

# Serverless development and deployment: A practical end-to-end scenario



# Speaker intro

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## Business

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# Agenda

**Intro**

**Scenario and technology overview**

**Development and deployment**

**(Not for today: Infrastructure deployment)**

Disclaimer: This is more a **scenario walkthrough / exploration** session than the typical topic explanation.  
**Please give me feedback** how you like this kind of session!

# Topic intro

Why serverless development

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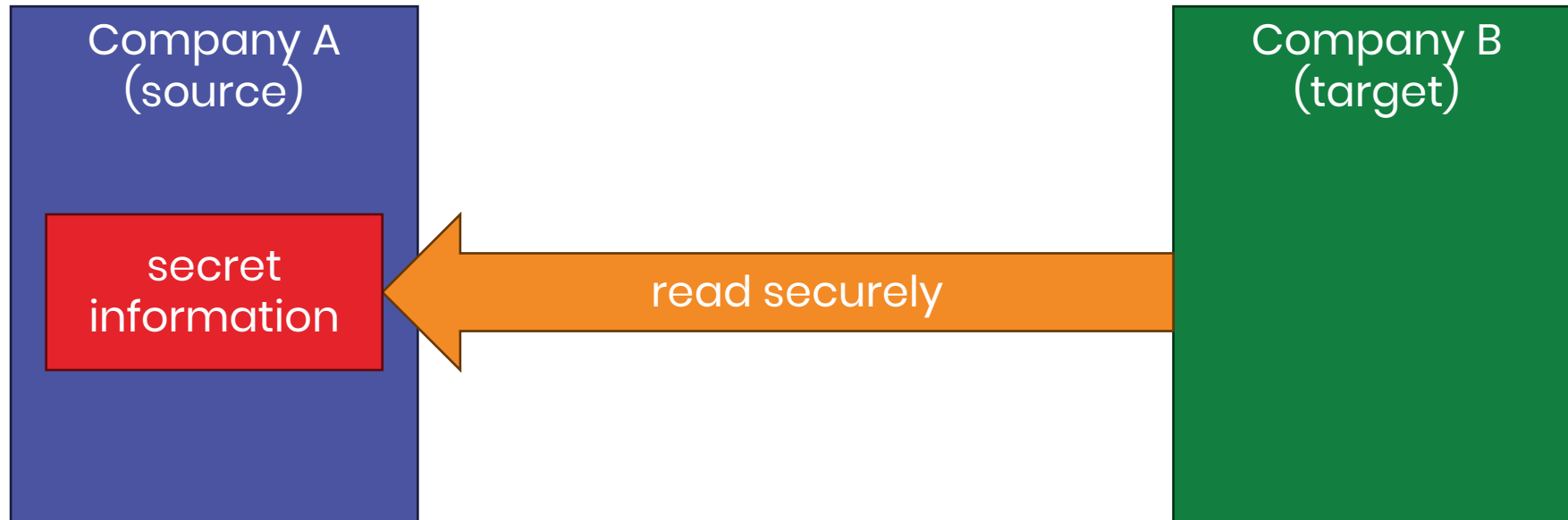


But how much can you actually do? Let's explore!

# Scenario

Requirement

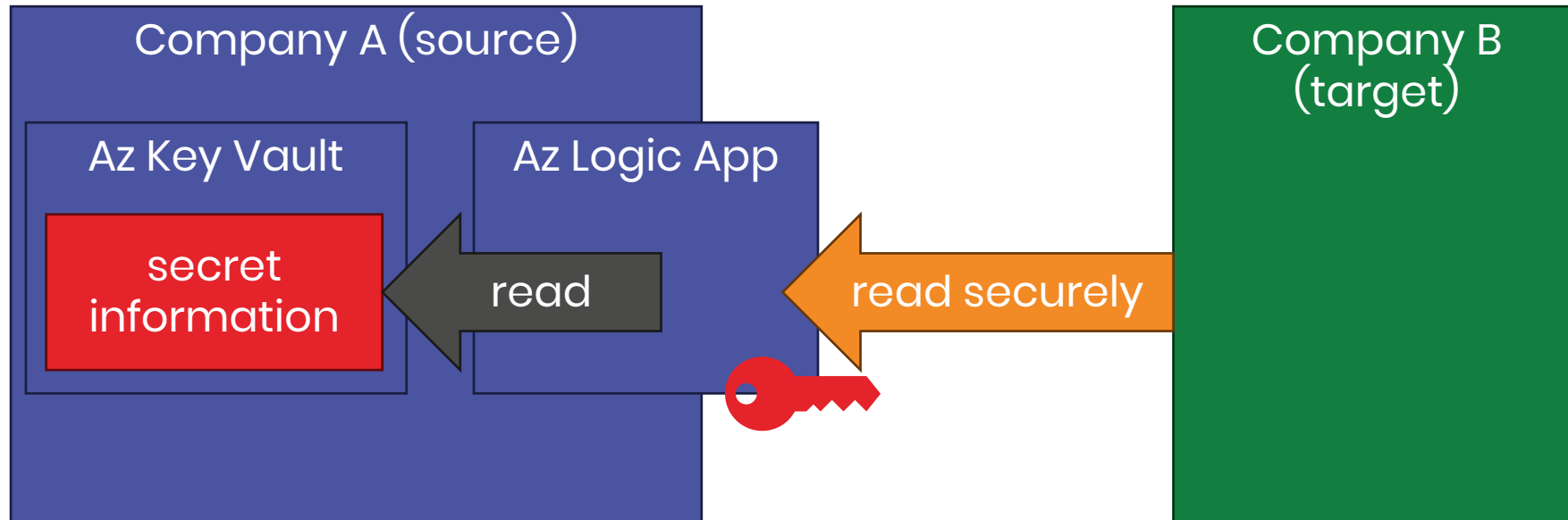
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“read securely”: Only access to the secret information; access controlled by Company A

