Alexa, ask CICS bank...

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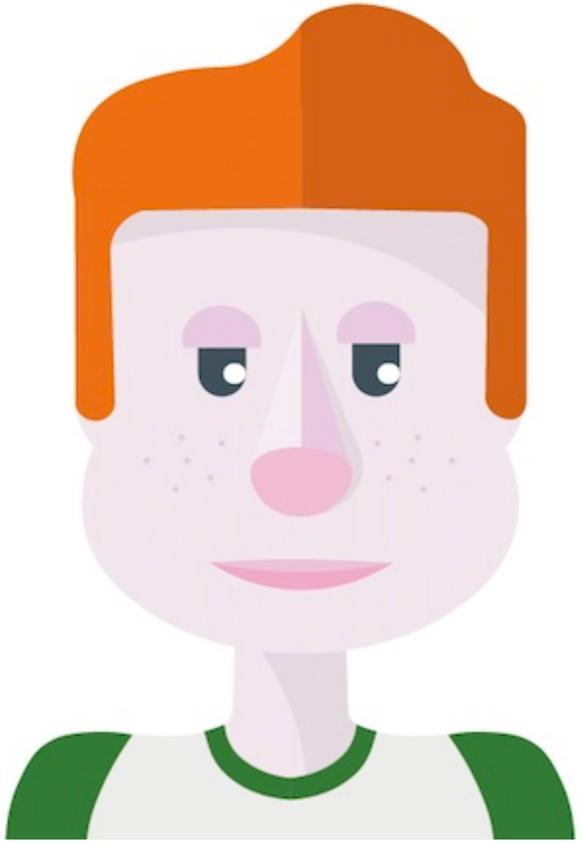
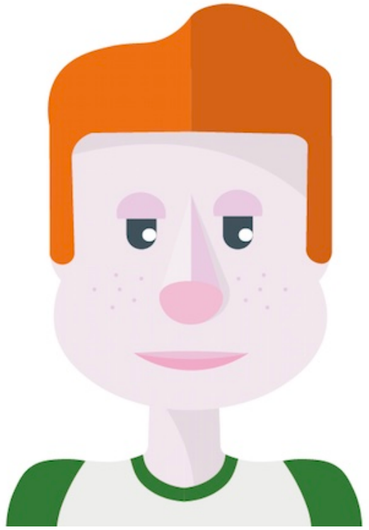
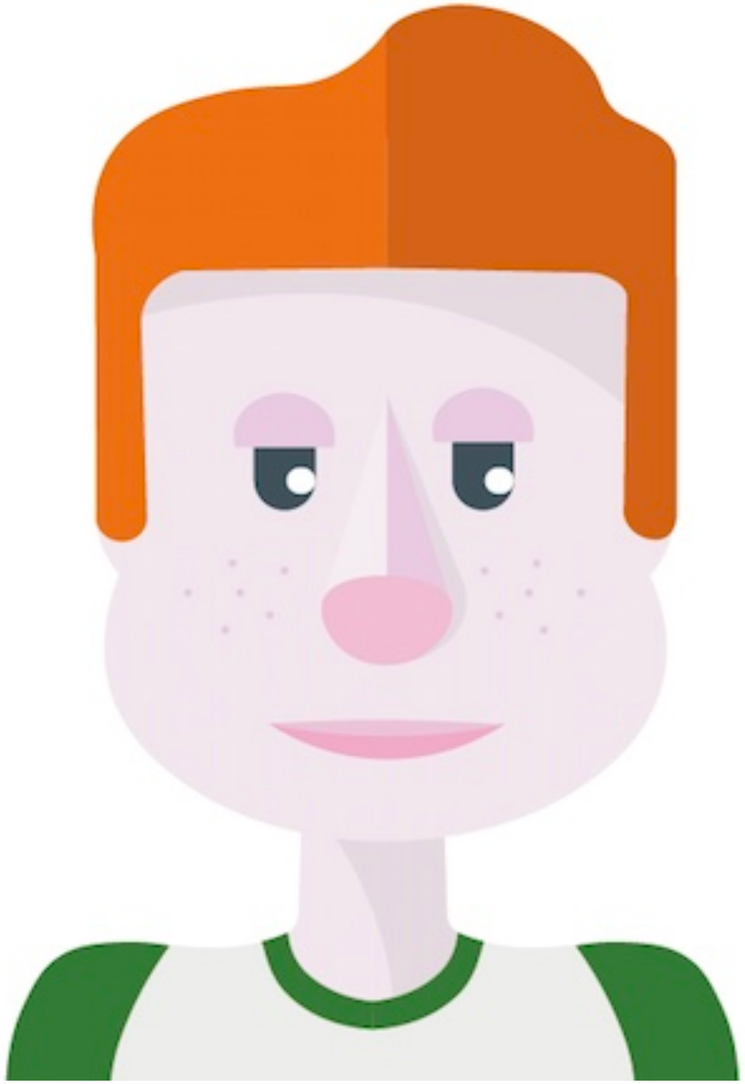
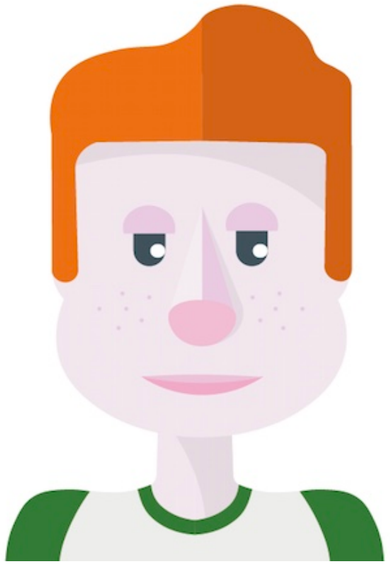




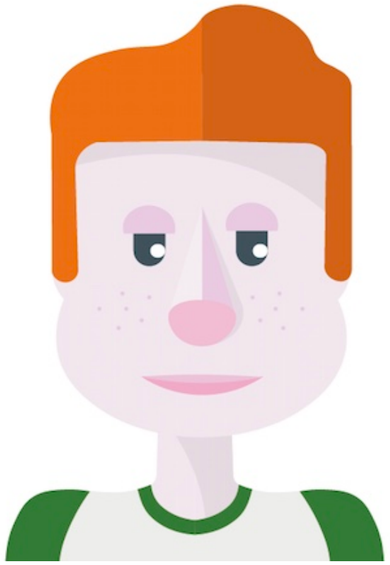
- Show how a ‘born in the cloud’ application infused with AI can create new business opportunities
- How this style of application can incorporate existing z/OS data without sacrificing existing service levels
- New developers can use best of breed APIs and toolchains to create applications





