

Cemisovs - Module 2

Thursday, 30 May 2024 08:09

1. Subtask 2: Resource Groups

- Screenshot of the Bash terminal showing variables set for both permanent and temporary resource groups.
- Screenshot of the az group list command and its output, listing available resource groups.
- Screenshot of the az group list command and its output, formatted as a table.
- Screenshot of the az group show command and its output for the permanent resource group.
- Screenshot of the az group list command and its output, filtered by location.
- Screenshot of saving the permanent resource group ID to a variable.
- Screenshot of the successful deletion of the temporary resource group.
- Screenshot of the az group list command and its output after deletion, showing only the permanent resource group.

2. Subtask 3: Azure Container Registry

- Screenshot of setting a variable for the Azure Container Registry name.
- Screenshot of the successful creation of an Azure Container Registry.
- Screenshot of the az resource list command and its output, showing the created Azure Container Registry.

3. Subtask 6: Creating a Web App in Azure App Services

- Screenshots of the Bash terminal showing:
 - Creation of a temporary resource group.
 - Creation of an App Service plan.
 - Creation of a web app and deployment of the container image.
 - Successful deletion of the temporary resource group.
- Screenshot of the web app running in a web browser.

Screenshot of the Bash terminal showing variables set for both permanent and temporary resource groups.

```
→ az-204 PERMANENT_GROUP=permanent_rg
PERMANENT_LOCATION=eastus
TEMPORARY_GROUP=temporary_rg
TEMPORARY_LOCATION=westeurope
→ az-204
```

Screenshot of the az group list command and its output, listing available resource groups.

→ **az-204** az group list

```
[
  {
    "id": "/subscriptions/72db4666-a351-4db6-b7fd-2cc68aa2b111/resourceGroups/piglating-rg",
    "location": "switzerlandnorth",
    "managedBy": null,
    "name": "piglating-rg",
    "properties": {
      "provisioningState": "Succeeded"
    },
    "tags": {
      "environment": "production"
    },
    "type": "Microsoft.Resources/resourceGroups"
  },
  {
    "id": "/subscriptions/72db4666-a351-4db6-b7fd-2cc68aa2b111/resourceGroups/cloud-shell-storage-west-europe",
    "location": "west-europe",
    "managedBy": null,
    "name": "cloud-shell-storage-west-europe",
    "properties": {
      "provisioningState": "Succeeded"
    },
    "tags": null,
    "type": "Microsoft.Resources/resourceGroups"
  },
  {
    "id": "/subscriptions/72db4666-a351-4db6-b7fd-2cc68aa2b111/resourceGroups/DefaultResourceGroup-WEU",
    "location": "west-europe",
    "managedBy": null,
    "name": "DefaultResourceGroup-WEU",
    "properties": {
      "provisioningState": "Succeeded"
    },
    "tags": null,
    "type": "Microsoft.Resources/resourceGroups"
  }
]
```

```

    "type": "Microsoft.Resources/resourceGroups"
  },
  {
    "id": "/subscriptions/72db4666-a351-4db6-
b7fd-2cc68aa2b111/resourceGroups/exercism-powershell-rg",
    "location": "westeurope",
    "managedBy": null,
    "name": "exercism-powershell-rg",
    "properties": {
      "provisioningState": "Succeeded"
    },
    "tags": null,
    "type": "Microsoft.Resources/resourceGroups"
  },
  {
    "id": "/subscriptions/72db4666-a351-4db6-
b7fd-2cc68aa2b111/resourceGroups/exercism-rg",
    "location": "westeurope",
    "managedBy": null,
    "name": "exercism-rg",
    "properties": {
      "provisioningState": "Succeeded"
    },
    "tags": null,
    "type": "Microsoft.Resources/resourceGroups"
  },
  {
    "id": "/subscriptions/72db4666-a351-4db6-
b7fd-2cc68aa2b111/resourceGroups/temporary_rg",
    "location": "westeurope",
    "managedBy": null,
    "name": "temporary_rg",
    "properties": {
      "provisioningState": "Succeeded"
    },
    "tags": null,
    "type": "Microsoft.Resources/resourceGroups"
  },
  {
    "id": "/subscriptions/72db4666-a351-4db6-
b7fd-2cc68aa2b111/resourceGroups/permanent_rg",
    "location": "eastus",
    "managedBy": null,
    "name": "permanent_rg",
    "properties": {
      "provisioningState": "Succeeded"
    }
  }
}

```

```

        provisioningState": "Succeeded"
      },
      "tags": null,
      "type": "Microsoft.Resources/resourceGroups"
    }
  ]
}

```

→ az-204

Screenshot of the az group list command and its output, formatted as a table.

