



Minneapolis API Management User Group

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Agenda

- 1 Introduction / Breakfast
- 2 Around the Room: Holiday Results
- 3 GUEST PRESENTATION : **TARGET TEAM**
- 4 10min Break
- 5 Shiny New Things
- 6 Wrap Up : **HAPPY VALENTINES DAY!!**

Around the Room: Discussion

Discuss the Holiday Deployment

- Did you experience predictable volumes?
- What monitoring techniques & tools used?
- Stability issues or outages?
- New enhancements / features used or requested?
- Plans to upgrade this year? Which products?

Discuss Current Automation Maturity

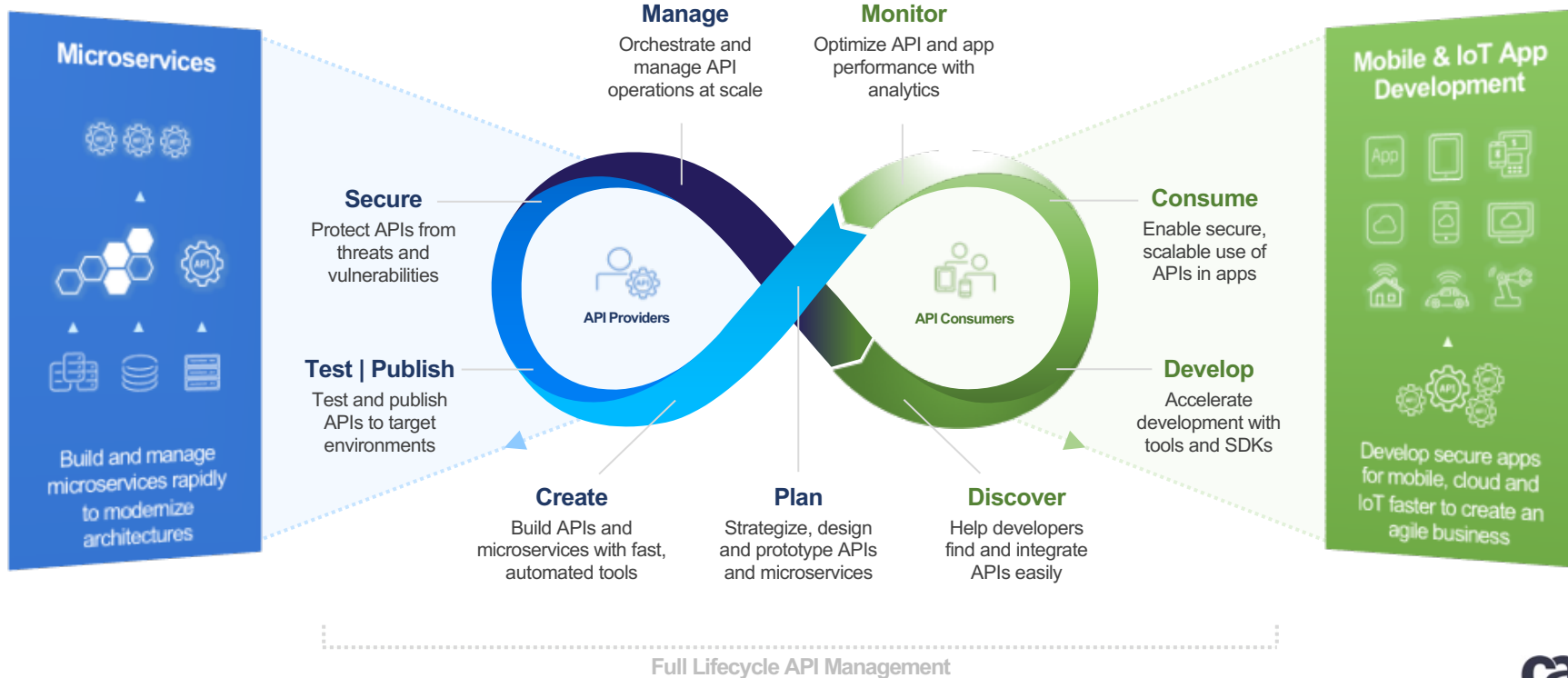
- Using automated server builds?
- Using automated service migration / deployment?
- Which CI/CD tools are in your toolbox?

Target Presentation: Use Case and Roadmap





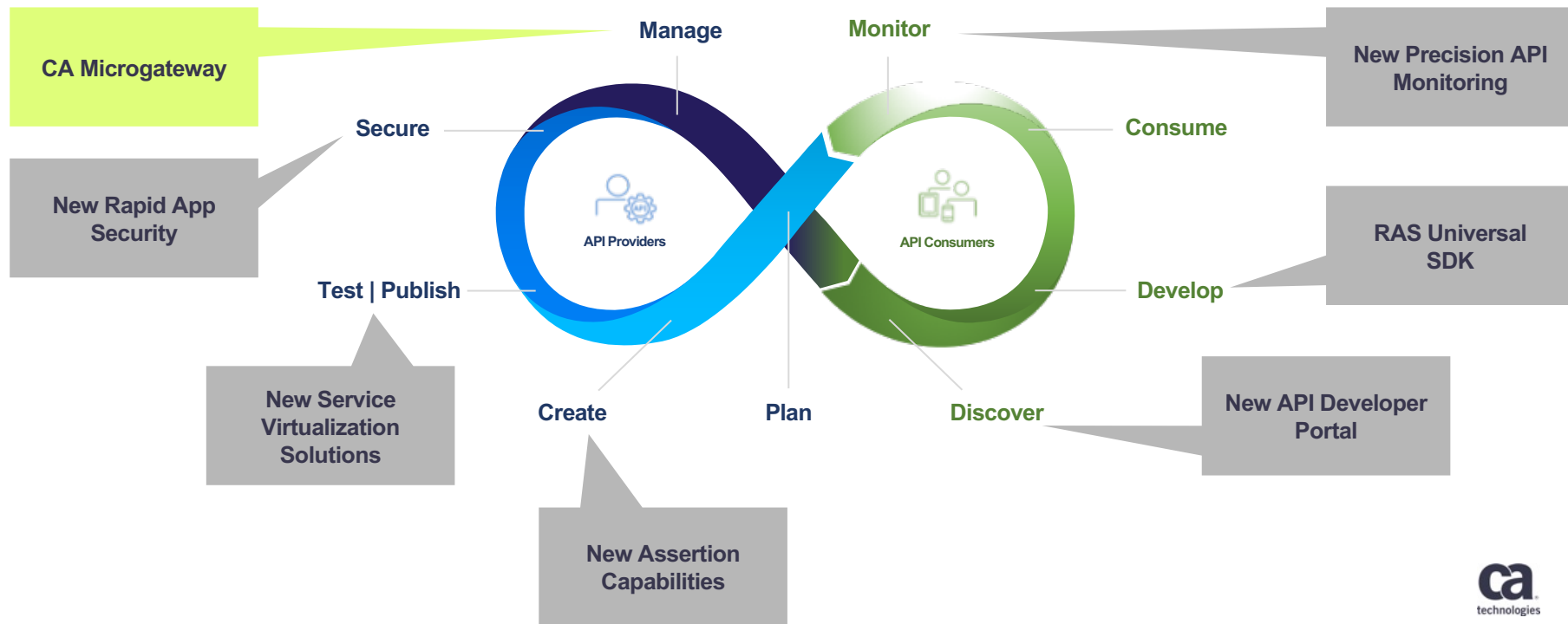
The Modern Application Architecture Model



So new
and shiny!



