

# Happy Troubleshooting in Azure

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# Introduction



Troubleshooting options

Debugging Web Apps

Diagnostics logs

Visual Studio Application Insights



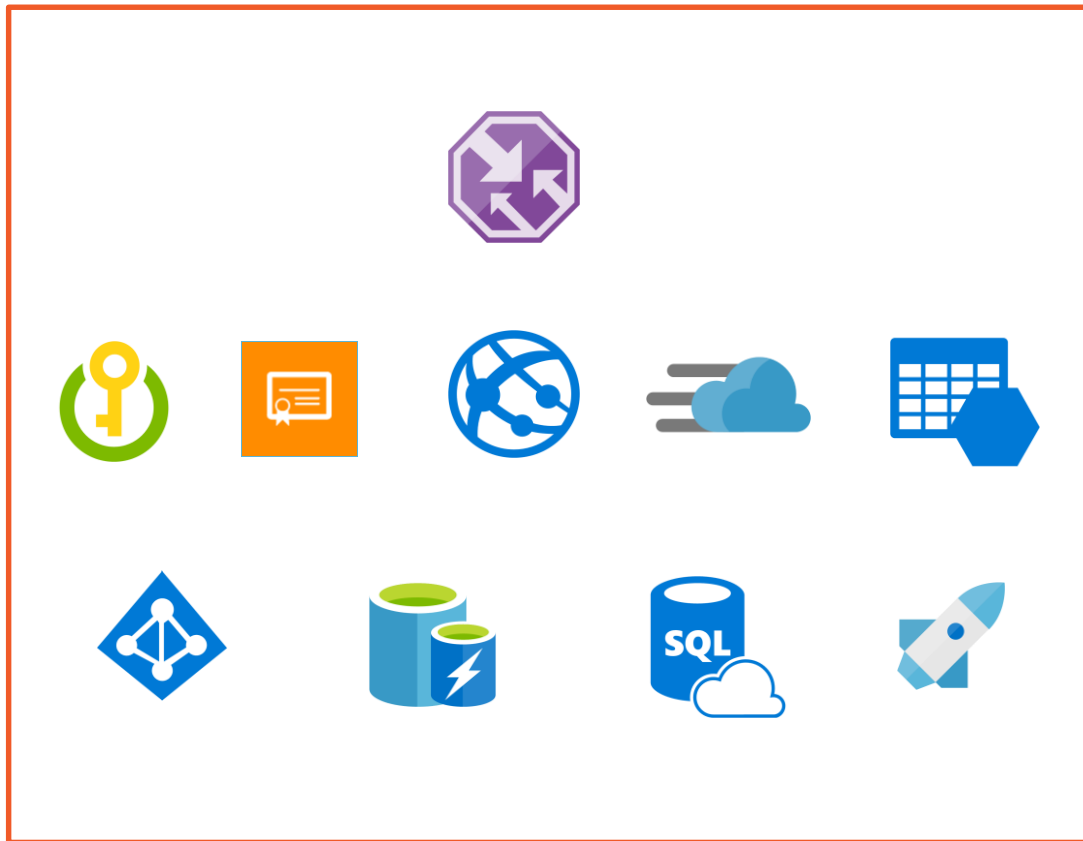
# A Look at Azure Troubleshooting Options