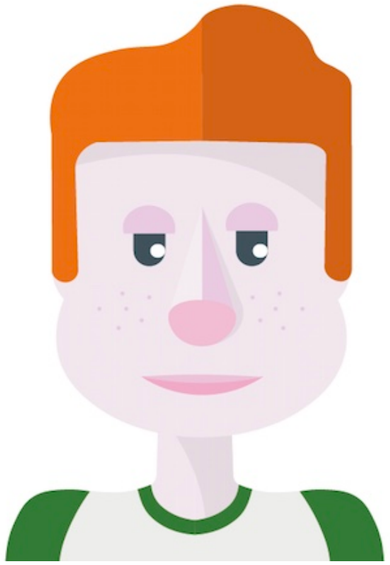
About Kevin

- Kevin is 8 years old
- Kevin wants to get the Monkeybox Radar Bike
- Kevin’s parents said he needs to earn the money to buy the bike himself



What does he need?

- To check that his parents have given him his chore money
- To find out how close he is to getting his new bike
- He wants to be able to talk to his bank, not use a complicated interface



How can he do this?

- Kevin talks to his parents about what he needs
- Kevin’s parents research what bank can offer this
- Kevin’s parents open a bank account at Kix Bank

About Fiona

- Fiona is a front-end developer for a leading bank
- She wants to differentiate her bank from competitors by creating innovative interfaces
- She wants to build an engaging digital experience for people like Kevin
- She wants to be able to develop and code in a language of her choice

What does she need?

- To be able to react quickly to the demands from her business
- To deliver an engaging front-end that connects with core business function
- To be able to find out which APIs are available to her

How can she do this?

- Use an API management tool, to select the APIs needed to build her solution
- Develop an Alexa skill to allow Kevin to talk to his bank
- Use Watson Assistant to understand what Kevin says
- Transparently connects to the core banking APIs provided by Stan

About Stan

- Long standing Systems Programmer on z/OS
- Has a wealth of experience working on the mainframe
- Has multiple demands on his time

What does he need?

- To stay relevant and agile in a ever changing industry
- To support Fiona by providing APIs that allow her to access core logic
- Needs to maintain resilience, security and speed of service

How can he do this?

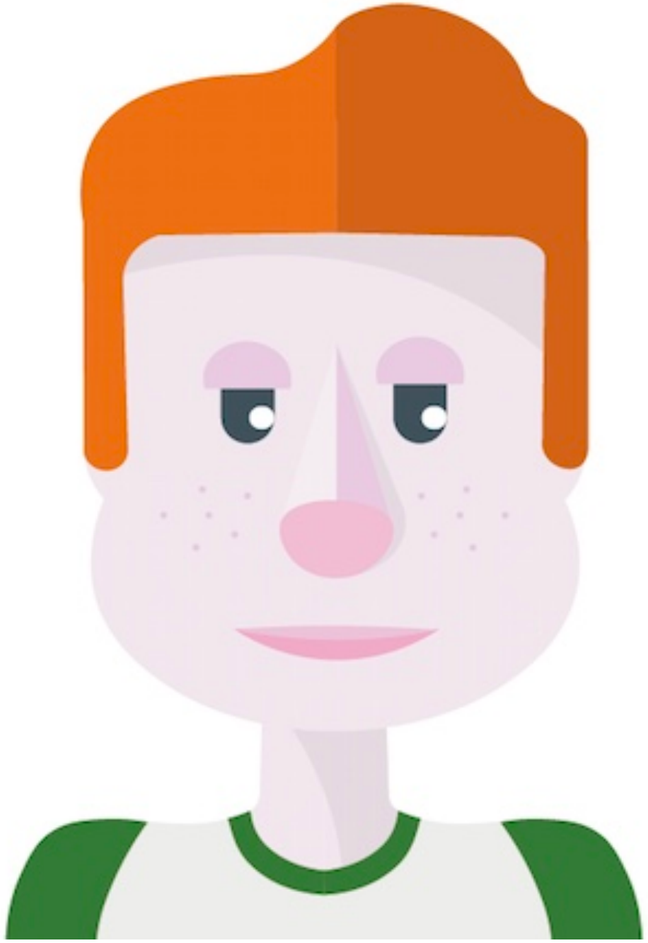
- Use ADDI to highlight potential applications that would be useful APIs
- Use z/OS Connect EE or Liberty in CICS to API enable existing applications
- Deploy new APIs to API Management