→ az-204 az group list --output table

Name	Location	Status
piglatin-rg	switzerlandnorth	Succeeded
cloud-shell-storage-west europe	west europe	Succeeded
DefaultResourceGroup-WEU	west europe	Succeeded
exercism-powershell-rg	west europe	Succeeded
exercism-rg	west europe	Succeeded
temporary_rg	west europe	Succeeded
permanent_rg	eastus	Succeeded

→ az-204

Screenshot of the az group show command and its output for the permanent resource group.

→ az-204 az group show --name \$PERMANENT_GROUP

```

{
  "id": "/subscriptions/72db4666-a351-4db6-b7fd-2cc68aa2b111/resourceGroups/permanent_rg",
  "location": "eastus",
  "managedBy": null,
  "name": "permanent_rg",
  "properties": {
    "provisioningState": "Succeeded"
  },
  "tags": null,
  "type": "Microsoft.Resources/resourceGroups"
}

```

→ az-204

Screenshot of the az group list command and its output, filtered by location.

→ az-204 az group list \

```

--output table \
--query "[?location=='$PERMANENT_LOCATION'].{Name:name,
Location:location}"
Name                Location
-----
permanent_rg       eastus
→ az-204

```

Screenshot of saving the permanent resource group ID to a variable.

```

→ az-204 GROUP_ID=$(az group show --name $PERMANENT_GROUP --
query "id" --output tsv)
echo $GROUP_ID
/subscriptions/72db4666-a351-4db6-
b7fd-2cc68aa2b111/resourceGroups/permanent_rg
→ az-204

```

Screenshot of the successful deletion of the temporary resource group.

```

→ az-204 az group delete --name $TEMPORARY_GROUP --yes --no-
wait
→ az-204

```

Screenshot of the az group list command and its output after deletion, showing only the permanent resource group.

```

→ az-204 az group list --output table

```

Name	Location	Status
piglatin-rg	switzerlandnorth	Succeeded
cloud-shell-storage-west europe	west europe	Succeeded
DefaultResourceGroup-WEU	west europe	Succeeded
exercism-powershell-rg	west europe	Succeeded
exercism-rg	west europe	Succeeded
permanent_rg	eastus	Succeeded

```

→ az-204

```

Subtask 3: Azure Container Registry

Screenshot of setting a variable for the Azure Container Registry name.

```
→ az-204 ACR_NAME=subtask3acr
→ az-204
```

Screenshot of the successful creation of an Azure Container Registry.

```
→ az-204 az acr create \
  --resource-group $PERMANENT_GROUP \
  --name $ACR_NAME \
  --sku Basic \
  --admin-enabled true
{
  "adminUserEnabled": true,
  "anonymousPullEnabled": false,
  "creationDate": "2024-05-29T13:47:19.900350+00:00",
  "dataEndpointEnabled": false,
  "dataEndpointHostNames": [],
  "encryption": {
    "keyVaultProperties": null,
    "status": "disabled"
  },
  "id": "/subscriptions/72db4666-a351-4db6-b7fd-2cc68aa2b111/resourceGroups/permanent_rg/providers/Microsoft.ContainerRegistry/registries/subtask3acr",
  "identity": null,
  "location": "eastus",
  "loginServer": "subtask3acr.azurecr.io",
  "metadataSearch": "Disabled",
  "name": "subtask3acr",
  "networkRuleBypassOptions": "AzureServices",
  "networkRuleSet": null,
  "policies": {
    "azureAdAuthenticationAsArmPolicy": {
      "status": "enabled"
    },
    "anonymousPull": {
      "status": "disabled"
    }
  }
}
```

```

    "exportPolicy": {
      "status": "enabled"
    },
    "quarantinePolicy": {
      "status": "disabled"
    },
    "retentionPolicy": {
      "days": 7,
      "lastUpdatedTime": "2024-05-30T05:26:29.221155+00:00",
      "status": "disabled"
    },
    "softDeletePolicy": {
      "lastUpdatedTime": "2024-05-30T05:26:29.221204+00:00",
      "retentionDays": 7,
      "status": "disabled"
    },
    "trustPolicy": {
      "status": "disabled",
      "type": "Notary"
    }
  },
  "privateEndpointConnections": [],
  "provisioningState": "Succeeded",
  "publicNetworkAccess": "Enabled",
  "resourceGroup": "permanent_rg",
  "sku": {
    "name": "Basic",
    "tier": "Basic"
  },
  "status": null,
  "systemData": {
    "createdAt": "2024-05-29T13:47:19.900350+00:00",
    "createdBy": "Jegors_Cemisovs@epam.com",
    "createdByType": "User",
    "lastModifiedAt": "2024-05-30T05:26:28.972899+00:00",
    "lastModifiedBy": "Jegors_Cemisovs@epam.com",
    "lastModifiedByType": "User"
  },
  "tags": {},
  "type": "Microsoft.ContainerRegistry/registries",
  "zoneRedundancy": "Disabled"
}