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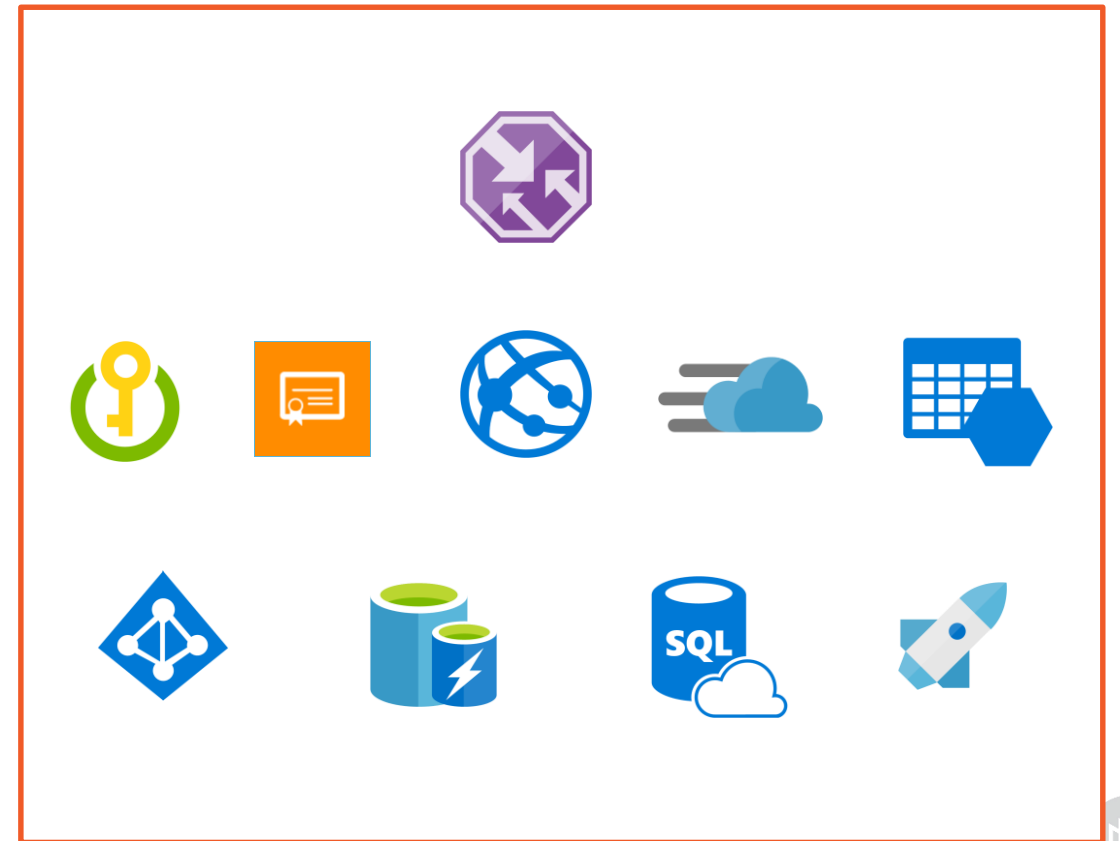


