservations/{CapacityReservationName}?api-version=2020-06-01](https://management.azure.com/subscriptions/%7bsubscriptionId%7d/resourceGroups/%7bresourceGroupName%7d/providers/Microsoft.Compute/CapacityReservationGroups/%7bCapacityReservationGroupName%7d/CapacityReservations/%7bCapacityReservationName%7d?api-version=2020-06-01)  URI Parameters   |  |  |  | | --- | --- | --- | | **Name** | **Required** | **Type** | | subscriptionId | True | String | | resourceGroupName | True | String | | capacityReservationGroupName | True | String | | capacityReservationName | True | String | | api-version | True | String |     Request Body     |  |  |  |  | | --- | --- | --- | --- | | **Name** | **Required** | **Type** | **Description** | | sku | True | sku | VM size | | location | True | String | Azure Region | | tags | False | Map<String, string> |  | | zones | False | String[] | Availability Zone. Only one AZ per capacity reservation is allowed |   sku   |  |  |  |  | | --- | --- | --- | --- | | **Name** | **Required** | **Type** | **Description** | | name | True | String | VM size | | capacity | True | int | Quantity to reserve |   {  "location": "eastus",  "zones": ["1"],  "tags": {          "environment": "testing"      },  "sku": {  "name": "Standard\_D2s\_v3",  "capacity": 5  }  } |
| Get Capacity Reservation Group | URI Parameters   |  |  |  | | --- | --- | --- | | **Name** | **Required** | **Type** | | subscriptionId | True | String | | resourceGroupName | True | String | | capacityReservationGroupName | True | String | | api-version | True | String |   GET  https://management.azure.com/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/CapacityReservationGroups/{CapacityReservationGroupName}?api-version=2020-06-01  **Response**  {      "name": "myCapacityReservationGroup",      "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/capacityReservationGroups/myCapacityReservationGroup",      "type": "Microsoft.Compute/capacityReservationGroups",      "location": "southcentralus",      "zones": [          "1"      ],      "properties": {          "capacityReservations": [              {                  "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/capacityReservationGroups/MYCAPACITYRESERVATIONGROUP/capacityReservations/MYCAPACITYRESERVATION"              }          ]      }  }  **Instance view**  GET InstanceView  https://management.azure.com/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/CapacityReservationGroups/{CapacityReservationGroupName}? $expand=instanceView&api-version=2020-06-01  **Response**  {      "name": "myRegionalCapacityReservationGroup",      "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/capacityReservationGroups/myRegionalCapacityReservationGroup",      "type": "Microsoft.Compute/capacityReservationGroups",      "location": "eastus2euap",      "properties": {          "capacityReservations": [              {                  "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/capacityReservationGroups/MYREGIONALCAPACITYRESERVATIONGROUP/capacityReservations/MYCAPACITYRESERVATION"              }          ],          "virtualMachinesAssociated": [              {                  "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/virtualMachines/MYD2V3VM"              }          ],          "instanceView": {              "capacityReservations": [                  {                      "name": "myCapacityReservation",                      "utilizationInfo": {                          "virtualMachinesAllocated": [                              {                                  "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/virtualMachines/myD2v3VM"                              }                          ]                      },                      "statuses": [                          {                              "code": "ProvisioningState/succeeded",                              "level": "Info",                              "displayStatus": "Provisioning succeeded",                              "time": "2021-03-08T19:20:22.2692084+00:00"                          }                      ]                  }              ]          }      }  } |
| Get Capacity Reservation | URI Parameters   |  |  |  | | --- | --- | --- | | **Name** | **Required** | **Type** | | subscriptionId | True | String | | resourceGroupName | True | String | | CapacityReservationGroupName | True | String | | CapacityReservationName | True | String | | api-version | True | String |   GET  [https://management.azure.com/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/CapacityReservationGroups/{CapacityReservationGroupName}/capacityReservations/{capacityReservationName}?api-version=2020-06-01](https://management.azure.com/subscriptions/%7bsubscriptionId%7d/resourceGroups/%7bresourceGroupName%7d/providers/Microsoft.Compute/CapacityReservationGroups/%7bCapacityReservationGroupName%7d/capacityReservations/%7bcapacityReservationName%7d?api-version=2020-06-01)  **Response**  {      "name": "myCapacityReservation",      "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/capacityReservationGroups/myCapacityReservationGroup/capacityReservations/myCapacityReservation",      "type": "Microsoft.Compute/capacityReservationGroups/capacityReservations",      "location": "southcentralus ",      "sku": {          "name": "Standard\_D2\_v3",          "capacity": 3      },      "zones": [          "1"      ],      "properties": {          "reservationId": "<reservationId>",          "provisioningTime": "2021-03-03T00:01:34.5064139+00:00",          "provisioningState": "Succeeded"      }  }  **Instance View**  GET instance view  [https://management.azure.com/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/CapacityReservationGroups/{CapacityReservationGroupoName}/CapacityReservations/{CapacityReservationName}?$expand=instanceView&api-version=2020-06-01](https://management.azure.com/subscriptions/%7bsubscriptionId%7d/resourceGroups/%7bresourceGroupName%7d/providers/Microsoft.Compute/CapacityReservationGroups/%7bCapacityReservationGroupoName%7d/CapacityReservations/%7bCapacityReservationName%7d?$expand=instanceView&api-version=2020-06-01%20)    **Response**  {      "name": "myCapacityReservation",      "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/capacityReservationGroups/myRegionalCapacityReservationGroup/capacityReservations/myCapacityReservation",      "type": "Microsoft.Compute/capacityReservationGroups/capacityReservations",      "location": "eastus2euap",      "sku": {          "name": "Standard\_D2\_v3",          "capacity": 3      },      "properties": {          "virtualMachinesAssociated": [              {                  "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/virtualMachines/MYD2V3VM"              }          ],          "reservationId": "<reservationId>",          "provisioningTime": "2021-03-08T19:20:22.2692084+00:00",          "provisioningState": "Succeeded",          "instanceView": {              "utilizationInfo": {                  "virtualMachinesAllocated": [                      {                          "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/virtualMachines/myD2v3VM"                      }                  ]              },              "statuses": [                  {                      "code": "ProvisioningState/succeeded",                      "level": "Info",                      "displayStatus": "Provisioning succeeded",                      "time": "2021-03-08T19:20:22.2692084+00:00"                  }              ]          }      }  } |
| Update the quantity of a Capacity Reservation | PATCH  [https://management.azure.com/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/CapacityReservationGroups/{CapacityReservationGroupName}/CapacityReservations/{CapacityReservationName}?api-version=2020-06-01](https://management.azure.com/subscriptions/%7bsubscriptionId%7d/resourceGroups/%7bresourceGroupName%7d/providers/Microsoft.Compute/CapacityReservationGroups/%7bCapacityReservationGroupName%7d/CapacityReservations/%7bCapacityReservationName%7d?api-version=2020-06-01)  {  "location": "eastus",  "sku": {  "name": "Standard\_D2s\_v3”  "capacity": 10,  }  }  Update “capacity” to the new desired quantity (10) to be reserved. |
| Delete Capacity Reservation | DELETE  [https://management.azure.com/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/CapacityReservationGroups/{CapacityReservationGroupName}/CapacityReservations/{CapacityReservationName}?api-version=2020-06-01](https://management.azure.com/subscriptions/%7bsubscriptionId%7d/resourceGroups/%7bresourceGroupName%7d/providers/Microsoft.Compute/CapacityReservationGroups/%7bCapacityReservationGroupName%7d/CapacityReservations/%7bCapacityReservationName%7d?api-version=2020-06-01)  **Note**  Capacity Reservation can only be deleted if there are no virtual machines associated with it. In order to delete reservation, first dissociate all the VMs in the “*virutalMachinesAssociated”* property and then proceed with the deletion. |
| Delete Capacity Reservation Group | DELETE  [https://management.azure.com/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/CapacityReservationGroups/{CapacityReservationGroupName}?api-version=2020-06-01](https://management.azure.com/subscriptions/%7bsubscriptionId%7d/resourceGroups/%7bresourceGroupName%7d/providers/Microsoft.Compute/CapacityReservationGroups/%7bCapacityReservationGroupName%7d?api-version=2020-06-01)  **Note**  Capacity Reservation Groups can only be deleted if there are no underlying capacity reservations. Hence, first delete the underlying capacity reservations and then proceed with deleting the capacity reservation group. |
