



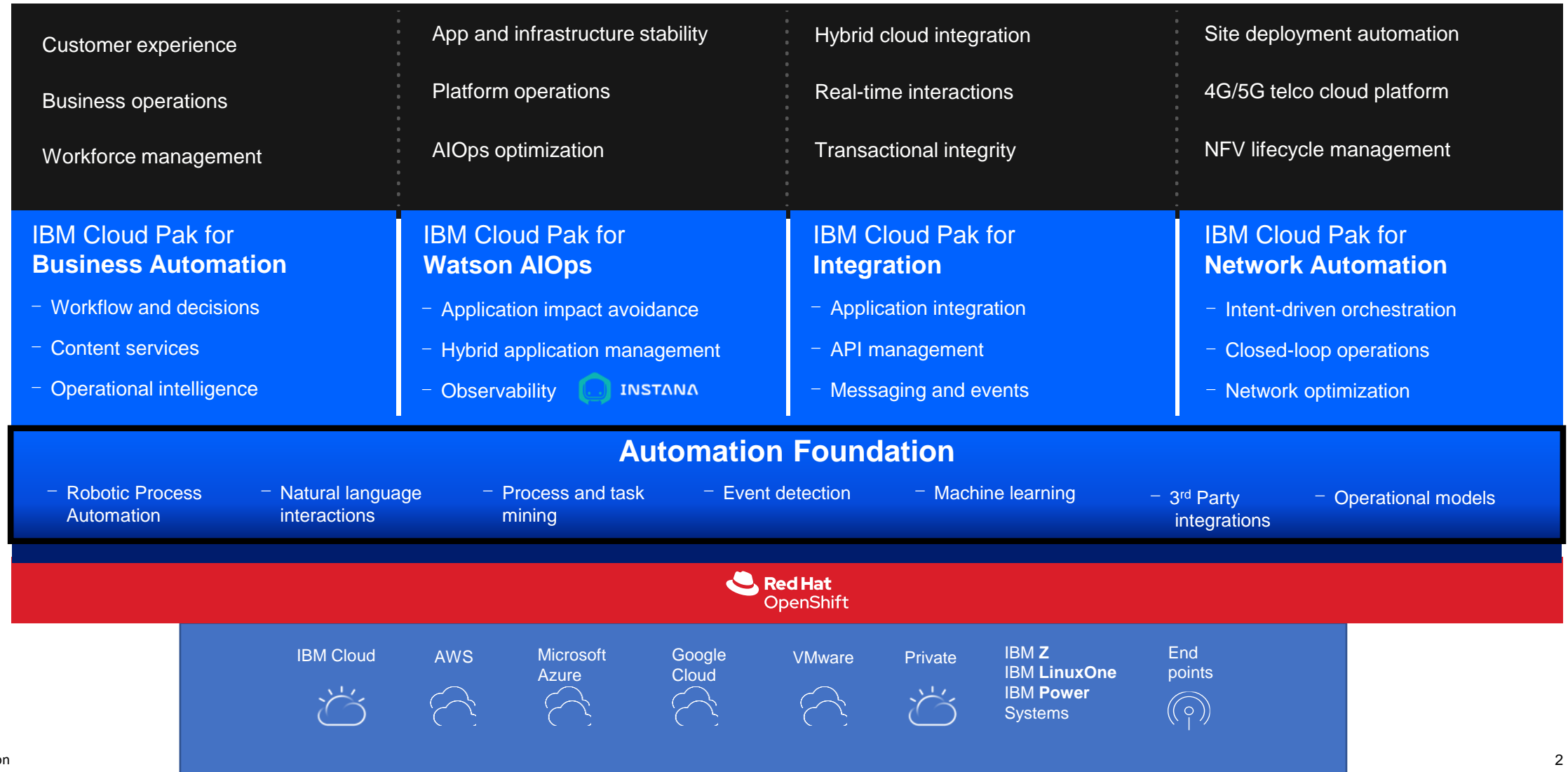
IBM Cloud Pak for Integration

What's new in CP4I 2021.1.1

Leif Davidsen and Alan Chatt

IBM Automation platform

The most complete set of business and IT Automation services, powered by AI



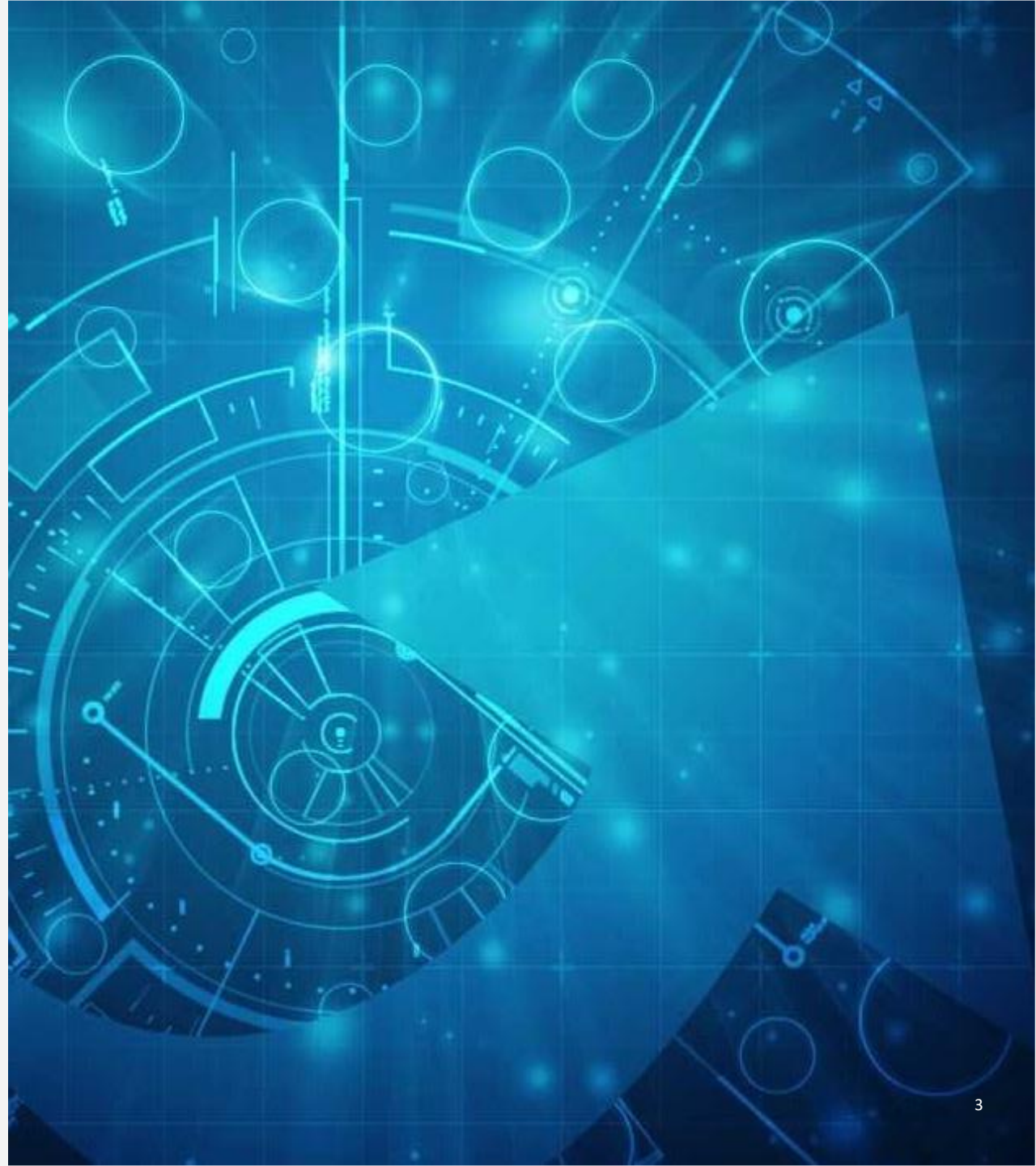
Organizations need to rethink their integration strategy

Every integration must be:

- Automated
- Closed-loop
- Multi-style

With AI, informed by real world operational data,
to continuously improve integrations

To integrate faster and ***better***



Successful enterprises integrate faster and ***better***

Intelligently automating every interaction



Manual tasks requiring expert integration skills



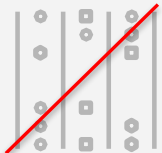
Automated integration lifecycle with AI, best-practices and built-in reuse to eliminate the skills barrier



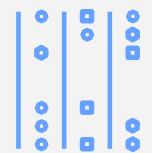
Lack of operational visibility to improve integrations



Closed-loop integration lifecycle that uses real-world, company specific, operational data to identify issues and recommend best practices



Traditional approach of using only one integration style



Multi-style integration streamlines using different styles of integration together to deliver faster and better than a one-style-fits-all approach

CP4I 2021.1.1 – What's in the release?

- ✓ Builds on IBM Automation Foundation
- ✓ Includes new Robotic Process Automation (RPA) capabilities
- ✓ Includes Process Mining
- ✓ New API Test generation features
- ✓ Manage Kafka endpoints as part of API lifecycle
- ✓ Enhanced capabilities included with DataPower Gateway Virtual Edition
- ✓ Additional support for storage options available in Storage Suite for Cloud Paks
- ✓ Deployable isolated in a Kubernetes namespace
- ✓ Early access, for evaluation use only, to a new IBM MQ native HA option
- ✓ Inclusion of IBM Aspera Enterprise add-on component
- ✓ Inclusion of Cloud Pak for Integration API Calls add-on
- ✓ Deprecation of IBM Event Streams