```

→ [az-204](#)

Screenshot of the az resource list command and its output, showing the created Azure Container Registry.

```
→ az-204 az resource list --resource-group
$PERMANENT_GROUP --output table
Name                ResourceGroup      Location      Type
                  Status
-----
subtask3acr         permanent_rg       eastus        Microsoft.Container
Registry/registries
→ az-204
```

Subtask 6: Creating a Web App in Azure App Services

- Screenshots of the Bash terminal showing:
 - Creation of a temporary resource group.
 - Creation of an App Service plan.
 - Creation of a web app and deployment of the container image.
 - Successful deletion of the temporary resource group.

```
→ az-204 az group create --name $TEMPORARY_GROUP --location
$PERMANENT_LOCATION
```

```
{
  "id": "/subscriptions/72db4666-a351-4db6-
b7fd-2cc68aa2b111/resourceGroups/temporary_rg",
  "location": "eastus",
  "managedBy": null,
  "name": "temporary_rg",
  "properties": {
    "provisioningState": "Succeeded"
  },
  "tags": null,
  "type": "Microsoft.Resources/resourceGroups"
}
```

```
→ az-204
```

```
→ az-204 az appservice plan create \
  --name webapp-plan \
  --resource-group $TEMPORARY_GROUP \
  --location $PERMANENT_LOCATION \
  --is-linux \
```



```
--is-linux \
```

```
--sku B1
```

```
Readonly attribute name will be ignored in class <class  
'azure.mgmt.web.v2023_01_01.models.  
_models_py3.AppServicePlan'>
```

```
{  
  "elasticScaleEnabled": false,  
  "extendedLocation": null,  
  "freeOfferExpirationTime": "2024-06-29T05:49:53.806666",  
  "geoRegion": "East US",  
  "hostingEnvironmentProfile": null,  
  "hyperV": false,  
  "id": "/subscriptions/72db4666-a351-4db6-  
b7fd-2cc68aa2b111/resourceGroups/temporary_rg/providers/Micro  
soft.Web/serverfarms/webapp-plan",  
  "isSpot": false,  
  "isXenon": false,  
  "kind": "linux",  
  "kubeEnvironmentProfile": null,  
  "location": "eastus",  
  "maximumElasticWorkerCount": 1,  
  "maximumNumberOfWorkers": 0,  
  "name": "webapp-plan",  
  "numberOfSites": 0,  
  "numberOfWorkers": 1,  
  "perSiteScaling": false,  
  "provisioningState": "Succeeded",  
  "reserved": true,  
  "resourceGroup": "temporary_rg",  
  "sku": {  
    "capabilities": null,  
    "capacity": 1,  
    "family": "B",  
    "locations": null,  
    "name": "B1",  
    "size": "B1",  
    "skuCapacity": null,  
    "tier": "Basic"  
  },  
  "spotExpirationTime": null,  
  "status": "Ready",  
  "subscription": "72db4666-a351-4db6-b7fd-2cc68aa2b111",  
  "tags": null,  
  "targetWorkerCount": 0,  
  "targetWorkerSizeId": 0,  
  "type": "Microsoft.Web/serverfarms".
```

```

    "workerTierName": null,
    "zoneRedundant": false
  }
}

```

→ az-204

```

→ az-204 az webapp create \
  --resource-group $TEMPORARY_GROUP \
  --plan webapp-plan \
  --name epam-cloudx-jegors-webapp \
  --deployment-container-image-name
$ACR_NAME.azurecr.io/webapp:latest \
  --container-registry-password $ACR_PASSWORD \
  --container-registry-user $ACR_USERNAME

