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Discover Azure Functions

3 minutes

Azure **Functions** is a serverless solution that allows you to write less code, maintain less infrastructure, and save on costs. Instead of worrying about deploying and maintaining servers, the cloud infrastructure provides all the up-to-date resources needed to keep your applications running.

We often build systems to react to a series of critical events. Whether you're building a web API, responding to database changes, processing IoT data streams, or even managing message queues - every application needs a way to run some code as these events occur.

Azure Functions supports *triggers*, which are ways to start execution of your code, and *bindings*, which are ways to simplify coding for input and output data. There are other integration and automation services in Azure and they all can solve integration problems and automate business processes. They can all define input, actions, conditions, and output.

Compare Azure Functions and Azure Logic Apps

Both Functions and Logic Apps are Azure Services that enable serverless workloads. Azure Functions is a serverless compute service, whereas Azure Logic Apps is a serverless workflow integration platform. Both can create complex *orchestrations*. An orchestration is a collection of functions or steps, called actions in Logic Apps, that are executed to accomplish a complex task.

For Azure Functions, you develop orchestrations by writing code and using the Durable Functions extension. For Logic Apps, you create orchestrations by using a GUI or editing configuration files.

The following table lists some of the key differences between Functions and Logic Apps:

Expand table

	Azure Functions	Logic Apps	
Development	Code-first (imperative)	Designer-first (declarative)	

	Azure Functions	Logic Apps
Connectivity	About a dozen built-in binding types, write code for custom bindings	Large collection of connectors, Enterprise Integration Pack for B2B scenarios, build custom connectors
Actions	Each activity is an Azure function; write code for activity functions	Large collection of ready-made actions
Monitoring	Azure Application Insights	Azure portal, Azure Monitor logs
Management	REST API, Visual Studio	Azure portal, REST API, PowerShell, Visual Studio
Execution context	Runs in Azure, or locally	Runs in Azure, locally, or on premises

Compare Functions and WebJobs

Like Azure Functions, Azure App Service WebJobs with the WebJobs SDK is a code-first integration service that is designed for developers. Both are built on Azure App Service and support features such as source control integration, authentication, and monitoring with Application Insights integration.

Azure Functions is built on the WebJobs SDK, so it shares many of the same event triggers and connections to other Azure services. Here are some factors to consider when you're choosing between Azure Functions and WebJobs with the WebJobs SDK:

Expand table

	Functions	WebJobs with WebJobs SDK
Serverless app model with automatic scaling	Yes	No

	Functions	WebJobs with WebJobs SDK
Develop and test in browser	Yes	No
Pay-per-use pricing	Yes	No
Integration with Logic Apps	Yes	No
Trigger events	Timer Azure Storage queues and blobs Azure Service Bus queues and topics Azure Cosmos DB Azure Event Hubs HTTP/WebHook (GitHub Slack) Azure Event Grid	Timer Azure Storage queues and blobs Azure Service Bus queues and topics Azure Cosmos DB Azure Event Hubs File system

Azure Functions offers more developer productivity than Azure App Service WebJobs does. It also offers more options for programming languages, development environments, Azure service integration, and pricing. For most scenarios, it's the best choice.

Next unit: Compare Azure Functions hosting options