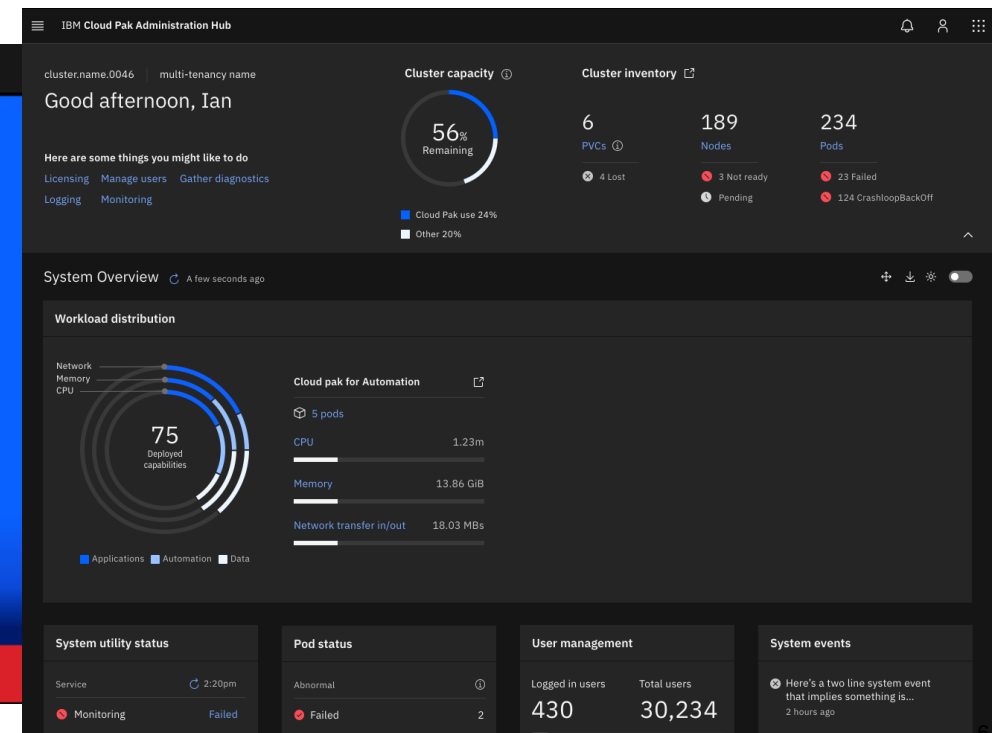
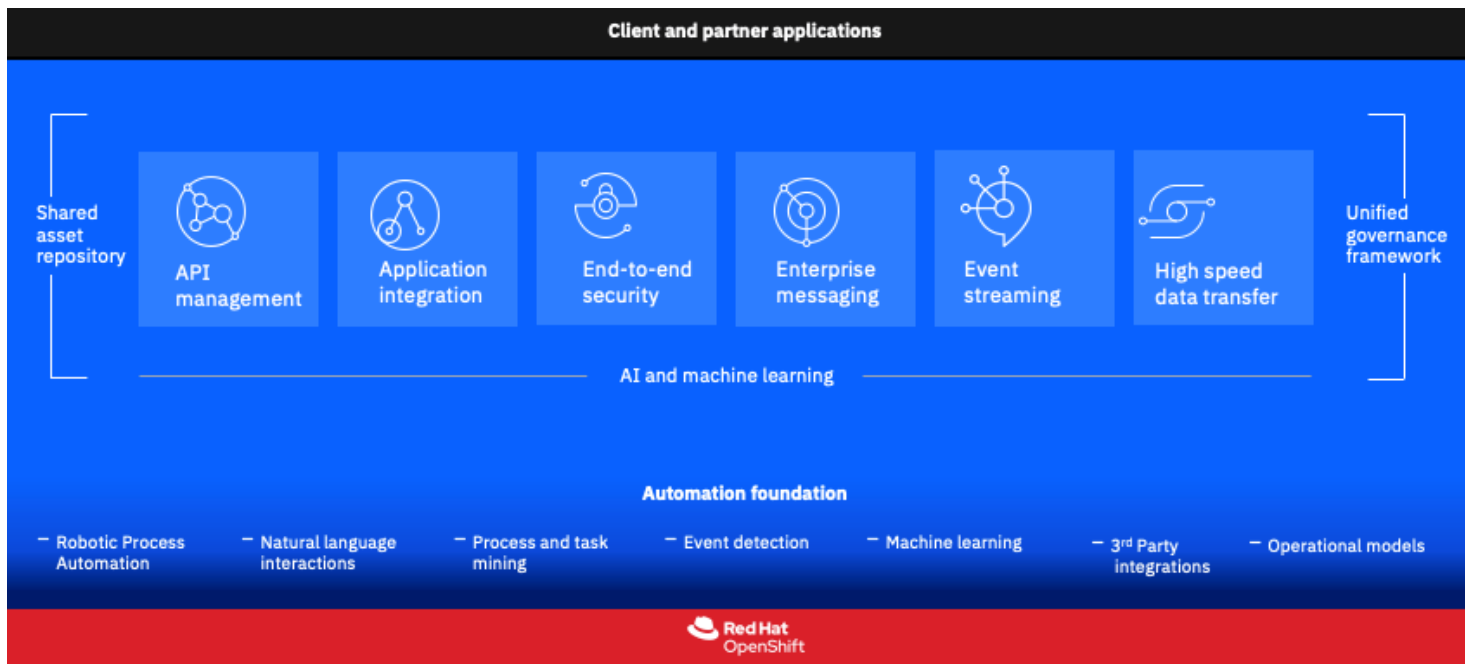
Now also available

