IBM Integration Bus on Cloud
and
App Connect Enterprise on Bluemix

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Hybrid Integration Development

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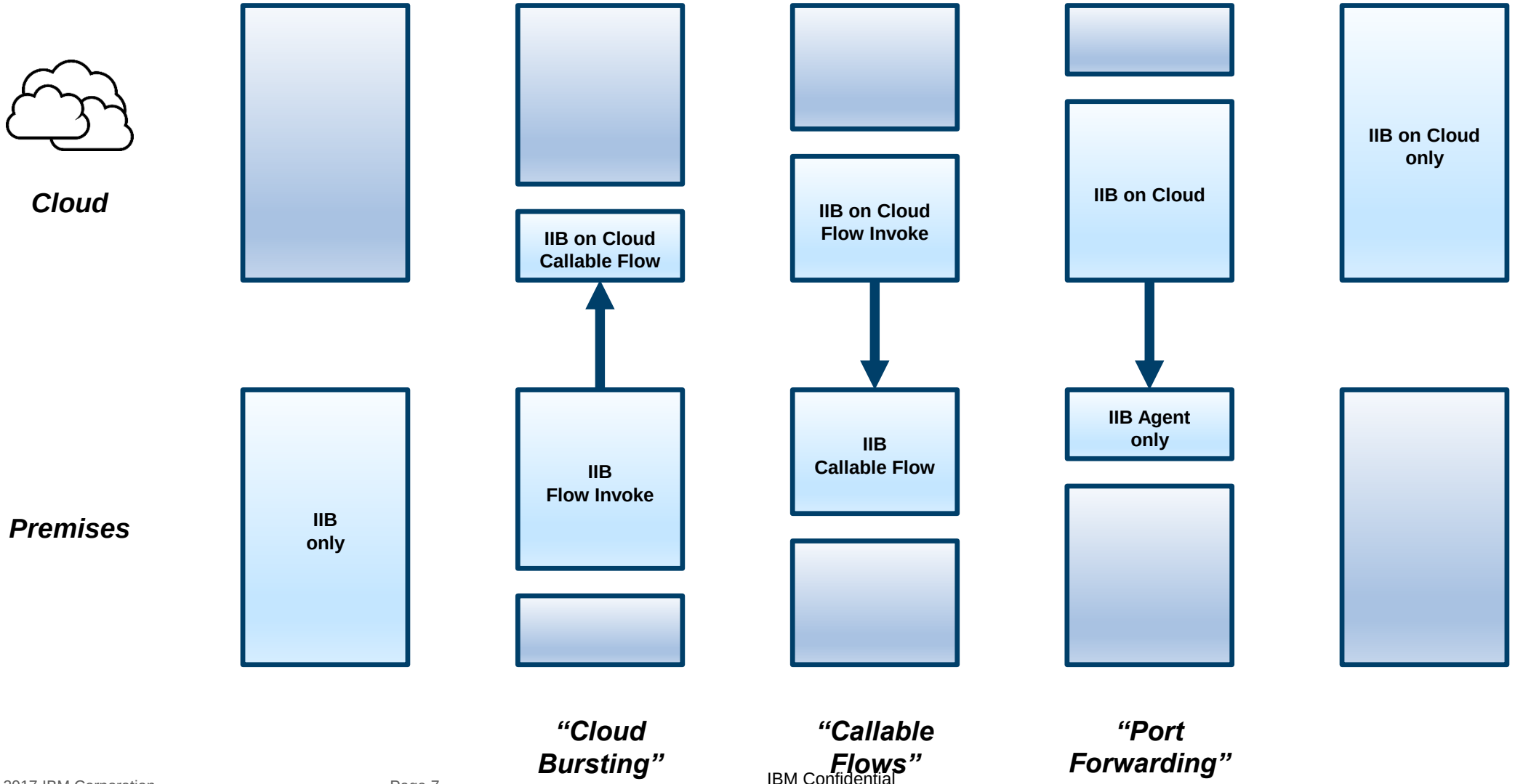
Integration Bus on Cloud (IIBoC) 1 Slide Summary

- Fully Managed Integration Bus Cloud Offering
- Based off Bluemix Container Service (in Dallas)
- Supports subset of the nodes available in IIB
- PAYG and Subscription based around 4GB Containers
- Integration runs as a DataFlowEngine in a standalone mode
- Stateless Integrations
- Free 30 Day Trial

Supported nodes

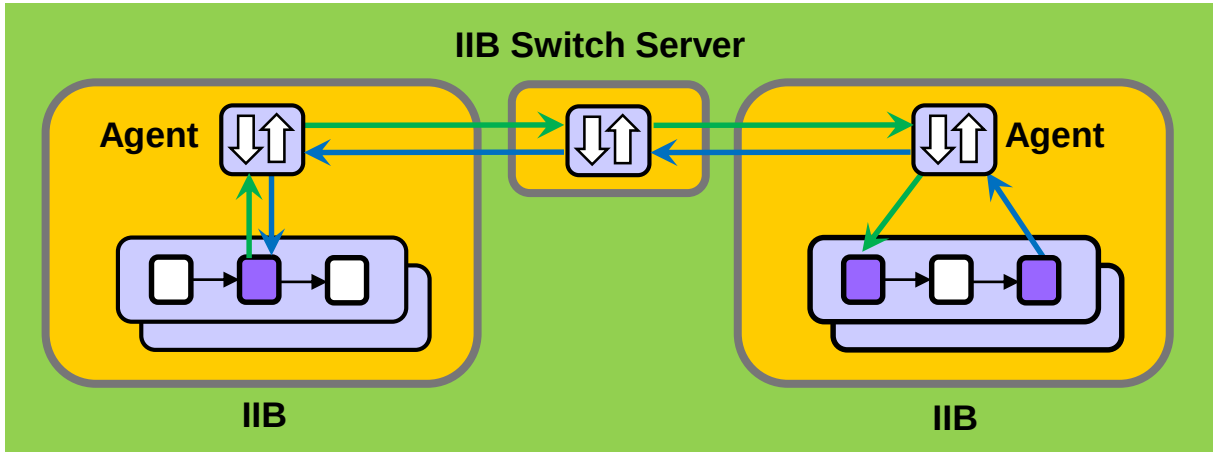
- CallableFlowAsyncInvoke
- CallableFlowAsyncResponse
- CallableFlowInvoke
- CallableInput
- CallableReply
- Compute
- Database
- DatabaseInput
- Filter
- FlowOrder
- HTTPAsyncRequest
- HTTPAsyncResponse
- HTTPHeader
- HTTPInput[1]
- HTTPReply
- HTTPRequest
- Input
- JavaCompute
- Label
- Mapping
- MQGet
- MQInput
- MQOutput
- MQReply
- Output
- Passthrough
- ResetContentDescriptor
- RESTAsyncRequest
- RESTAsyncResponse
- RESTRequest
- Route
- RouteToLabel
- SOAPAsyncRequest
- SOAPAsyncResponse
- SOAPEnvelope
- SOAPExtract
- SOAPInput
- SOAPReply
- SOAPRequest
- Throw
- Trace
- TryCatch
- Validate
- XSLTransform

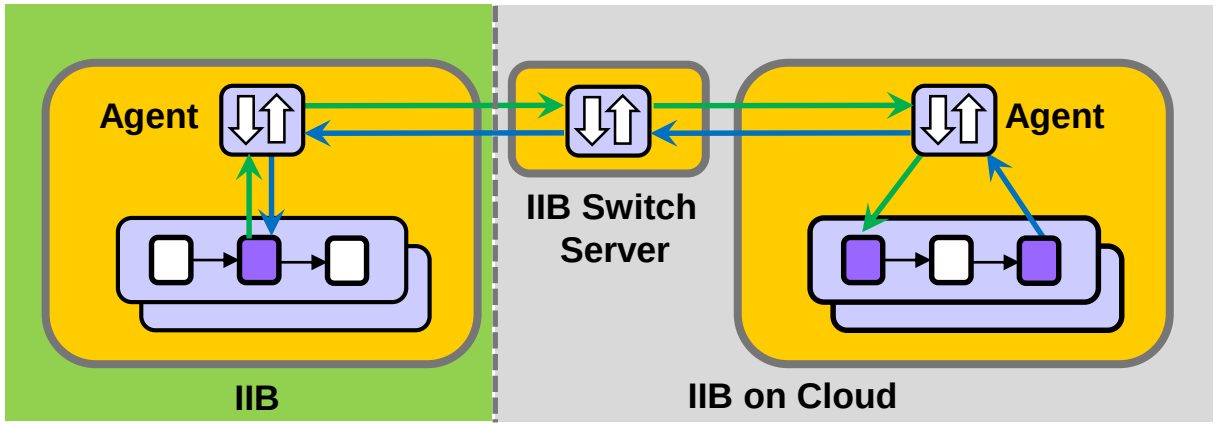
Moving IIB to the Hybrid Cloud



Hybrid Integration using the IIB Switch component

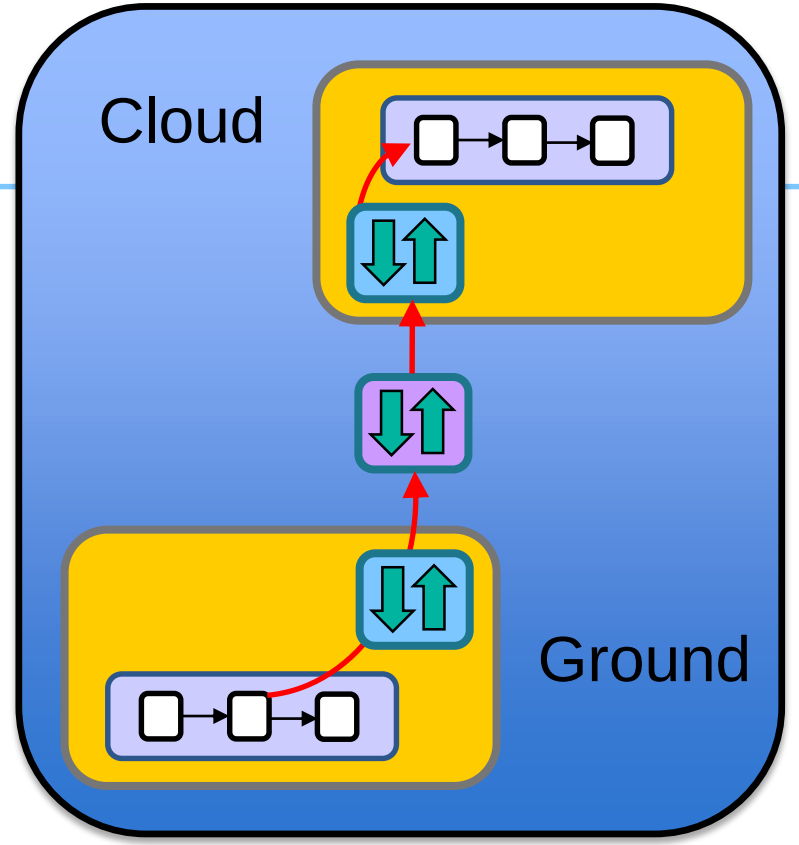
- Simpler to run IIB in a cloud architecture due to deployment processing and flow runtime all coordinated using a single OS process
- Split processing between different Integration Servers
- Flows communicate using a Switch server and connectivity agents
- If callable flows are deployed in IIB (on-prem, in Docker, or in another vendor's IaaS such as AWS or Azure) then the agent contains certificates to secure the web socket connections to the Switch server
- If splitting work between IIB and IIB on Cloud, the Switch server is created and managed for you in the cloud