# Scenario

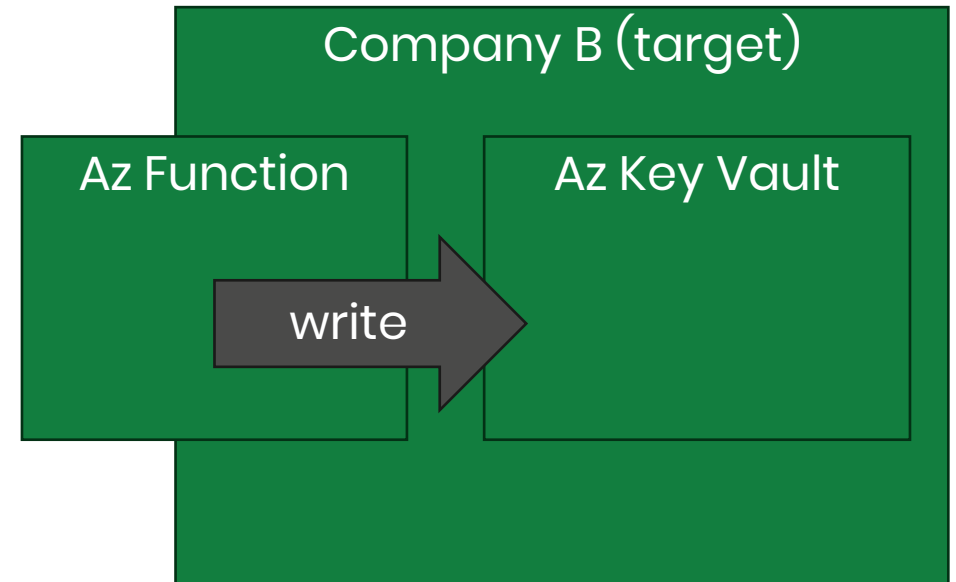
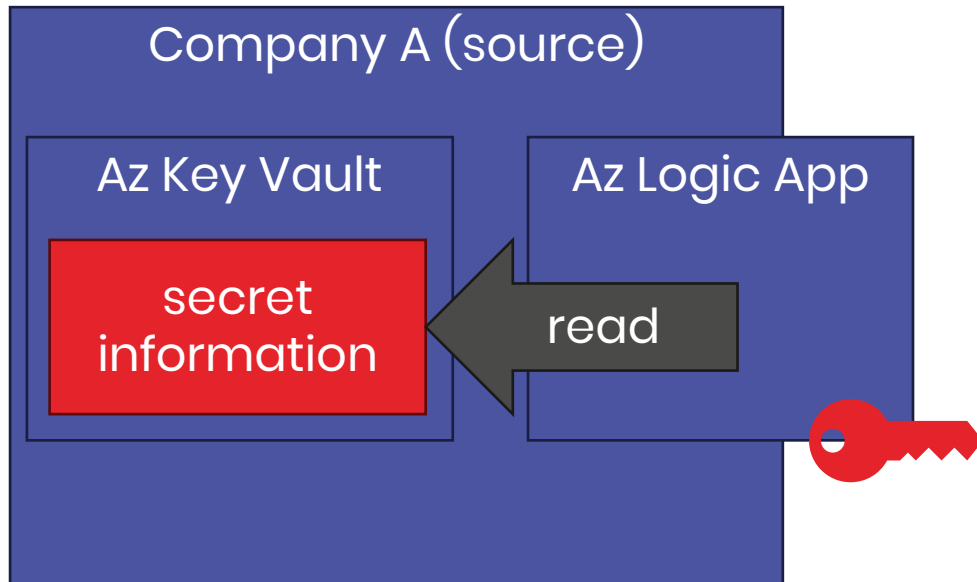
Implementation of read enablement



