# Module 1: Implement Azure App Service web apps

<https://learn.microsoft.com/en-gb/training/paths/create-azure-app-service-web-apps/>

* [Explore Azure App Service](https://learn.microsoft.com/en-au/training/modules/introduction-to-azure-app-service/)
* [Configure web app settings](https://learn.microsoft.com/en-au/training/modules/configure-web-app-settings/)
* [Scale apps in Azure App Service](https://learn.microsoft.com/en-au/training/modules/scale-apps-app-service/)
* [Explore Azure App Service deployment slots](https://learn.microsoft.com/en-au/training/modules/understand-app-service-deployment-slots/)

1. [https://learn.microsoft.com/en-us/azure/app-service/overview](https://docs.microsoft.com/en-us/azure/app-service/overview)
2. [https://learn.microsoft.com/en-us/azure/app-service/overview-hosting-plans](https://docs.microsoft.com/en-us/azure/app-service/overview-hosting-plans)
3. [https://learn.microsoft.com/en-us/azure/app-service/app-service-plan-manage](https://docs.microsoft.com/en-us/azure/app-service/app-service-plan-manage)
4. [https://learn.microsoft.com/en-us/azure/app-service/overview-authentication-authorization](https://docs.microsoft.com/en-us/azure/app-service/overview-authentication-authorization)
5. [https://learn.microsoft.com/en-us/azure/app-service/networking-features](https://docs.microsoft.com/en-us/azure/app-service/networking-features)
6. <https://learn.microsoft.com/en-us/azure/virtual-network/virtual-network-service-endpoints-overview>
7. <https://learn.microsoft.com/en-us/azure/app-service/networking/private-endpoint>
8. <https://jeffbrown.tech/azure-private-service-endpoint/>
9. <https://learn.microsoft.com/en-us/azure/app-service/overview-vnet-integration>
10. <https://learn.microsoft.com/en-us/azure/app-service/app-service-ip-restrictions>
11. [https://learn.microsoft.com/en-us/azure/app-service/configure-common#configure-general-settings](https://docs.microsoft.com/en-us/azure/app-service/configure-common#configure-general-settings)
12. [https://learn.microsoft.com/en-us/azure/app-service/configure-connect-to-azure-storage#mount-storage-to-linux-container](https://learn.microsoft.com/en-us/azure/app-service/configure-connect-to-azure-storage?tabs=portal&pivots=container-linux#mount-storage-to-linux-container)
13. [https://learn.microsoft.com/en-us/azure/app-service/troubleshoot-diagnostic-logs](https://docs.microsoft.com/en-us/azure/app-service/troubleshoot-diagnostic-logs)
14. [https://learn.microsoft.com/en-us/azure/app-service/configure-ssl-certificate](https://docs.microsoft.com/en-us/azure/app-service/configure-ssl-certificate)
15. [https://learn.microsoft.com/en-us/azure/azure-app-configuration/manage-feature-flags](https://docs.microsoft.com/en-us/azure/azure-app-configuration/manage-feature-flags)
16. [https://learn.microsoft.com/en-us/azure/azure-app-configuration/use-feature-flags-dotnet-core](https://docs.microsoft.com/en-us/azure/azure-app-configuration/use-feature-flags-dotnet-core)
17. [https://learn.microsoft.com/en-us/azure/azure-monitor/autoscale/autoscale-get-started](https://docs.microsoft.com/en-us/azure/azure-monitor/autoscale/autoscale-get-started)
18. [https://learn.microsoft.com/en-us/azure/app-service/deploy-staging-slots](https://docs.microsoft.com/en-us/azure/app-service/deploy-staging-slots)

# Module 2: Implement Azure Functions

<https://learn.microsoft.com/en-au/training/paths/implement-azure-functions/>

* [Explore Azure Functions](https://learn.microsoft.com/en-au/training/modules/explore-azure-functions/)
* [Develop Azure Functions](https://learn.microsoft.com/en-au/training/modules/develop-azure-functions/)

