

Citrix Deep Dive

Daan Akkerman
Sr. Solution Manager
Arrow ECS

Edwin Ilario
Business Development Manager
Arrow ECS

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citrix

Agenda

Citrix Cloud Services

Architecture & Management

-Break-

Citrix Workspace

Experience, Security, Productivity

Citrix + Microsoft

Better together

-Break-

Citrix Networking Deep Dive

14:45 - Menno Bernardt, Citrix

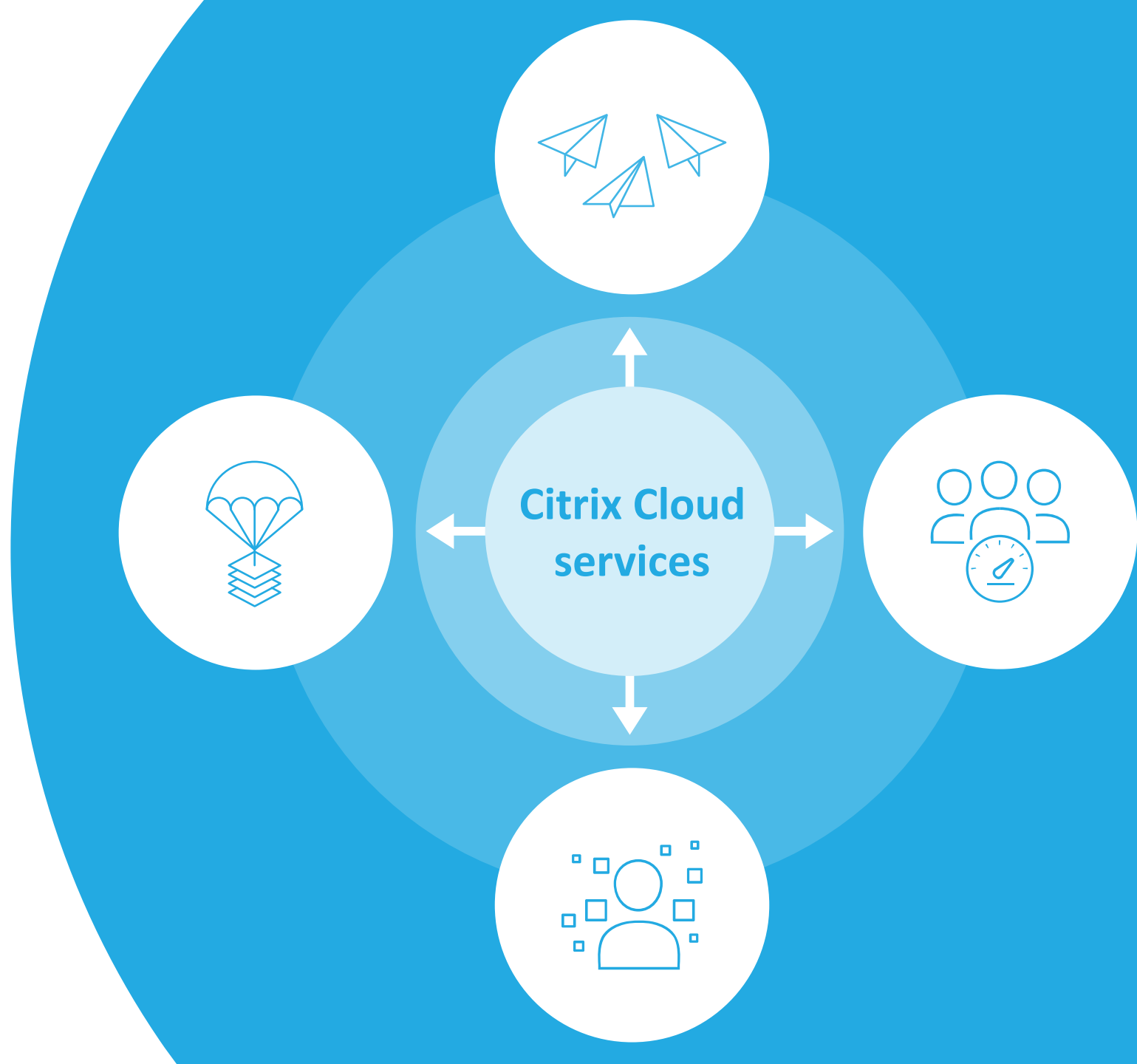




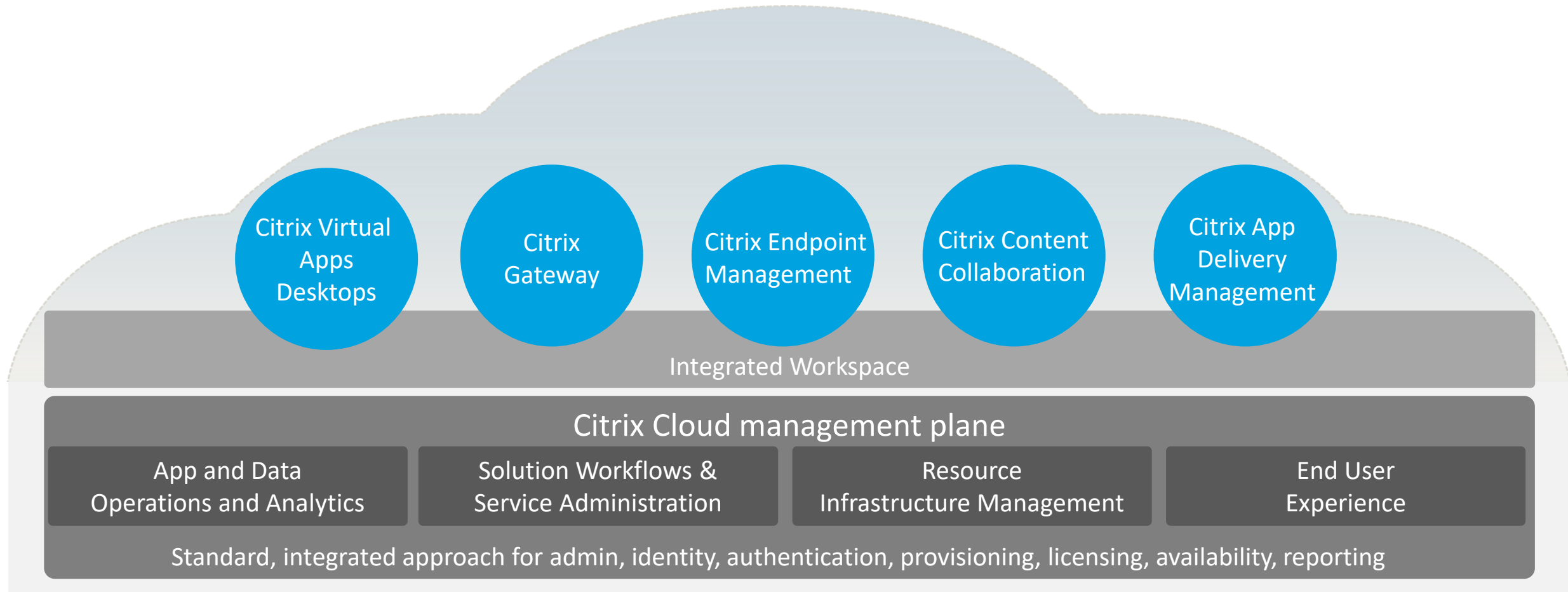
Citrix Cloud Services