# Scenario

Implementation of key exchange

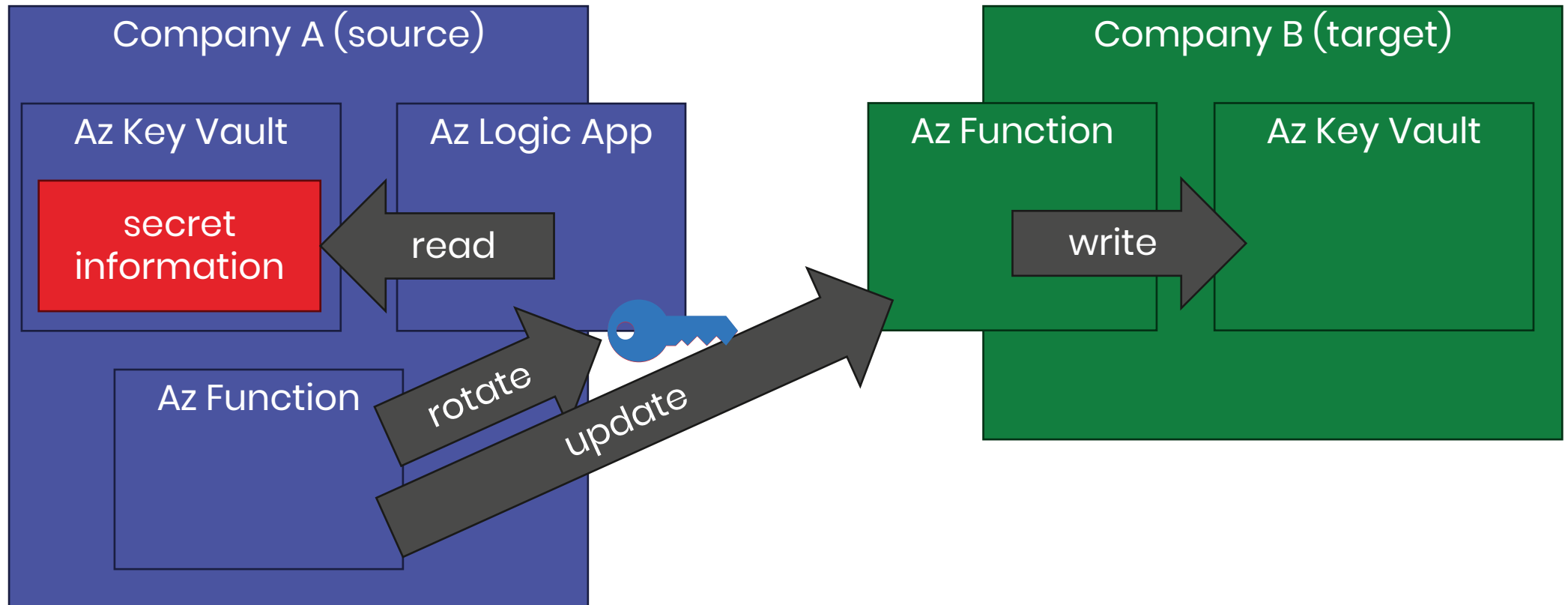
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# Scenario