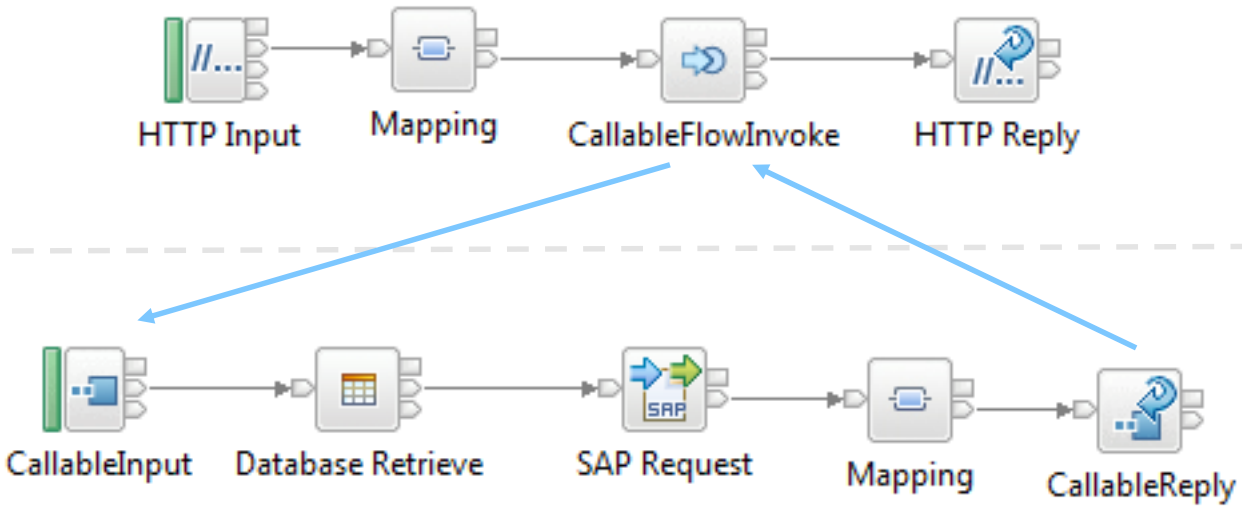


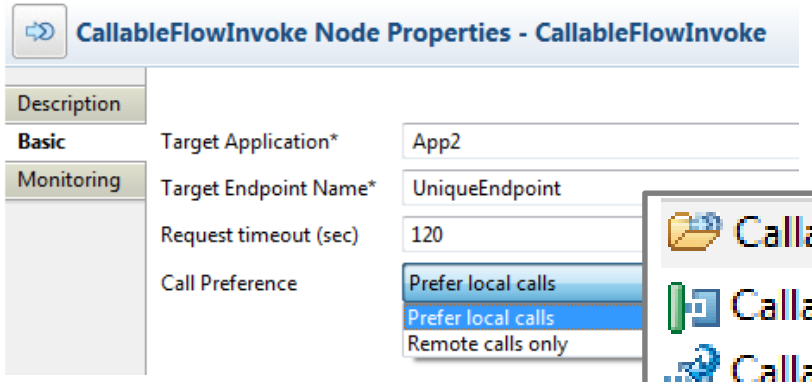


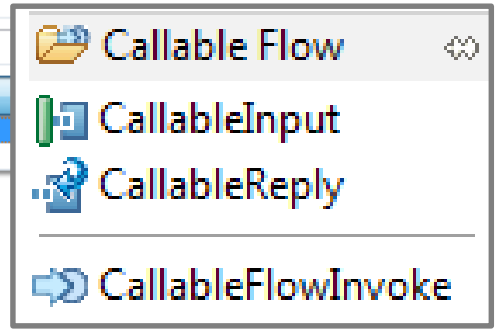
Callable Flows

- True Hybrid integration is achievable right now!
- Cloud burst workload when needed!
- Easily connect IIB running on ground with IIB on Cloud, and in Docker, pure application, other IaaS vendors etc.
- Dynamically control the CallableFlowInvoke node to route to different message flows for specific message traffic
- Dynamic behaviour is also useful for on-premise use cases



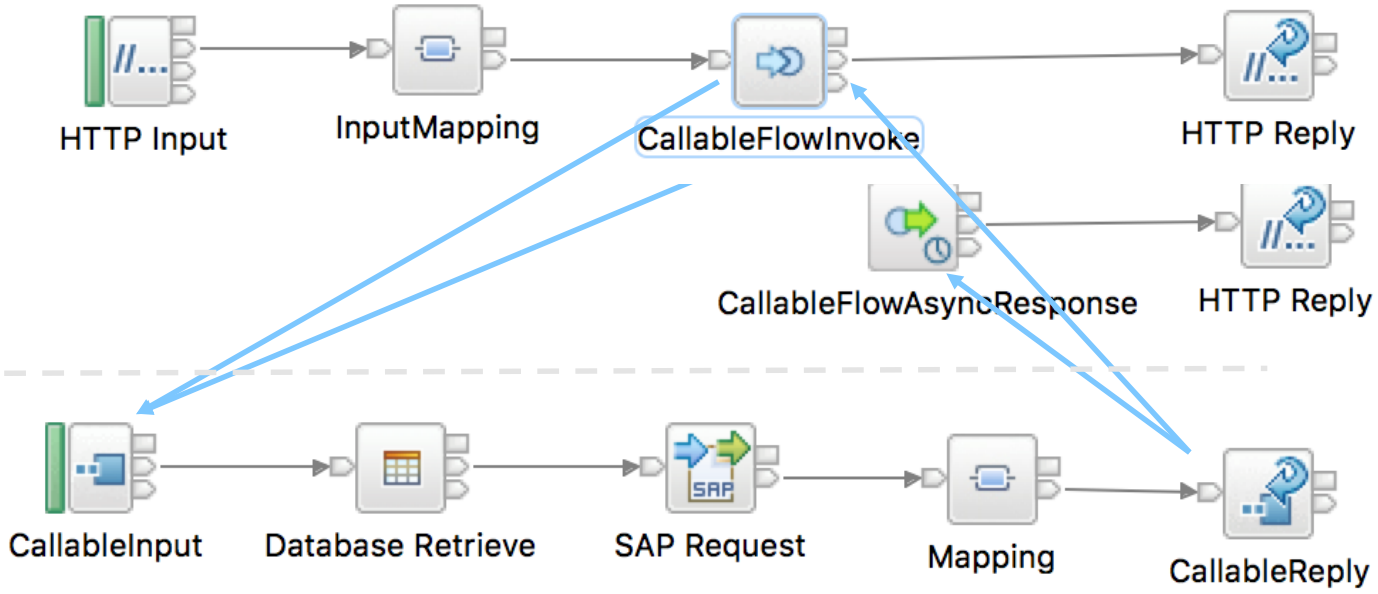


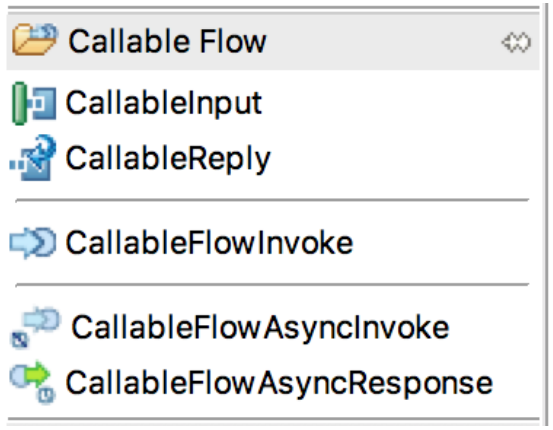




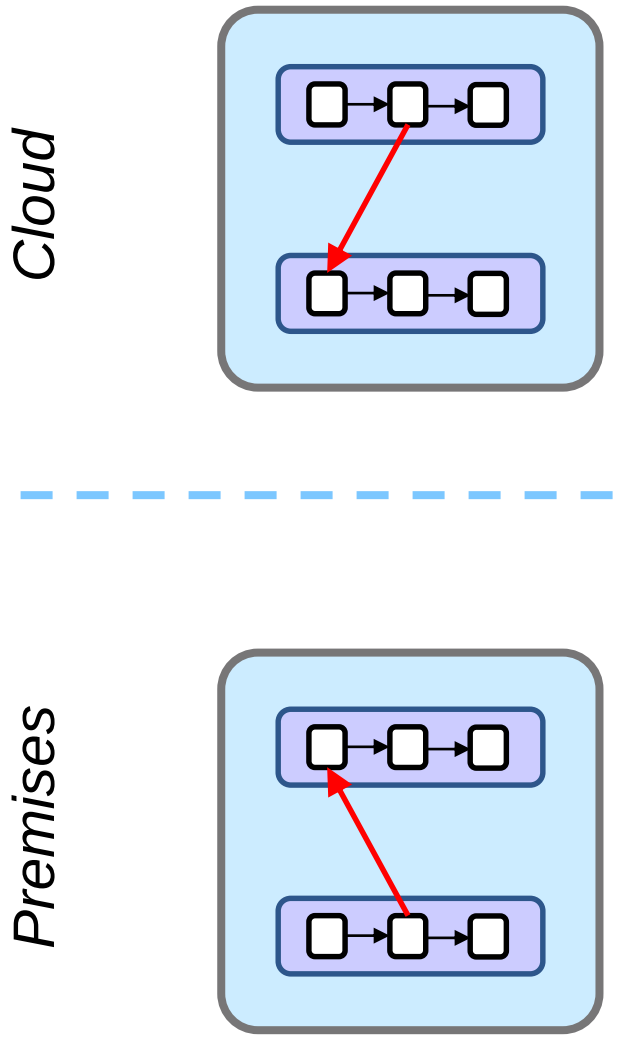
Callable Async Flows

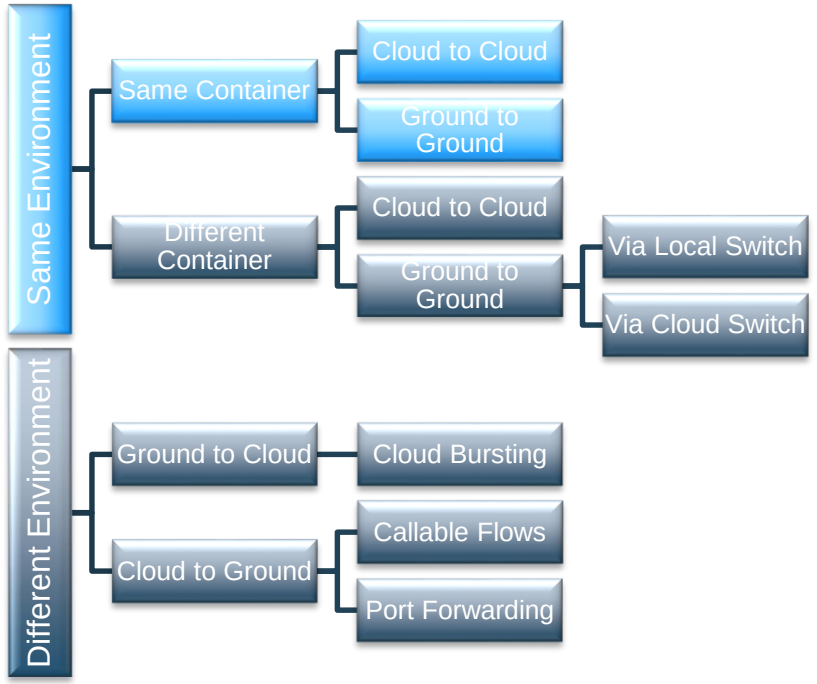
- Releases invoking threads
- More effencient when working with high latency or high duration callable flows
- Improve utilisation of machine running Invoking flows





Connectivity Between Cloud and Premise





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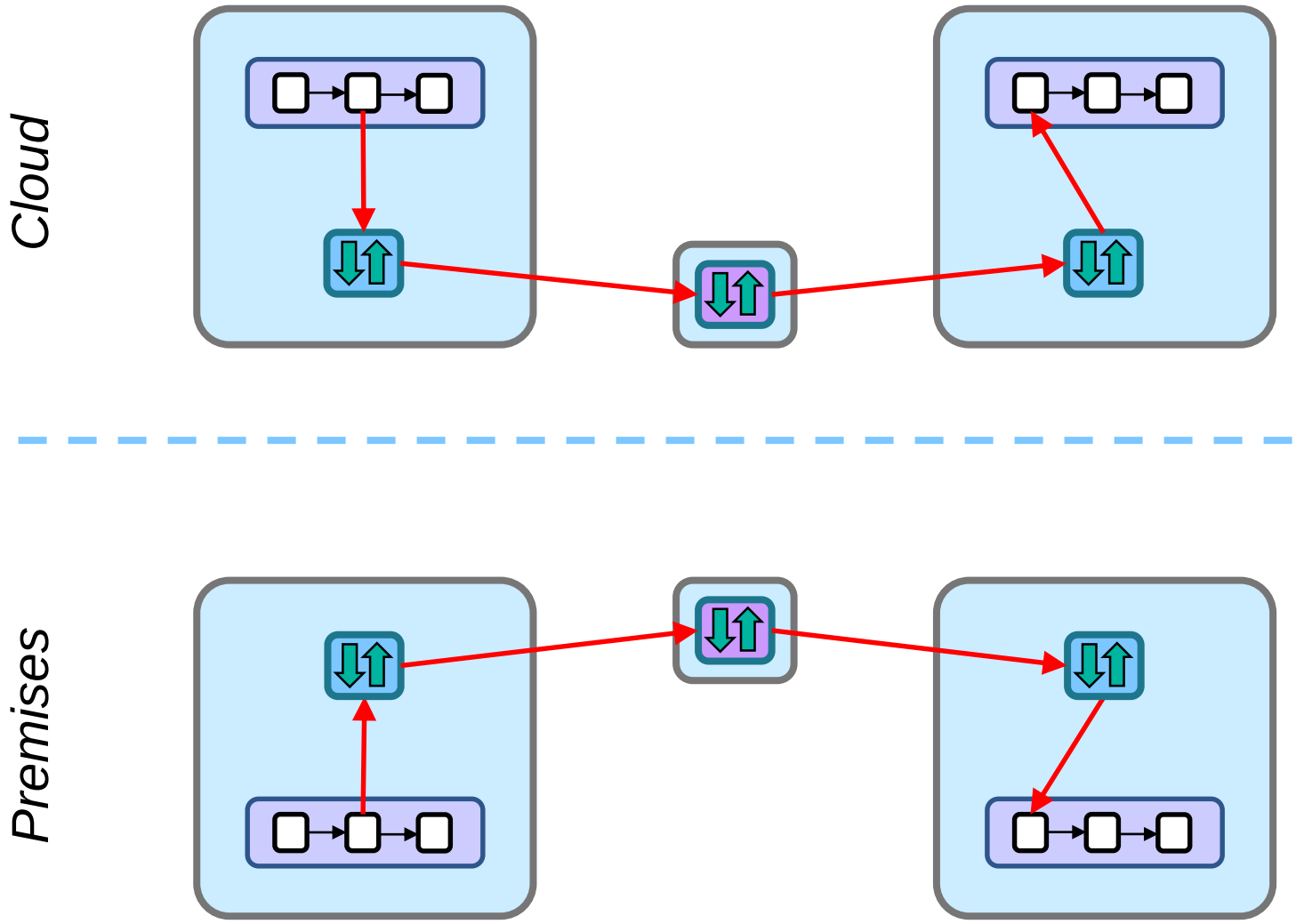