```

Option '--deployment-container-image-name' has been deprecated and will be removed in a future release. App settings have been redacted. Use `az webapp/logicapp/functionapp config appsettings list` to view. App settings have been redacted. Use `az webapp/logicapp/functionapp config appsettings list` to view.

```

{
  "availabilityState": "Normal",
  "clientAffinityEnabled": true,
  "clientCertEnabled": false,
  "clientCertExclusionPaths": null,
  "clientCertMode": "Required",
  "cloningInfo": null,
  "containerSize": 0,
  "customDomainVerificationId":
"2A47FB86B9D9D89D1383F647658A63115B3A4E6B3CEDCCF41B6F2A6B916D
5F70",
  "dailyMemoryTimeQuota": 0,
  "daprConfig": null,
  "defaultHostName": "epam-cloudx-jegors-
webapp.azurewebsites.net",
  "enabled": true,
  "enabledHostNames": [
    "epam-cloudx-jegors-webapp.azurewebsites.net",
    "epam-cloudx-jegors-webapp.scm.azurewebsites.net"
  ],
  "extendedLocation": null,
  "ftpPublishingUrl": "ftps://waws-prod-
blu-557.ftp.azurewebsites.windows.net/site/wwwroot",
  "hostNameSslStates": [
    {
      "certificateResourceId": null,

```

```

        "hostType": "Standard",
        "ipBasedSslResult": null,
        "ipBasedSslState": "NotConfigured",
        "name": "epam-cloudx-jegors-webapp.azurewebsites.net",
        "sslState": "Disabled",
        "thumbprint": null,
        "toUpdate": null,
        "toUpdateIpBasedSsl": null,
        "virtualIPv6": null,
        "virtualIp": null
    },
    {
        "certificateResourceId": null,
        "hostType": "Repository",
        "ipBasedSslResult": null,
        "ipBasedSslState": "NotConfigured",
        "name": "epam-cloudx-jegors-
webapp.scm.azurewebsites.net",
        "sslState": "Disabled",
        "thumbprint": null,
        "toUpdate": null,
        "toUpdateIpBasedSsl": null,
        "virtualIPv6": null,
        "virtualIp": null
    }
],
"hostNames": [
    "epam-cloudx-jegors-webapp.azurewebsites.net"
],
"hostNamesDisabled": false,
"hostingEnvironmentProfile": null,
"httpsOnly": false,
"hyperV": false,
"id": "/subscriptions/72db4666-a351-4db6-
b7fd-2cc68aa2b111/resourceGroups/temporary_rg/providers/Micro
soft.Web/sites/epam-cloudx-jegors-webapp",
"identity": null,
"inProgressOperationId": null,
"isDefaultContainer": null,
"isXenon": false,
"keyVaultReferenceIdentity": "SystemAssigned",
"kind": "app,linux,container",
"lastModifiedTimeUtc": "2024-05-30T05:52:22.493333",
"location": "East US",
"managedEnvironmentId": null,

```

```
"numberOfWorkers": null,  
"name": "epam-cloudx-jegors-webapp",  
"outboundIpAddresses":  
"20.253.79.11,20.253.79.20,20.253.79.21,20.253.79.22,20.253.7  
9.23,20.253.79.24,20.253.73.128,20.253.77.121,20.253.78.45,20  
.253.78.136,20.253.78.137,20.253.78.138,20.119.16.52",  
"possibleOutboundIpAddresses":  
"20.253.79.11,20.253.79.20,20.253.79.21,20.253.79.22,20.253.7  
9.23,20.253.79.24,20.253.73.128,20.253.77.121,20.253.78.45,20  
.253.78.136,20.253.78.137,20.253.78.138,20.253.78.139,20.253.  
78.180,20.253.78.181,20.253.78.182,20.253.78.183,20.253.78.24  
0,20.253.78.241,20.253.78.242,20.253.78.243,20.253.79.8,20.25  
3.79.9,20.253.79.10,20.253.79.11,20.253.79.20,20.253.79.21,20  
.253.79.22,20.253.79.23,20.253.79.24,20.253.79.25,20.253.79.2  
6,20.253.79.27,20.253.79.224,20.253.79.225,20.253.79.226,20.1  
19.16.52",  
"publicNetworkAccess": null,  
"redundancyMode": "None",  
"repositorySiteName": "epam-cloudx-jegors-webapp",  
"reserved": true,  
"resourceConfig": null,  
"resourceGroup": "temporary_rg",  
"scmSiteAlsoStopped": false,  
"serverFarmId": "/subscriptions/72db4666-a351-4db6-  
b7fd-2cc68aa2b111/resourceGroups/temporary_rg/providers/Micro  
soft.Web/serverfarms/webapp-plan",  
"siteConfig": {  
  "acrUseManagedIdentityCreds": false,  
  "acrUserManagedIdentityId": null,  
  "alwaysOn": false,  
  "antivirusScanEnabled": null,  
  "apiDefinition": null,  
  "apiManagementConfig": null,  
  "appCommandLine": null,  
  "appSettings": null,  
  "autoHealEnabled": null,  
  "autoHealRules": null,  
  "autoSwapSlotName": null,  
  "azureMonitorLogCategories": null,  
  "azureStorageAccounts": null,  
  "clusteringEnabled": false,  
  "connectionStrings": null,  
  "cors": null,  
  "customAppPoolIdentityAdminState": null,  
  "customAppPoolIdentityTenantState": null,  
  "defaultDocument": null
```

```

"defaultDocuments": null,
"detailedErrorLoggingEnabled": null,
"documentRoot": null,
"elasticWebAppScaleLimit": 0,
"experiments": null,
"fileChangeAuditEnabled": null,
"ftpsState": null,
"functionAppScaleLimit": null,
"functionsRuntimeScaleMonitoringEnabled": null,
"handlerMappings": null,
"healthCheckPath": null,
"http20Enabled": false,
"http20ProxyFlag": null,
"httpLoggingEnabled": null,
"ipSecurityRestrictions": [
  {
    "action": "Allow",
    "description": "Allow all access",
    "headers": null,
    "ipAddress": "Any",
    "name": "Allow all",
    "priority": 2147483647,
    "subnetMask": null,
    "subnetTrafficTag": null,
    "tag": null,
    "vnetSubnetResourceId": null,
    "vnetTrafficTag": null
  }
],
"ipSecurityRestrictionsDefaultAction": null,
"javaContainer": null,
"javaContainerVersion": null,
"javaVersion": null,
"keyVaultReferenceIdentity": null,
"limits": null,
"linuxFxVersion": "",
"loadBalancing": null,
"localMySQLEnabled": null,
"logsDirectorySizeLimit": null,
"machineKey": null,
"managedPipelineMode": null,
"managedServiceIdentityId": null,
"metadata": null,
"minTlsCipherSuite": null,
"minTlsVersion": null,
"minimumElasticInstanceCount": 0