- Quick Start for Cloud Pak for Integration on AWS
- Confluent Platform now a deployment choice for Kafka

Built on IBM Automation Foundation

Additional values

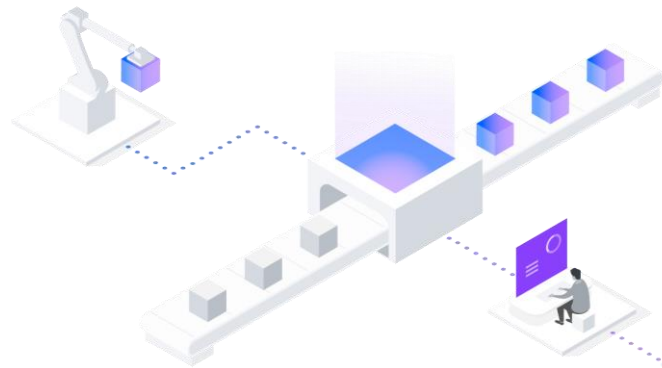
- ✓ Seamless update from prior Cloud Pak for Integration instances onto new IBM Automation Platform
- ✓ Automation Foundation includes core technologies to enable existing and future automation features
 - ✓ Only deployed if used
- ✓ Includes dashboard to show status of deployments



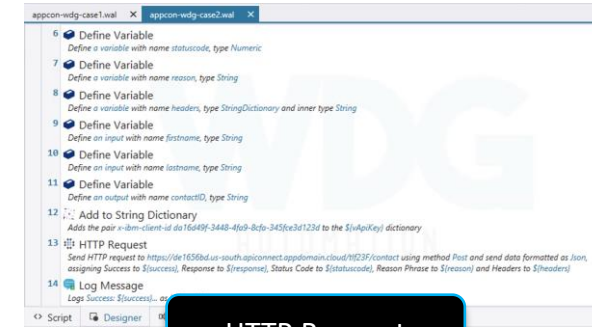
IBM Robotic Process Automation

Optional CP4I chargeable component

- ✓ Legacy applications create and hold valuable data
- ✓ Robotic Process Automation (RPA) enables that data to be accessed and used without changing the application
 - ✓ Uses screen-scraping and metadata inference
- ✓ RPA is a component of the Automation Foundation that can be purchased in Cloud Pak for Integration
 - ✓ RPA solution requires an environment and unattended bots
- ✓ In this release RPA will send data to Cloud Pak for Integration through HTTP calls

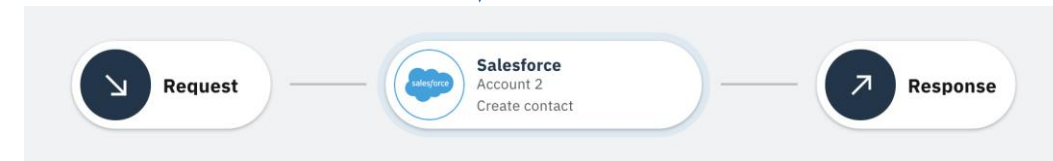


RPA
environment



HTTP Request

API Gateway



Cloud Pak for Integration
Designer

IBM Process Mining

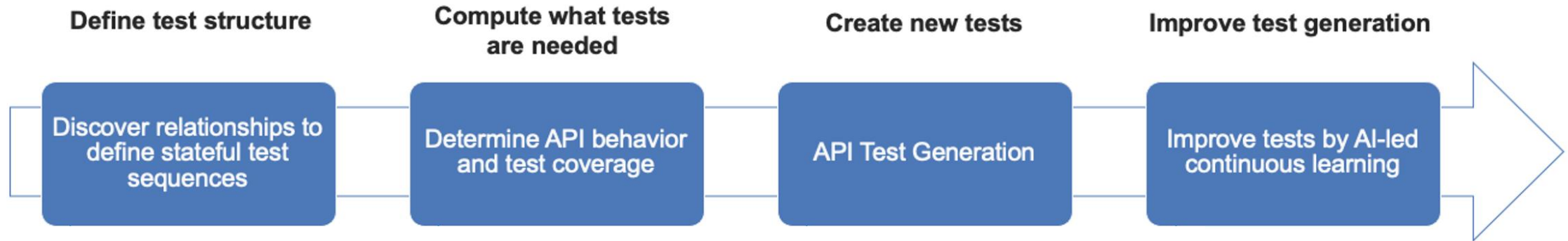
Optional CP4I chargeable component

- ✓ Process Mining allows clients to discover review and decide where there are bottlenecks in their environments
 - ✓ Inputs include logs from existing integration deployments
 - ✓ Output of Process Mining can determine where automation can make improvements
- ✓ Discovery includes automated algorithms for:
 - ✓ Process Discovery; Task Mining; Business Rules Mining; Multi-level Process Mining
- ✓ Analytics includes dashboards and event flows for:
 - ✓ KPI and Cost Checking; Compliance Checking; Automation Outcomes; Root Cause Analysis
- ✓ Digital Twin is used to:
 - ✓ Study what-if scenarios; Simulate improvements; Calculate ROI