1. [https://learn.microsoft.com/en-us/azure/azure-functions/functions-overview](https://docs.microsoft.com/en-us/azure/azure-functions/functions-overview)
2. [https://learn.microsoft.com/en-us/azure/logic-apps/logic-apps-overview](https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-overview)
3. [https://learn.microsoft.com/en-us/azure/app-service/webjobs-create](https://docs.microsoft.com/en-us/azure/app-service/webjobs-create)
4. [https://learn.microsoft.com/en-us/azure/azure-functions/functions-scale](https://docs.microsoft.com/en-us/azure/azure-functions/functions-scale)
5. [https://learn.microsoft.com/en-us/azure/azure-functions/functions-develop-vs-code](https://docs.microsoft.com/en-us/azure/azure-functions/functions-develop-vs-code)
6. [https://learn.microsoft.com/en-us/azure/azure-functions/functions-develop-vs](https://docs.microsoft.com/en-us/azure/azure-functions/functions-develop-vs)
7. [https://learn.microsoft.com/en-us/azure/azure-functions/functions-triggers-bindings](https://docs.microsoft.com/en-us/azure/azure-functions/functions-triggers-bindings)
8. <https://curl.se/docs/manpage.html>

Note: Durable Functions have been taken away from the exam, but it’s worth knowing the basics.

1. [https://learn.microsoft.com/en-us/azure/azure-functions/durable/durable-functions-overview](https://docs.microsoft.com/en-us/azure/azure-functions/durable/durable-functions-overview)

# Module 3: Develop solutions that use Blob storage

<https://learn.microsoft.com/en-gb/training/paths/develop-solutions-that-use-blob-storage/>

* [Explore Azure Blob storage](https://learn.microsoft.com/en-gb/training/modules/explore-azure-blob-storage/)
* [Manage the Azure Blob storage lifecycle](https://learn.microsoft.com/en-gb/training/modules/manage-azure-blob-storage-lifecycle/)
* [Work with Azure Blob storage](https://learn.microsoft.com/en-gb/training/modules/work-azure-blob-storage/)

1. [https://learn.microsoft.com/en-us/azure/storage/common/storage-account-overview](https://docs.microsoft.com/en-us/azure/storage/common/storage-account-overview)
2. [https://learn.microsoft.com/en-us/azure/storage/blobs/storage-blobs-introduction](https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blobs-introduction)
3. [https://learn.microsoft.com/en-us/azure/storage/common/storage-service-encryption](https://docs.microsoft.com/en-us/azure/storage/common/storage-service-encryption)
4. [https://learn.microsoft.com/en-us/azure/storage/common/storage-redundancy](https://docs.microsoft.com/en-us/azure/storage/common/storage-redundancy)
5. [https://learn.microsoft.com/en-us/azure/storage/blobs/access-tiers-overview](https://docs.microsoft.com/en-us/azure/storage/blobs/access-tiers-overview)
6. [https://learn.microsoft.com/en-us/azure/storage/blobs/lifecycle-management-policy-configure](https://docs.microsoft.com/en-us/azure/storage/blobs/lifecycle-management-policy-configure)
7. [https://learn.microsoft.com/en-au/azure/storage/blobs/lifecycle-management-overview](https://docs.microsoft.com/en-au/azure/storage/blobs/lifecycle-management-overview)
8. [https://learn.microsoft.com/en-us/azure/storage/blobs/storage-quickstart-blobs-dotnet](https://docs.microsoft.com/en-us/azure/storage/blobs/storage-quickstart-blobs-dotnet)
9. [https://learn.microsoft.com/en-us/azure/storage/blobs/storage-blob-properties-metadata](https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-properties-metadata)

# Module 4: Develop solutions that use Azure Cosmos DB

<https://learn.microsoft.com/en-gb/training/paths/az-204-develop-solutions-that-use-azure-cosmos-db/>

* [Explore Azure Cosmos DB](https://learn.microsoft.com/en-gb/training/modules/explore-azure-cosmos-db/)
* [Work with Azure Cosmos DB](https://learn.microsoft.com/en-gb/training/modules/work-with-cosmos-db/)