What is the value to our personas

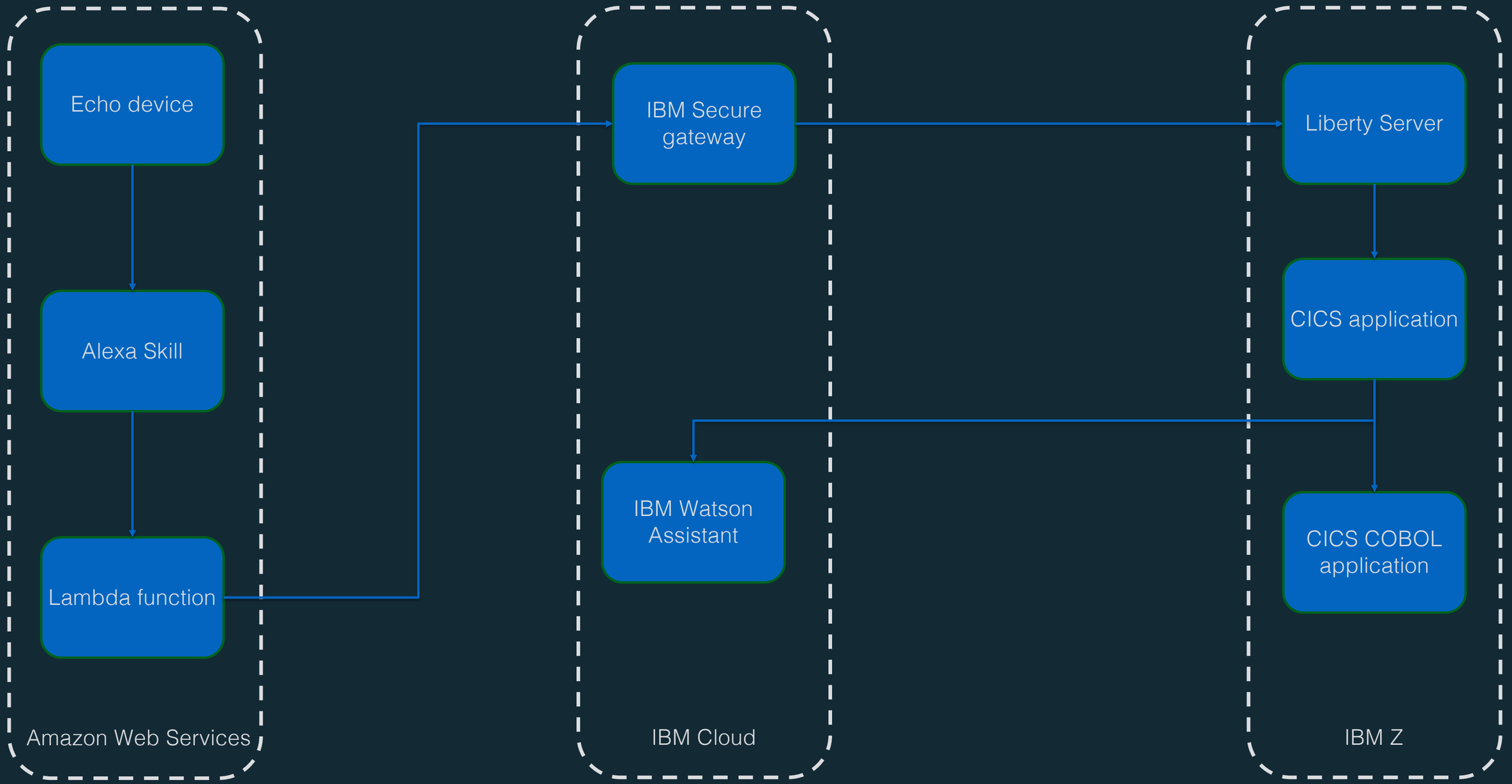
- Fiona can build a new digital experience for customers
- She can improve customer retention and bring in new customers
- She can easily create new applications by bringing API’s to mainframe

- Stan wants to stay relevant by adopting new technologies
- He is able to make existing mainframe data accessible
- He can expose existing assets with less risk

Demo



Architecture



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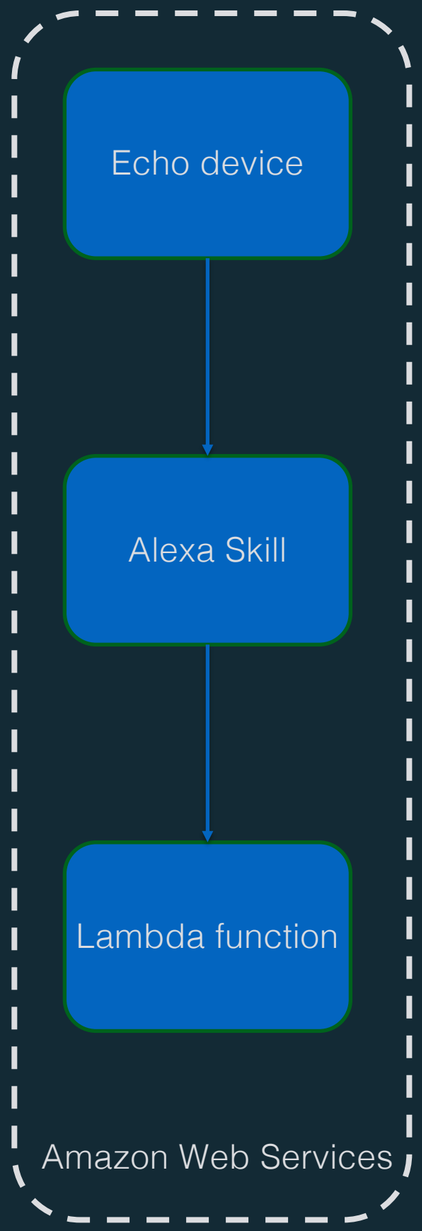
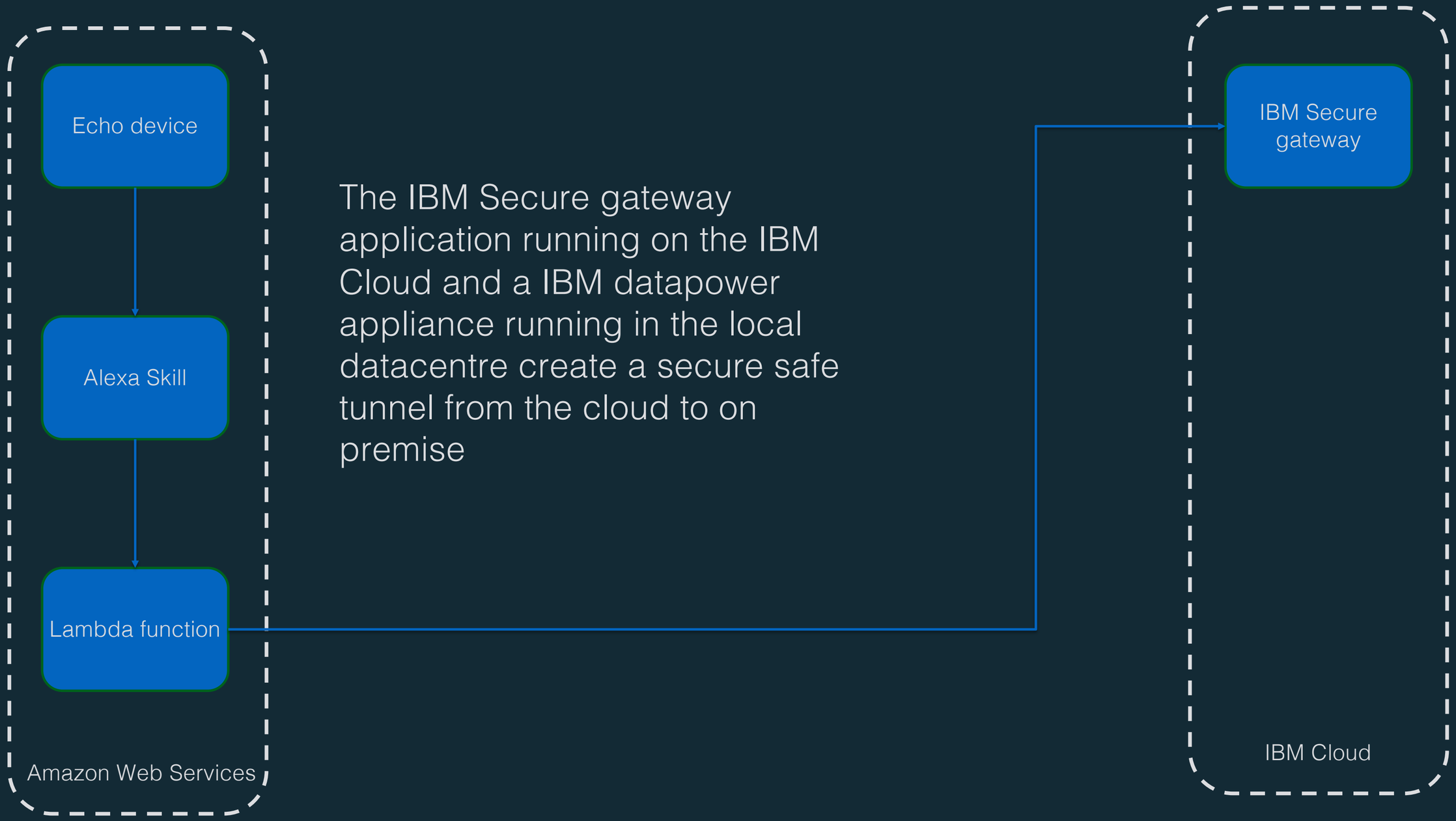