API Test Generation

Creating tests based on integration definition



- ✓ Customers struggle to build large enough test suites to provide coverage of their API solutions
 - ✓ Generate new API tests through awareness of API resource definitions using an OpenAPI analyzer
 - ✓ Expands number and range of tests to cover more potential API call combinations
- ✓ Provides basis for additional test generation approaches

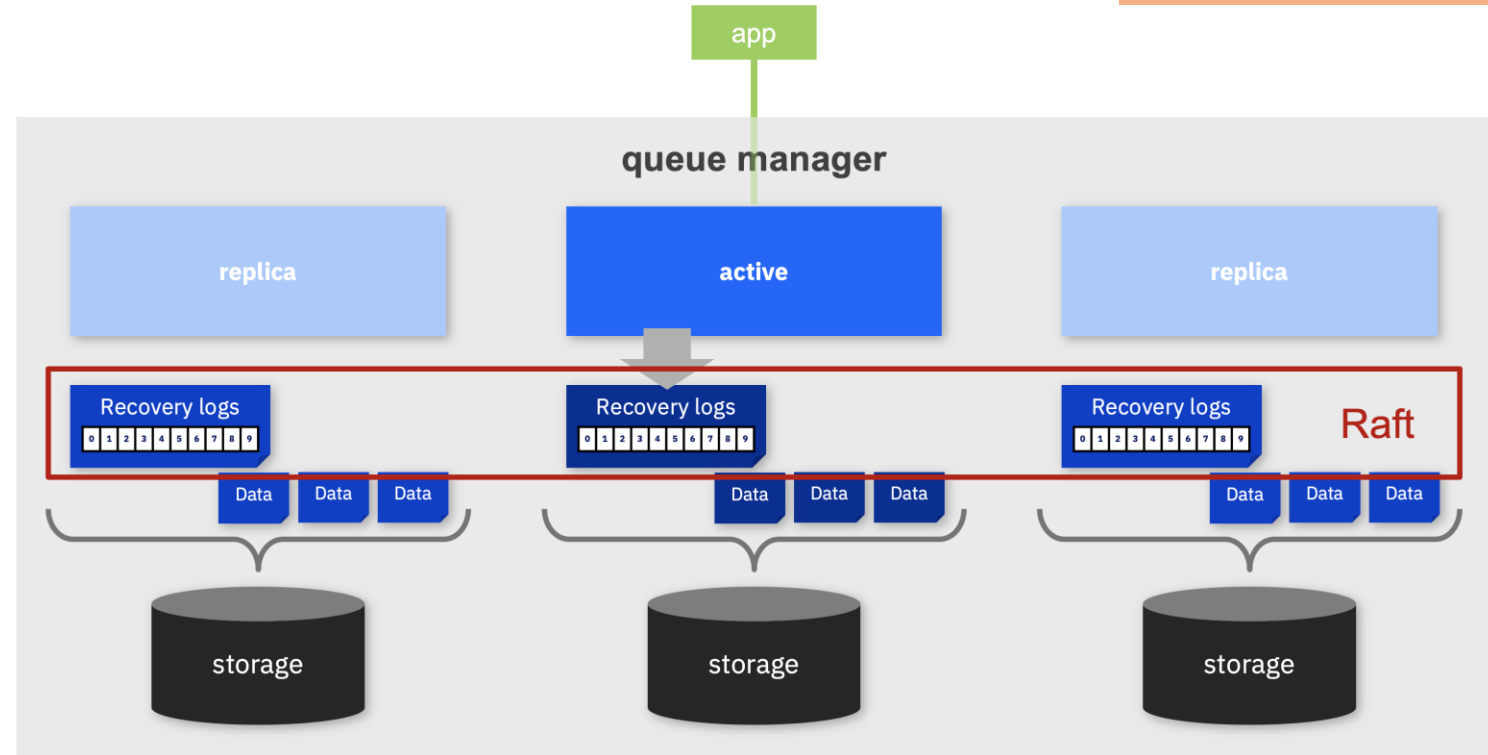
A new option for MQ High Availability

Early access to new container-native HA feature

Provides a truly container-based solution for individual MQ queue managers for IBM Cloud Pak for Integration (CP4I) customers running IBM MQ Advanced.