1. [https://learn.microsoft.com/en-us/azure/cosmos-db/introduction](https://docs.microsoft.com/en-us/azure/cosmos-db/introduction)
2. [https://learn.microsoft.com/en-us/azure/cosmos-db/account-databases-containers-items](https://docs.microsoft.com/en-us/azure/cosmos-db/account-databases-containers-items)
3. [https://learn.microsoft.com/en-us/azure/cosmos-db/consistency-levels](https://docs.microsoft.com/en-us/azure/cosmos-db/consistency-levels)
4. [https://learn.microsoft.com/en-us/azure/cosmos-db/choose-api](https://docs.microsoft.com/en-us/azure/cosmos-db/choose-api)
5. [https://learn.microsoft.com/en-us/azure/cosmos-db/request-units](https://docs.microsoft.com/en-us/azure/cosmos-db/request-units)
6. [https://learn.microsoft.com/en-us/azure/cosmos-db/partitioning-overview](https://docs.microsoft.com/en-us/azure/cosmos-db/partitioning-overview)
7. [https://learn.microsoft.com/en-au/azure/cosmos-db/sql/sql-api-dotnet-v3sdk-samples](https://docs.microsoft.com/en-au/azure/cosmos-db/sql/sql-api-dotnet-v3sdk-samples)
8. [https://learn.microsoft.com/en-us/azure/cosmos-db/sql/sql-query-getting-started](https://docs.microsoft.com/en-us/azure/cosmos-db/sql/sql-query-getting-started)
9. [https://learn.microsoft.com/en-us/azure/cosmos-db/sql/how-to-write-stored-procedures-triggers-udfs](https://docs.microsoft.com/en-us/azure/cosmos-db/sql/how-to-write-stored-procedures-triggers-udfs)
10. <https://learn.microsoft.com/en-us/azure/cosmos-db/change-feed>
11. <https://learn.microsoft.com/en-us/azure/cosmos-db/nosql/change-feed-processor?tabs=dotnet>

# Module 5: Implement containerized solutions

<https://learn.microsoft.com/en-gb/training/paths/az-204-implement-iaas-solutions/>

* [Manage container images in Azure Container Registry](https://learn.microsoft.com/en-gb/training/modules/publish-container-image-to-azure-container-registry/)
* [Run container images in Azure Container Instances](https://learn.microsoft.com/en-gb/training/modules/create-run-container-images-azure-container-instances/)
* [Implement Azure Container Apps](https://learn.microsoft.com/en-gb/training/modules/implement-azure-container-apps/)

1. [https://learn.microsoft.com/en-us/azure/container-registry/container-registry-intro](https://docs.microsoft.com/en-us/azure/container-registry/container-registry-intro)
2. [https://learn.microsoft.com/en-us/azure/container-registry/container-registry-tasks-overview](https://docs.microsoft.com/en-us/azure/container-registry/container-registry-tasks-overview)
3. [https://learn.microsoft.com/en-us/azure/container-registry/container-registry-quickstart-task-cli](https://docs.microsoft.com/en-us/azure/container-registry/container-registry-quickstart-task-cli)
4. <https://docs.docker.com/engine/reference/builder/>
5. [https://learn.microsoft.com/en-us/azure/container-instances/container-instances-overview](https://docs.microsoft.com/en-us/azure/container-instances/container-instances-overview)
6. [https://learn.microsoft.com/en-us/azure/container-instances/container-instances-container-groups](https://docs.microsoft.com/en-us/azure/container-instances/container-instances-container-groups)
7. [https://learn.microsoft.com/en-us/azure/container-instances/container-instances-restart-policy](https://docs.microsoft.com/en-us/azure/container-instances/container-instances-restart-policy)
8. [https://learn.microsoft.com/en-us/azure/container-instances/container-instances-environment-variables](https://docs.microsoft.com/en-us/azure/container-instances/container-instances-environment-variables)
9. <https://learn.microsoft.com/en-us/azure/container-apps/overview>
10. <https://learn.microsoft.com/en-us/azure/container-apps/get-started>
11. <https://docs.dapr.io/concepts/overview/>

# Module 6: Implement user authentication and authorization

<https://learn.microsoft.com/en-gb/training/paths/az-204-implement-authentication-authorization/>

* [Explore the Microsoft identity platform](https://learn.microsoft.com/en-gb/training/modules/explore-microsoft-identity-platform/)
* [Implement authentication by using the Microsoft Authentication Library](https://learn.microsoft.com/en-gb/training/modules/implement-authentication-by-using-microsoft-authentication-library/)
* [Implement shared access signatures](https://learn.microsoft.com/en-gb/training/modules/implement-shared-access-signatures/)
* [Explore Microsoft Graph](https://learn.microsoft.com/en-gb/training/modules/microsoft-graph/)