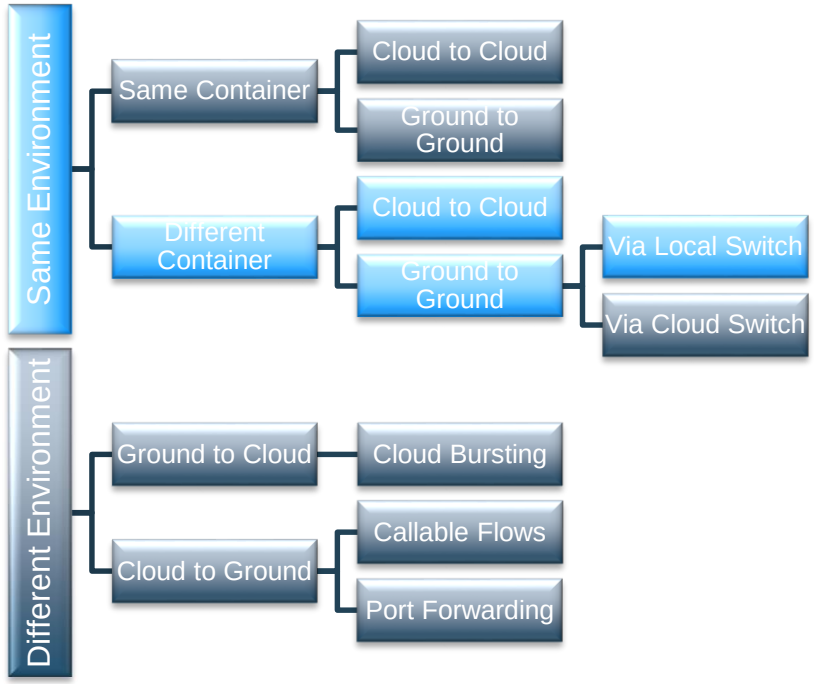

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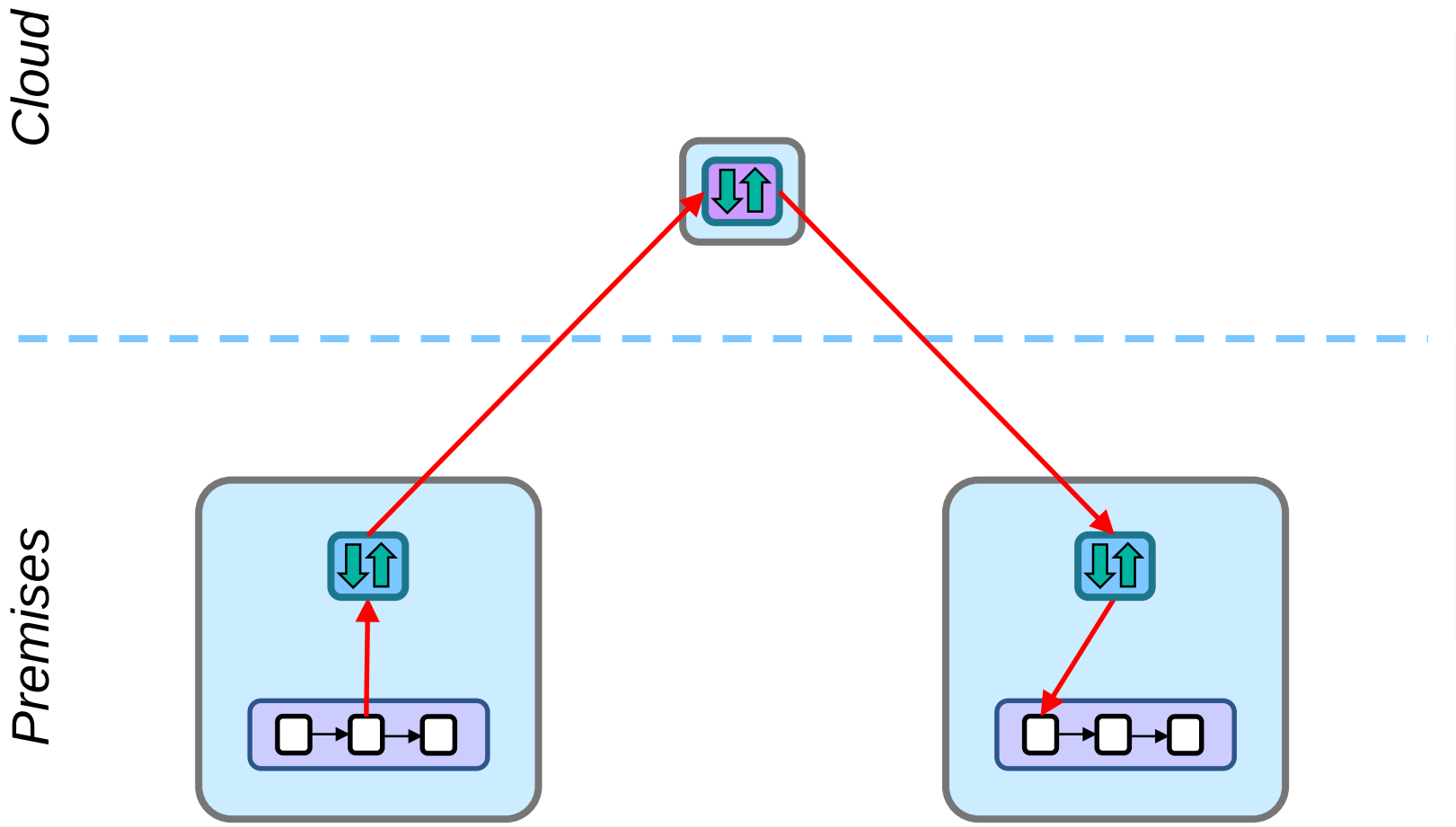

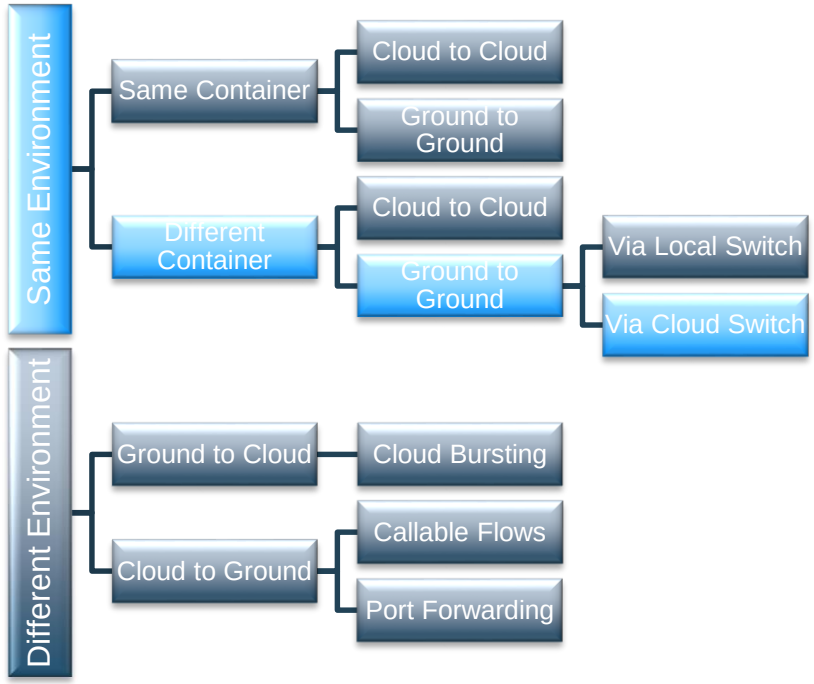

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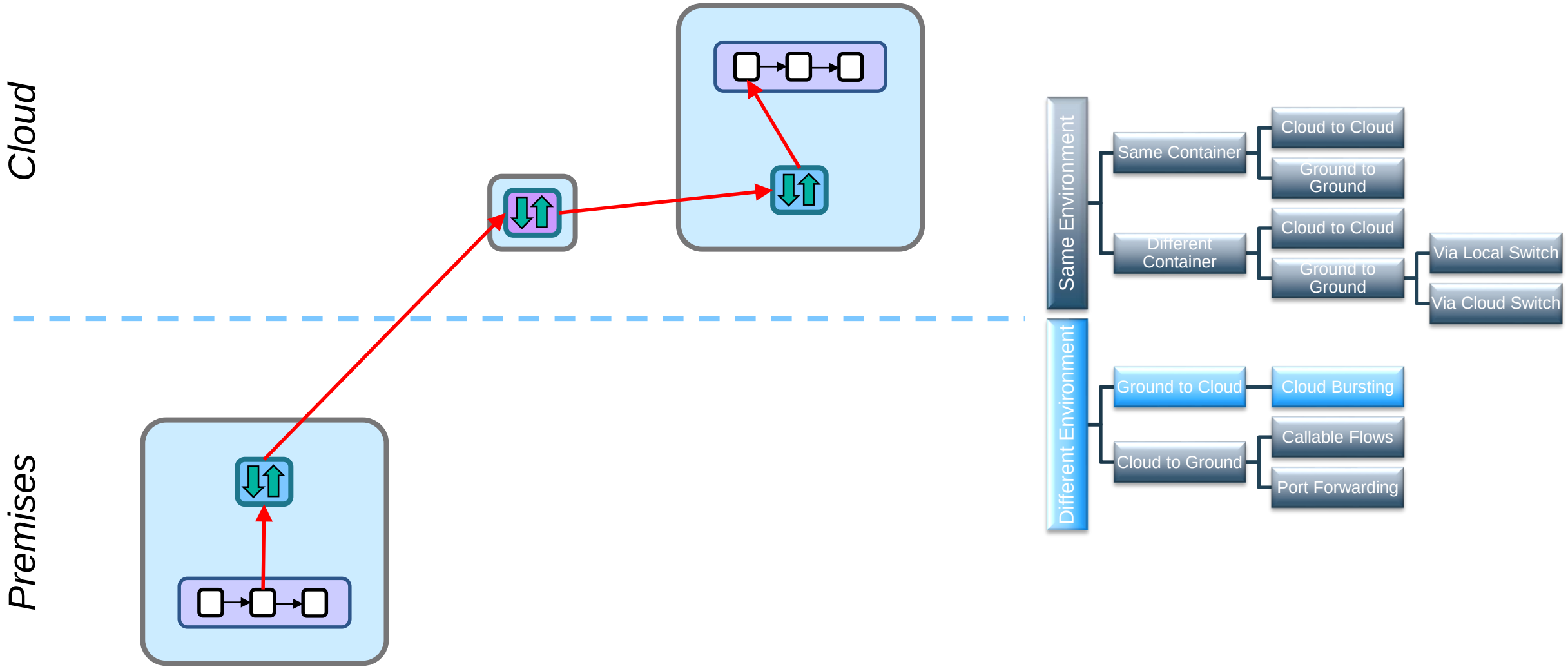