Implementation of key rotation

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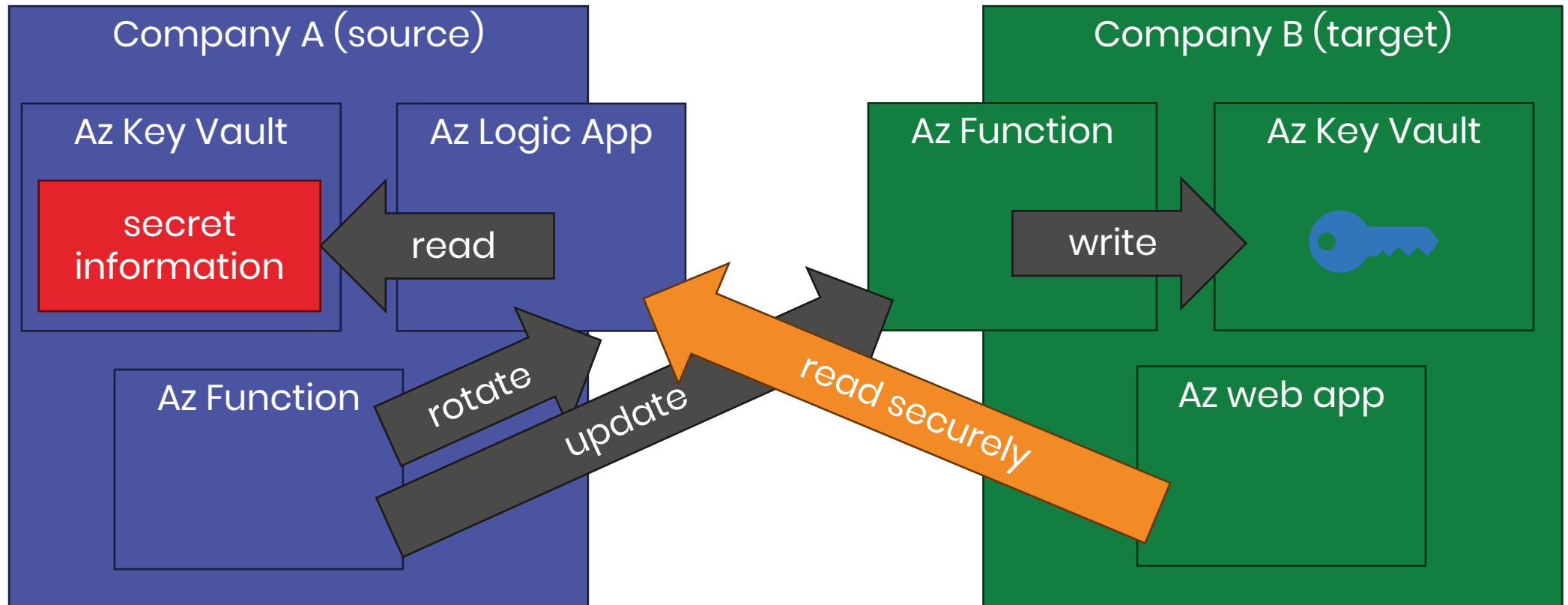




# Scenario

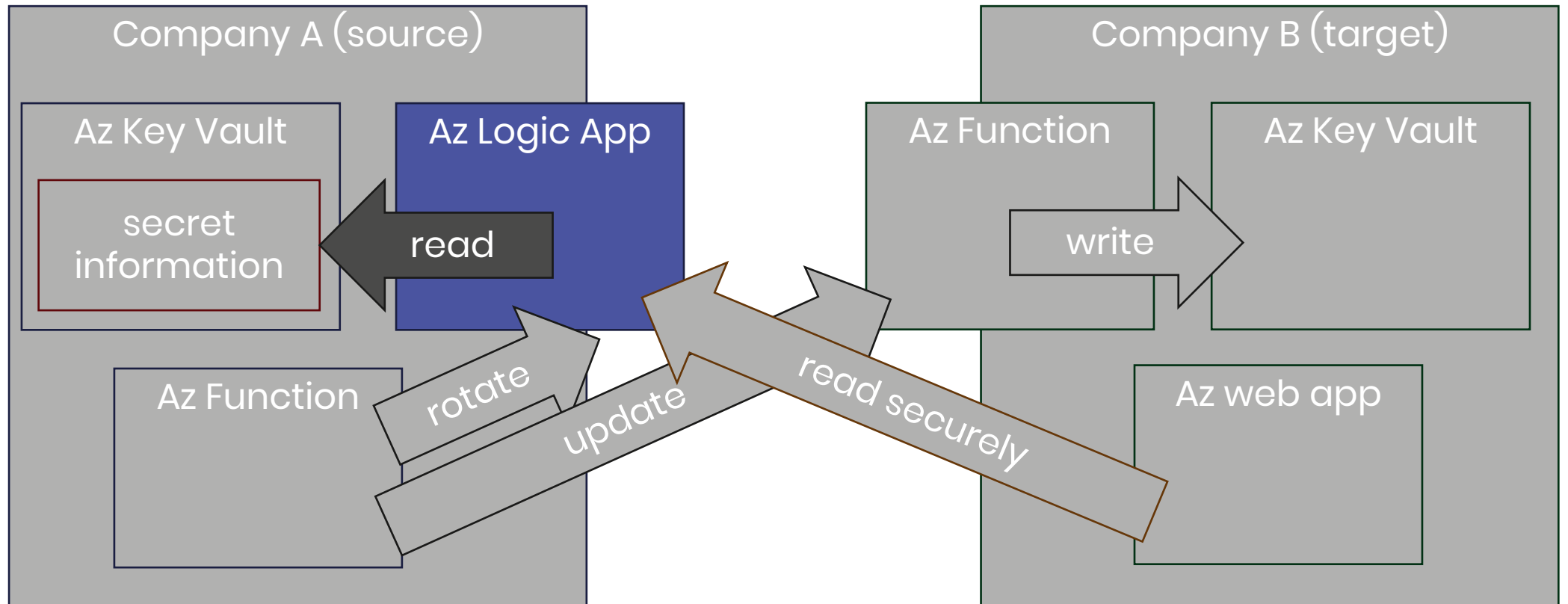
Implementation of read client

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# Development

Azure Logic App to read



# Tech intro: Azure Logic App

## From the docs

Azure Logic Apps is a cloud platform where you can create and run automated workflows with little to no code. By using the visual designer and selecting from prebuilt operations, you can quickly build a workflow that integrates and manages your apps, data, services, and systems