The Echo device (consumer unit) is associated to a new Alexa Skill through the user's amazon ID

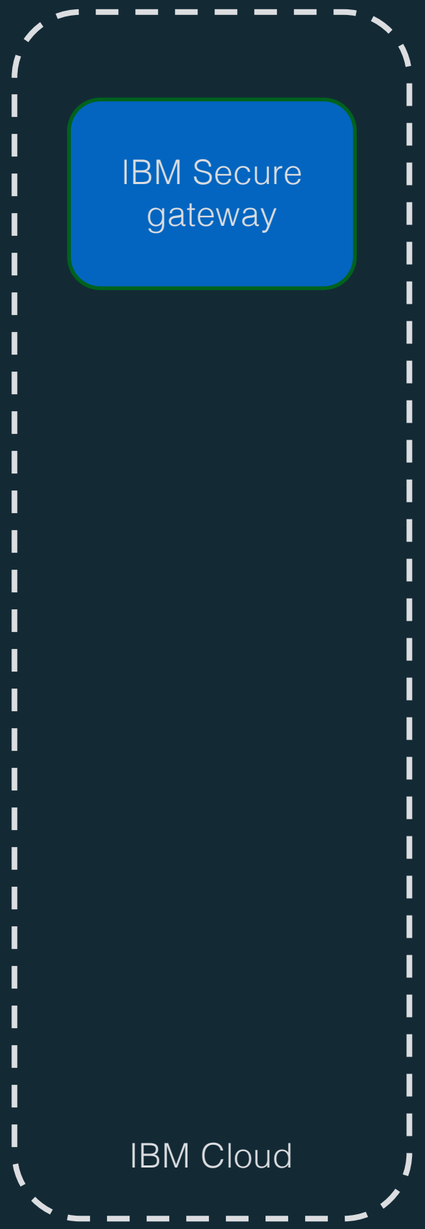
The Alexa skill performs speech to text translation and calls a lambda function running on AWS to transfer control to the IBM Cloud

Architecture



The IBM Secure gateway application running on the IBM Cloud and a IBM datapower appliance running in the local datacentre create a secure safe tunnel from the cloud to on premise

Architecture



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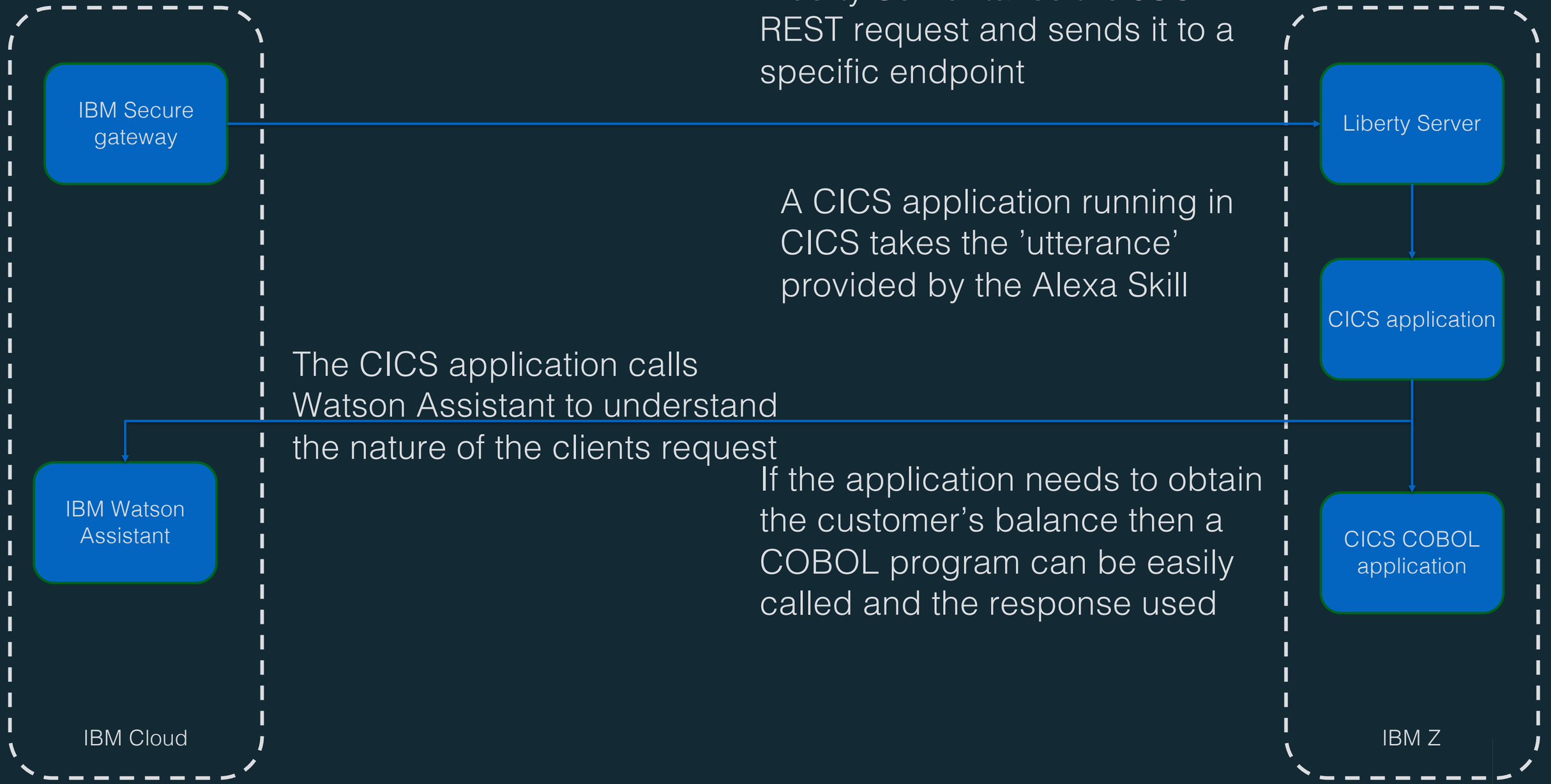