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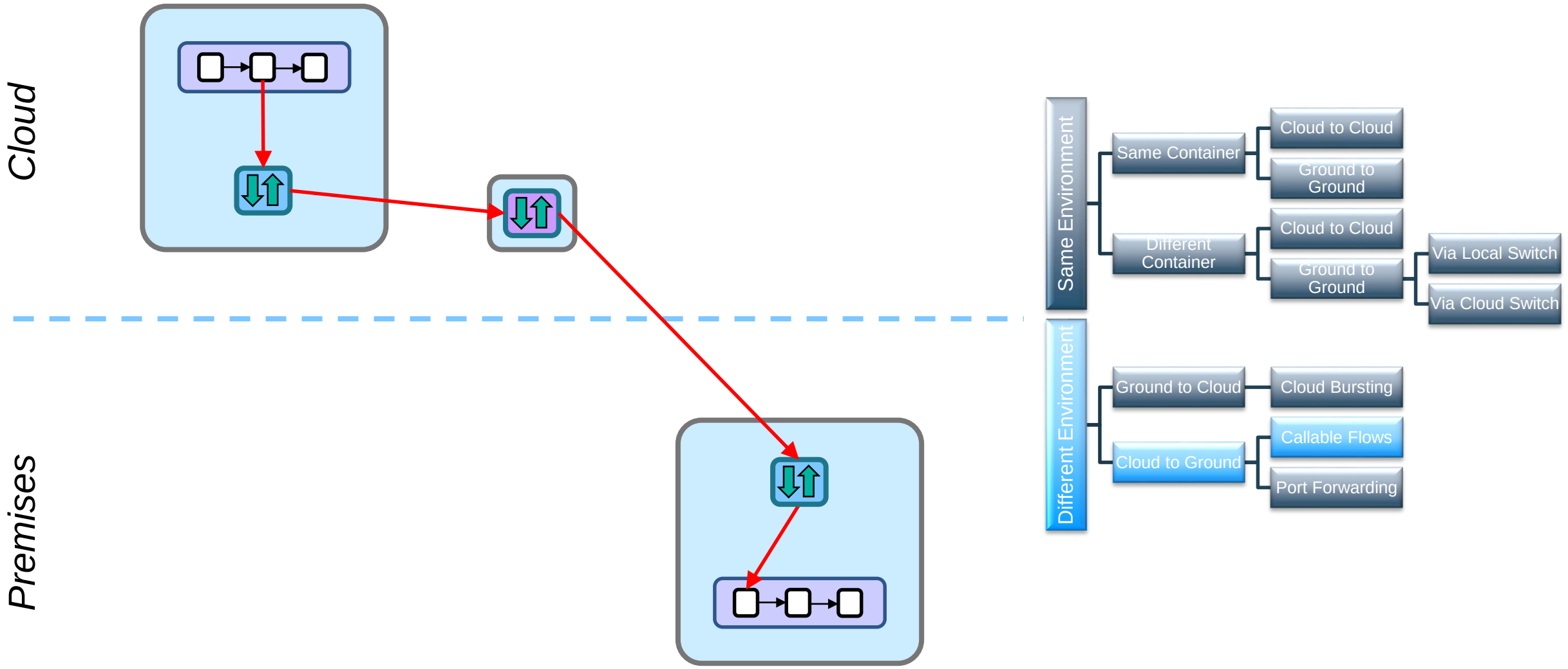

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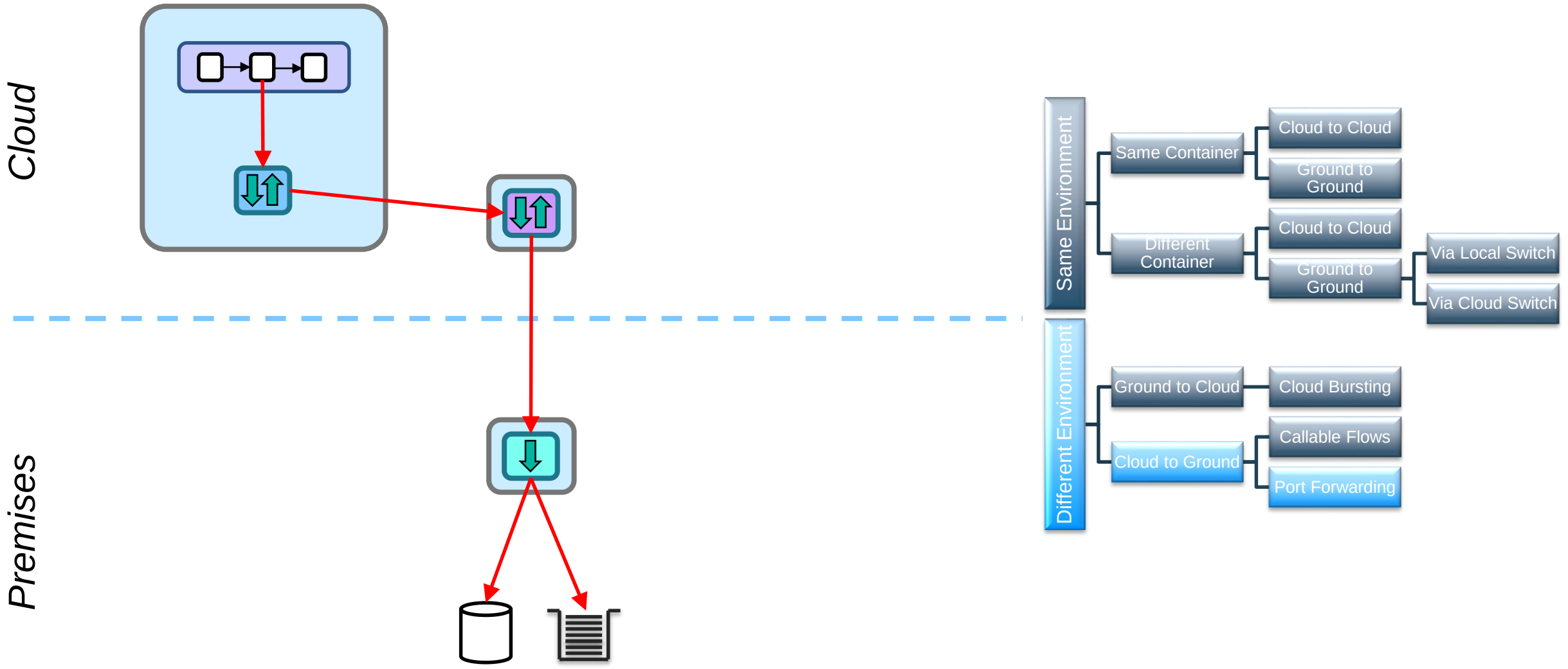
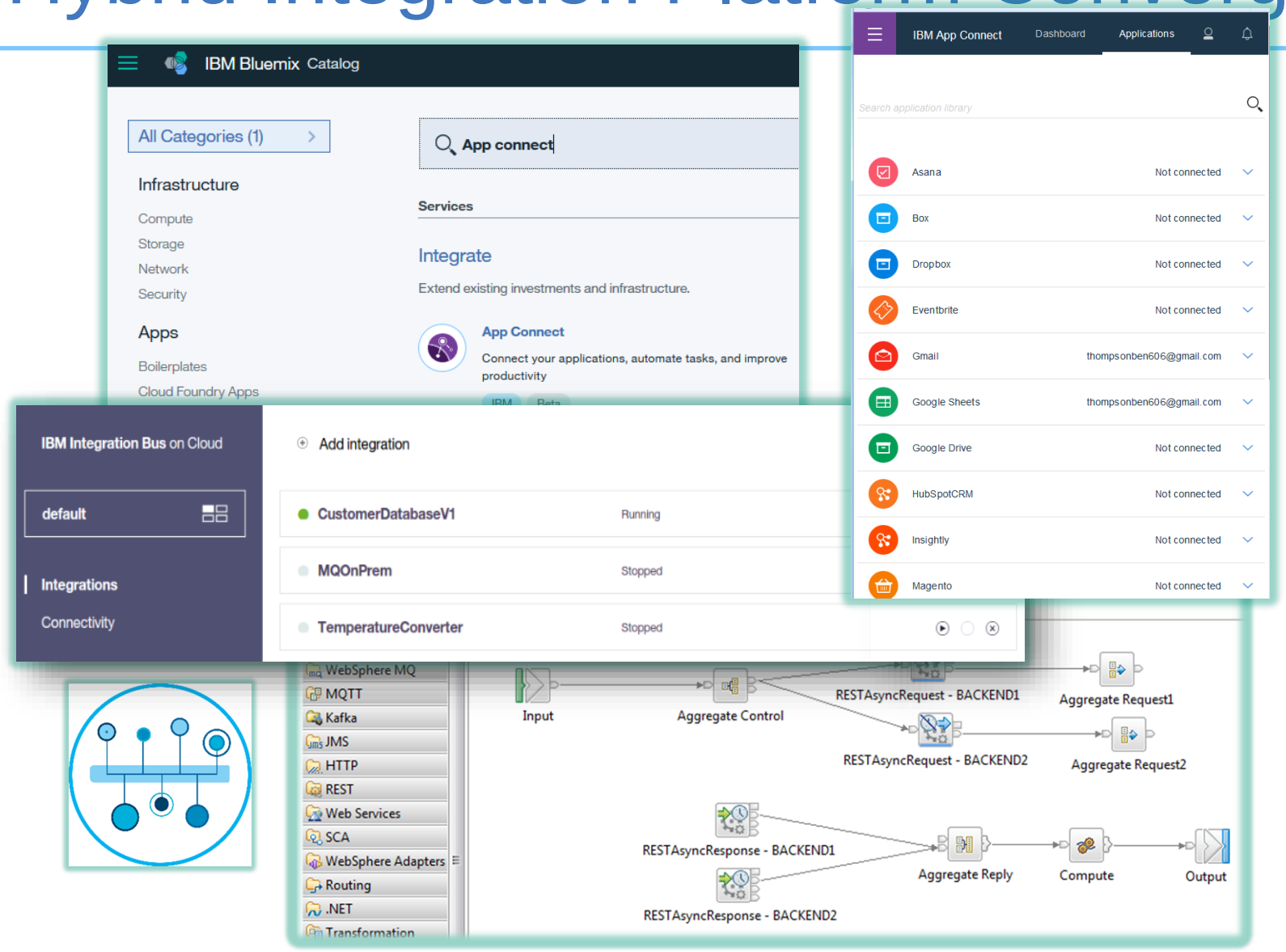


App Connect on Bluemix Enterprise Plan

Hybrid Integration Platform Convergence

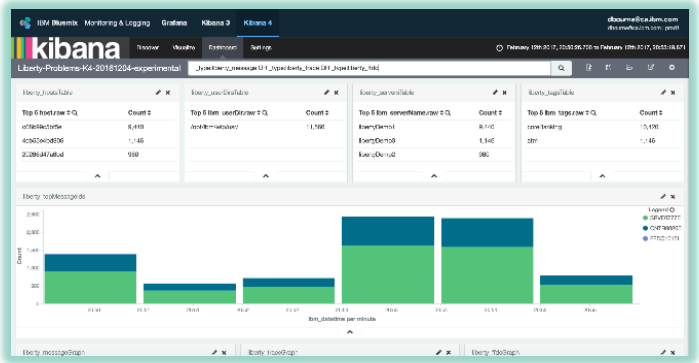


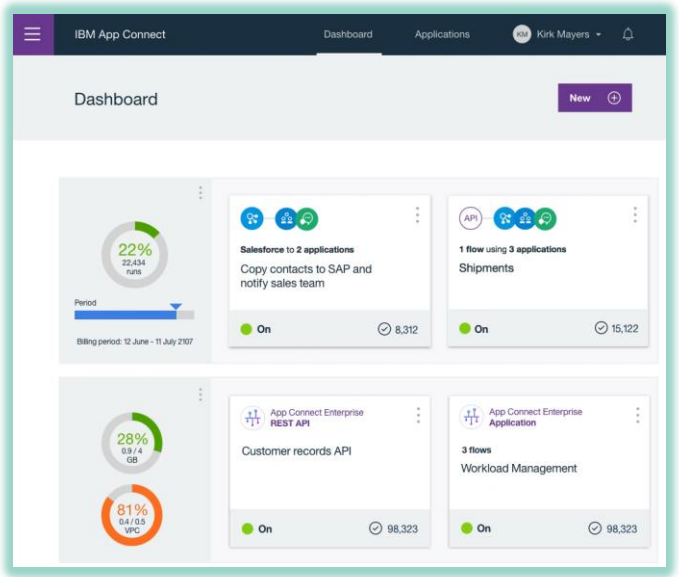
App Connect Enterprise (managed cloud service)

App Connect Enterprise (software on-premise)