Latest Innovations in CA API Management



Microgateway – Key Characteristics

Capabilities and Patterns:

Service Discovery and Route via integration with service registries

Access Token for last mile security

Rate Limiting and policy enforcement

Licensed and priced to **scale** within highly **decentralized** environments

Lightweight Orchestration allows for decoupling of backend services front frontend capabilities

Circuit Breaker to protect from the propagation of failures

Deployment:

Lightweight, containerized gateway
Easily **accessible** from common developer platforms

Deploy and manage using **Docker**
Incorporate into industry-standard **DevOps** processes

Support for PaaS environments with **OpenShift** as first target

Interaction:

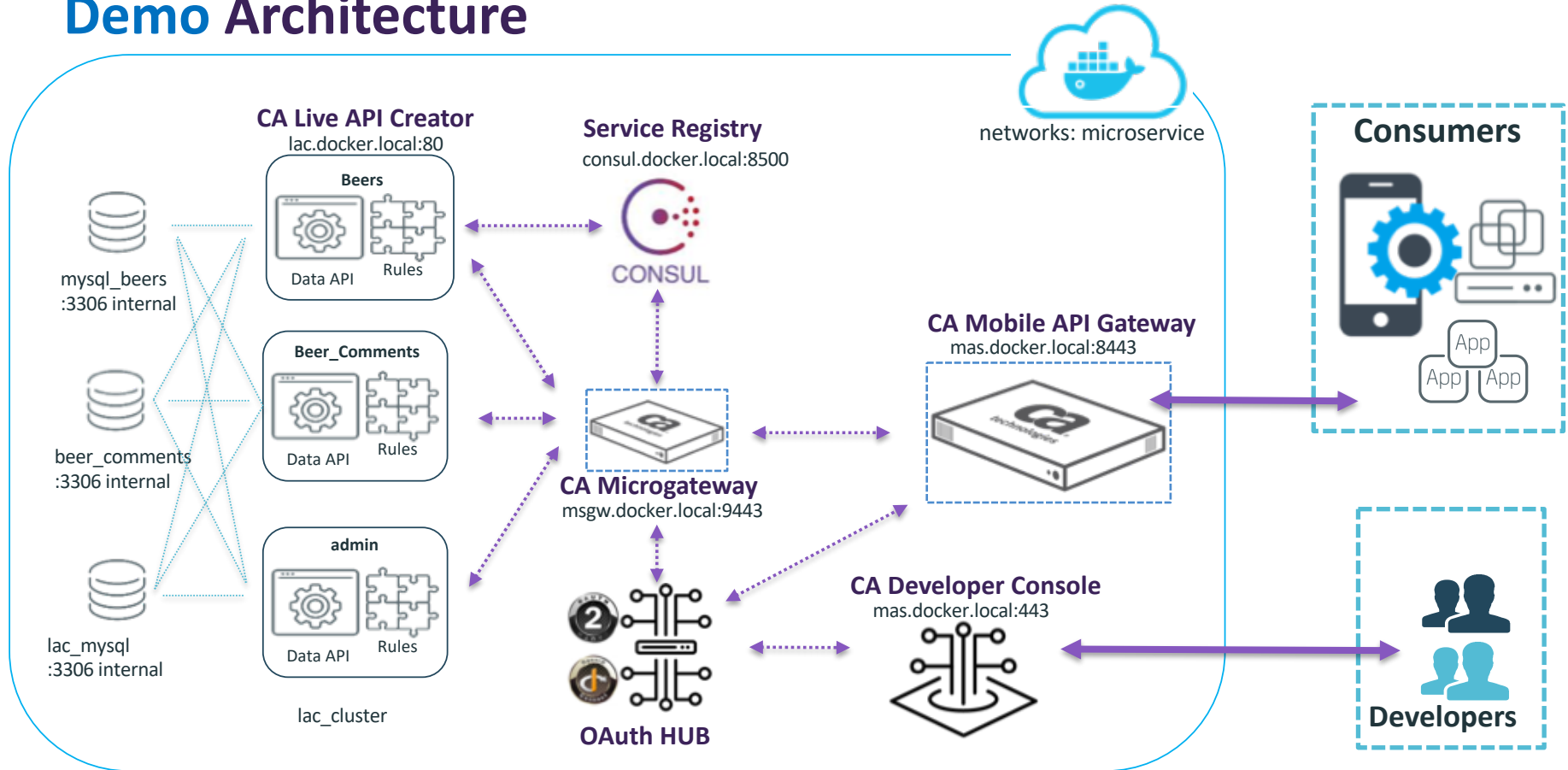
Developer-friendly **policy templates** provided for easy design-time config

