

Develop Azure Compute Solutions

└─ 1.2 Implement Azure App Service Web Apps

└─ 1.2.2 Configure and Implement Diagnostics and Logging

1. What types of logs are available in Azure App Service?
2. How do you enable diagnostics logging via CLI?
3. How do you stream logs from App Service in real-time?
4. How do you integrate Application Insights with App Service?
5. What's the difference between App Service logs and App Insights?
6. How do you query logs in Application Insights using KQL?

1. What types of logs are available in Azure App Service?

- Application Logs: stdout/stderr from app
- Web Server Logs: HTTP access logs
- Detailed Error Logs: 500-level errors
- Failed Request Tracing Logs (FREQ): IIS-level tracing
- App Insights Logs: Telemetry (requests, exceptions, dependencies)

2. How do you enable diagnostics logging via CLI?

```
az webapp log config --name <app> --resource-group <rg> \
--application-logging filesystem --web-server-logging filesystem
```

Stores logs in local file system (Basic+) or blob storage.

3. How do you stream logs from App Service in real-time?

```
az webapp log tail --name <app> --resource-group <rg>
```

Streams stdout/stderr and App Logs live to console.

4. How do you integrate Application Insights with App Service?

```
az monitor app-insights component create --app <name> --location <region> --resource-group <rg>
az webapp config appsettings set --name <app> --resource-group <rg> --settings
APPINSIGHTS_INSTRUMENTATIONKEY=<key>
```

.NET apps may auto-integrate; others need SDK.

5. What's the difference between App Service logs and App Insights?

- App Service Logs: Platform logs (stdout, web server logs)
- App Insights: Full telemetry—requests, exceptions, dependencies, metrics, traces

6. How do you query logs in Application Insights using KQL?

Use Log Analytics (or Logs tab in App Insights):

Example query:

```
requests
| where timestamp > ago(1h)
| summarize count() by resultCode
```