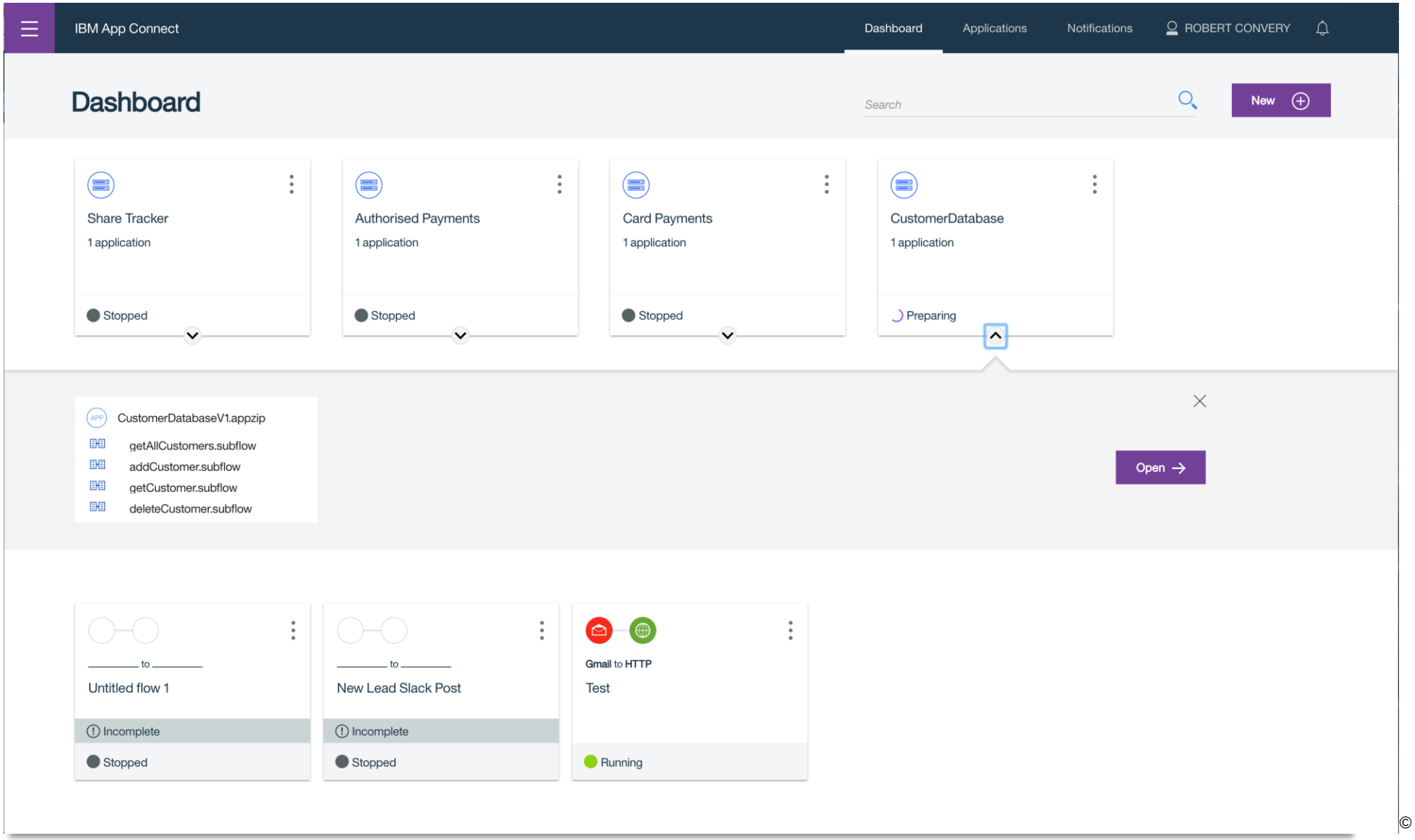
App Connect Enterprise (managed cloud service on Bluemix)

- IIB on Cloud Dashboard and App Connect Professional Designer will merge to become the App Connect Enterprise plan underneath the App Connect Bluemix tile
- From the Bluemix catalog you will create a Service instance for the App Connect Enterprise plan which will allow you to run (side by side):
  - IIB artifacts (deployed as IIB BAR files) containing Apps, Libs, REST APIs, Flows etc.
  - App Connect artifacts (Flows and REST APIs)
- A single monitoring dashboard (Bluemix logging and metrics)
- A single administration dashboard to start and stop
- A common management CLI and API
- At initial launch, development experience is likely to be a mixture of Eclipse based Toolkit and App Connect Designer (more on this in the next session!)
- Licensing and charging paths are still to be decided
  - Likely to include both PAYG and Subscription options
  - Likely to be a mixed charging model based on both number of invocations and container size