Extend and enhance templates to provide custom/**new policies**

Bake new templates into **reusable containers** for future

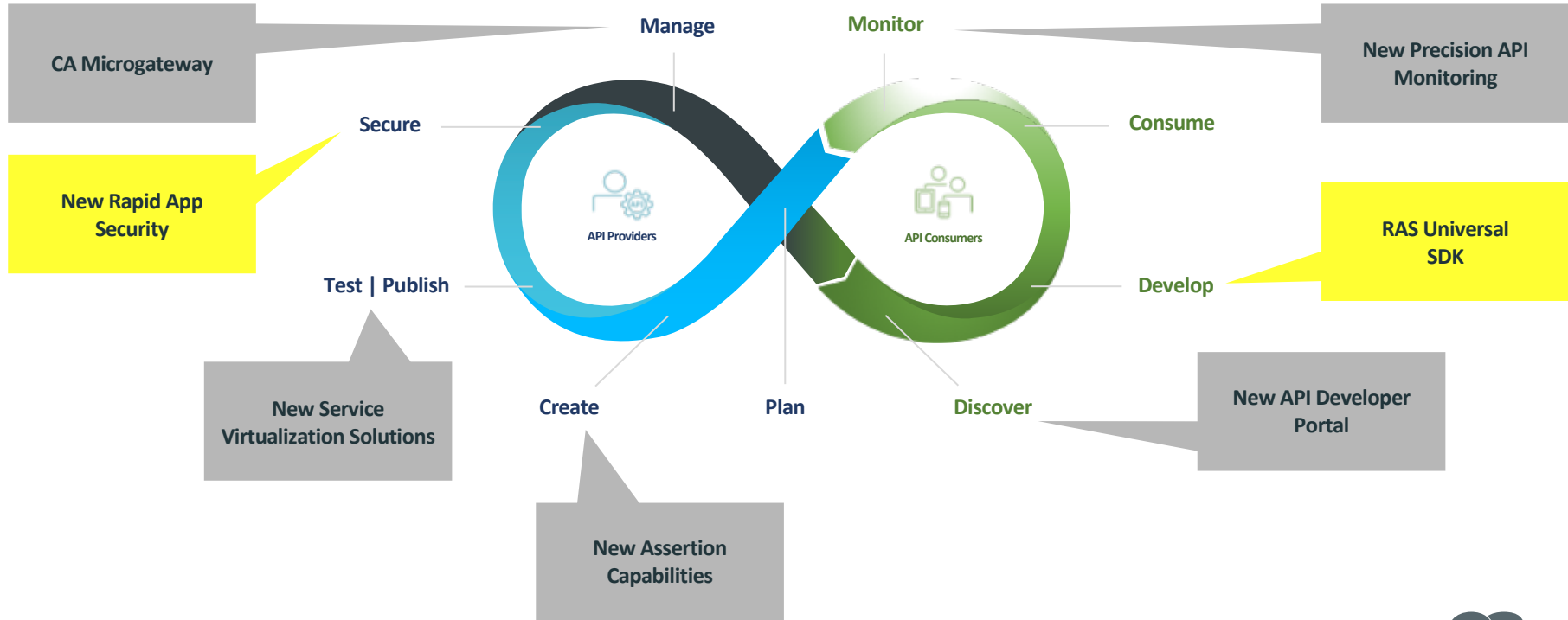
<https://github.com/CAAPIM/Microgateway>

Demo Architecture



https://github.com/aricday/apimanagement/tree/master/mps_ms_demo

Latest Innovations in CA API Management



Rapid App Security **Technical Overview**

Components for addressing authentication challenges

- Components
 - CA Advanced Authentication
 - Provides a cost-effective and user-convenient way to protect mobile apps with 2FA credentials and contextual risk-based authentication
 - CA Mobile API Gateway (OAuth HUB)
 - Builds trust relationship between user, app, and device, and secures communications between device and backend systems
 - CA Rapid App Security Mobile SDK
 - Simplifies developer experience through a single, unified SDK that easily embeds security into a mobile app



FIDO® Overview

The FIDO® (Fast IDentity Online) Alliance was established to tackle the issues related to traditional usernames and passwords.

FIDO empowers secure authentication among devices and online services by using biometric information.

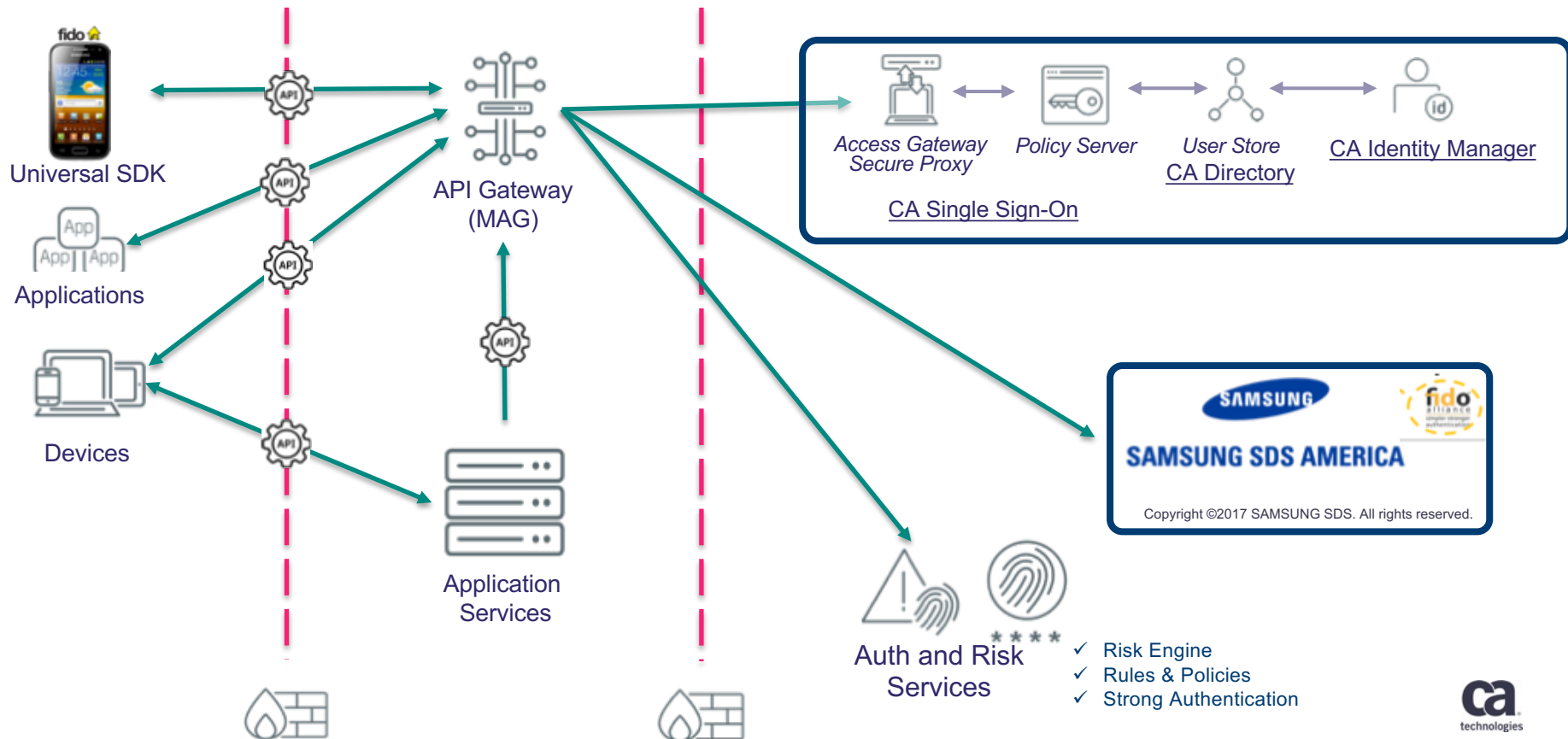
FIDO is based on public key cryptography where biometric information about the user is saved only on the device, and not on the server.