1. [https://learn.microsoft.com/en-au/azure/active-directory/develop/v2-overview](https://docs.microsoft.com/en-au/azure/active-directory/develop/v2-overview)
2. [https://learn.microsoft.com/en-au/azure/active-directory/develop/app-objects-and-service-principals](https://docs.microsoft.com/en-au/azure/active-directory/develop/app-objects-and-service-principals)
3. [https://learn.microsoft.com/en-au/azure/active-directory/develop/v2-permissions-and-consent](https://docs.microsoft.com/en-au/azure/active-directory/develop/v2-permissions-and-consent)
4. [https://learn.microsoft.com/en-us/azure/architecture/multitenant-identity/signup](https://docs.microsoft.com/en-us/azure/architecture/multitenant-identity/signup)
5. [https://learn.microsoft.com/en-us/azure/active-directory/conditional-access/overview](https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/overview)
6. [https://learn.microsoft.com/en-us/azure/active-directory/authentication/tutorial-enable-azure-mfa](https://docs.microsoft.com/en-us/azure/active-directory/authentication/tutorial-enable-azure-mfa)
7. [https://learn.microsoft.com/en-us/azure/active-directory/develop/msal-overview](https://docs.microsoft.com/en-us/azure/active-directory/develop/msal-overview)
8. <https://learn.microsoft.com/en-us/entra/identity-platform/quickstart-web-api-aspnet-core-protect-api>
9. <https://github.com/Azure-Samples/active-directory-aspnetcore-webapp-openidconnect-v2/tree/master/1-WebApp-OIDC>
10. [https://learn.microsoft.com/en-us/azure/active-directory/develop/v2-oauth2-auth-code-flow](https://docs.microsoft.com/en-us/azure/active-directory/develop/v2-oauth2-auth-code-flow)
11. <https://openid.net/specs/openid-connect-core-1_0.html>
12. <https://datatracker.ietf.org/doc/html/draft-ietf-oauth-security-topics>
13. [https://learn.microsoft.com/en-us/azure/active-directory/develop/msal-net-initializing-client-applications](https://docs.microsoft.com/en-us/azure/active-directory/develop/msal-net-initializing-client-applications)
14. [https://learn.microsoft.com/en-us/azure/active-directory/develop/scenario-web-app-sign-user-app-configuration](https://docs.microsoft.com/en-us/azure/active-directory/develop/scenario-web-app-sign-user-app-configuration)
15. [https://learn.microsoft.com/en-us/azure/storage/common/storage-sas-overview](https://docs.microsoft.com/en-us/azure/storage/common/storage-sas-overview)
16. [https://learn.microsoft.com/en-us/azure/storage/blobs/storage-blob-user-delegation-sas-create-dotnet](https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-user-delegation-sas-create-dotnet)
17. [https://learn.microsoft.com/en-us/rest/api/storageservices/define-stored-access-policy](https://docs.microsoft.com/en-us/rest/api/storageservices/define-stored-access-policy)
18. [https://learn.microsoft.com/en-us/graph/overview](https://docs.microsoft.com/en-us/graph/overview)
19. [https://learn.microsoft.com/en-us/graph/auth/auth-concepts](https://docs.microsoft.com/en-us/graph/auth/auth-concepts)

# Module 7: Implement secure Azure solutions

<https://learn.microsoft.com/en-gb/training/paths/az-204-implement-secure-cloud-solutions/>

* [Implement Azure Key Vault](https://learn.microsoft.com/en-gb/training/modules/implement-azure-key-vault/)
* [Implement managed identities](https://learn.microsoft.com/en-gb/training/modules/implement-managed-identities/)
* [Implement Azure App Configuration](https://learn.microsoft.com/en-gb/training/modules/implement-azure-app-configuration/)

1. [https://learn.microsoft.com/en-us/azure/key-vault/general/basic-concepts](https://docs.microsoft.com/en-us/azure/key-vault/general/basic-concepts)
2. [https://learn.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/overview](https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/overview)
3. [https://learn.microsoft.com/en-us/azure/key-vault/general/authentication](https://docs.microsoft.com/en-us/azure/key-vault/general/authentication)
4. [https://learn.microsoft.com/en-us/dotnet/api/overview/azure/identity-readme](https://docs.microsoft.com/en-us/dotnet/api/overview/azure/identity-readme)
5. [https://learn.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/how-managed-identities-work-vm](https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/how-managed-identities-work-vm)
6. <https://github.com/MicrosoftDocs/azure-docs/blob/main/articles/active-directory/managed-identities-azure-resources/how-to-use-vm-token.md>
7. [https://learn.microsoft.com/en-us/azure/azure-app-configuration/quickstart-dotnet-core-app](https://docs.microsoft.com/en-us/azure/azure-app-configuration/quickstart-dotnet-core-app)
8. [https://learn.microsoft.com/en-us/azure/azure-app-configuration/concept-key-value](https://docs.microsoft.com/en-us/azure/azure-app-configuration/concept-key-value)
9. [https://learn.microsoft.com/en-us/azure/azure-app-configuration/concept-feature-management](https://docs.microsoft.com/en-us/azure/azure-app-configuration/concept-feature-management)