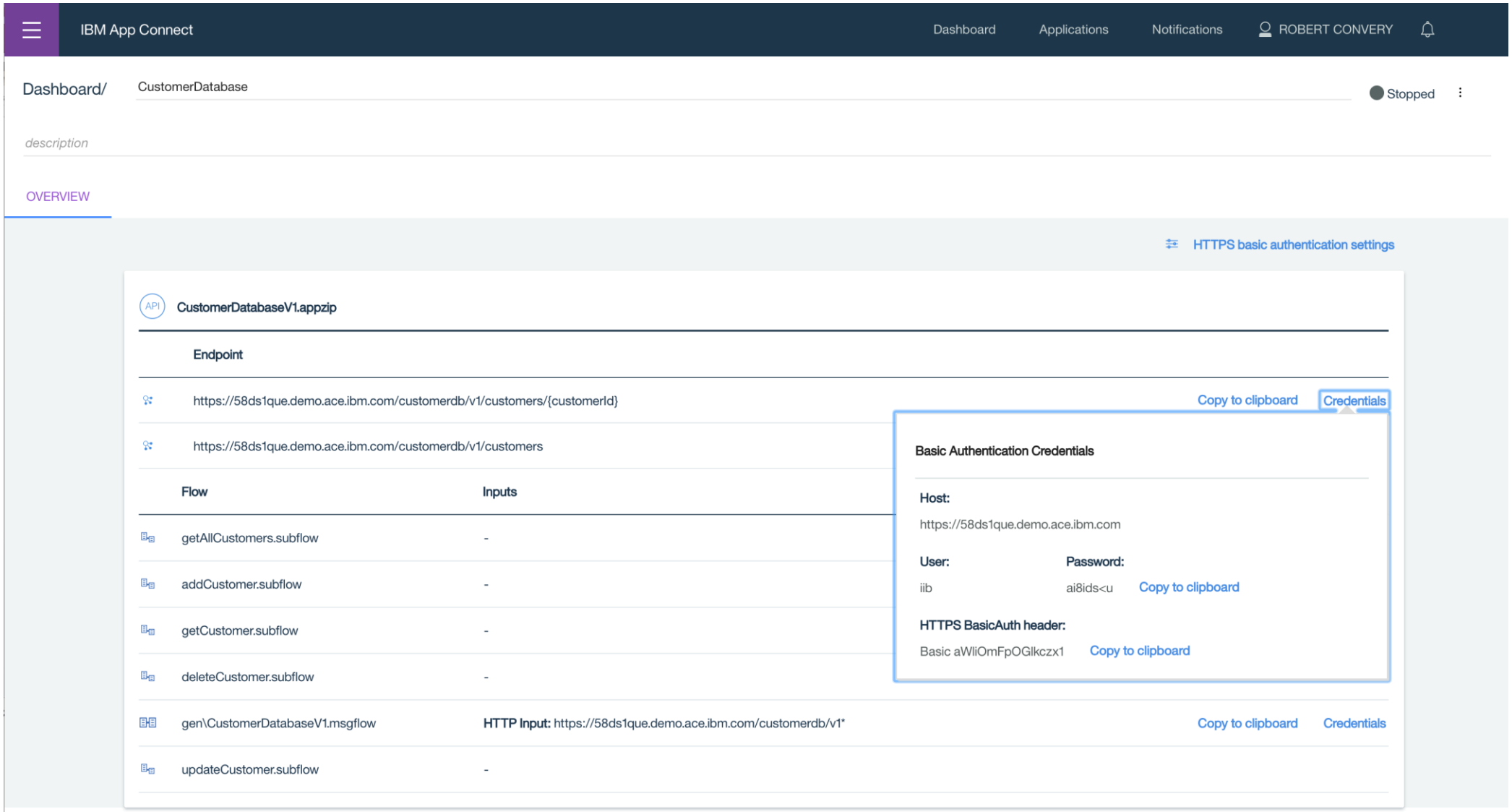




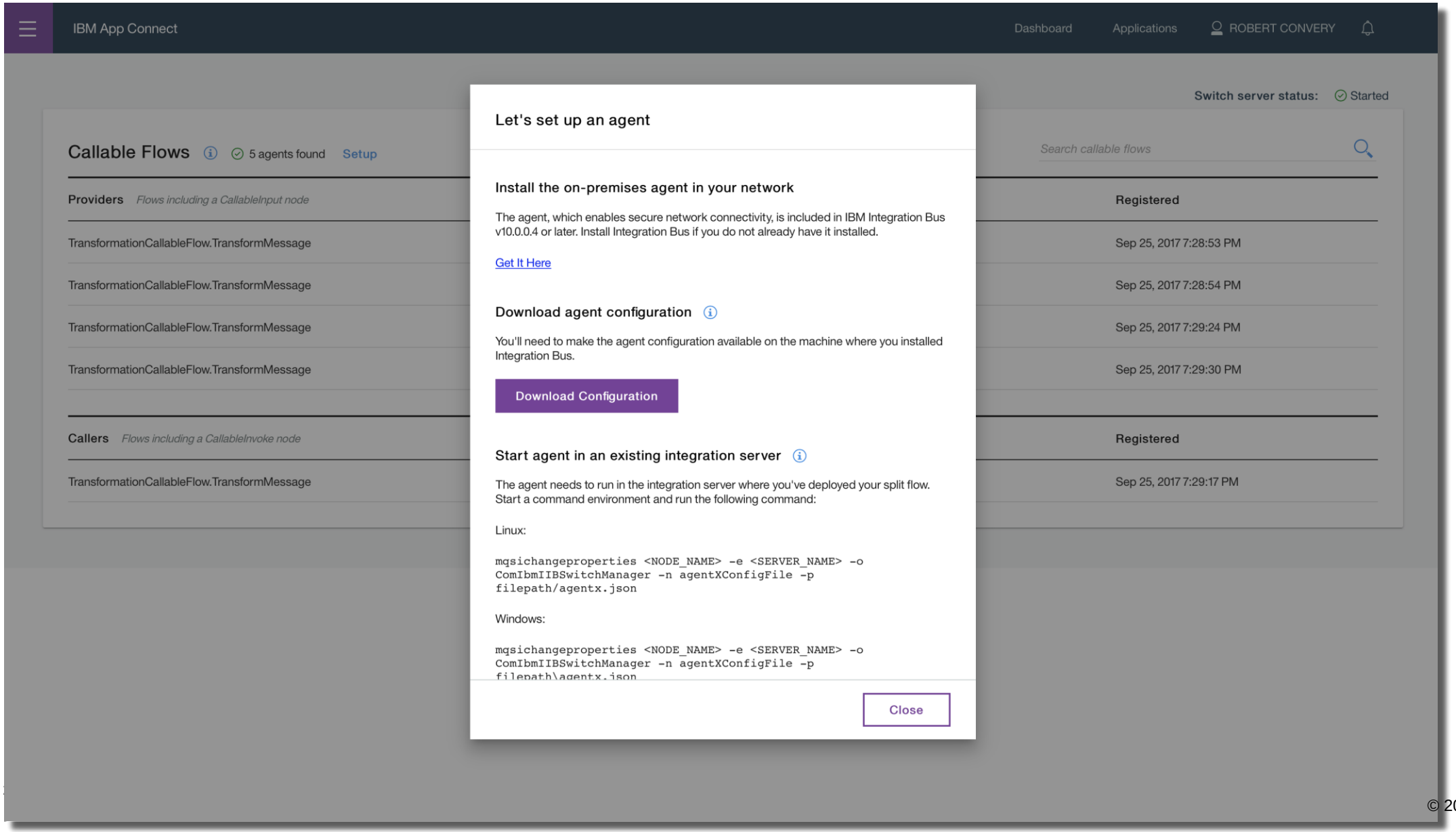
Dashboard



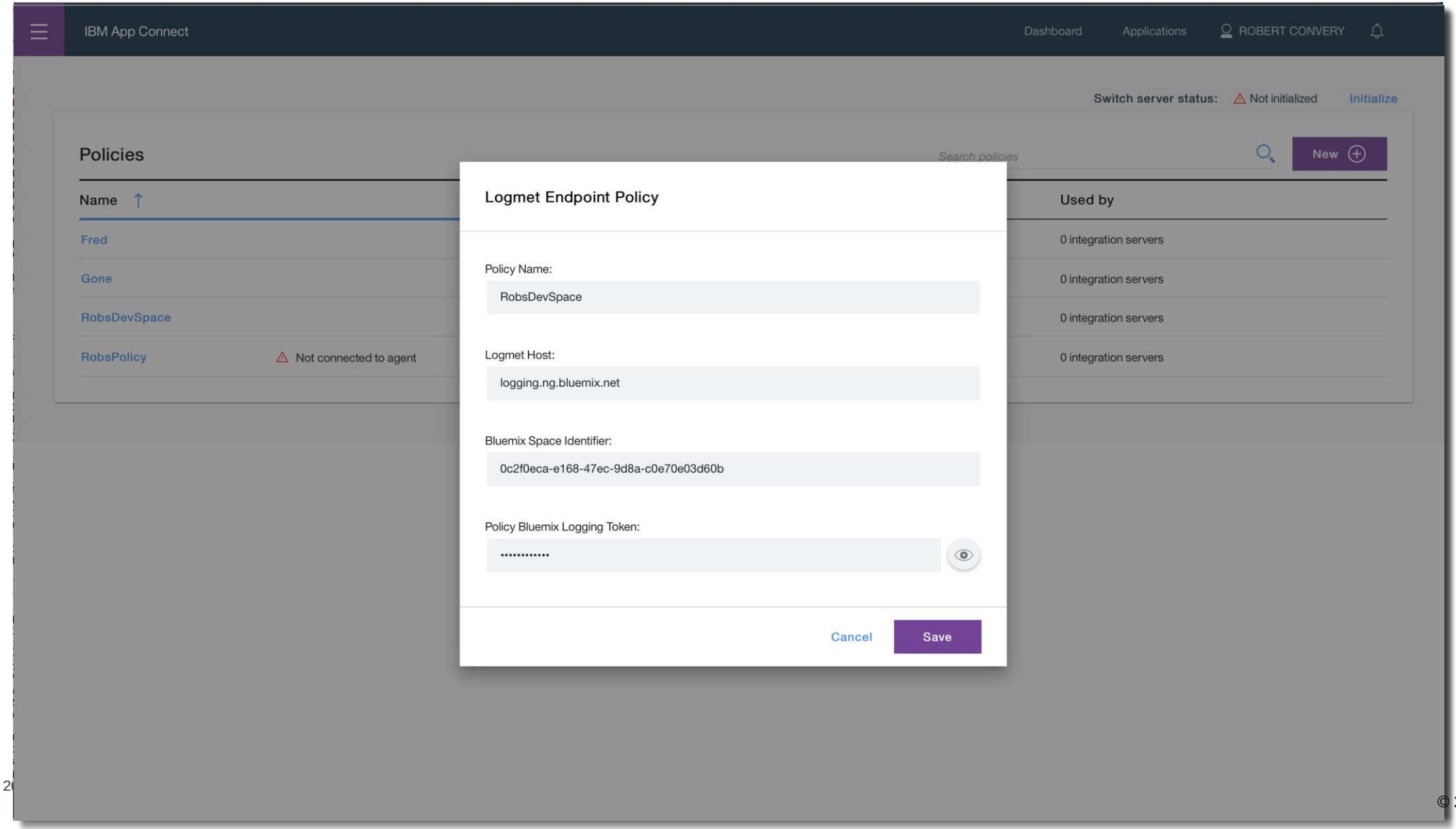
Integration Details



Callable Flows



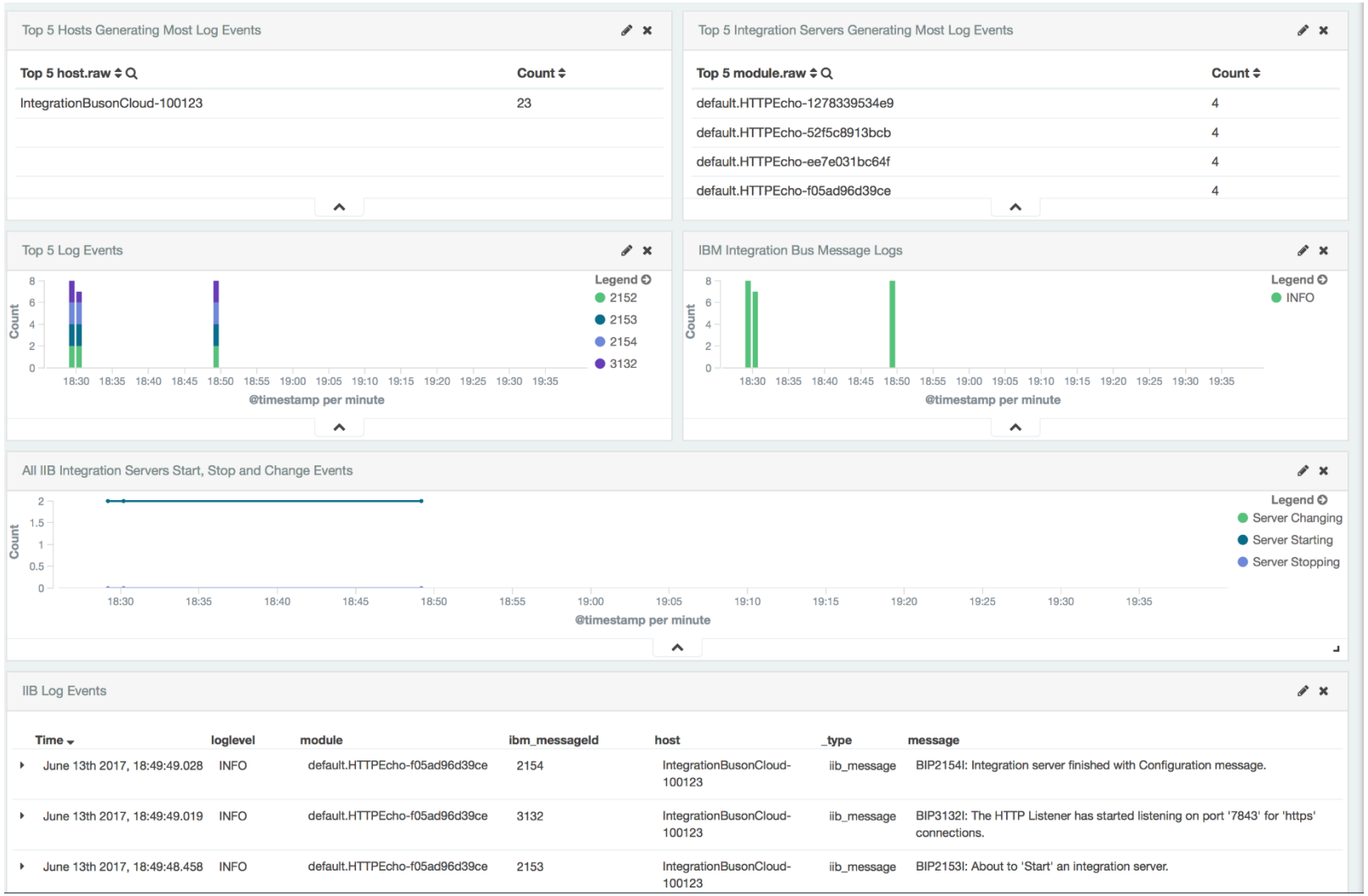
Policies



Policies - Logmet

- Centralised Logging for all IIBoC & IIB & App Connect
- Uses BlueMix Logmet - Kibana
- Configured using Policies
- Sends all syslog messages into Logmet

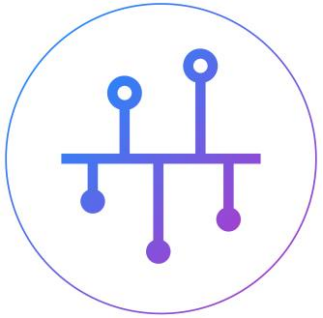
- Credentials Required to push to Logmet
  - space_id
  - Logging_host
  - logging_token (specific to logmet)



Demo / Walkthrough

- Upload a simple HTTP integration
- Attach a logmet policy
- Start Integration
- Launch Logging Kibana Dashboard

Blogs, Communities and Useful links



- App Connect - https://appconnect.ibmcloud.com/
- Integration Bus on Cloud - http://www-03.ibm.com/software/products/en/ibm-integration-bus-on-cloud

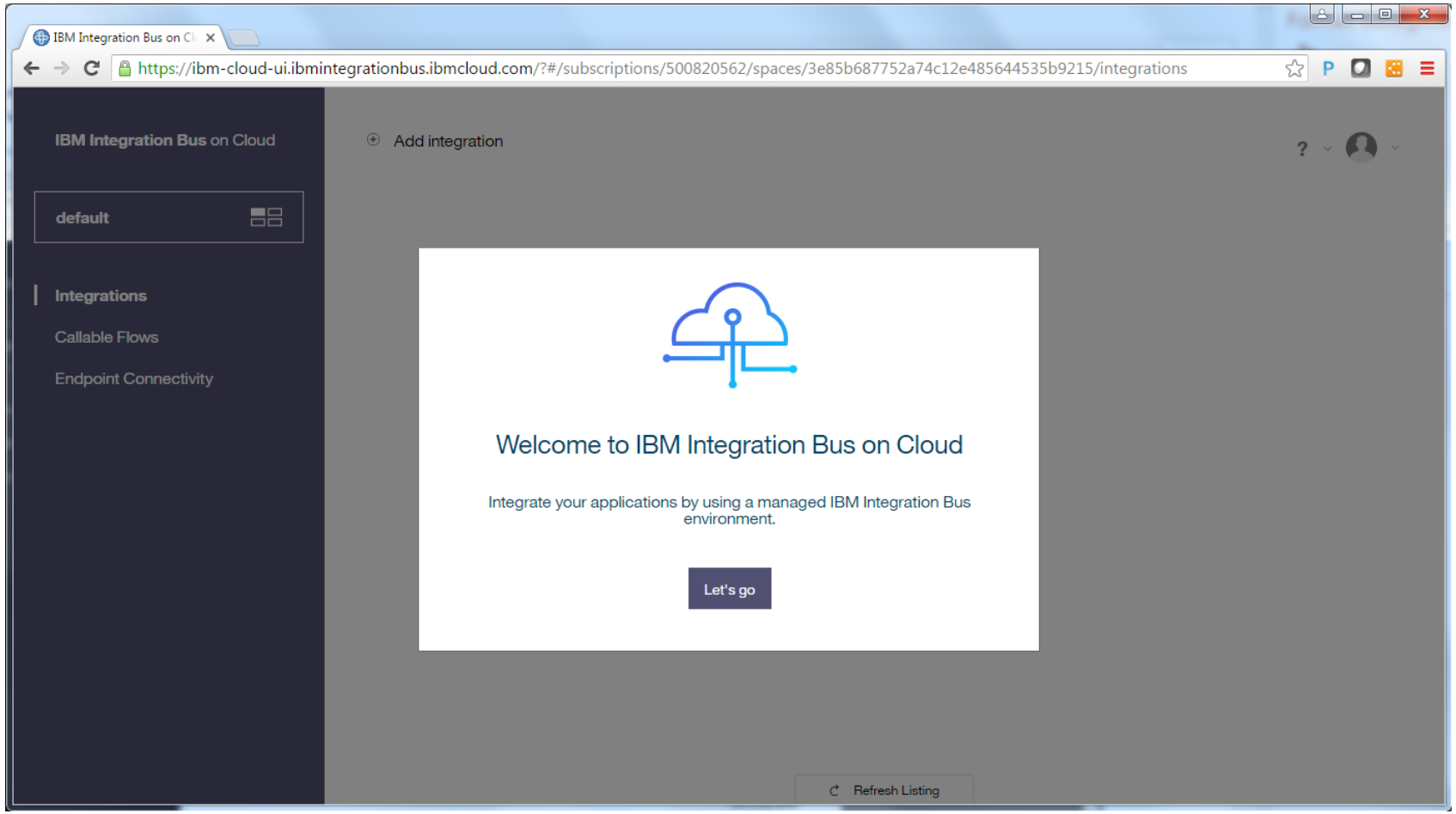
- Integration community: https://developer.ibm.com/integration/
  - Blogs, resources, support and more for IBM Integration Bus
- dW Answers: https://developer.ibm.com/answers/index.html
  - Your direct portal to ask questions about IBM products from the support and development teams