As the user credentials are not traversing over the network in FIDO, it is a safer protocol. Thus, FIDO prevents man-in-the-middle attacks.

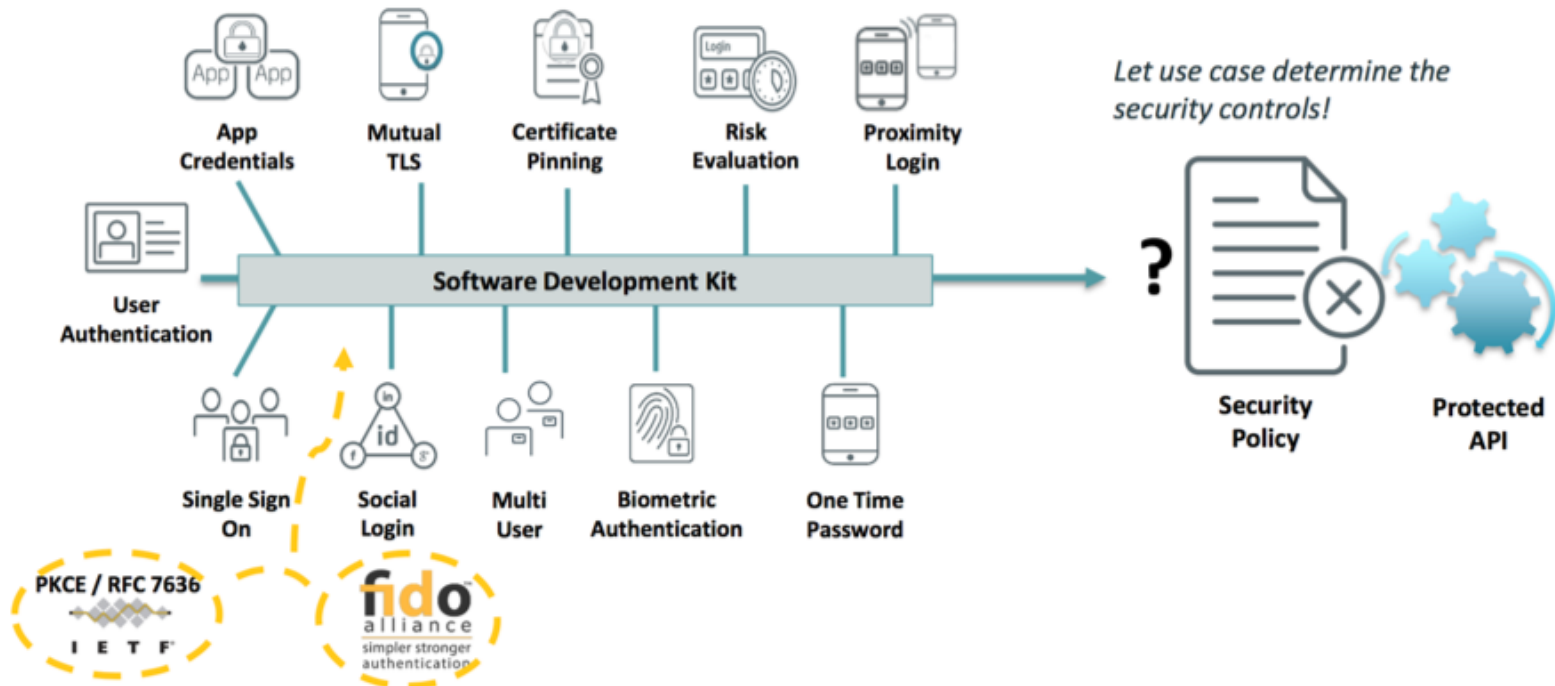
Commonly used biometric modalities include fingerprint, face, iris, and voice scan.