| Associate VM to a Capacity Reservation Group | PUT  [https://management.azure.com/subscriptions/{subscription-id}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/virtualMachines/{VirtualMachineName}?api-version=2020-12-01](https://management.azure.com/subscriptions/%7bsubscription-id%7d/resourceGroups/%7bresourceGroupName%7d/providers/Microsoft.Compute/virtualMachines/%7bVirtualMachineName%7d?api-version=2020-12-01)  {  "location": "eastus",  "properties": {  "hardwareProfile": {  "vmSize": "Standard\_D2s\_v3"  },  …  “CapacityReservation”:{  “capacityReservationGroup”:{  “id”:”subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/CapacityReservationGroup/{CapacityReservationGroupName}”  }  "storageProfile": {  …  },  "osProfile": {  …  },  "networkProfile": {  …  }  }  }  Get VM  GET  [https://management.azure.com/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/virtualMachines/{VirtualMachineName}?api-version=2020-12-01](https://management.azure.com/subscriptions/%7bsubscriptionId%7d/resourceGroups/%7bresourceGroupName%7d/providers/Microsoft.Compute/virtualMachines/%7bVirtualMachineName%7d?api-version=2020-12-01)  {      "name": "myD2v3VM",      "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/virtualMachines/myD2v3VM",      "type": "Microsoft.Compute/virtualMachines",      "location": "westcentralus",      "properties": {          "vmId": "<VMId>",          "hardwareProfile": {              "vmSize": "Standard\_D2\_v3"          },          "capacityReservation": {              "capacityReservationGroup": {                  "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/capacityReservationGroups/{CapacityReservationGroupName}"              }          } |
| Dissociate VM from a Capacity Reservation Group | There are 2 ways to dissociate a VM from a Capacity Reservation Group:   1. Change quantity reserved for the Capacity Reservation to zero and then dissociate the VM by removing the reference to the Capacity Reservation Group. 2. Deallocate the VM first and then dissociate it by removing the reference to the Capacity Reservation Group. |
| LIST API – lists out all the reservation groups, reservations, and associated VM and VMSS resources for a subscription | GET  [https://management.azure.com/subscriptions/{subscriptionId}/providers/Microsoft.Compute/capacityReservationGroups?api-version=2020-12-01&$expand=virtualMachines/$ref](https://management.azure.com/subscriptions/%7bsubscriptionId%7d/providers/Microsoft.Compute/capacityReservationGroups?api-version=2020-12-01&$expand=virtualMachines/$ref),virtualMachineScaleSets/$ref  **Response:**  {      "value": [          {              "name": "myCapacityReservationGroup",              "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/capacityReservationGroups/cczZonalCRG1",              "type": "Microsoft.Compute/capacityReservationGroups",              "location": "southcentralus",              "zones": [                  "1",                  "2",                  "3"              ]          },          {              "name": "myRegionalCapacityReservationGroup",              "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/capacityReservationGroups/myRegionalCapacityReservationGroup",              "type": "Microsoft.Compute/capacityReservationGroups",              "location": "southcentralus",              "properties": {                  "capacityReservations": [                      {                          "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/capacityReservationGroups/MYREGIONALCAPACITYRESERVATIONGROUP/capacityReservations/MYCAPACITYRESERVATION"                      },                      {                          "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/capacityReservationGroups/MYREGIONALCAPACITYRESERVATIONGROUP/capacityReservations/MYCAPACITYRESERVATION2"                      }                  ],                  "virtualMachinesAssociated": [                      {                          "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/virtualMachines/myD2V3VM"                      }                  ]              }          },          {              "name": "myRegionalCapacityReservationGroup2",              "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/capacityReservationGroups/myRegionalCapacityReservationGroup2",              "type": "Microsoft.Compute/capacityReservationGroups",              "location": "westcentralus",              "properties": {                  "capacityReservations": [                      {                          "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/capacityReservationGroups/MYREGIONALCAPACITYRESERVATIONGROUP2/capacityReservations/MYCAPACITYRESERVATION"                      }                  ],                  "virtualMachinesAssociated": [                      {                          "id": "/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.Compute/virtualMachines/myD2v3VM"                      }                  ]              }          }      ]  } |