dW Answers

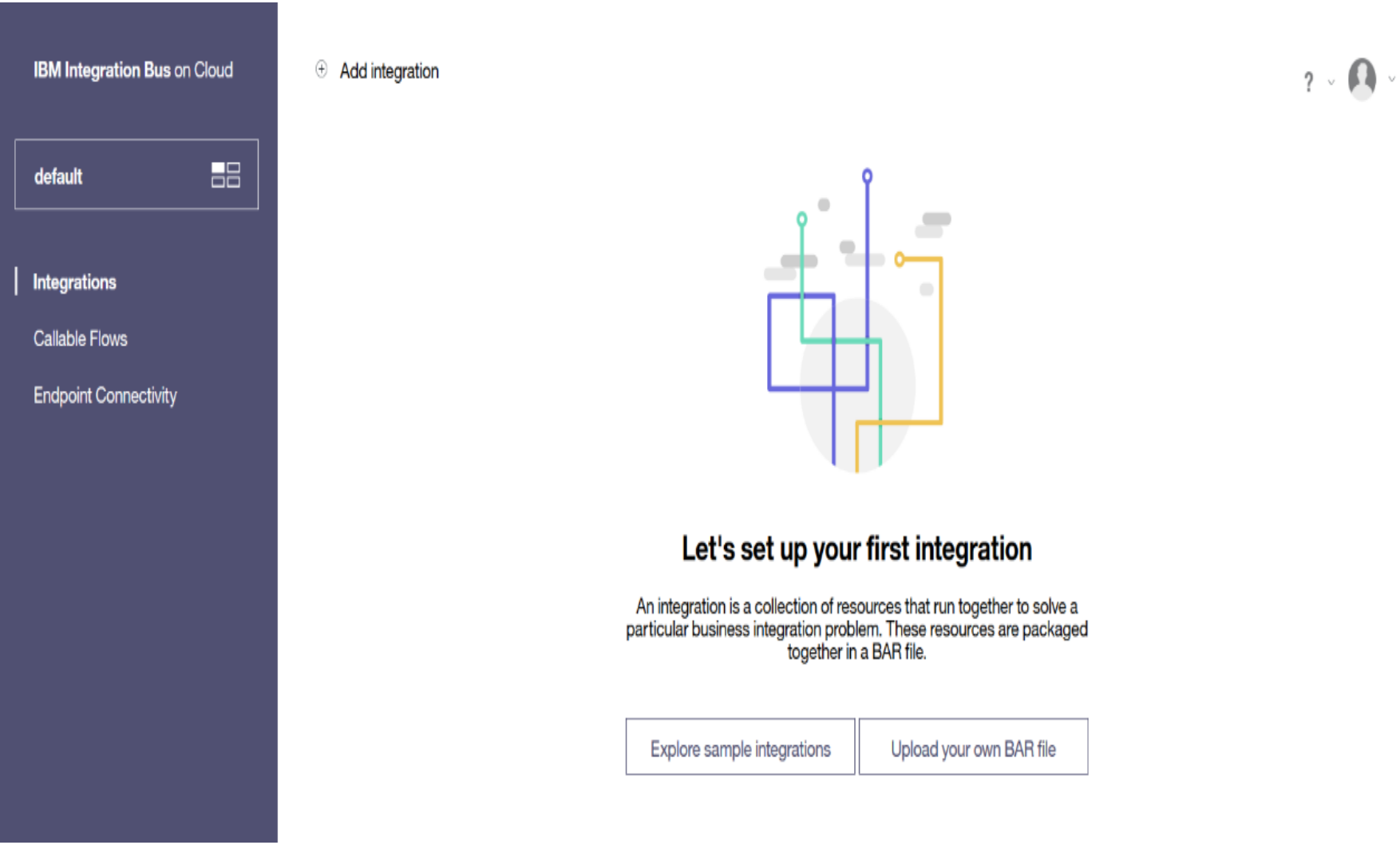
Thank you and Questions?

IIBoC Walk through

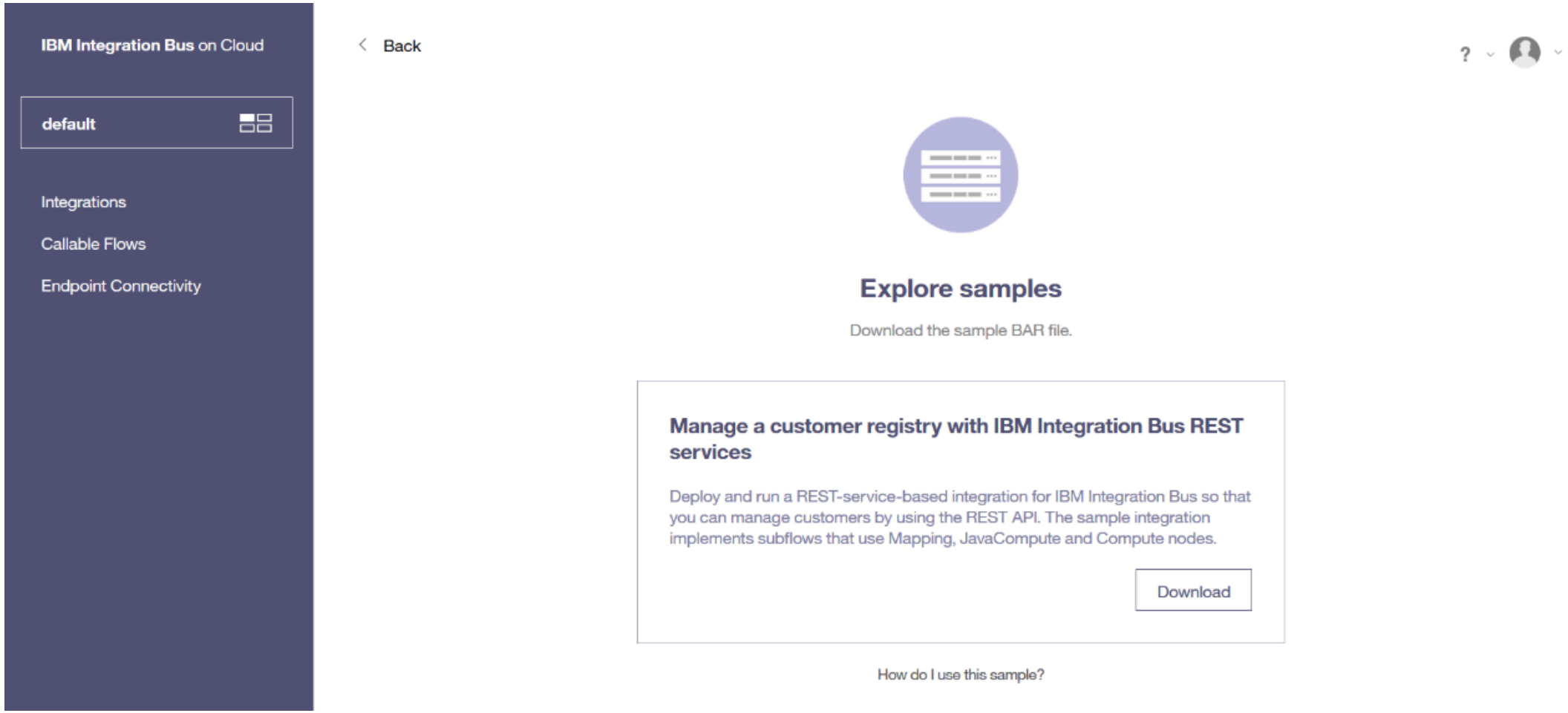
Introducing IIBoC



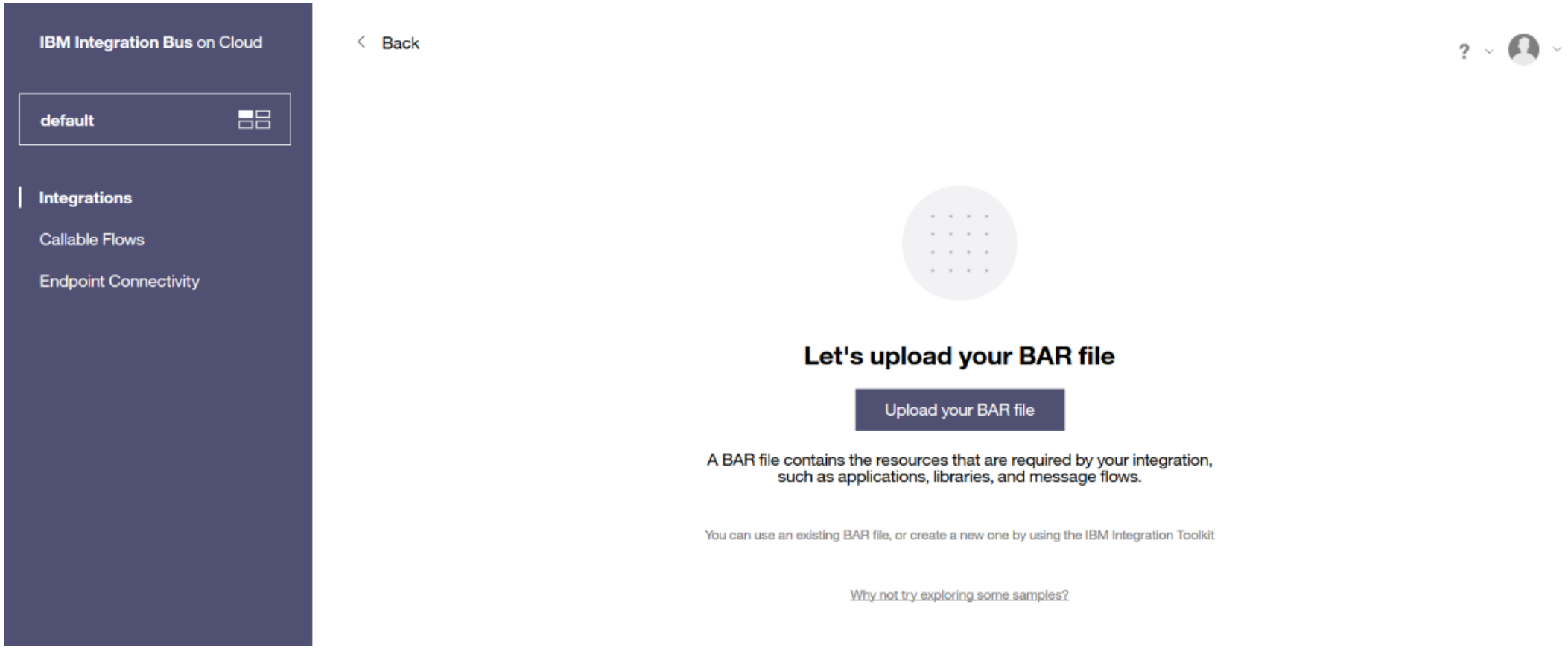
Welcome



Samples



Uploading a BAR file



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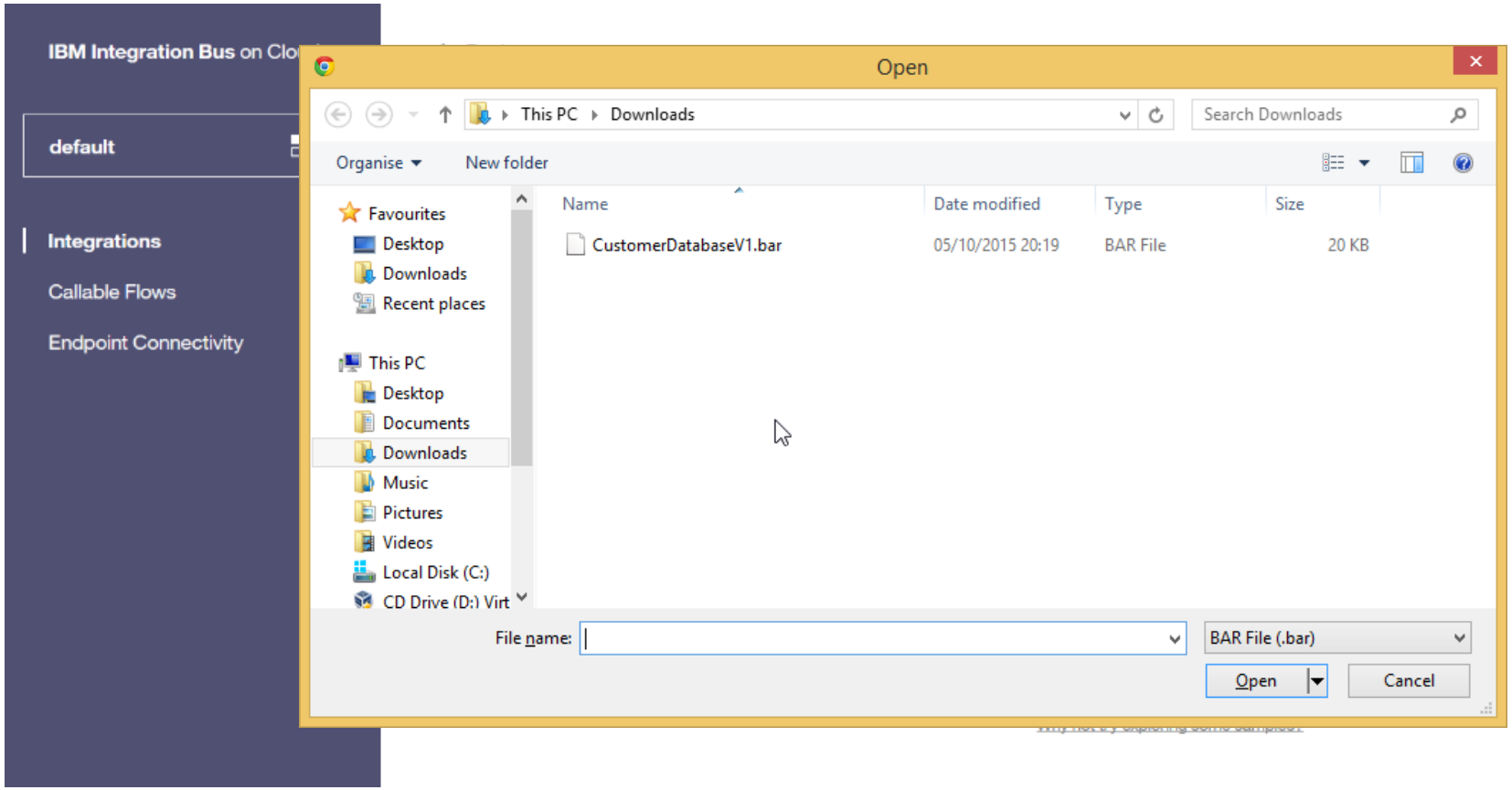