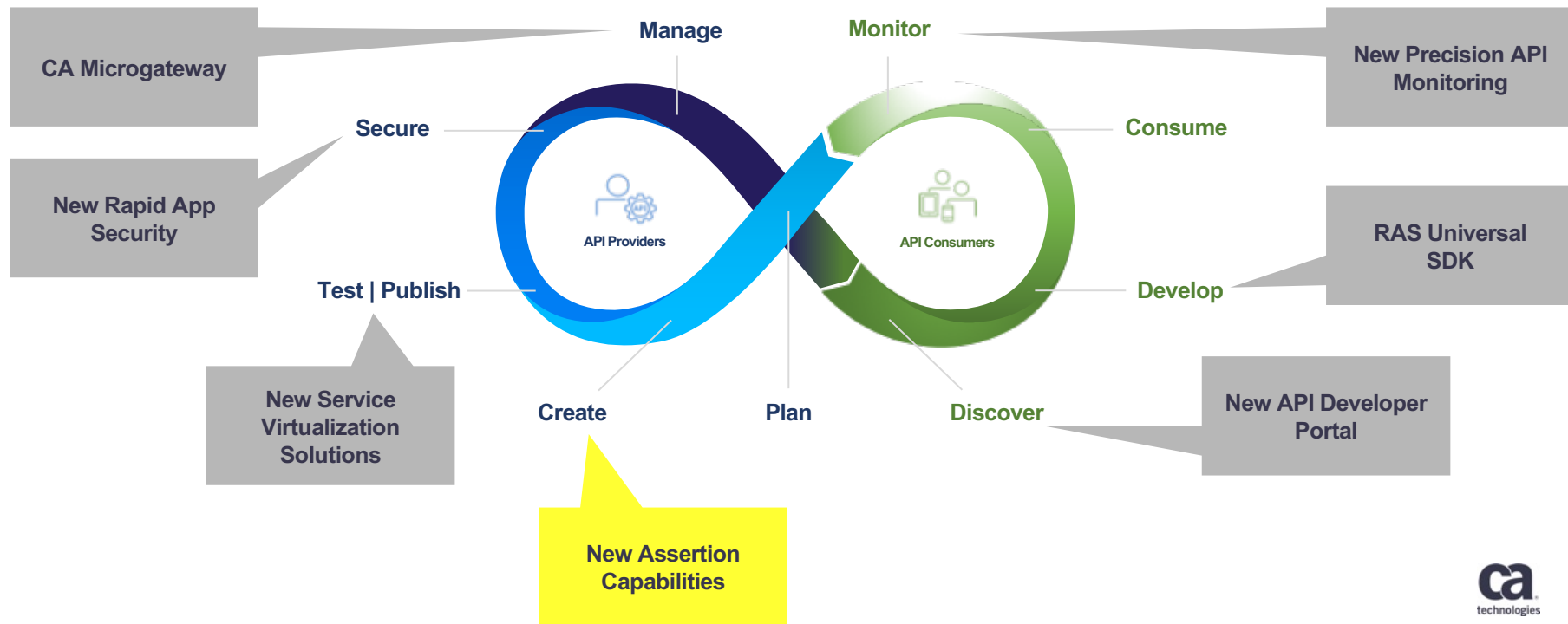
FIDO Integration with CA Solutions



Universal SDK



Latest Innovations in CA API Management

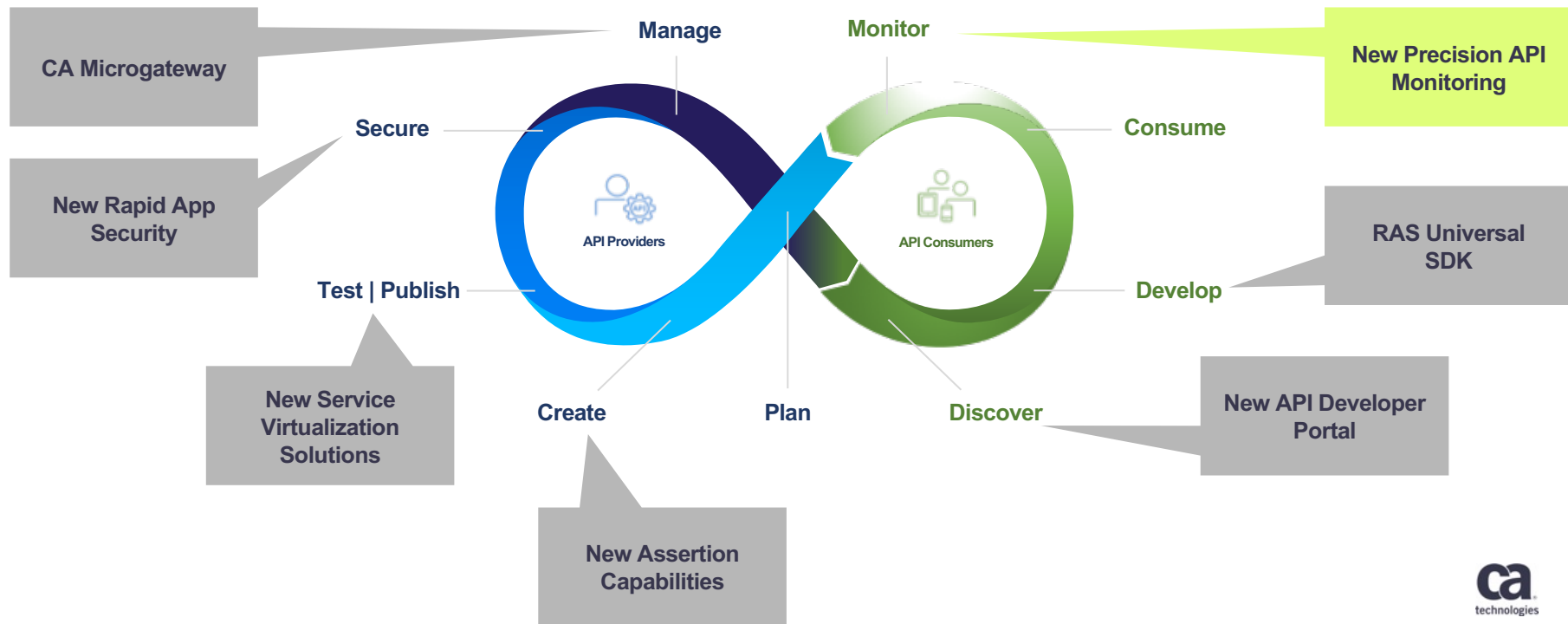


New Assertions:

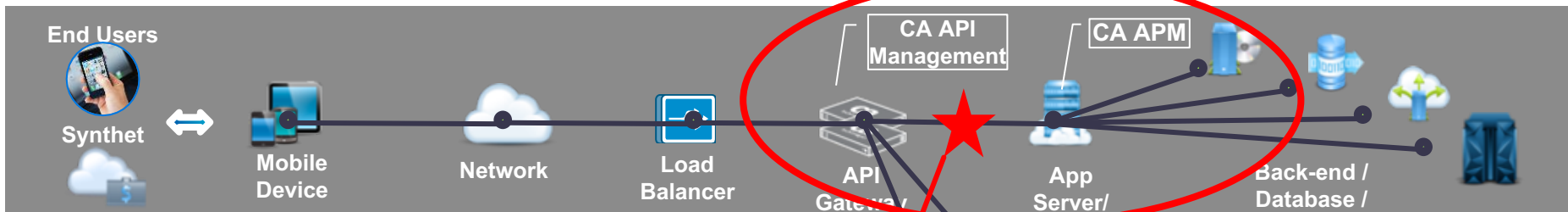
- **JavaScript Execution Assertion (ALPHA)**
- **AWS Integration Assertion (BETA)**
- **Circuit Breaker Assertion (GA)**
- **Write LDAP Assertion (GA)**