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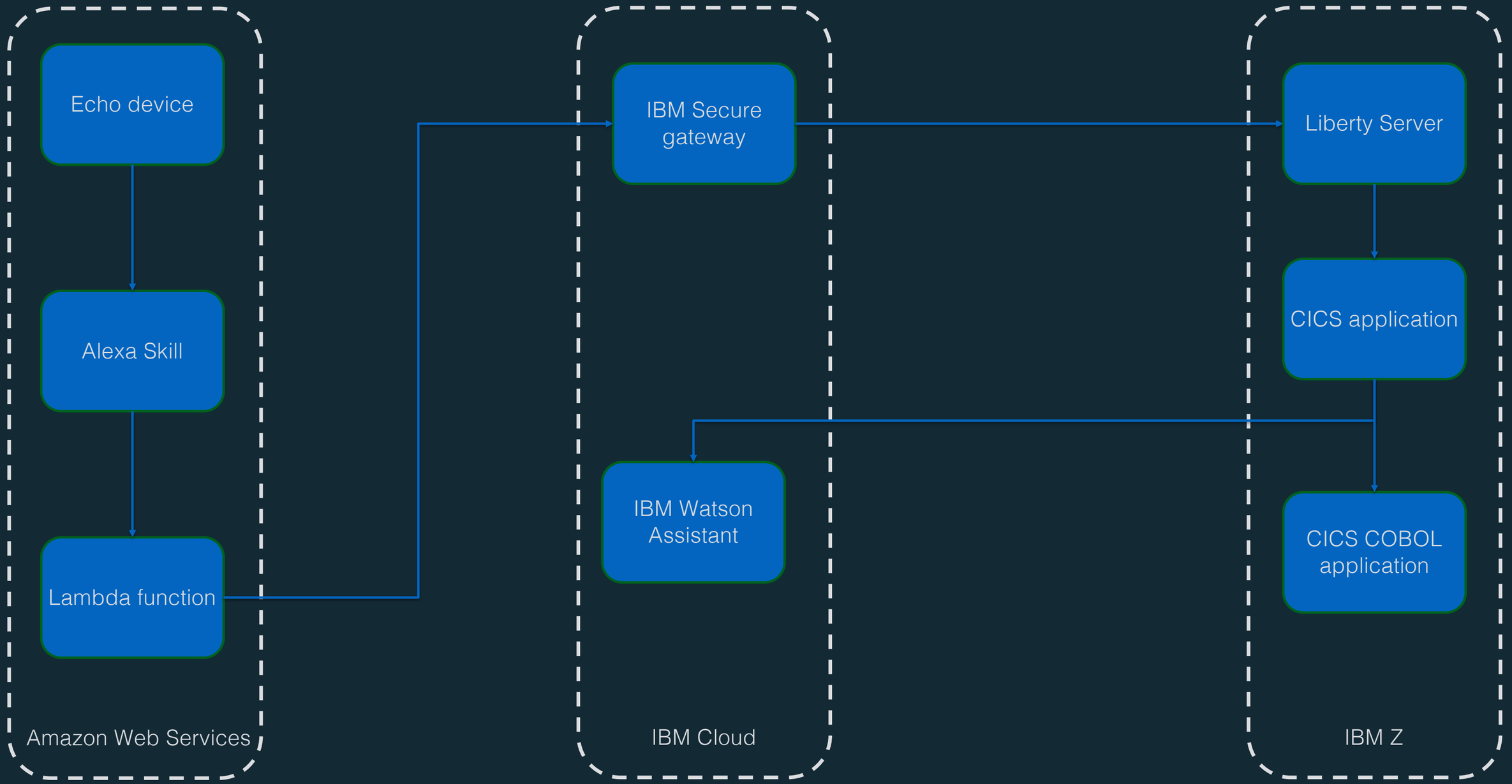
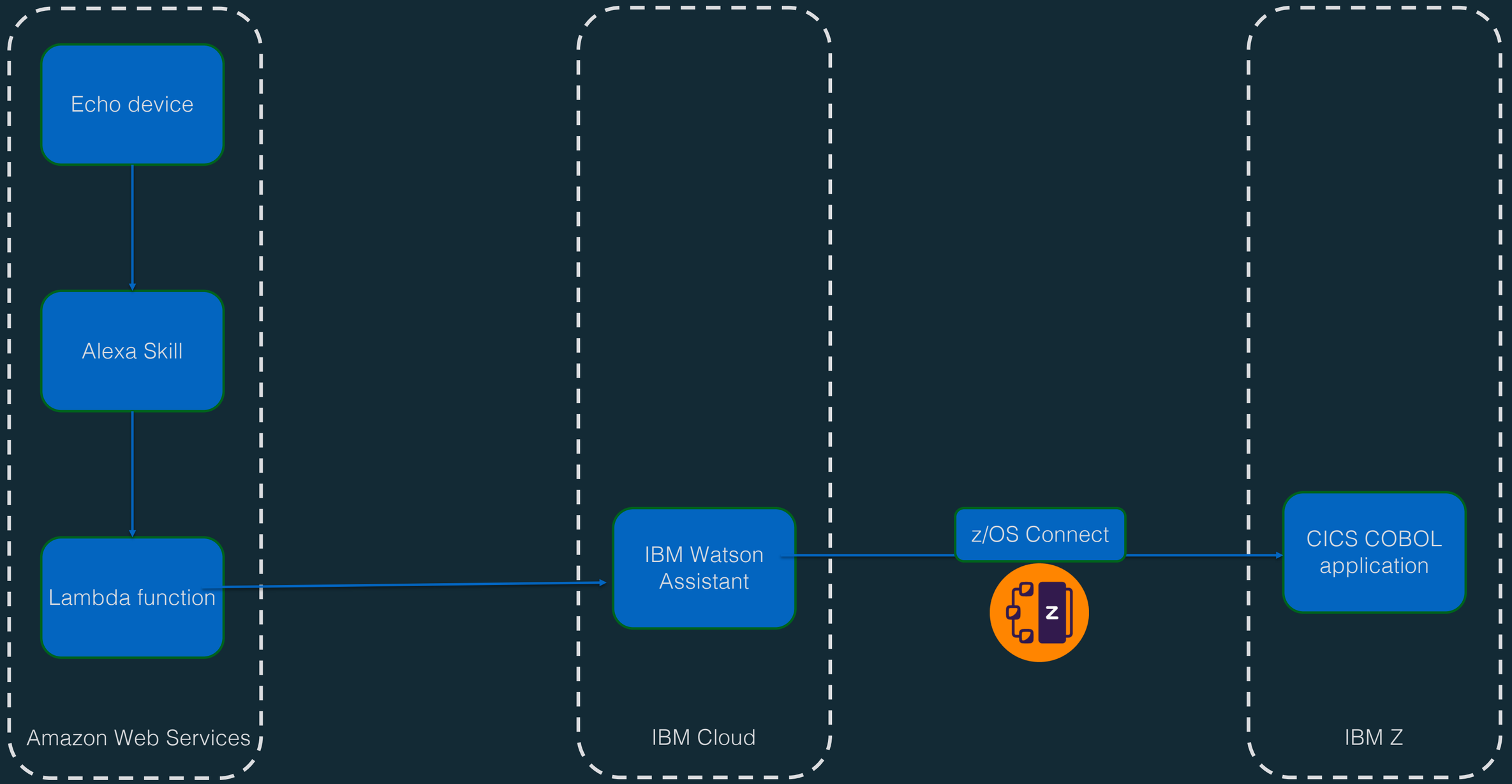