## What we are doing with it

Accept an HTTP request

Retrieve the secret from the Key Vault (including security setup)

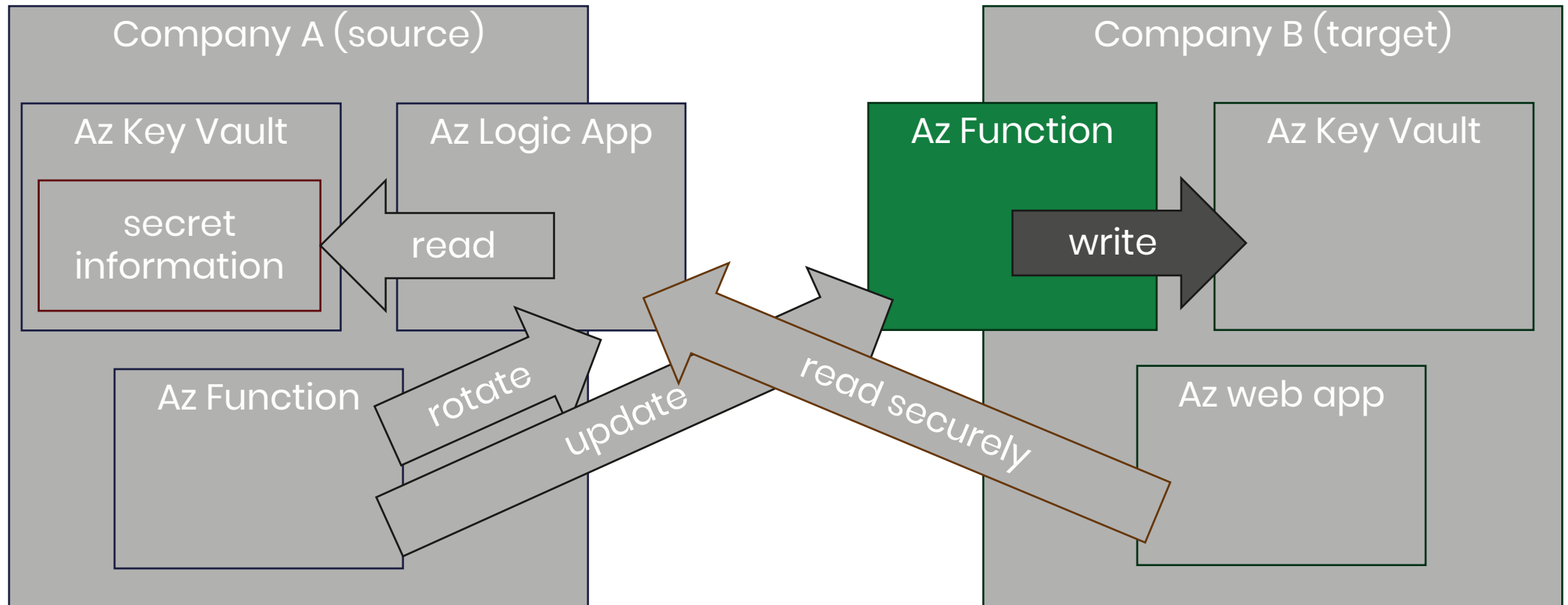
Respond with the secret

# Azure Logic App

# Development

Azure Function to write

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# Tech intro: Azure Functions

## From the docs

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.

You focus on the code that matters most to you, in the most productive language for you, and Azure Functions handles the rest.

## What we are doing with it

Accept an HTTP request

Validate the access signature and if valid, store it in the key vault (incl. security setup)