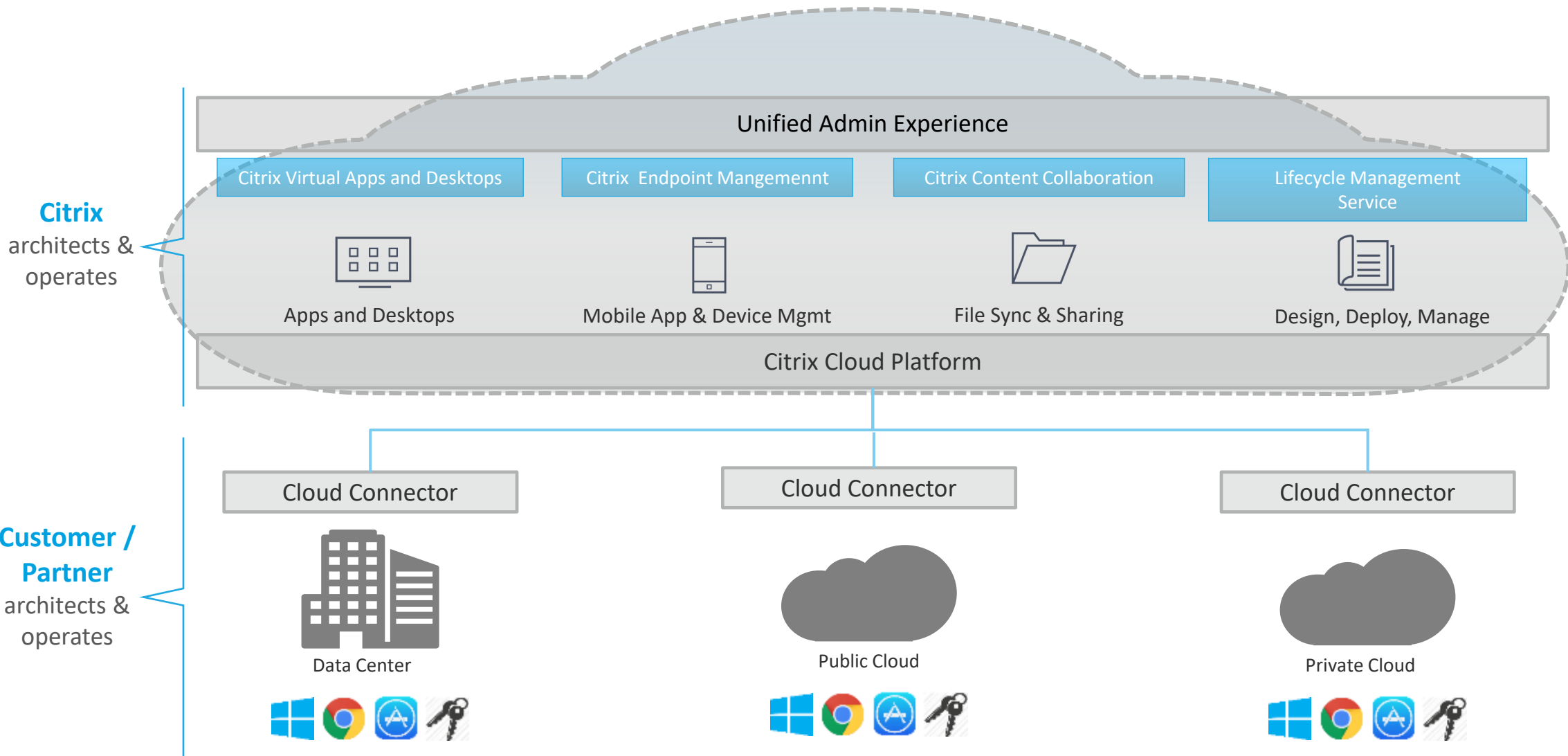
Core Principles

1. Transforms products to cloud services, innovate with cloud-first mindset
2. Deliver a seamless workspace-as-a-service experience
3. Enable seamless transition to & co-existence with hybrid cloud