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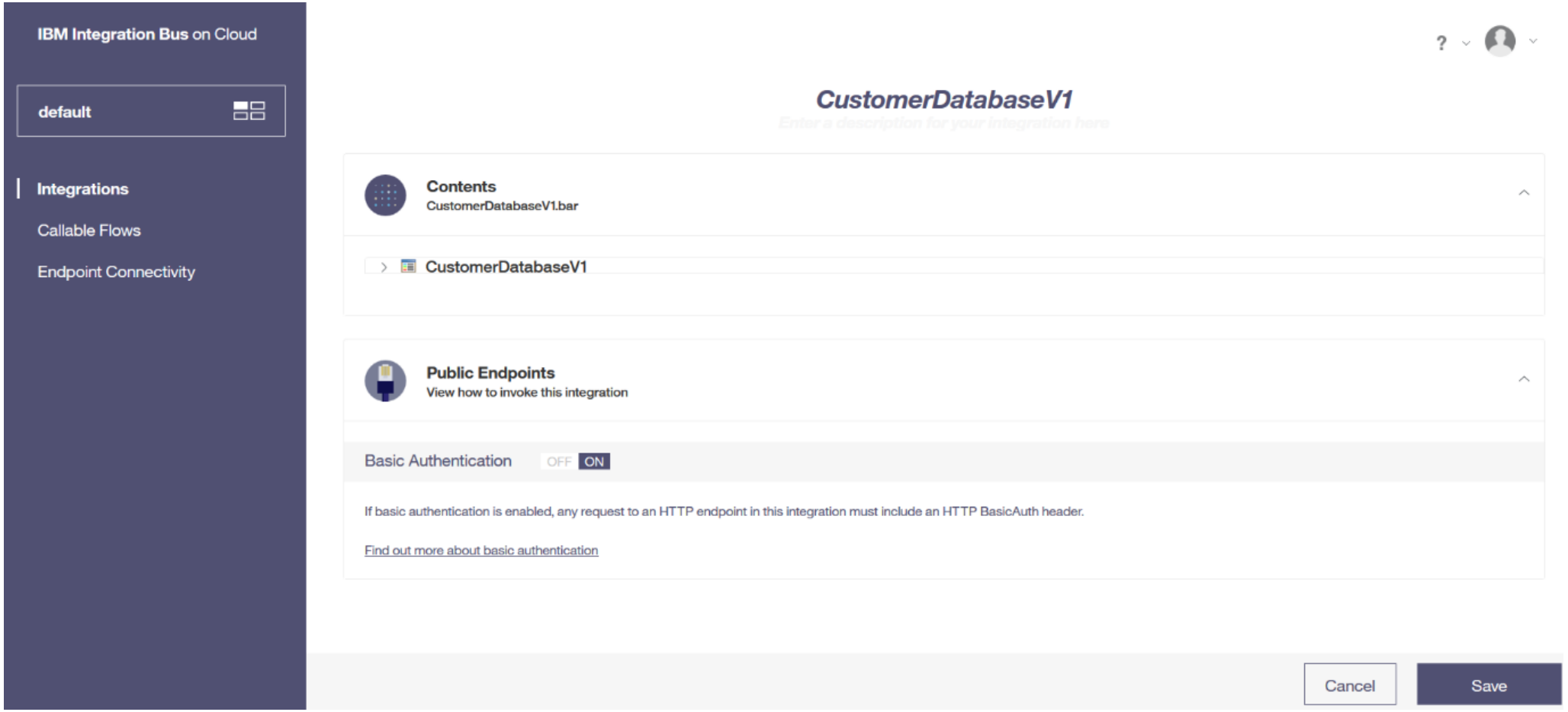
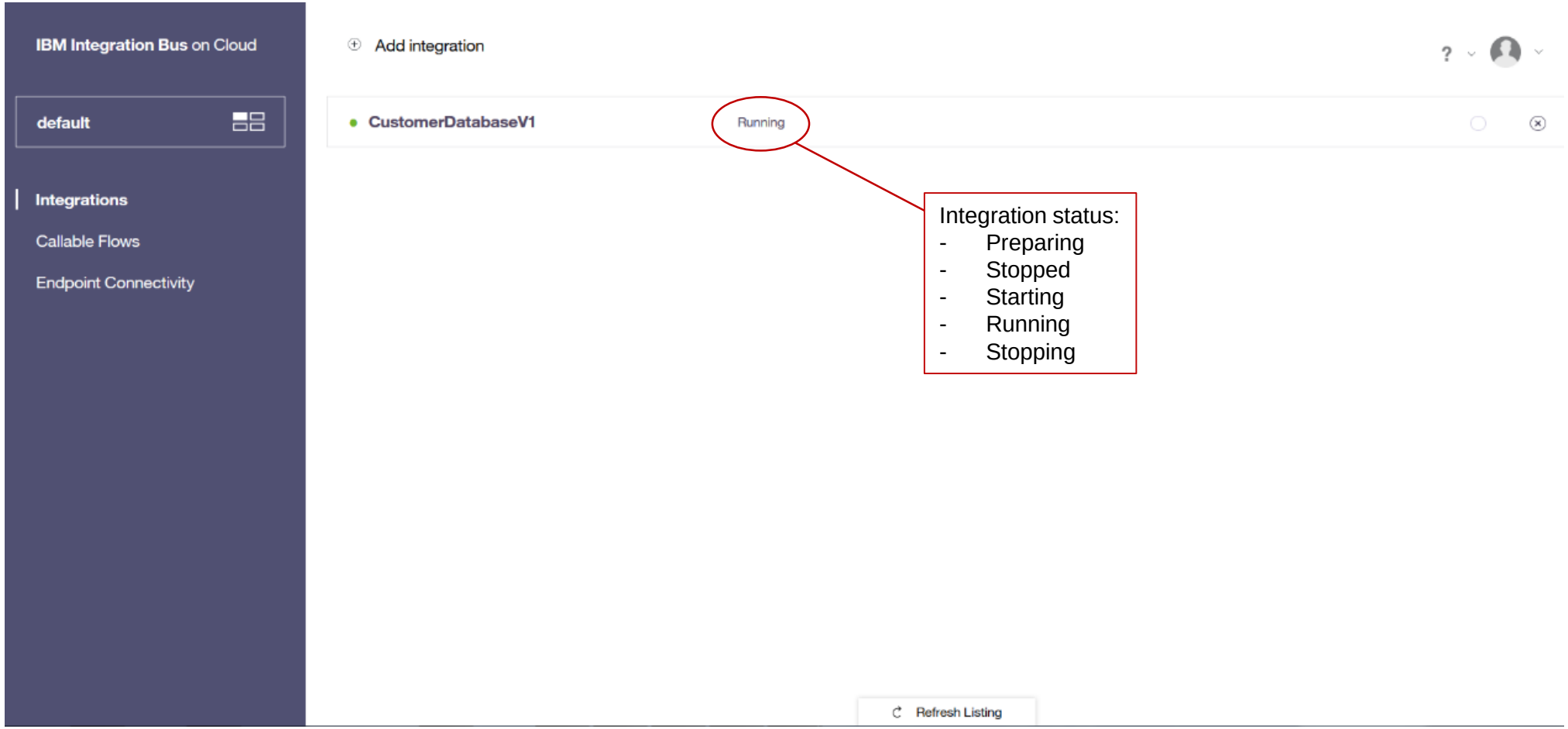
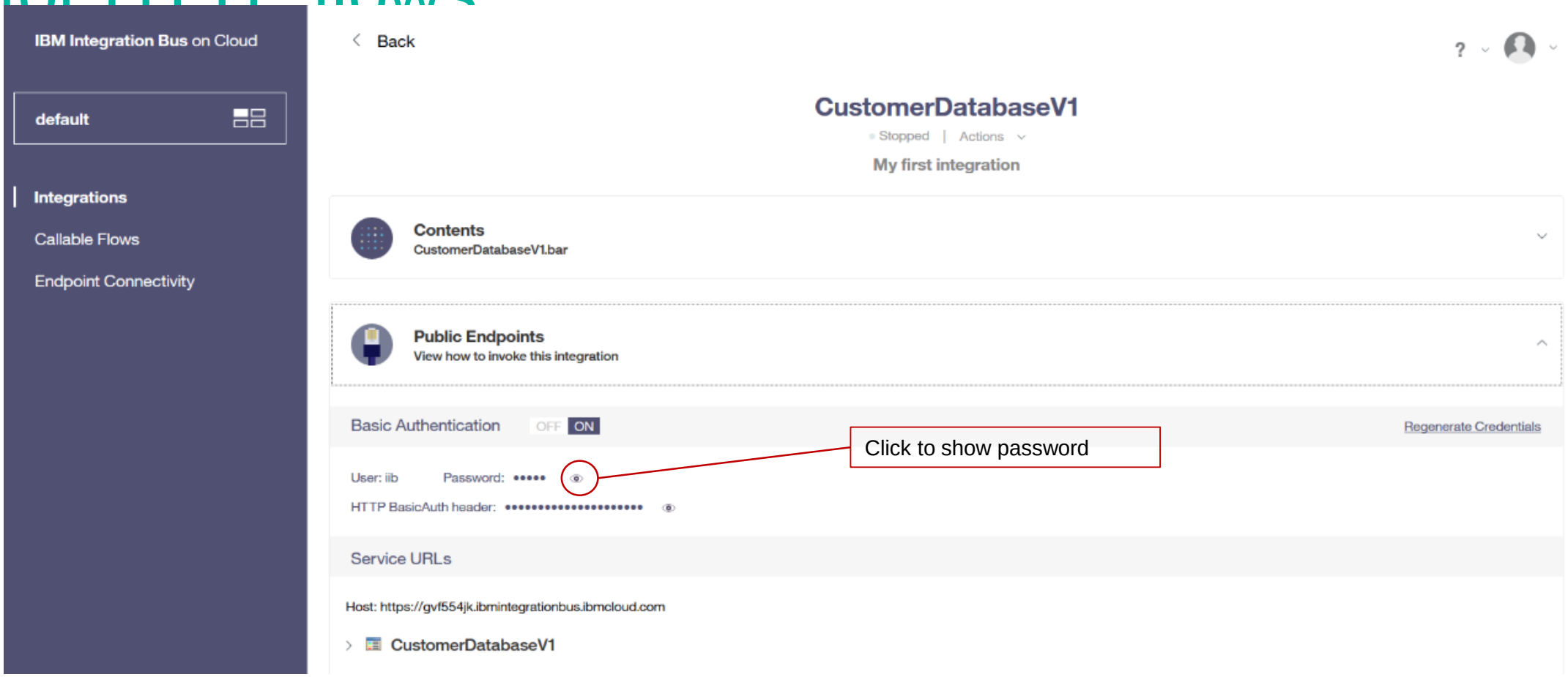


Integration status page



Configure Basic Auth for HTTP flows



Discover URL for HTTP flows