```

```
    "minimumElasticInstanceCount": 0,
    "netFrameworkVersion": null,
    "nodeVersion": null,
    "numberOfWorkers": 1,
    "phpVersion": null,
    "powerShellVersion": null,
    "preWarmedInstanceCount": null,
    "publicNetworkAccess": null,
    "publishingPassword": null,
    "publishingUsername": null,
    "push": null,
    "pythonVersion": null,
    "remoteDebuggingEnabled": null,
    "remoteDebuggingVersion": null,
    "requestTracingEnabled": null,
    "requestTracingExpirationTime": null,
    "routingRules": null,
    "runtimeADUser": null,
    "runtimeADUserPassword": null,
    "scmIpSecurityRestrictions": [
      {
        "action": "Allow",
        "description": "Allow all access",
        "headers": null,
        "ipAddress": "Any",
        "name": "Allow all",
        "priority": 2147483647,
        "subnetMask": null,
        "subnetTrafficTag": null,
        "tag": null,
        "vnetSubnetResourceId": null,
        "vnetTrafficTag": null
      }
    ],
    "scmIpSecurityRestrictionsDefaultAction": null,
    "scmIpSecurityRestrictionsUseMain": null,
    "scmMinTlsVersion": null,
    "scmType": null,
    "sitePort": null,
    "sitePrivateLinkHostEnabled": null,
    "storageType": null,
    "supportedTlsCipherSuites": null,
    "tracingOptions": null,
    "use32BitWorkerProcess": null,
    "virtualApplications": null,
    "vnetName": null.
```

```

    "vnetPrivatePortsCount": null,
    "vnetRouteAllEnabled": null,
    "webSocketsEnabled": null,
    "websiteTimeZone": null,
    "winAuthAdminState": null,
    "winAuthTenantState": null,
    "windowsConfiguredStacks": null,
    "windowsFxVersion": null,
    "xManagedServiceIdentityId": null
  },
  "slotSwapStatus": null,
  "state": "Running",
  "storageAccountRequired": false,
  "suspendedTill": null,
  "tags": null,
  "targetSwapSlot": null,
  "trafficManagerHostNames": null,
  "type": "Microsoft.Web/sites",
  "usageState": "Normal",
  "virtualNetworkSubnetId": null,
  "vnetContentShareEnabled": false,
  "vnetImagePullEnabled": false,
  "vnetRouteAllEnabled": false,
  "workloadProfileName": null
}

```

→ [az-204](#)

→ [az-204](#)

```
az group delete --name $TEMPORARY_GROUP --yes --no-wait
```

→ [az-204](#)

- Screenshot of the web app running in a web browser.