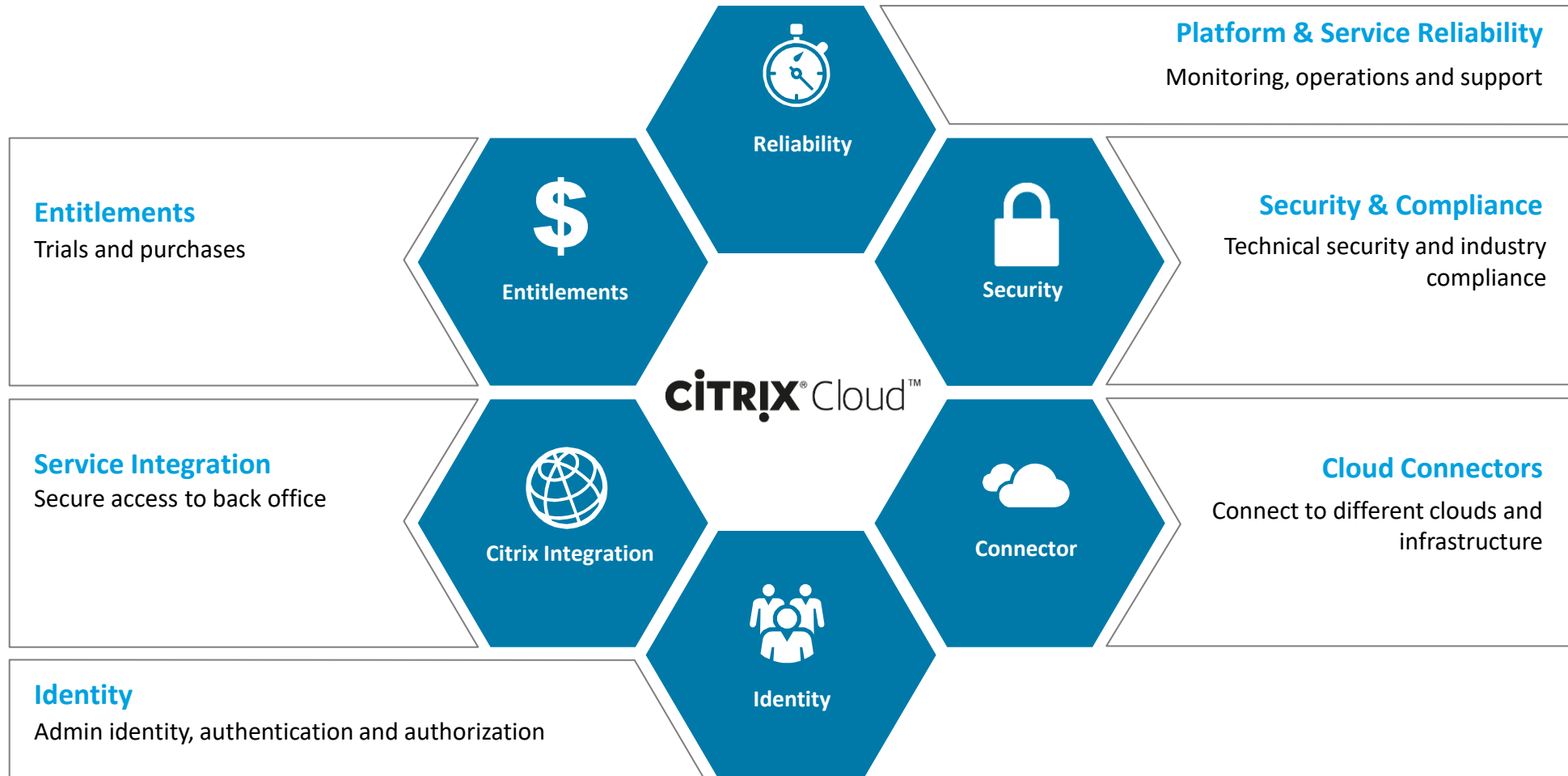


Citrix Cloud Services are Integrated





Platform Foundations

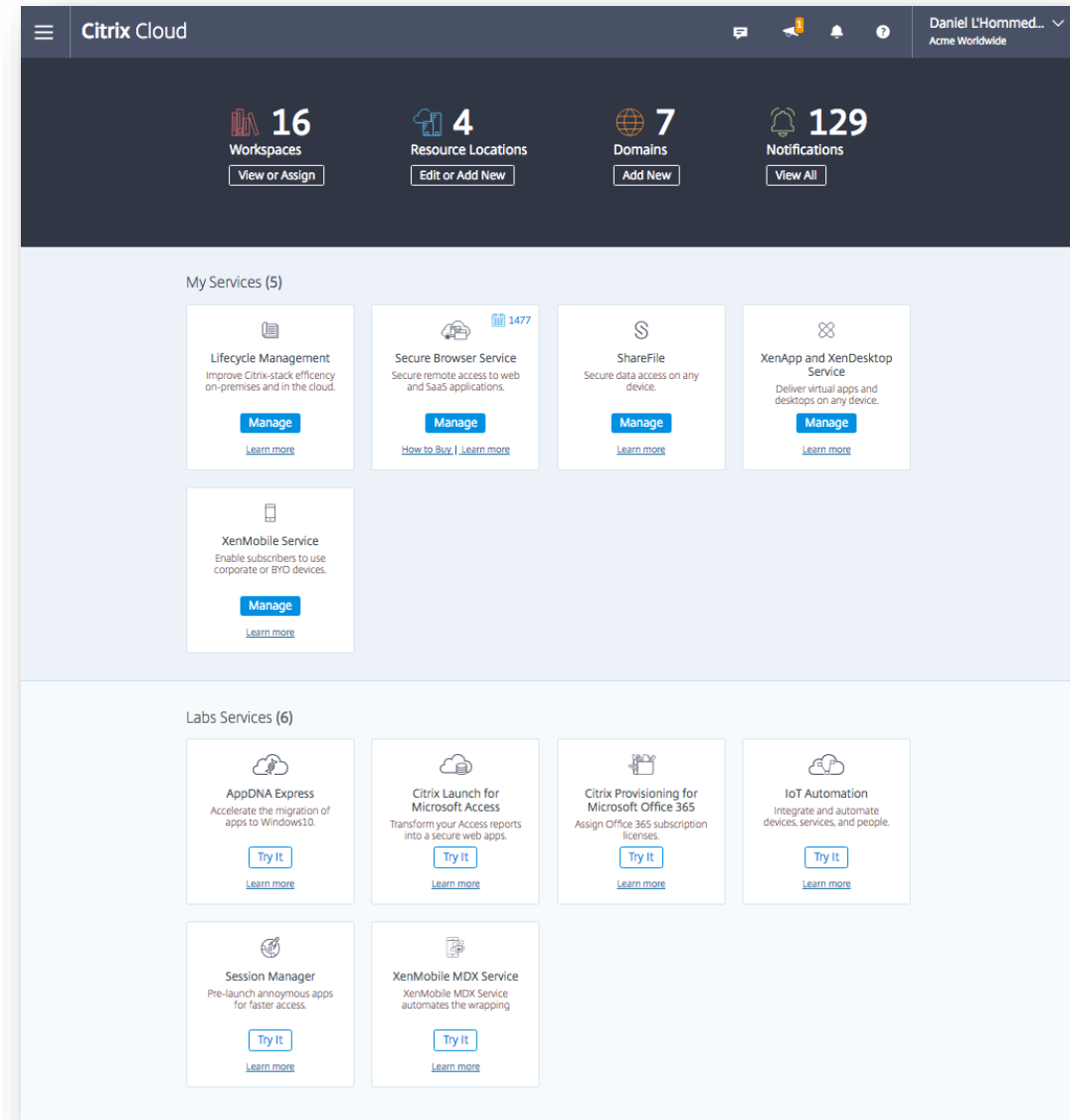




