Azure Container Apps

Advanced Features

Agenda

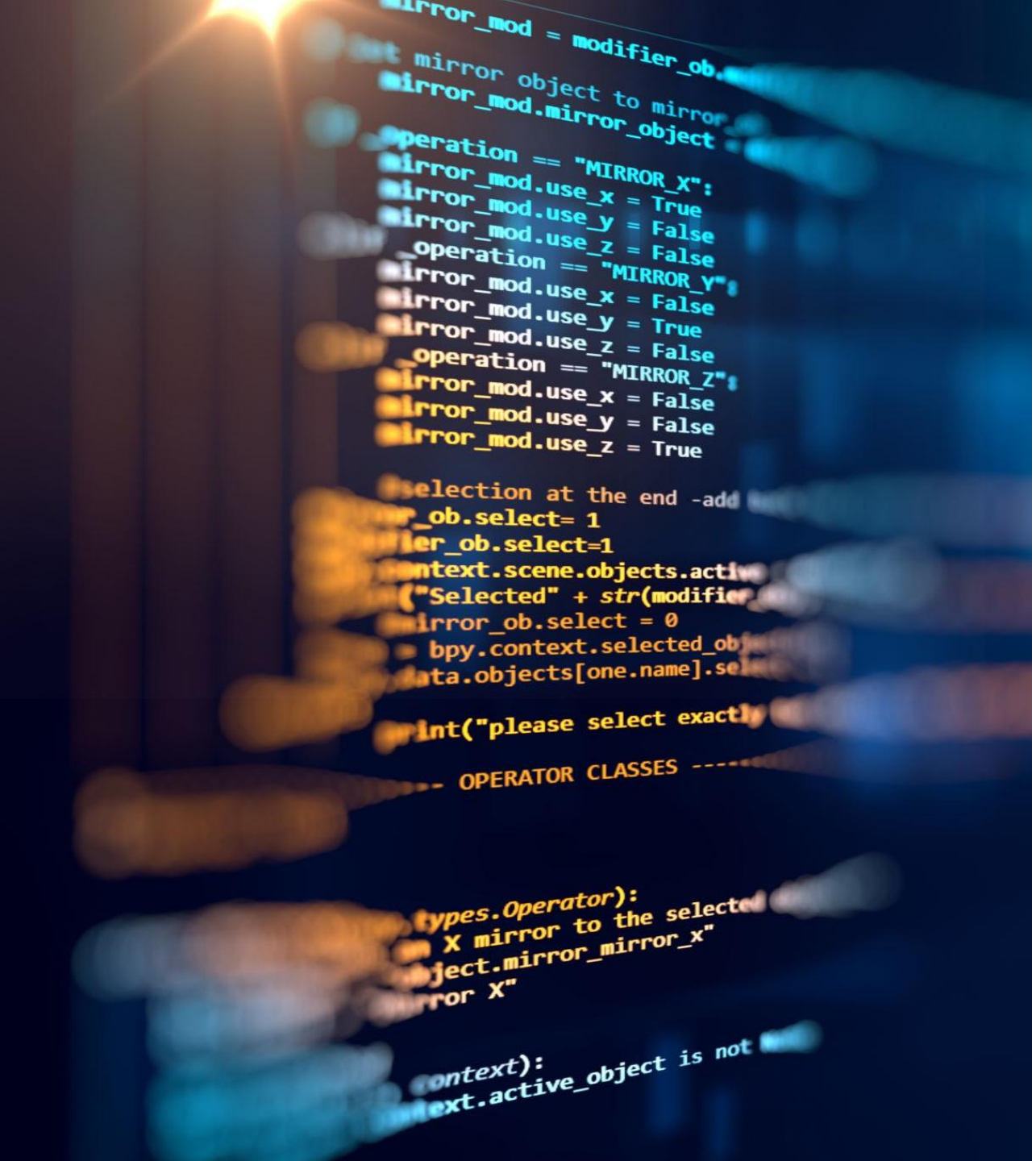
- Scaling
- Split Traffic
- Custom DNS
- Network Configuration
- Integration with Other Azure Services

Scaling Options

- CPU/Memory based
- HTTP requests
- Queues (Azure Service Bus, Storage Queues)
- Custom metrics

Scaling Example

```
az containerapp update
    --name my-app
    --resource-group my-containerapps-group
    --scale-rule-name http-rule
    --scale-rule-type http
    --scale-rule-http-concurrency 50
```



Network Configuration

- Ingress options: internal vs external
- VNET integration (Preview)
- IP restrictions
- Custom domains

Secrets

- Store secrets in Azure
- Access using environment variables

```
az containerapp secret set
    --name my-app
    --name my-containerapps-group
    --name my-secret=supersecurevalue
```

Using Secrets in App

```
az containerapp update
    --name my-app
    --resource-group my-containerapps-group
    --env-vars SECRET_VAR=secretref:my-secret
```

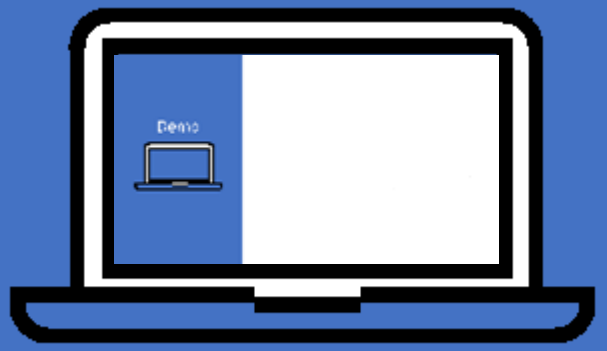
Integration with Azure Services

- Azure Monitor
- Azure Key Vault
- Azure Container Registry
- Azure Functions and Logic Apps

Event-driven Architectures

- Use Dapr for pub/sub, state management
- Integrate with Event Grid

Demo



Advanced Features

Custom DNS, Scaling, Split Traffic

Summary

- Explored advanced features such as auto-scaling based on metrics, secure networking configurations, and managing secrets in Azure.
- Learned how to integrate Azure Container Apps with services like Azure Monitor, Key Vault, and Event Grid to build robust, event-driven applications.
- Next steps: Explore Microsoft Learn paths and Azure documentation for deep dives into production deployments and CI/CD strategies.

Resources

- Azure Container Apps documentation
  https://learn.microsoft.com/en-us/azure/container-apps/