

Azure Key Vault demonstration

This document demonstrates that the Azure Key Vault deployed via Bicep is functional. It includes verification steps showing the Key Vault exists, secrets can be created, retrieved, and listed, and access policies are correctly applied.

Environment Details

- Resource Group: RG-sarabattistella
- Key Vault Name: prodapp-kv-prod
- Location: swedencentral

1. Check that kv exists:

```
$ az keyvault show --name prodapp-kv-prod
```

```
{
  "id":
"/subscriptions/c4b7ee56-bbc7-4664-bf23-a55d20a9086f/resourceGroups/RG-sarabattistella/providers/Microsoft.KeyVault/vaults/prodapp-kv-prod",
  "location": "swedencentral",
  "name": "prodapp-kv-prod",
  "properties": {
    "accessPolicies": [],
    "createMode": null,
    "enablePurgeProtection": null,
    "enableRbacAuthorization": null,
    "enableSoftDelete": true,
    "enabledForDeployment": false,
    "enabledForDiskEncryption": false,
    "enabledForTemplateDeployment": false,
    "hsmPoolResourceId": null,
    "networkAcls": null,
    "privateEndpointConnections": null,
    "provisioningState": "Succeeded",
    "publicNetworkAccess": "Enabled",
    "sku": {
      "family": "A",
      "name": "standard"
    },
    "softDeleteRetentionInDays": 90,
    "tenantId": "5b679921-53f7-4642-a251-8a603608d21c",
    "vaultUri": "https://prodapp-kv-prod.vault.azure.net/"
  },
  "resourceGroup": "RG-sarabattistella",
  "systemData": {
    "createdAt": "2025-09-06T12:10:00.229000+00:00",
    "createdBy": "sara.battistella@ITHogskolan.onmicrosoft.com",
```

```

    "createdByType": "User",
    "lastModifiedAt": "2025-09-06T12:10:00.229000+00:00",
    "lastModifiedBy": "sara.battistella@ITHogskolan.onmicrosoft.com",
    "lastModifiedByType": "User"
  },
  "tags": {
    "costCenter": "DEV-003",
    "environment": "prod",
    "owner": "Sara Battistella"
  },
  "type": "Microsoft.KeyVault/vaults"
}

```

2. Add access policy for the current user:

```

$ az keyvault set-policy \
--name prodapp-kv-prod \
--upn sara.battistella@ITHogskolan.onmicrosoft.com \
--secret-permissions get list set delete

```

```

{
  "id":
"/subscriptions/c4b7ee56-bbc7-4664-bf23-a55d20a9086f/resourceGroups/RG-sarabattistella/providers/Microsoft.KeyVault/vaults/prodapp-kv-prod",
  "location": "swedencentral",
  "name": "prodapp-kv-prod",
  "properties": {
    "accessPolicies": [
      {
        "applicationId": null,
        "objectId": "414640d7-8477-4408-a8d6-c763374ee26f",
        "permissions": {
          "certificates": null,
          "keys": null,
          "secrets": [
            "get",
            "delete",
            "list",
            "set"
          ],
          "storage": null
        },
        "tenantId": "5b679921-53f7-4642-a251-8a603608d21c"
      }
    ],
    "createMode": null,
    "enablePurgeProtection": null,

```

```

    "enableRbacAuthorization": null,
    "enableSoftDelete": true,
    "enabledForDeployment": false,
    "enabledForDiskEncryption": false,
    "enabledForTemplateDeployment": false,
    "hsmPoolResourceId": null,
    "networkAcls": null,
    "privateEndpointConnections": null,
    "provisioningState": "Succeeded",
    "publicNetworkAccess": "Enabled",
    "sku": {
      "family": "A",
      "name": "standard"
    },
    "softDeleteRetentionInDays": 90,
    "tenantId": "5b679921-53f7-4642-a251-8a603608d21c",
    "vaultUri": "https://prodapp-kv-prod.vault.azure.net/"
  },
  "resourceGroup": "RG-sarabattistella",
  "systemData": {
    "createdAt": "2025-09-06T12:10:00.229000+00:00",
    "createdBy": "sara.battistella@ITHogskolan.onmicrosoft.com",
    "createdByType": "User",
    "lastModifiedAt": "2025-09-06T13:04:51.311000+00:00",
    "lastModifiedBy": "sara.battistella@ITHogskolan.onmicrosoft.com",
    "lastModifiedByType": "User"
  },
  "tags": {
    "costCenter": "DEV-003",
    "environment": "prod",
    "owner": "Sara Battistella"
  },
  "type": "Microsoft.KeyVault/vaults"
}

```

3. Create a test secret:

```

$ az keyvault secret set \
  --vault-name prodapp-kv-prod \
  --name TestSecret \
  --value "MySecretValue123"

```

```

{
  "attributes": {
    "created": "2025-09-06T13:05:13+00:00",
    "enabled": true,
    "expires": null,

```

```

    "notBefore": null,
    "recoverableDays": 90,
    "recoveryLevel": "Recoverable+Purgeable",
    "updated": "2025-09-06T13:05:13+00:00"
  },
  "contentType": null,
  "id":
"https://prodapp-kv-prod.vault.azure.net/secrets/TestSecret/204200c5d8c448
a3a0ab5ec23a31b2ee",
  "kid": null,
  "managed": null,
  "name": "TestSecret",
  "tags": {
    "file-encoding": "utf-8"
  },
  "value": "MySecretValue123"
}

```

4. Retrieve secret value:

```

$ az keyvault secret show \
--vault-name prodapp-kv-prod \
--name TestSecret \
--query value -o tsv
MySecretValue123

```

5. List all secrets in the Key Vault:

```

$ az keyvault secret list --vault-name prodapp-kv-prod

```

```

[
  {
    "attributes": {
      "created": "2025-09-06T12:10:19+00:00",
      "enabled": true,
      "expires": null,
      "notBefore": null,
      "recoverableDays": 90,
      "recoveryLevel": "Recoverable+Purgeable",
      "updated": "2025-09-06T12:10:19+00:00"
    },
    "contentType": null,
    "id":
"https://prodapp-kv-prod.vault.azure.net/secrets/MySecret-c3un7w4qzrlpm",
    "managed": null,
    "name": "MySecret-c3un7w4qzrlpm",
    "tags": null
  }
]

```

```
},
{
  "attributes": {
    "created": "2025-09-06T13:05:13+00:00",
    "enabled": true,
    "expires": null,
    "notBefore": null,
    "recoverableDays": 90,
    "recoveryLevel": "Recoverable+Purgeable",
    "updated": "2025-09-06T13:05:13+00:00"
  },
  "contentType": null,
  "id": "https://prodapp-kv-prod.vault.azure.net/secrets/TestSecret",
  "managed": null,
  "name": "TestSecret",
  "tags": {
    "file-encoding": "utf-8"
  }
}
]
```

Conclusion:

The Key Vault has been successfully deployed and verified. Secrets can be created, retrieved, and listed, and access policies work as expected.