****Only available in beta/preview in 2021.1.1****

- ✓ Achieve high availability through secure replication and reconciliation of log data
- ✓ **Cloud native** - specifically designed for container deployment:
 - ✓ No dependency on shared filesystem
 - ✓ No dependency on 3rd party libraries or kernel modules



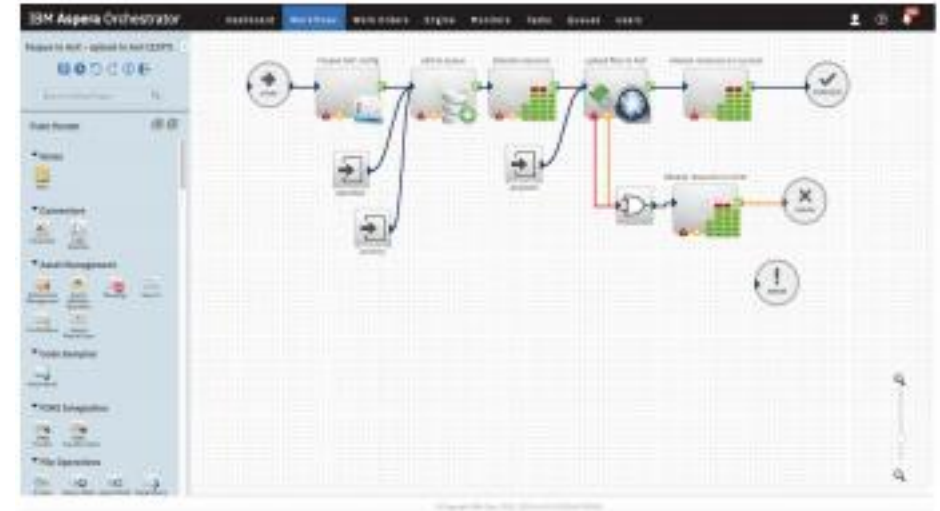
- **Secure** - Replication traffic can be configured to use TLS
- **Effortless** - Single click deployment through the MQ Operator in CP4I

Aspera Enterprise add-on

Higher throughput and additional features

Why Aspera Enterprise?

- ✓ For CP4I customers who are looking for enhanced Aspera functionality and additional throughput beyond that included in CP4I
- ✓ Aspera Enterprise add-on includes High Speed Transfer Server 10Gpbs, as well as additional Aspera tools and capabilities
- ✓ Pricing/licensing
 - ✓ Aspera Enterprise add-on is subscription only part
 - ✓ Only the 10Gbps part is available
- ✓ Includes OCP entitlement for the deployment of the Aspera High Speed Transfer Server component



Aspera Orchestrator – part of Aspera Enterprise

API Calls add-on

Optional metric for API deployment and licensing

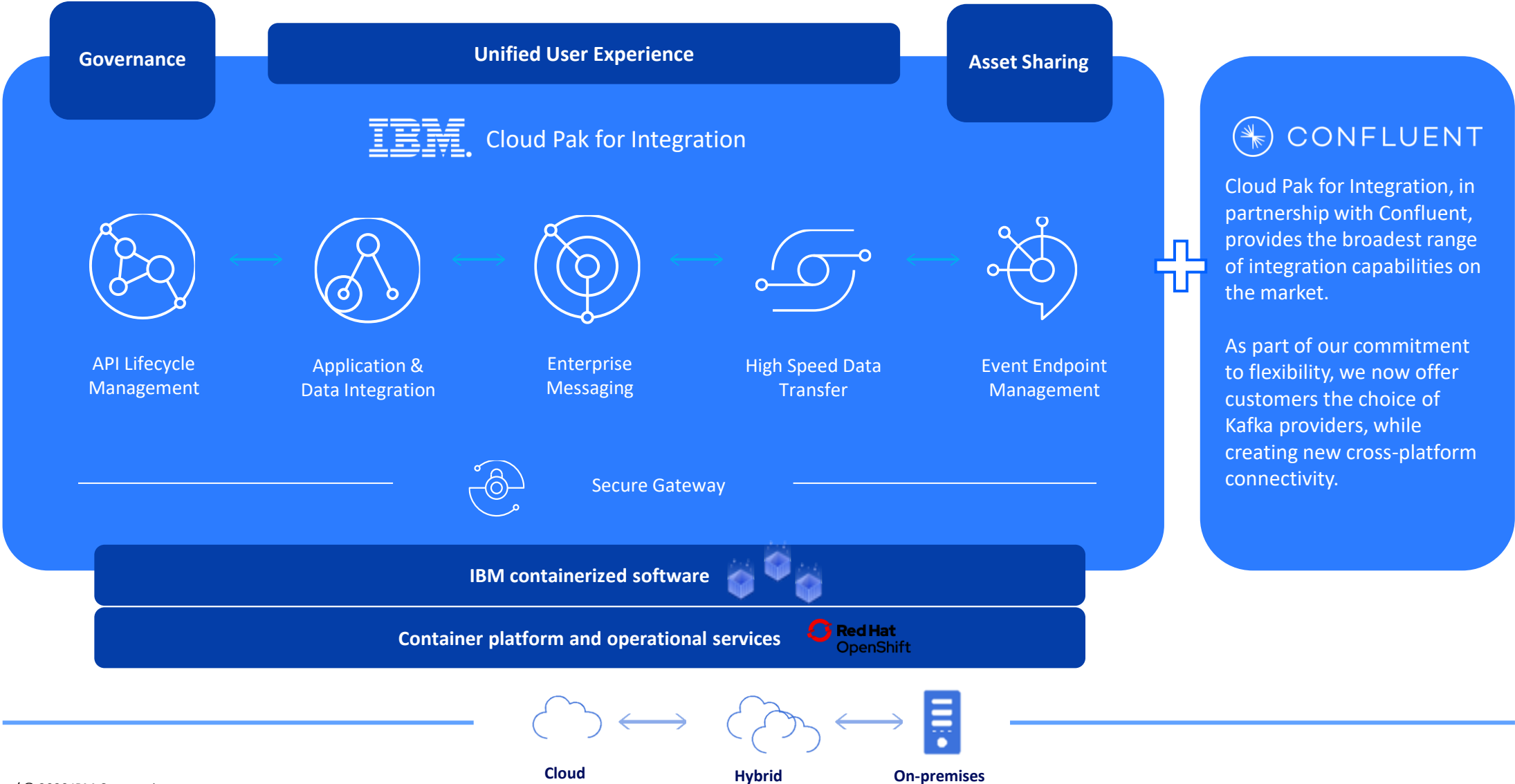
Why API Calls add-on metric?