# Module 8: Implement API Management

<https://learn.microsoft.com/en-gb/training/paths/az-204-implement-api-management/>

* [Explore API Management](https://learn.microsoft.com/en-gb/training/modules/explore-api-management/)

1. [https://learn.microsoft.com/en-us/azure/api-management/api-management-key-concepts](https://docs.microsoft.com/en-us/azure/api-management/api-management-key-concepts)
2. [https://learn.microsoft.com/en-us/azure/api-management/import-and-publish](https://docs.microsoft.com/en-us/azure/api-management/import-and-publish)
3. [https://learn.microsoft.com/en-us/azure/api-management/api-management-howto-add-products](https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-add-products)
4. [https://learn.microsoft.com/en-us/azure/api-management/api-management-howto-create-groups](https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-create-groups)
5. [https://learn.microsoft.com/en-us/azure/api-management/api-management-howto-policies](https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-policies)
6. [https://learn.microsoft.com/en-us/azure/api-management/api-management-policies](https://docs.microsoft.com/en-us/azure/api-management/api-management-policies)
7. [https://learn.microsoft.com/en-us/azure/api-management/api-management-subscriptions](https://docs.microsoft.com/en-us/azure/api-management/api-management-subscriptions)
8. [https://learn.microsoft.com/en-us/azure/api-management/api-management-authentication-policies](https://docs.microsoft.com/en-us/azure/api-management/api-management-authentication-policies)
9. [https://learn.microsoft.com/en-us/azure/api-management/import-and-publish](https://docs.microsoft.com/en-us/azure/api-management/import-and-publish)
10. [https://learn.microsoft.com/en-us/azure/api-management/api-management-howto-mutual-certificates-for-clients](https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-mutual-certificates-for-clients)

# Module 9: Develop event-based solutions

<https://learn.microsoft.com/en-gb/training/paths/az-204-develop-event-based-solutions/>

* [Explore Azure Event Grid](https://learn.microsoft.com/en-gb/training/modules/azure-event-grid/)
* [Explore Azure Event Hubs](https://learn.microsoft.com/en-gb/training/modules/azure-event-hubs/)

1. [https://learn.microsoft.com/en-us/azure/event-grid/overview](https://docs.microsoft.com/en-us/azure/event-grid/overview)
2. [https://learn.microsoft.com/en-us/azure/event-grid/event-schema](https://docs.microsoft.com/en-us/azure/event-grid/event-schema)
3. [https://learn.microsoft.com/en-us/azure/event-grid/cloud-event-schema](https://docs.microsoft.com/en-us/azure/event-grid/cloud-event-schema)
4. [https://learn.microsoft.com/en-us/azure/event-grid/delivery-and-retry](https://docs.microsoft.com/en-us/azure/event-grid/delivery-and-retry)
5. [https://learn.microsoft.com/en-us/azure/event-grid/security-authorization](https://docs.microsoft.com/en-us/azure/event-grid/security-authorization)
6. [https://learn.microsoft.com/en-us/azure/event-grid/handler-webhooks](https://docs.microsoft.com/en-us/azure/event-grid/handler-webhooks)
7. [https://learn.microsoft.com/en-us/azure/event-grid/how-to-filter-events](https://docs.microsoft.com/en-us/azure/event-grid/how-to-filter-events)
8. [https://learn.microsoft.com/en-us/azure/event-hubs/event-hubs-about](https://docs.microsoft.com/en-us/azure/event-hubs/event-hubs-about)
9. [https://learn.microsoft.com/en-us/azure/event-hubs/event-hubs-features#partitions](https://docs.microsoft.com/en-us/azure/event-hubs/event-hubs-features)
10. [https://learn.microsoft.com/en-us/azure/event-hubs/event-hubs-capture-overview](https://docs.microsoft.com/en-us/azure/event-hubs/event-hubs-capture-overview)
11. [https://learn.microsoft.com/en-us/azure/event-hubs/event-processor-balance-partition-load](https://docs.microsoft.com/en-us/azure/event-hubs/event-processor-balance-partition-load)
12. [https://learn.microsoft.com/en-us/azure/event-hubs/authorize-access-azure-active-directory](https://docs.microsoft.com/en-us/azure/event-hubs/authorize-access-azure-active-directory)
13. [https://learn.microsoft.com/en-us/azure/event-hubs/event-hubs-dotnet-standard-getstarted-send](https://docs.microsoft.com/en-us/azure/event-hubs/event-hubs-dotnet-standard-getstarted-send)