<https://validate.ca.com/welcome/>

Latest Innovations in CA API Management

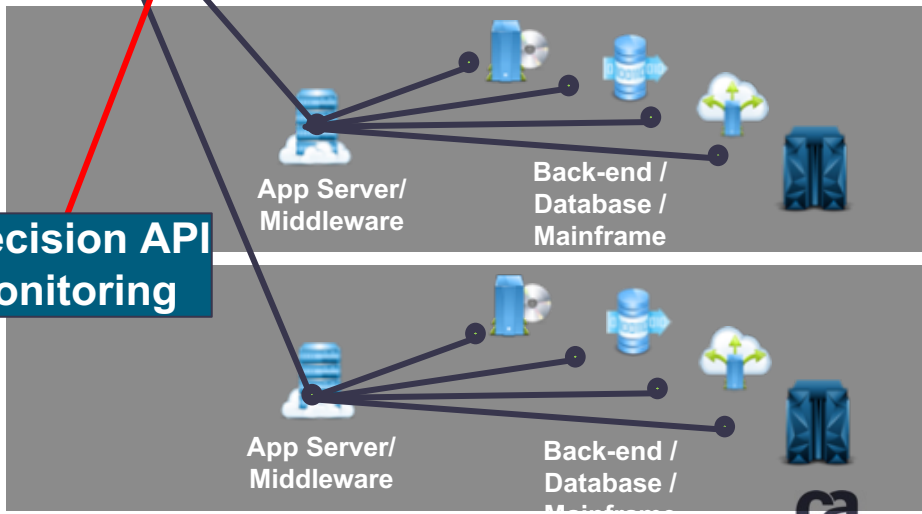


CA Precision API Monitoring: **End-to-End Visibility**

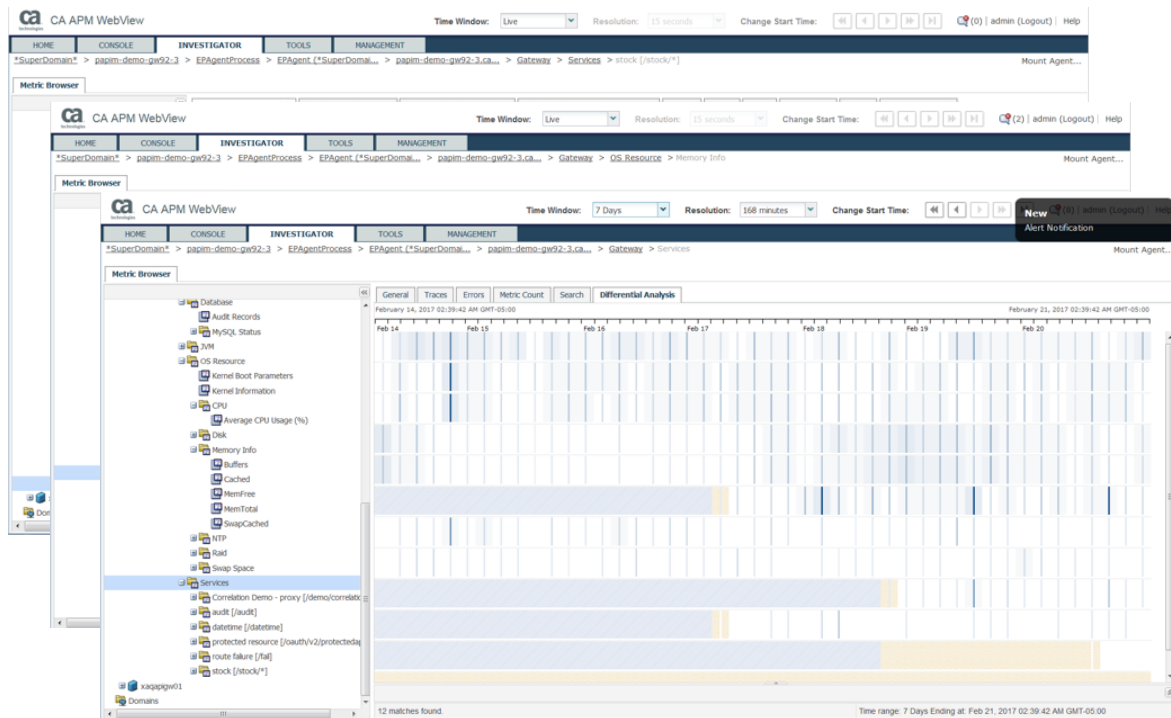


- **Visibility into API performance**
- **Understand which back-end systems support business services**
- **Determine End-User experience**
- **Rapidly triage performance issues**