- ✓ Aligns with expectation for customers looking to buy a specific number of API Calls
- ✓ Licensing not dependent on number of cores with API Management capabilities deployed
- ✓ Deployments in a cluster should be either CP4I VPCs or API Calls
- ✓ Pricing/licensing
 - ✓ API Calls is subscription only part
 - ✓ Buy a number of RVUs which map, through tiering to API Calls (minimum 50RVUs - 5M API Calls per month)
- ✓ Includes OCP entitlement based on a base entitlement plus more per RVU

			Unit = 100K	API calls	
Monthly				Cumulative RVU	
Tier	Min Units (per 100k)	Max Units (per 100k)	Ratio / Factor	Min	Max
1	1	500	1.0000	1	500
2	501	1,500	0.8455	501	1,346
3	1,501	3,000	0.6137	1,347	2,267
4	3,001	5,000	0.4639	2,267	3,194
5	5,001	12,000	0.2783	3,195	5,142
6	12,001	50,000	0.1531	5,143	10,960
7	50,001	100,000	0.0765	10,960	14,785
8	100,001	175,000	0.0344	14,785	17,365
9	175,001	275,000	0.0121	17,365	18,575
10	275,001	-	0.0030	18,575	

# OCP cores (min)	# OCP cores (max)
22	47
47	89
89	135
135	181
181	279
279	569
570	761
761	890
890	950
950	

IBM Cloud Pak for Integration with Confluent



Deprecation of IBM Event Streams

Support continues for existing deployments



Updates via entitled registry for existing users to address:

- Security vulnerability fixes
- Bug fixes for existing features
- No functional enhancements

Individual I-fixes for specific users to address:

- Security vulnerability fixes
- Bug fixes for existing features
- No functional enhancements

Why?

- ✓ Confluent platform has proven the popular choice for running Apache Kafka with many valuable and unique features to help deploy, run and build Kafka applications
- ✓ Confluent has the largest investment in the Apache Kafka technology and will become more integrated with IBM CP4I platform over the coming releases
- ✓ IBM will focus on bringing consistency and automation to event-driven integrations alongside all other integration styles supported by CP4I

Event Endpoint Management



Delivered in time to be useful

- Latency measured in seconds not minutes
- Delivered rather than polled



Consumed reliably

- Consumption options suitable for many application types
- Replay history, durable subs, horizontal scale