Alternative architecture

Alternative architecture

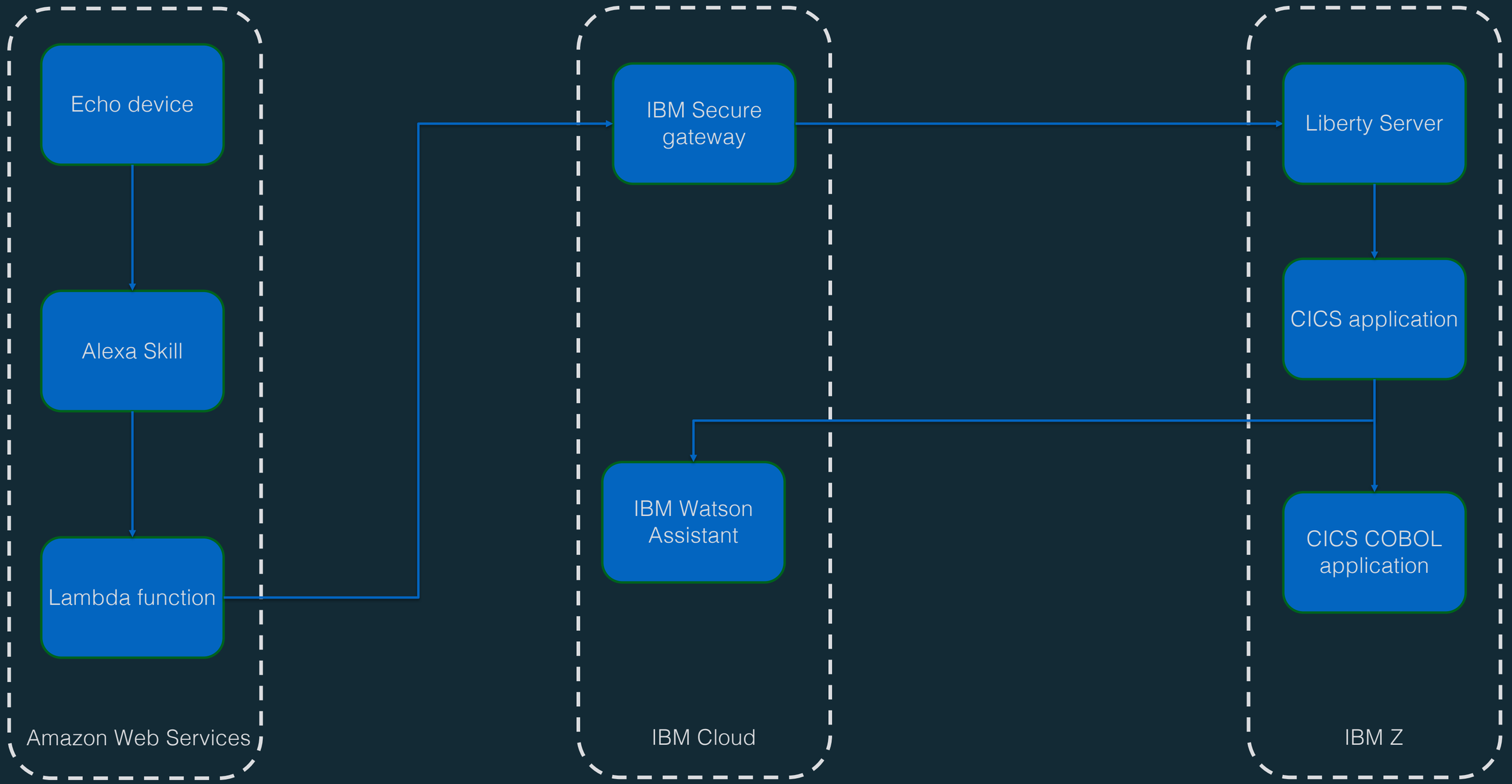


Just in case you don’t believe me....