Precision API Monitoring



Manage & Monitor API and Gateway Metrics



Customized type views for Services and API Gateway metrics

Metric visibility: per service latency, successes, failures, and violations

Gateway *OS vitals monitoring* including CPU, memory, and MySQL database

Automatic alerting on API performance anomalies



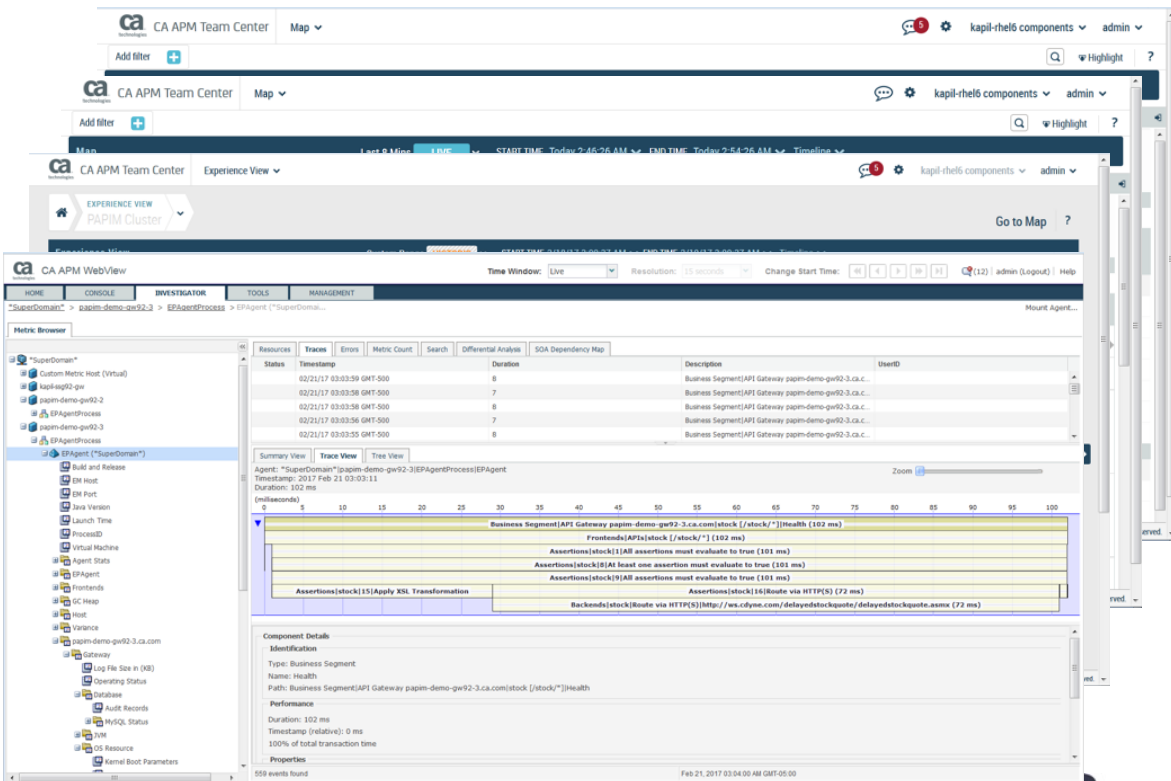
Topology Map and Transaction Tracing

Team Center exposes front-end APIs grouped by gateways & clusters with back-ends

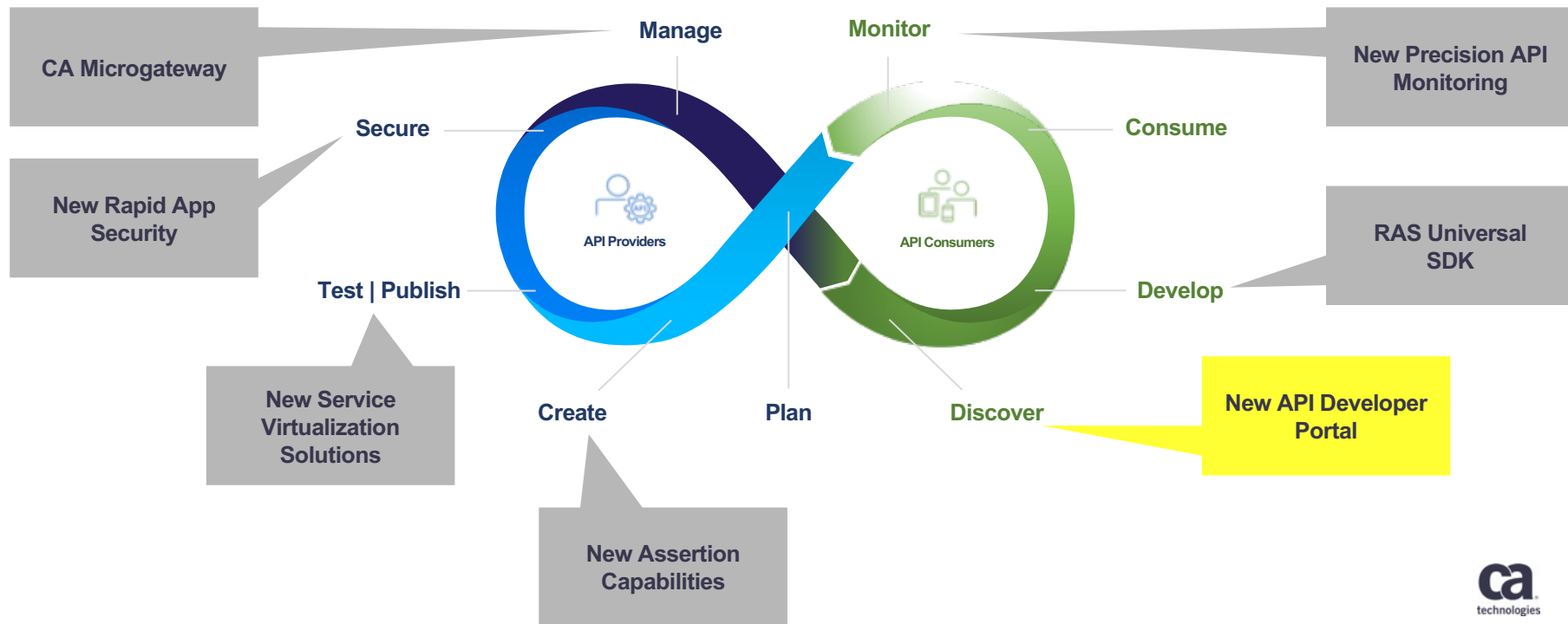
Experience Views summarize key API metrics in a simple interface

Detailed *API transaction tracing* allows quick triage

Correlation of API traces to backend APM monitored systems show entire transaction from customer perspective



Latest Innovations in CA API Management



CA API Developer Portal Timeline

CA API Developer Portal (Classic)

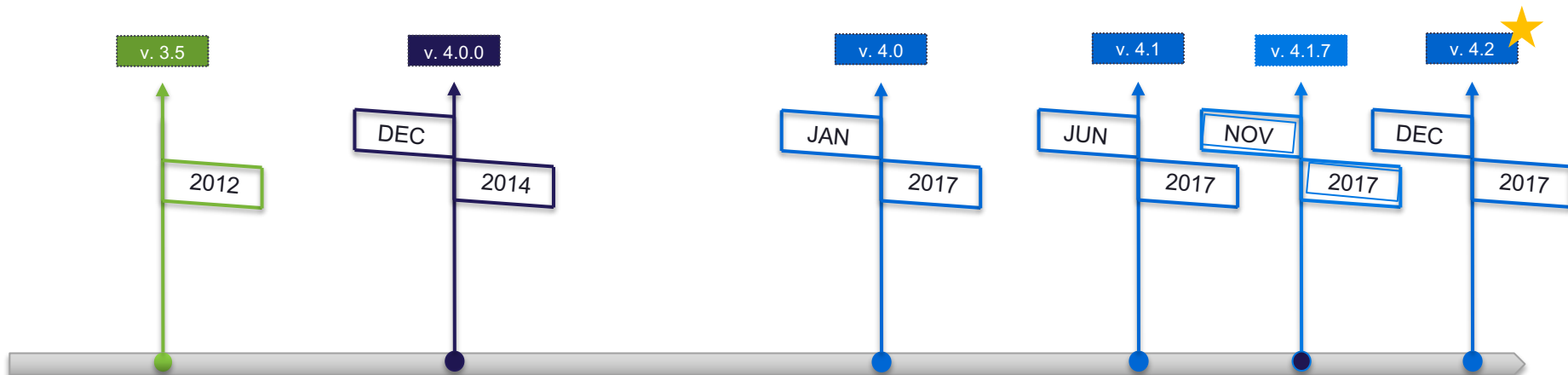
This is the latest version of the called
"classic" portal

CA API Developer Portal (SaaS)

SaaS version of the CA API
Management suite with a brand new
portal and enhanced features

CA API Developer Portal (On-Prem or Enhanced Experience)

SaaS version of the CA API Management suite with a brand new portal
and enhanced features



