

Understanding Triggers and Bindings



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Overview



Trigger types

- Timers, HTTP requests
- Queue messages, blobs, Cosmos DB

Input and output bindings

- Connect to external resources
- Reduce amount of code

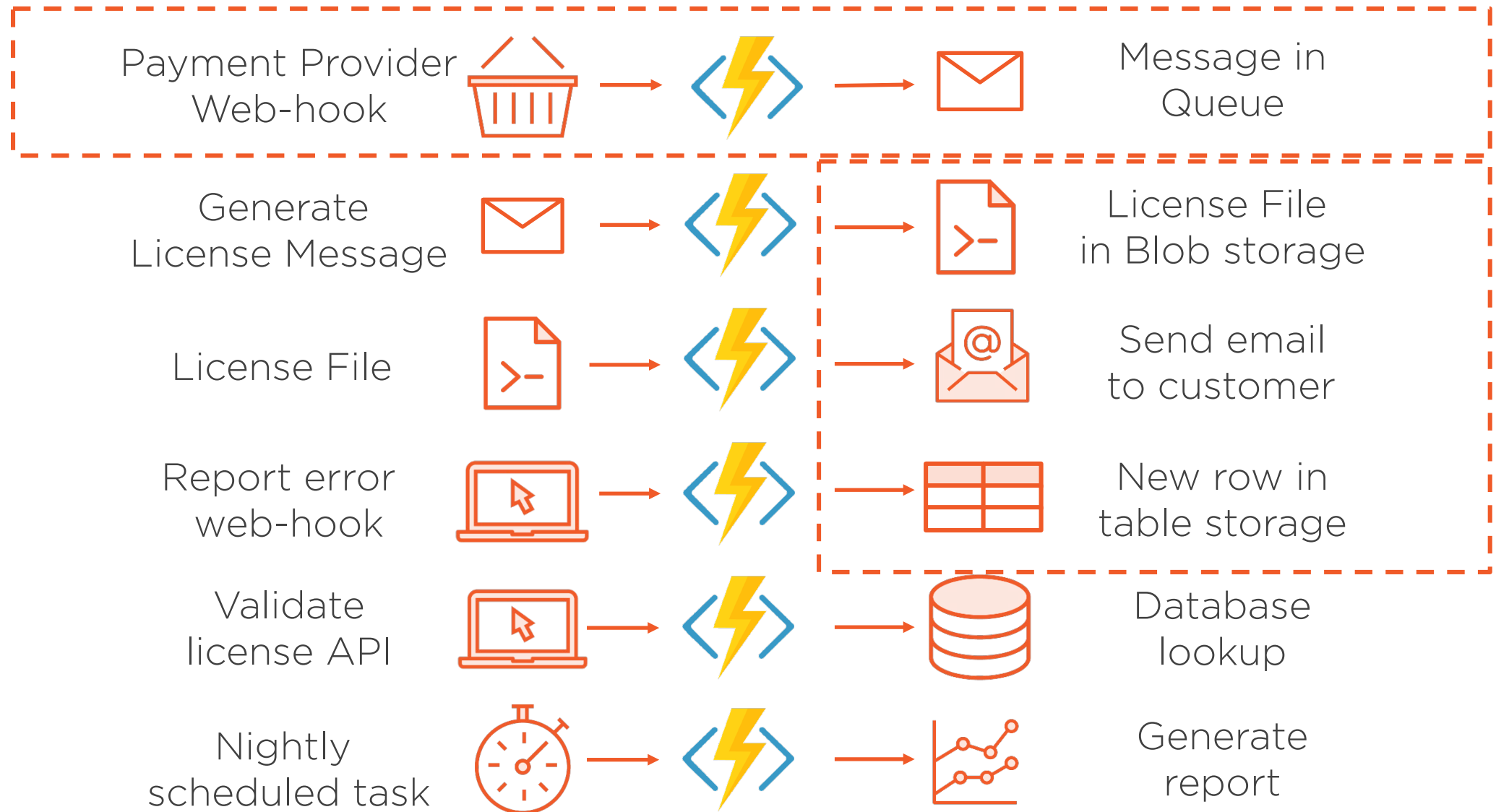
Using triggers and bindings

Azure Functions Core Tools

- Cross-platform development
- function.json



Real-World Example



Developing Azure Functions

Visual Studio
2017 or newer

Azure Functions
Core Tools

- Cross-platform
- Command line

.NET SDK

- <https://dot.net>

Modifying — Visual Studio Enterprise 2017 — 15.9.6

Workloads

Individual components

Language packs

Installation locations

Windows (3)



.NET desktop development

Build WPF, Windows Forms, and console applications using C#, Visual Basic, and F#.



Desktop development with C++

Build Windows desktop applications using the Microsoft C++ toolset, ATL, or MFC.



Universal Windows Platform development

Create applications for the Universal Windows Platform with C#, VB, JavaScript, or optionally C++.



Web & Cloud (7)



ASP.NET and web development

Build web applications using ASP.NET, ASP.NET Core, HTML/JavaScript, and Containers including Docker support.



Azure development

Azure SDKs, tools, and projects for developing cloud apps, creating resources, and building Containers including...



Python development

Editing, debugging, interactive development and source control for Python.



Node.js development

Build scalable network applications using Node.js, an asynchronous event-driven JavaScript runtime.



Demo



Payment Provider
Webhook



Message in
Queue

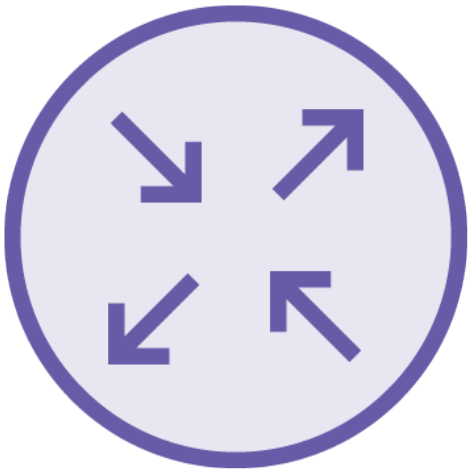
Create a HTTP triggered function

Azure Functions Core Tools

Test and run locally



Route Templates



Default is api/functionName

- api/getCustomer?id=123
- api/customer/{customerId}

Demo



Payment Provider
Web-hook



Message in
Queue



Summary



Azure Functions supported languages

- C#, F#, JavaScript, Java, and more

Two types of C# function

- C# script files (.csx)
- C# class library (.dll)

Azure Functions Core Tools

- Open source, cross platform
- Function templates
- Works well with Visual Studio Code

Triggers and bindings

- HTTP trigger and Queue output binding



C# HTTP Trigger

```
[FunctionName("OnPaymentReceived")]  
public static async Task<ActionResult> Run(  
    [HttpTrigger(AuthorizationLevel.Function,  
        "post", Route = null)] HttpRequest req)
```

/api/OnPaymentReceived



C# Queue Output Binding

Microsoft.Azure.WebJobs.Extensions.Storage NuGet package

```
[FunctionName("OnPaymentReceived")]
public static async Task<IActionResult> Run(
    [HttpTrigger(AuthorizationLevel.Function,
                 "post", Route = null)] HttpRequest req,
    [Queue("orders")] IAsyncCollector<Order> orderQueue)
{
    // ...
    await orderQueue.AddAsync(order);
}
```

/api/OnPaymentReceived



The Story so Far