Administrator Experience

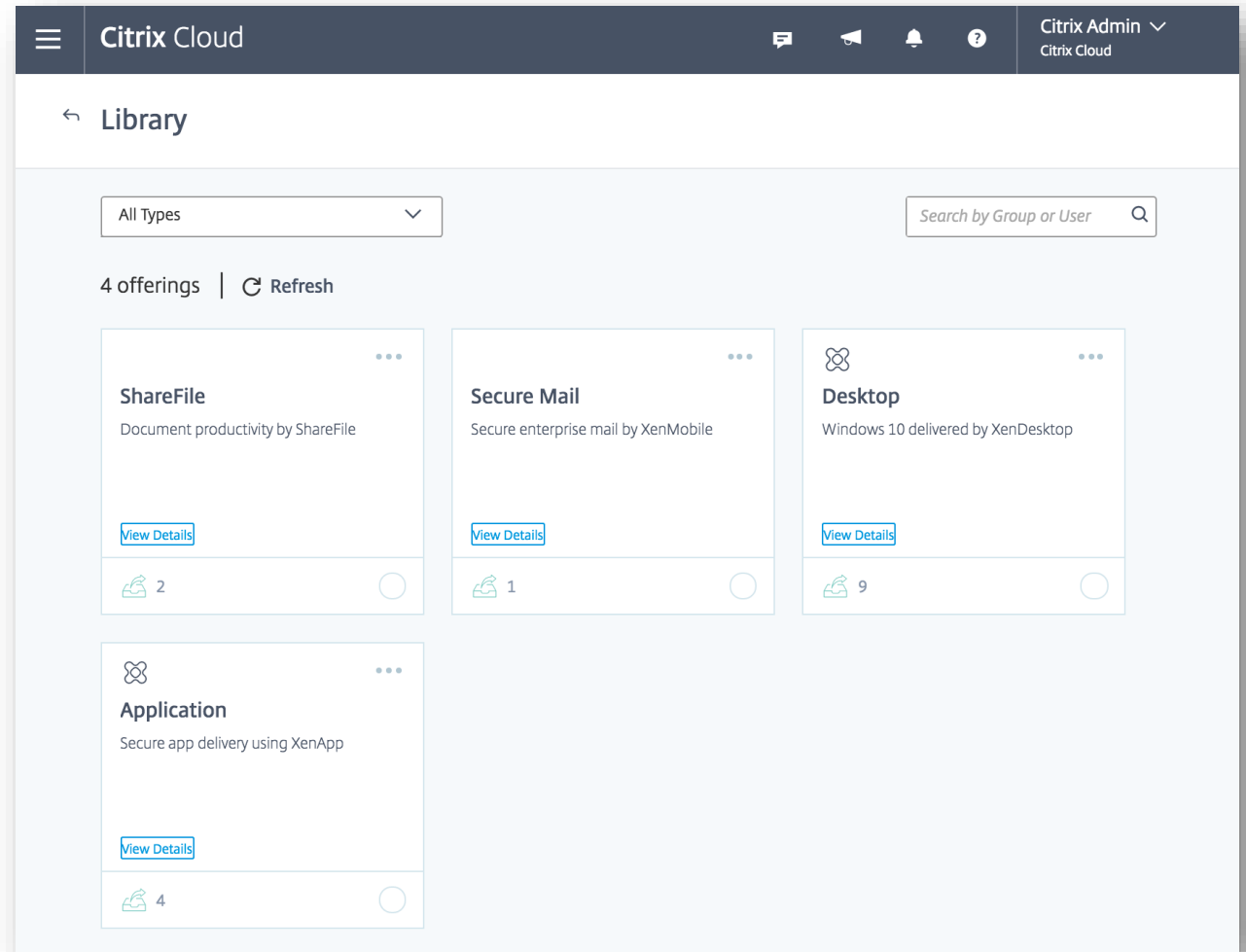
Launchpad

- Landing page for administrators
- Navigate into service or platform interfaces
- View a summary of system objects and notifications
- View active and available services
- Per-Tenant management