Easily found, quickly consumed

- Described
- Catalogued and discoverable
- Policy controlled access



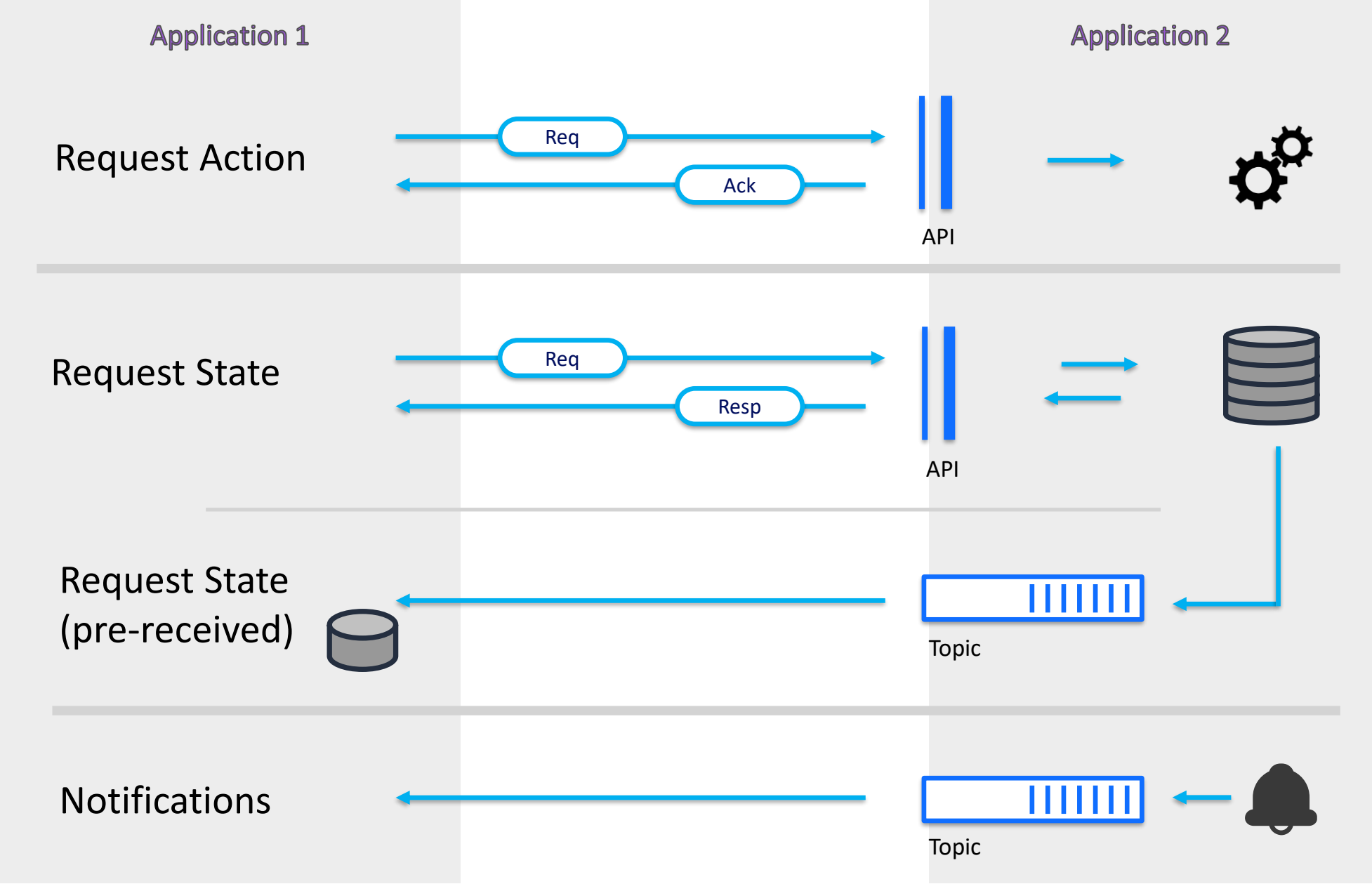
Completely De-coupled

- Self-service consumption
- No technology ties between provider and consumers
- No operational ties

Transport: Event Distribution

Event Endpoint Management

API and Event Integration Patterns



Ingredients for Event Endpoint Management



Event Transport

Described

Discoverable

Decentralised

Decoupled

Responsive experiences

Ingredients for Event Endpoint Management



Event Transport

Described

Discoverable

Decentralised

Decoupled

Describing Events

Events need to be described so developers can quickly understand what they are and how to consume them

- Understood by people
- Supported by tooling
- Consistent with API definitions



IBM already contributing into the **Async API** specification

<https://github.com/asynccapi/bindings/tree/master/ibmmq>

Ingredients for Event Endpoint Management



Event Transport

Described

Discoverable

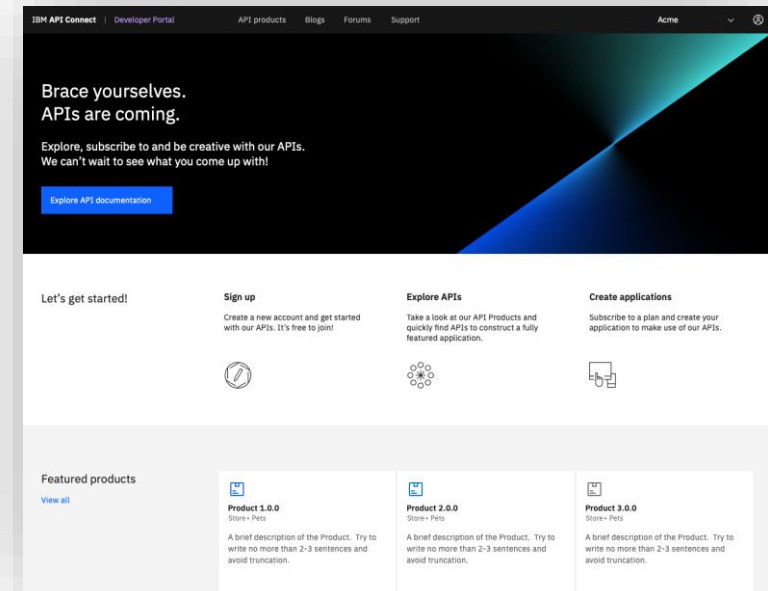
Decentralised

Decoupled

Discovering events exists

An interface that cannot be found is no use to anyone

- Catalogued in one place
- Searchable
- Understandable and ready to consume



Responsive
experiences

Event Endpoint Management Demo

<http://ibm.biz/eem-demo>

BACKUP