How does Watson convert “How much is in my savings account?” into something meaningful for CICS to use?

What about authentication?

Extended Architecture



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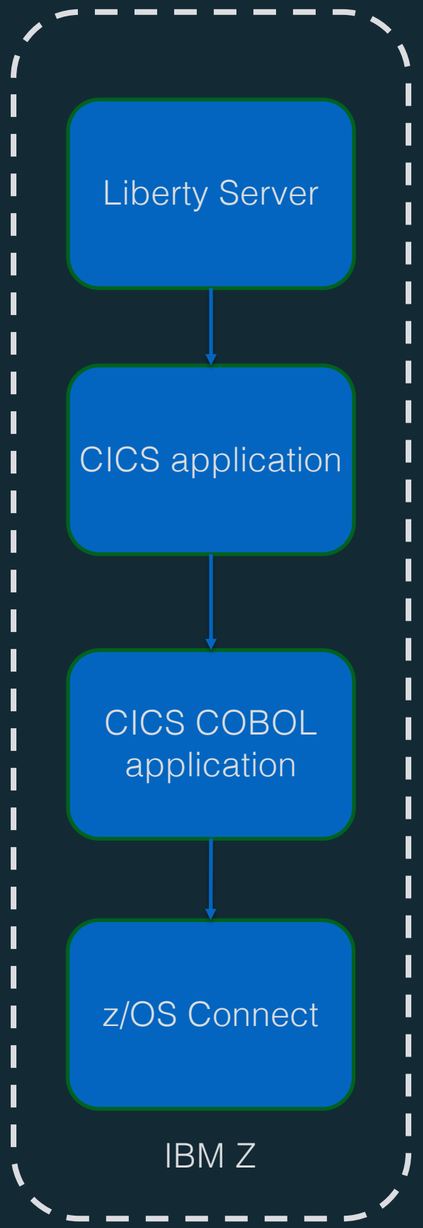

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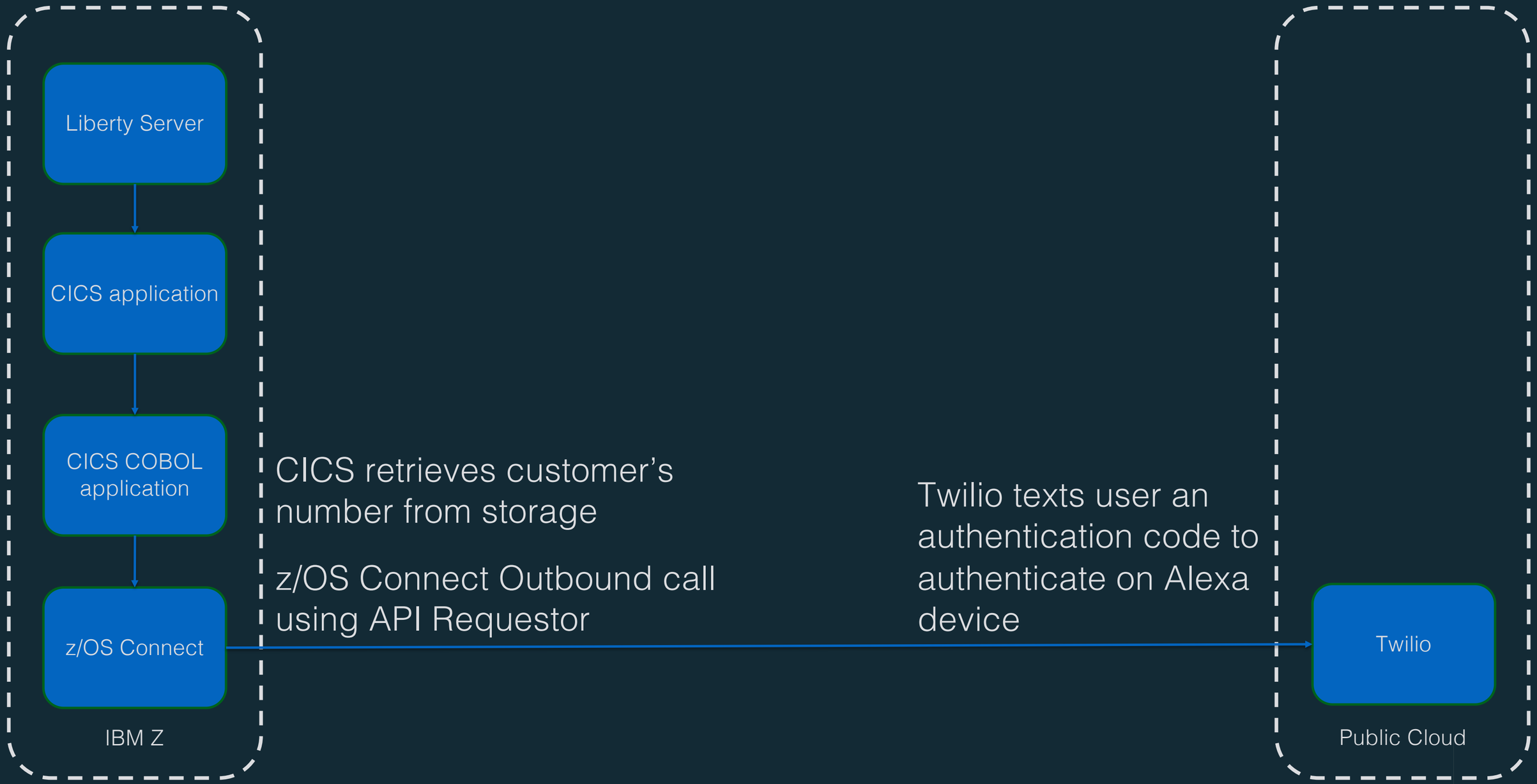