# Where Do Things Go Wrong?

## Development (Dev / Test / QA)

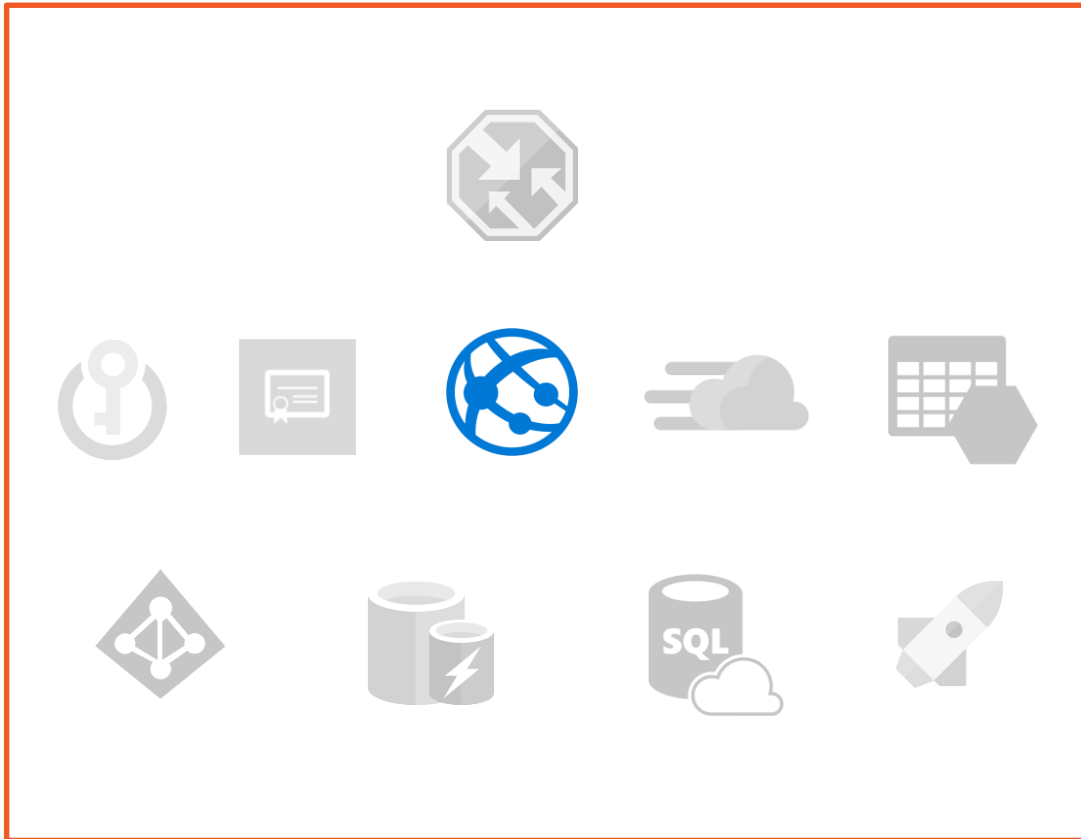


## Production

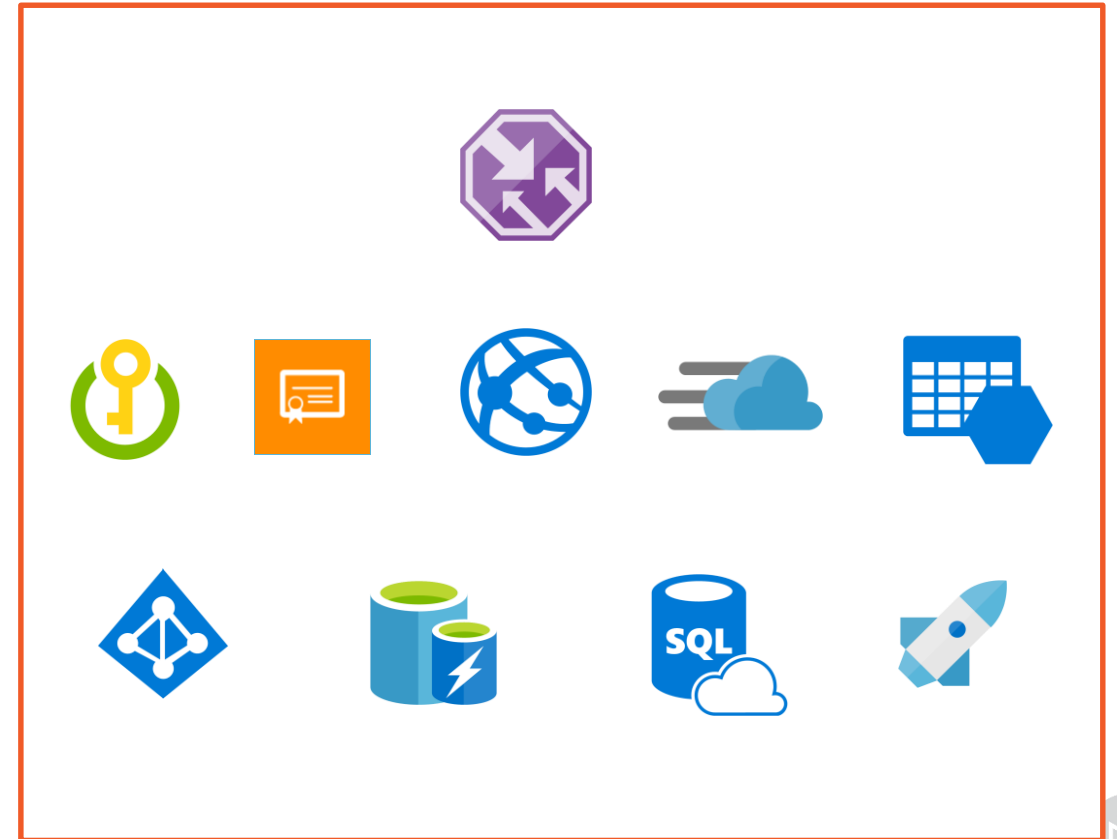


# Where Do Things Go Wrong?

## Development (Dev / Test / QA)

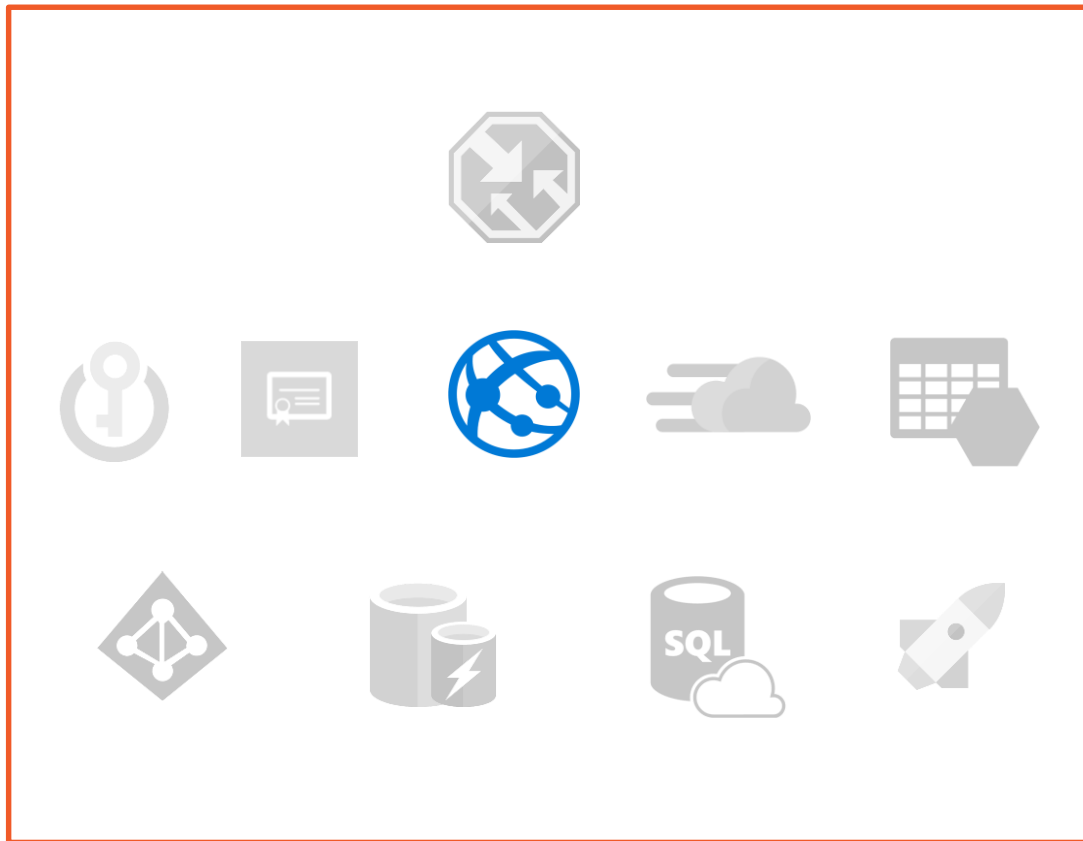


## Production

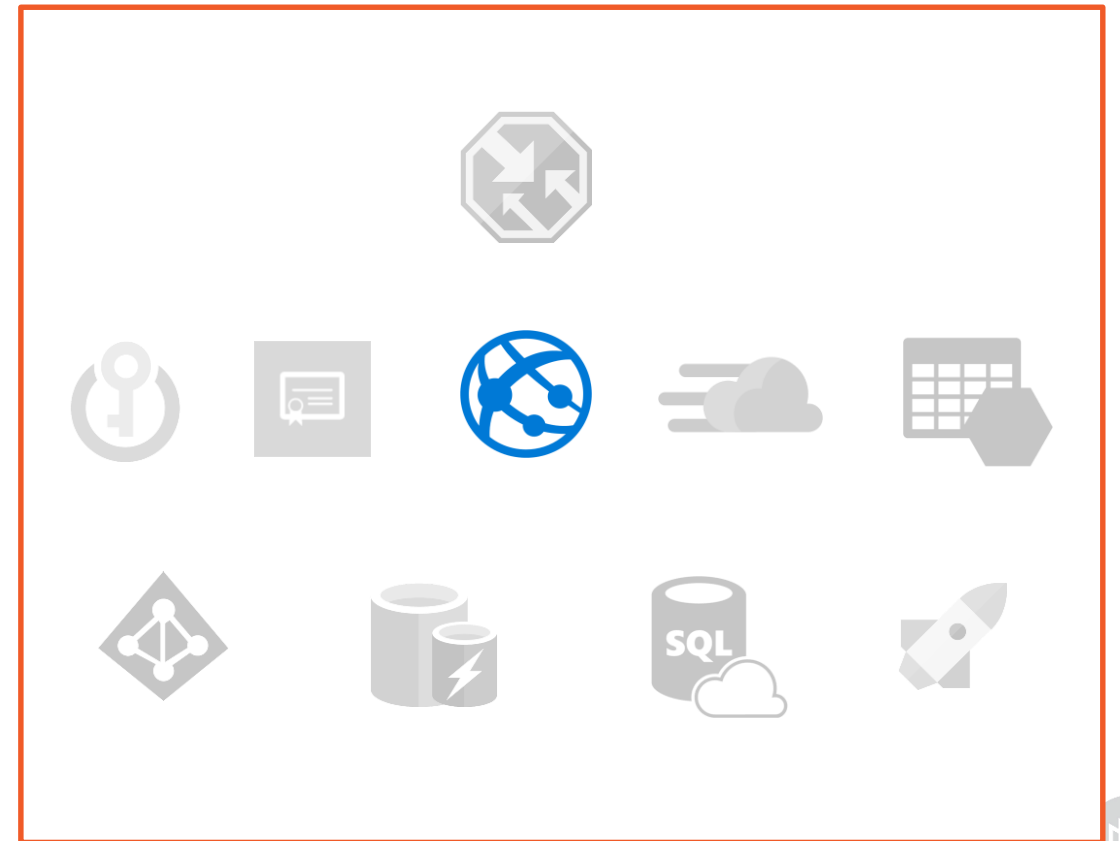


# Where Do Things Go Wrong?

## Development (Dev / Test / QA)



## Production



# Troubleshooting Options

## Development (Dev / Test / QA)

- Debugging
- Diagnostic logging
- Application Insights
- Operation Management Suite (OMS)

## Production

- Diagnostic logging
- Application Insights
- Operation Management Suite (OMS)



# Troubleshooting Options

## Development (Dev / Test / QA)

- Debugging
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- ~~Operation Management Suite (OMS)~~

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# Troubleshooting Options

## Development (Dev / Test / QA)

- Debugging
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## Production

- Diagnostic logging
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- ~~Operation Management Suite (OMS)~~





# About Debugging Web Apps

**Visual Studio 2012, 2013 or 2015**

**Does not work with express edition**

**Azure SDK 2.2 or higher**

**Debugger simultaneous connection limit**

- 1 connection for free and shared tiers
- 5 connections for standard and premium