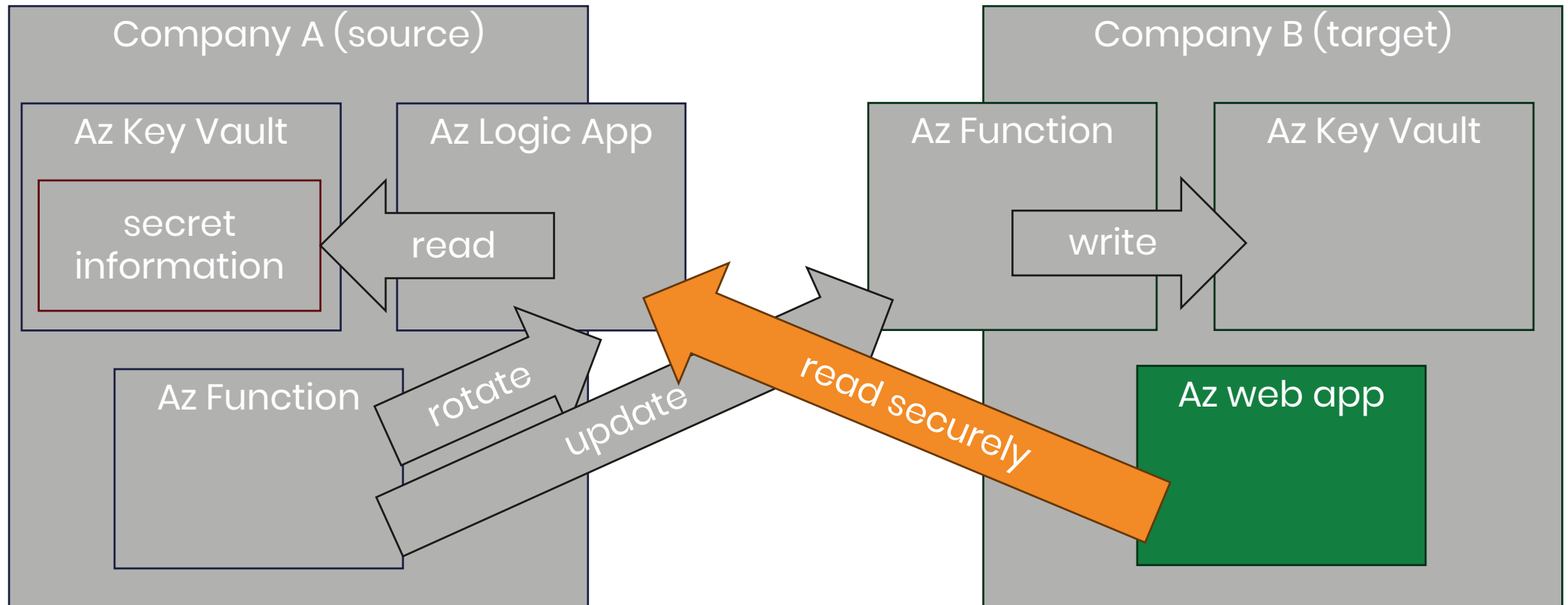
Respond

→ And we deploy to Azure

# Azure Function

# Development

Client application to read





# Tech intro: Azure web app (.NET Razor)



## From the docs

Azure App Service is an HTTP-based service for hosting web applications, REST APIs, and mobile back ends. You can develop in your favorite language, be it .NET, .NET Core, Java, Node.js, PHP, or Python. Applications run and scale with ease on both Windows and Linux-based environments.

Razor Pages is a page-based model for building server rendered web UI. Razor pages UI are dynamically rendered on the server to generate the page's HTML and CSS in response to a browser request. The page arrives at the client ready to display. Support for Razor Pages is built on ASP.NET Core MVC.

## What we are doing with it

Scaffold a default application (incl. security setup)