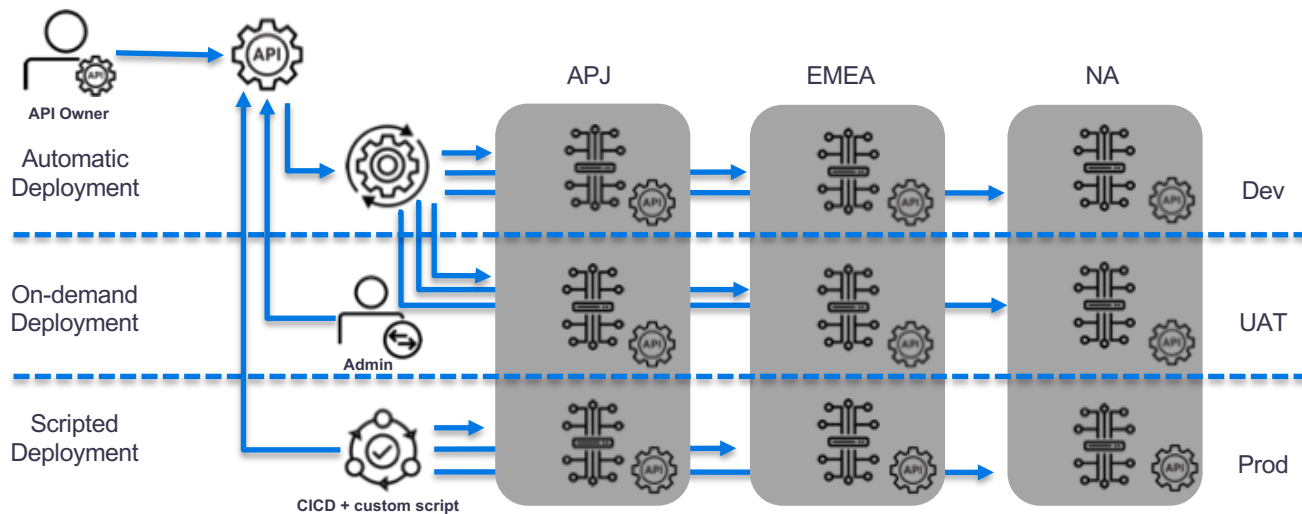
Improved On-Premises Deployment Process

```
alancota@COTAL01MHP: ~/Google Drive/Work/Portal4.2/portal-4.2.0
➔ 1
total 744
-rw-r--r--@ 1 alancota  staff   2.3K Dec 14 18:16 apim.pl2
-rwxr-xr-x@ 1 alancota  staff  20K Oct  3 11:53 license.xml*
-rw-r--r--@ 1 alancota  staff   66K Dec 14 14:02 portal-4.2.0.yml
-rw-r--r--  1 alancota  staff  263K Dec 18 18:18 portal-data.log
-rw-r--r--  1 alancota  staff   11K Dec 18 18:18 pssg.log
alancota@COTAL01MHP:~/Google Drive/Work/Portal4.2/portal-4.2.0
➔ docker service ls
ID                NAME                                MODE                REPLICAS            IMAGE
z8B60rjkf8b5     portal_analytics-server            global              1/1                  apim-portal.packages.ca.com/apim-portal/analytics-server:4.2.0.rc3
vec3lgsbpeyjl    portal_apim                        global              1/1                  apim-portal.packages.ca.com/apim-portal/apim:4.2.0.rc3
l2aheh7tqvqv     portal_apis                        replicated          1/1                  jarvis.packages.ca.com/analytics/jarvis_api:2.2.0.89
yxl07nxf6s8      portal_authenticator              global              1/1                  apim-portal.packages.ca.com/apim-portal/authenticator:4.2.0.rc3
lpg8thm22v2l     portal_dispatcher                  global              1/1                  apim-portal.packages.ca.com/apim-portal/dispatcher:4.2.0.rc3
ytpf5523mcjm     portal_elasticsearch               global              1/1                  jarvis.packages.ca.com/analytics/elasticsearch-5.5.3:2.2.0.130
qtirzbjltw35     portal_indexer                    replicated          1/1                  jarvis.packages.ca.com/analytics/jarvis_indexer:2.2.0.43
b92f6rv9a21s     portal_kafka                      replicated          1/1                  jarvis.packages.ca.com/analytics/kafka-0.10.1.0:2.2.0.126
0v24x106a8t4     portal_kron                       replicated          1/1                  jarvis.packages.ca.com/analytics/jarvis_kron:2.2.0.19
kjjp90a7h90e     portal_ldds-web                   replicated          1/1                  jarvis.packages.ca.com/analytics/ldds:2.1.0.1
0a2nr46paa6      portal_portal-data                global              1/1                  apim-portal.packages.ca.com/apim-portal/portal-data:4.2.0.rc3
we137vbo0wue     portal_portal-enterprise           global              1/1                  apim-portal.packages.ca.com/apim-portal/portal-enterprise:4.2.0.rc3
0ngvrvhuaj5     portal_portaldb                   replicated          1/1                  apim-portal.packages.ca.com/apim-portal/postgres:4.2.0.rc3
1b0d7a277fex2    portal_pssg                       global              1/1                  apim-portal.packages.ca.com/apim-portal/pssg:4.2.0.rc3
u82ajlt3e06x     portal_rabbitmq                   replicated          1/1                  apim-portal.packages.ca.com/apim-portal/message-broker:4.2.0.rc3
svk9ughnqph4     portal_schema_registry            replicated          1/1                  jarvis.packages.ca.com/analytics/jarvis_schema_registry:2.2.0.10
gjmkn2w9z10      portal_sntp                       replicated          1/1                  apim-portal.packages.ca.com/apim-portal/sntp:4.2.0.rc3
nadr1ugm2o2      portal_solr                       replicated          1/1                  apim-portal.packages.ca.com/apim-portal/solr:4.2.0.rc3
z36s34x0mwll     portal_tenant-provisioner         replicated          1/1                  apim-portal.packages.ca.com/apim-portal/tenant-provisioning-service:4.2.0.rc3
dljy5w6c47f      portal_utils                      replicated          1/1                  jarvis.packages.ca.com/analytics/jarvis_es_utils:2.2.0.81
n17n281c0gp      portal_verifier                   replicated          1/1                  jarvis.packages.ca.com/analytics/jarvis_verifier:2.2.0.42
qv609fq202nz     portal_zookeeper1                 replicated          1/1                  jarvis.packages.ca.com/analytics/zookeeper-3.4.8:2.2.0.122
```

The screenshot displays the CA API Developer Portal Enhanced Experience MULTI-PLATFORM interface. The top navigation bar includes links for Solutions, Products, Education & Training, Services & Support, Partners, Search, and Sign Out. The main content area shows a 'Download Management' section with a table of available components. The table has columns for Release, Service Pack, Component, and Date. Below the table, there are icons for downloading the component. The bottom of the page shows 'Showing 1 - 5 of 5'.

RELEASE	SERVICE PACK	COMPONENT	DATE
4.2	0000	API DEVELOPER PORTAL VIRTUAL CENTOS 4.2	Dec 12, 2017
4.2	0000	API DEVELOPER PORTAL INSTALLER 4.2	Dec 12, 2017
4.2	0000	API DEVELOPER PORTAL INSTALLER OFFLINE 4.2	Dec 12, 2017
4.2	0000	API DEVELOPER PORTAL ES DATA MIGRATION UTILITY 4.2	Dec 11, 2017
4.2	0000	API DEVELOPER PORTAL JARVIS DOCKER MIGRATION UTILITY 4.2	Dec 11, 2017

New decoupled API Publishing (Federated Deployment)



New decoupled API Publishing (Federated Deployment)