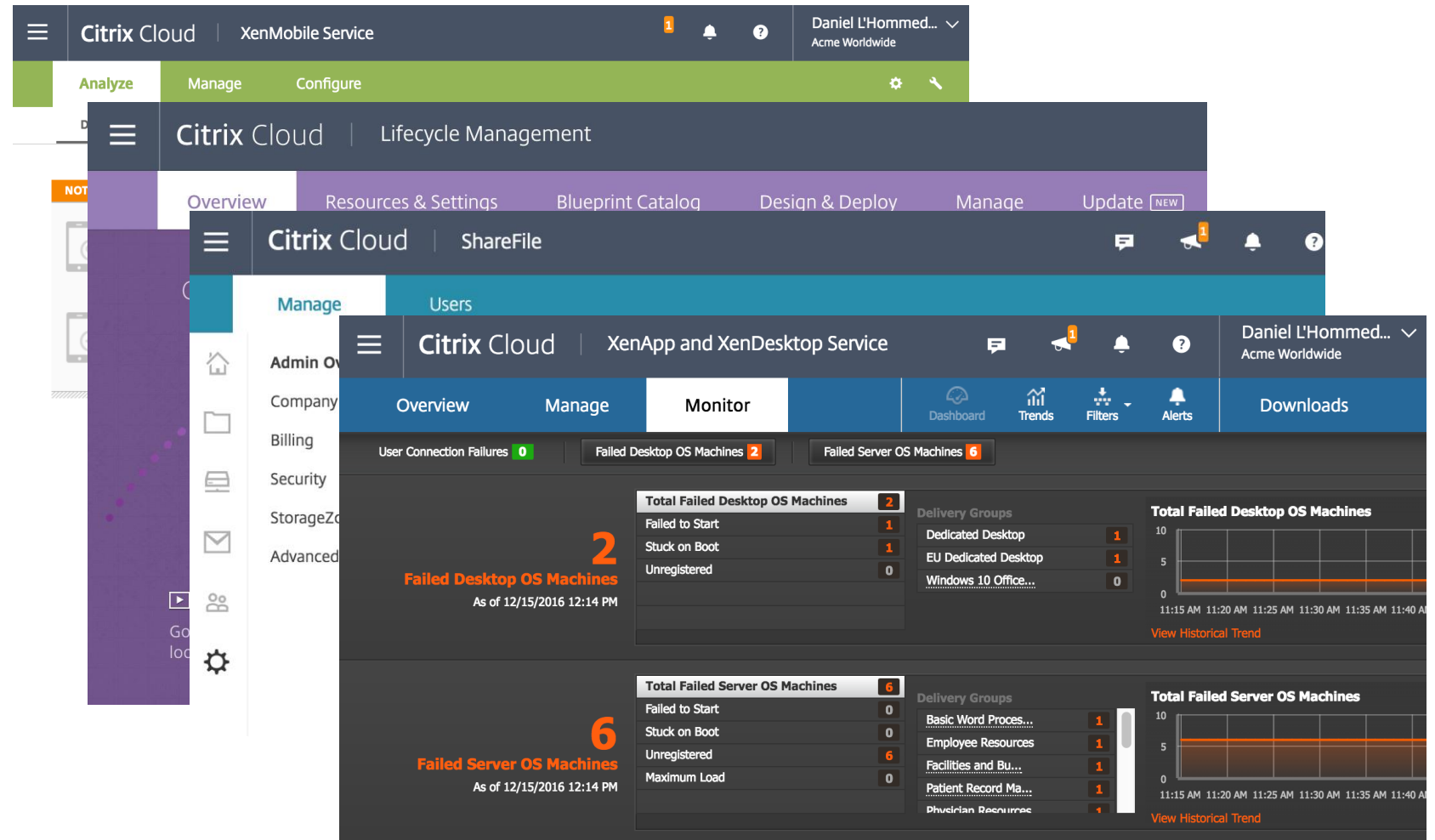
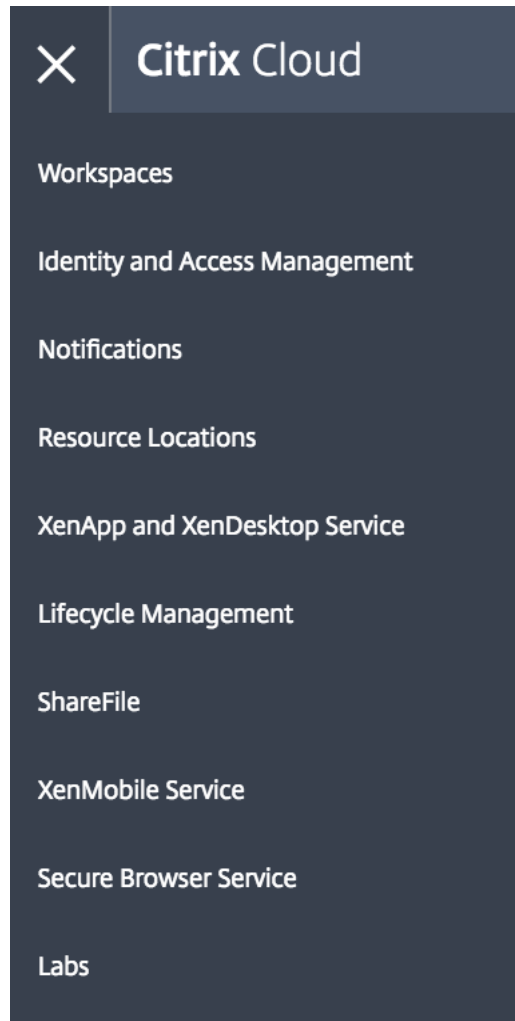
Library