**You need to turn debugging on**

- The setting will switch off after 48 hours

**Requires debug version of your app**



# Demo



## Debug a Web App

### Visual Studio



# Using Diagnostic Logs to Troubleshoot Your App

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# Diagnostic Log Types

Application  
logging



Diagnostic trace  
information

Web server  
logging



Diagnostic  
information  
from the web  
server

Detailed error  
messages



Messages from  
exceptions

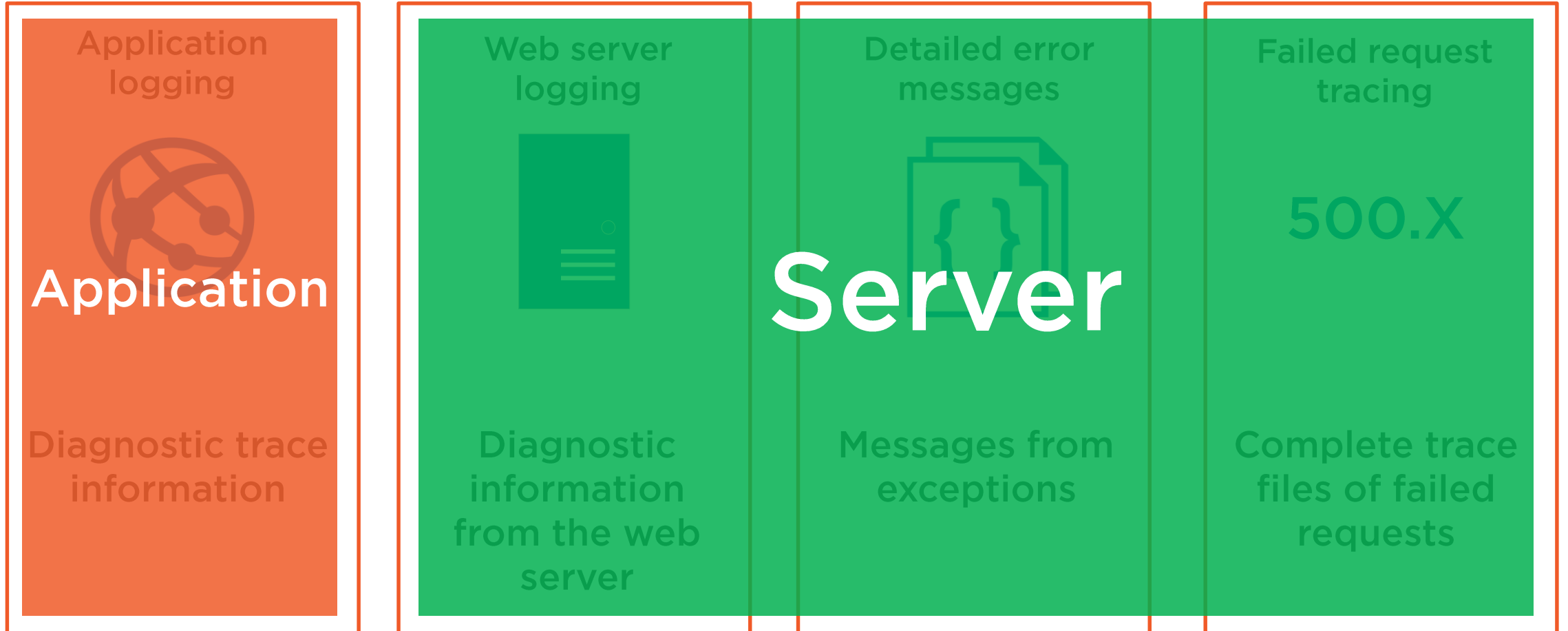
Failed request  
tracing

500.X




Complete trace  
files of failed  
requests



# Diagnostic Log Types



# Diagnostic Log Types

	Application logging 	Web server logging 	Detailed error messages 	Failed request tracing 500.X
Check for custom events	✗			
See webserver activity (requests)		✗		
Bug hunting	✗		✗	
Obscure bug hunting			✗	✗



# Demo



Enable logs

See the logs in action





# Get the Facts with Application Insights

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# Visual Studio Application Insights



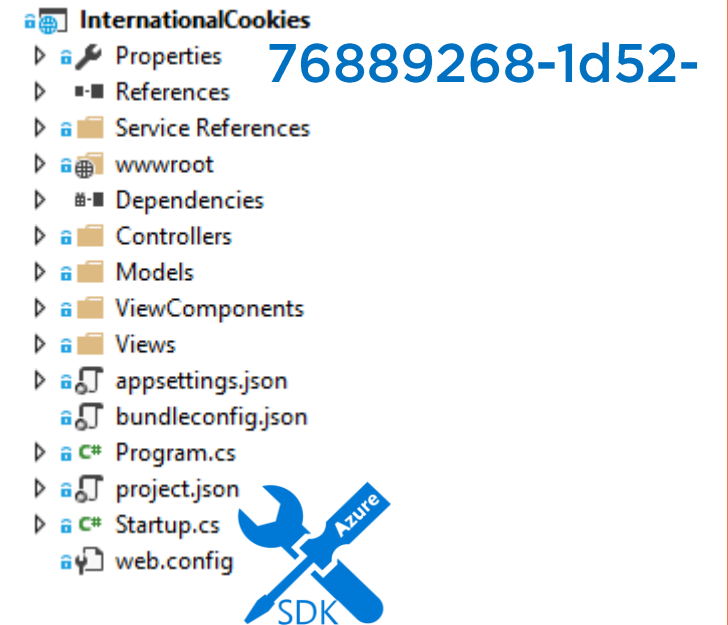
Application Insights

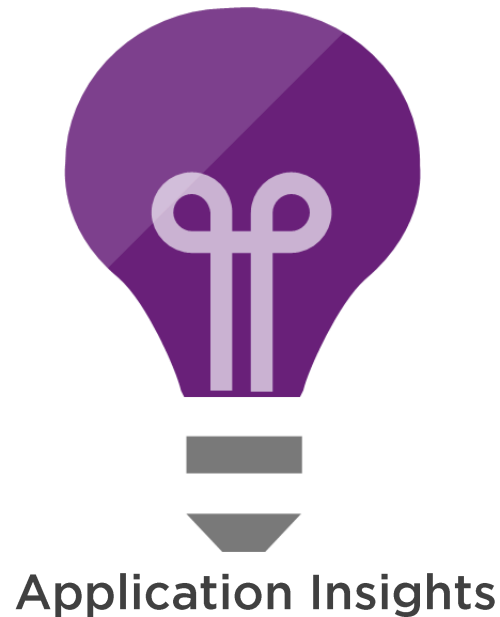


Browser



Web App





# About Application Insights

## Measures application metrics

- Usage
- Availability (requires web tests)
- Failures and exceptions
- Performance
- Dependency performance and status

**7 days raw data retained**

**90 days aggregated data**

**Continuous export of raw data**

- JSON format

**Analytics**



# Demo



## Implement Application Insights



# Summary



## How to troubleshoot apps in Azure

- Debugging
- Diagnostics logs
- Visual Studio Application Insights