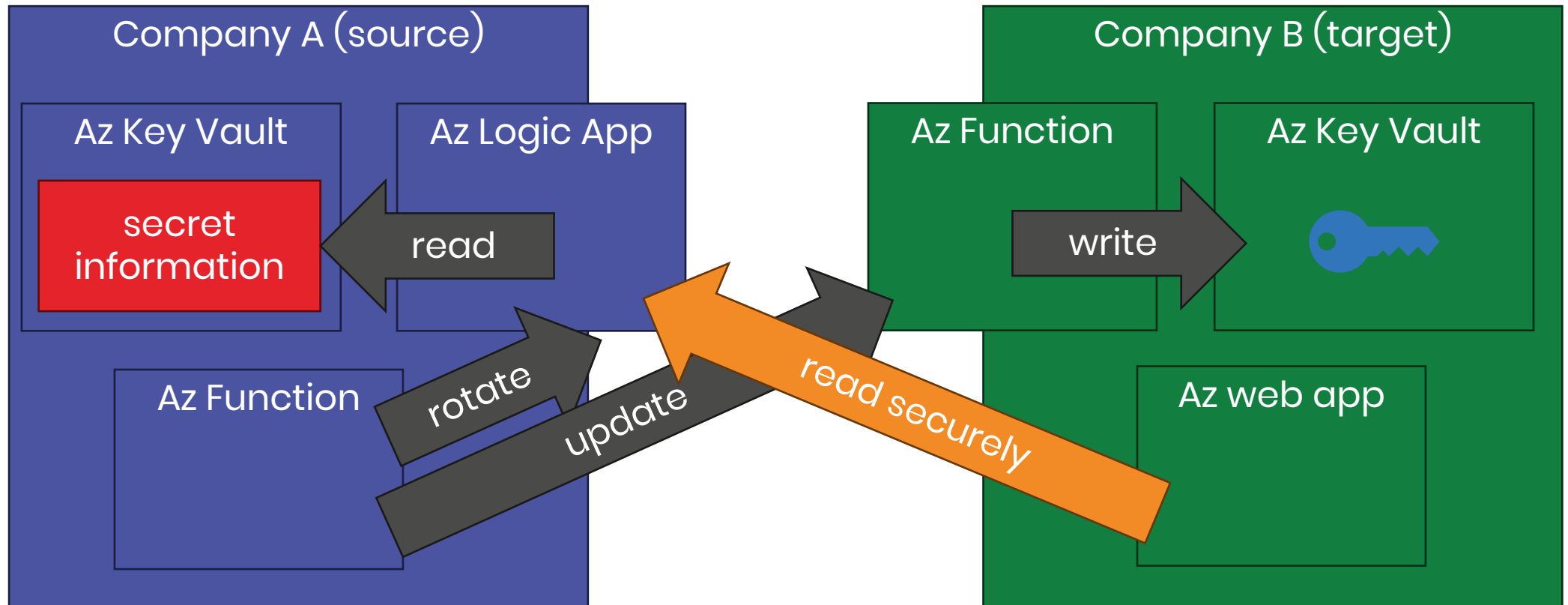
Access and show the secret of Company A using the signature known to Company B

→ And we deploy to Azure

**Azure Web app**

# Scenario

Recap – We did all of this in the browser...



# Key takeaways

You can probably **do more with serverless development** than you think!

Probably not too many benefits for tech stacks you use every day / very often

Interesting for **setups and tech stacks you use sporadically**

→ No setup, no infrastructure, no local dependencies! **Give it a try**

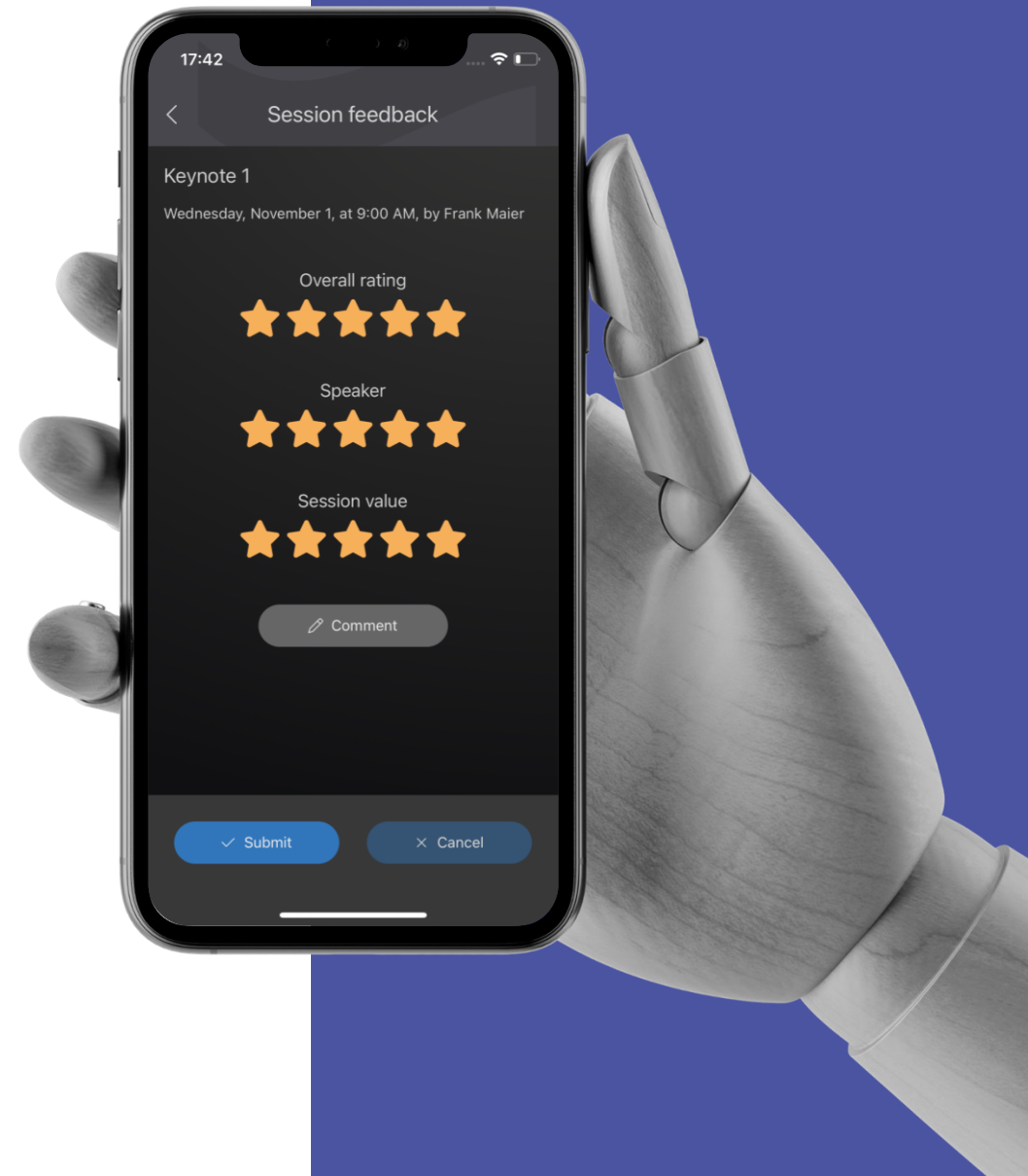
# Give us Feedback!