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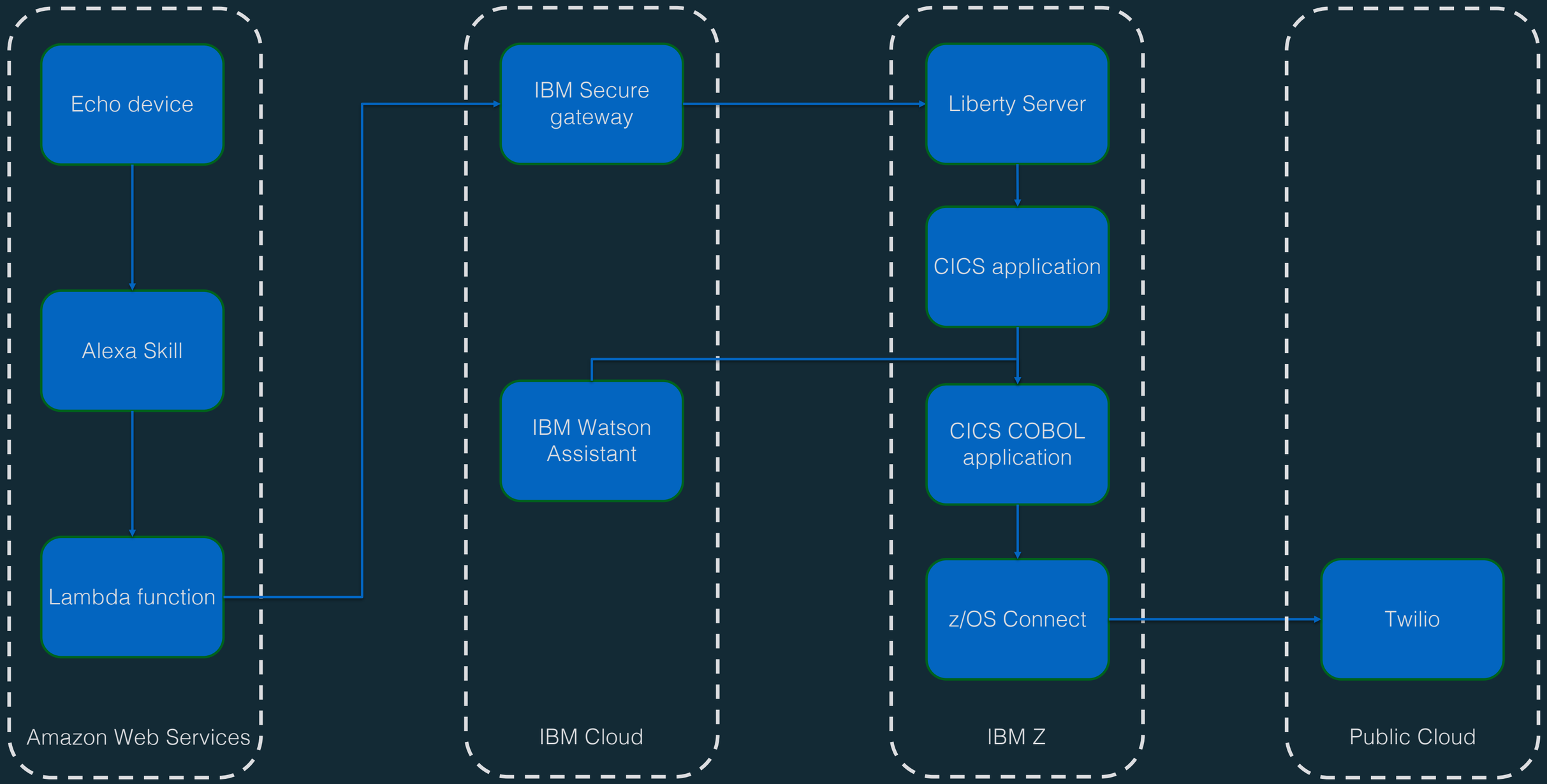


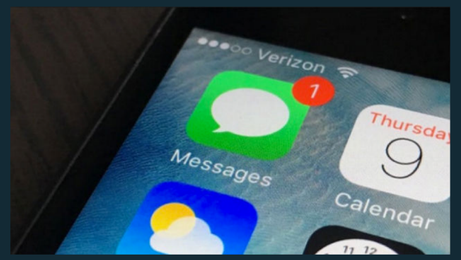
”Please read out the authentication code”

What’s my bank balance

What’s my bank balance

What’s my bank balance

“1234”



What’s my bank balance

Intent: Bank Balance
Entity: Current Account

Authentication code: 1234

Authentication code: 1234

twilio

Authentication code: 1234

“Your account 92738393 has balance £278”

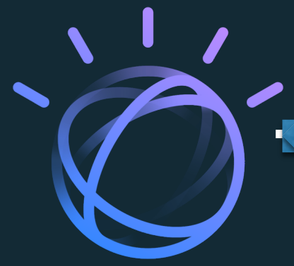
1234

“Your account 92738393 has balance £278”

1234

1234

“Your account 92738393 has balance £278”

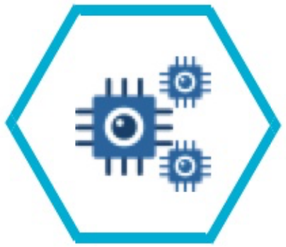


1234

Authenticated

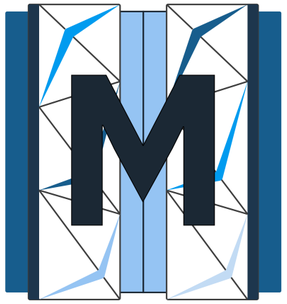
How else could you modernise the mainframe?

Hey Siri



Internet Of Things

IBM



MainframerZ

meetup

MainframerZ is a community of app devs, sys progs, and anyone else with an interest in Z Systems.

Join one of our events and get to know like-minded people who are also passionate about the mainframe - there will be plenty of pizza!

Join the group at ibm.biz/z-meetup-group