# Module 10: Develop message-based solutions

<https://learn.microsoft.com/en-gb/training/paths/az-204-develop-message-based-solutions/>

* [Discover Azure message queues](https://learn.microsoft.com/en-gb/training/modules/discover-azure-message-queue/)

1. [https://learn.microsoft.com/en-us/azure/architecture/patterns/queue-based-load-leveling](https://docs.microsoft.com/en-us/azure/architecture/patterns/queue-based-load-leveling)
2. [https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-azure-and-service-bus-queues-compared-contrasted](https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-azure-and-service-bus-queues-compared-contrasted)
3. [https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview](https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview)
4. [https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-dotnet-get-started-with-queues](https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-dotnet-get-started-with-queues)
5. [https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-premium-messaging](https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-premium-messaging)
6. [https://learn.microsoft.com/en-us/azure/service-bus-messaging/topic-filters](https://docs.microsoft.com/en-us/azure/service-bus-messaging/topic-filters)
7. [https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messages-payloads](https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messages-payloads)
8. [https://learn.microsoft.com/en-us/azure/service-bus-messaging/message-sessions](https://docs.microsoft.com/en-us/azure/service-bus-messaging/message-sessions)
9. [https://learn.microsoft.com/en-au/azure/service-bus-messaging/service-bus-amqp-overview](https://docs.microsoft.com/en-au/azure/service-bus-messaging/service-bus-amqp-overview)
10. [https://learn.microsoft.com/en-au/azure/storage/queues/storage-queues-introduction](https://docs.microsoft.com/en-au/azure/storage/queues/storage-queues-introduction)
11. [https://learn.microsoft.com/en-au/azure/storage/queues/storage-dotnet-how-to-use-queues?tabs=dotnet](https://docs.microsoft.com/en-au/azure/storage/queues/storage-dotnet-how-to-use-queues?tabs=dotnet)

# Module 11: Troubleshoot solutions by using Application Insights

<https://learn.microsoft.com/en-gb/training/paths/az-204-instrument-solutions-support-monitoring-logging/>

* [Monitor app performance](https://learn.microsoft.com/en-gb/training/modules/monitor-app-performance/)

1. [https://learn.microsoft.com/en-us/azure/azure-monitor/overview](https://docs.microsoft.com/en-us/azure/azure-monitor/overview)
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10. [https://learn.microsoft.com/en-us/azure/azure-monitor/app/app-map](https://docs.microsoft.com/en-us/azure/azure-monitor/app/app-map)

# Module 12: Implement caching for solutions

<https://learn.microsoft.com/en-gb/training/paths/az-204-integrate-caching-content-delivery-within-solutions/>

* [Develop for Azure Cache for Redis](https://learn.microsoft.com/en-gb/training/modules/develop-for-azure-cache-for-redis/)
* [Develop for storage on CDNs](https://learn.microsoft.com/en-gb/training/modules/develop-for-storage-cdns/)

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2. [https://learn.microsoft.com/en-us/azure/azure-cache-for-redis/cache-overview](https://docs.microsoft.com/en-us/azure/azure-cache-for-redis/cache-overview)
3. [https://learn.microsoft.com/en-us/azure/azure-cache-for-redis/cache-how-to-redis-cli-tool](https://docs.microsoft.com/en-us/azure/azure-cache-for-redis/cache-how-to-redis-cli-tool)
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11. [https://learn.microsoft.com/en-us/azure/cdn/cdn-app-dev-net](https://docs.microsoft.com/en-us/azure/cdn/cdn-app-dev-net)

# Labs:

* <https://lumify.learnondemand.net>