and help us improve!

Please rate my session in the Conference App!

and leave a constructive comment.

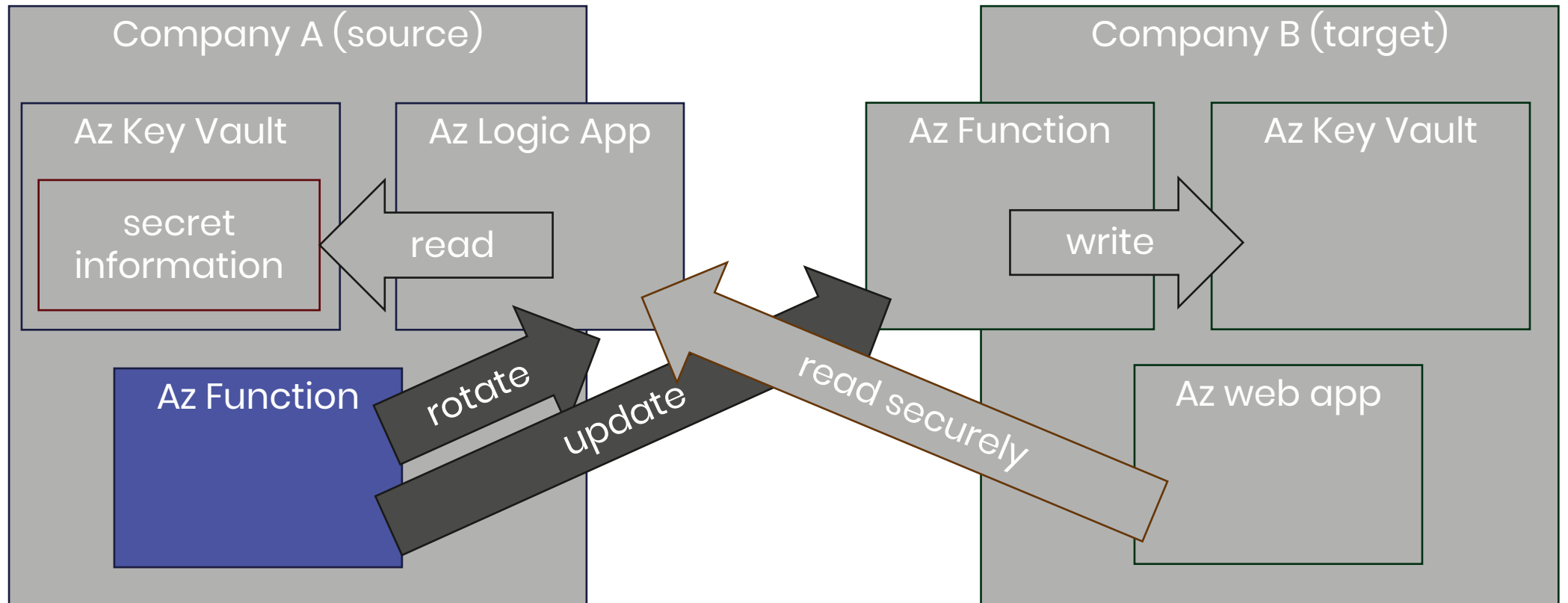
**Thank you !**



# Development

Azure Function to rotate and update

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# Tech intro: Azure Functions

## From the docs

- Same as before -

## What we are doing with it

Run based on a time trigger

Rotate the access key of the logic app (incl. security setup) and share it

→ And we deploy to Azure

# Azure Function