## Azure Function Topics

Tuesday, December 10, 2019 4:42 PM

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  - o <u>Hosting plan options</u>
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  - o Create function C#
  - o Create function Java
  - Create function JavaScript
  - o Create function PowerShell
  - o Create function Python
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- Tutorials
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  - o Develop Python functions with VS Code
  - o OpenAPI definition for serverless APIs
  - o Connect to a Virtual Network
  - o <u>Image resize with Event Grid</u>
  - o Create a serverless web app
  - o <u>Machine learning with TensorFlow</u>
  - Create a custom Linux image
  - o Functions on IoT Edge device
  - o Java with Azure Cosmos DB and Event Hubs
- Samples
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  - o Azure Samples
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- PowerShell
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- TypeScript
- o <u>Azure CLI</u>
- Concepts
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  - o <u>Premium plan</u>
  - o Deployments
  - o Events and messaging
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    - Binding example
    - Register binding extensions
    - Binding expression patterns
    - Use binding return values
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  - o Languages
    - Supported languages
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    - C# script (.csx)
    - <u>F#</u>
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    - TypeScript
  - o <u>Diagnostics</u>
  - o Consumption plan costs
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  - o <u>Networking options</u>
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    - Developer guide
    - Local development

- Develop and debug locally
- Visual Studio Code development
- <u>Visual Studio development</u>
- Core Tools development
- Create functions
  - HTTP trigger
  - Azure Cosmos DB trigger
  - Blob storage trigger
  - Queue storage trigger
  - <u>Timer trigger</u>
- Add bindings
- Debug and test
- Dependency injection
- Manage connections
- Error handling
- Manually run a non HTTP-triggered function
- o Deploy
  - Continuous deployment
  - Deployment slots
  - Build and deploy using Azure Pipelines
  - Build and deploy using GitHub Actions
  - Zip deployment
  - Run from package
  - Functions in Kubernetes
  - Automate resource deployment
  - On-premises functions
  - Deploy using the Jenkins plugin
- o Configure
  - Manage a function app
  - Set the runtime version
  - Manually register an extension
  - Disable a function
  - <u>Geo-disaster recovery</u>
- o Monitor
  - Monitor functions
  - Analyze logs
- o Secure

- Add SSL cert
- Authenticate users
- Advanced auth
- Restrict IPs
- Use a managed identity
- Reference secrets from Key Vault
- o Integrate
  - Add bindings
  - Connect to SQL Database
  - Connect to a virtual Network
  - Create an Open API 2.0 definition
  - Export to PowerApps and Microsoft Flow
  - Use a managed identity
  - Customize HTTP function endpoint
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- o <u>Troubleshoot</u>
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    - Azure Cosmos DB
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    - <u>IoT Hub</u>
    - HTTP and webhooks
    - Microsoft Graph
    - Mobile Apps
    - Notification Hubs
    - Queue storage
    - SendGrid
    - Service Bus
    - SignalR Service
    - Table storage
    - <u>Timer</u>
    - <u>Twilio</u>
    - Warmup
  - o host. json 2. x reference