- Manage a library or catalog of service offerings
- Control user and group access to apps, desktops and services using subscriptions
- Search and view offering details and assignments



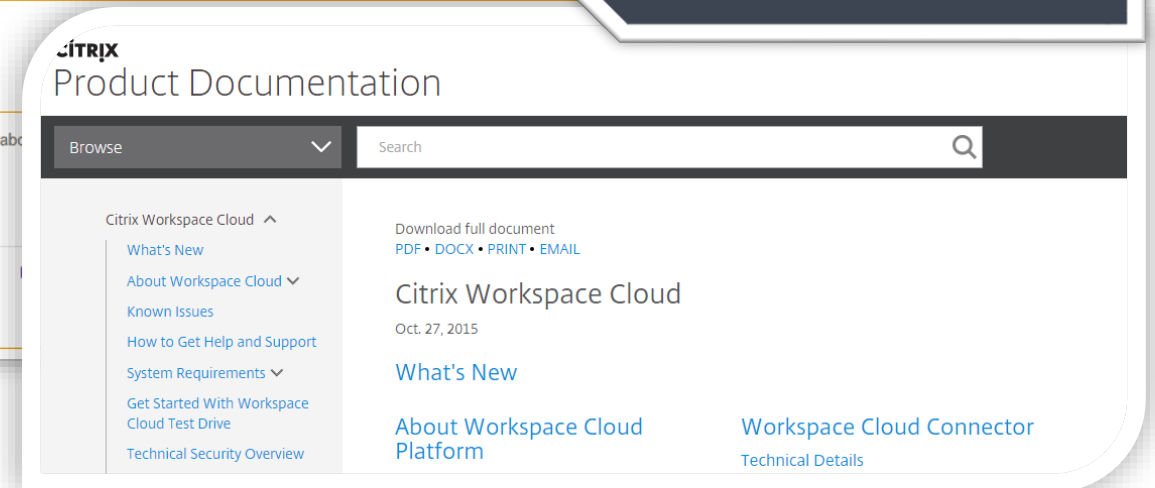
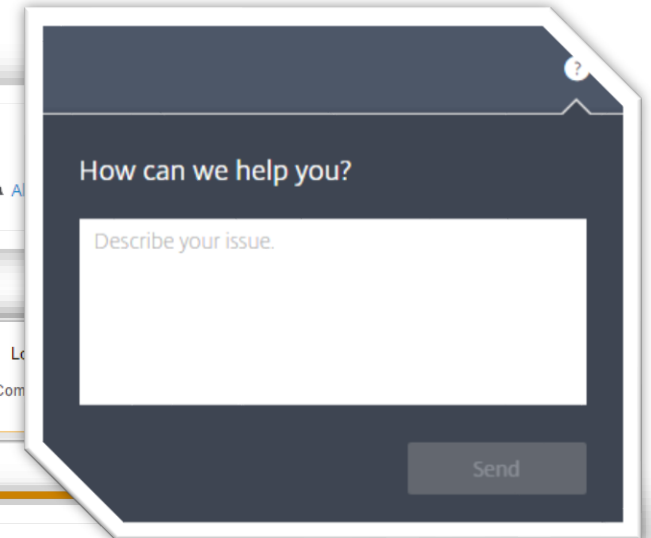
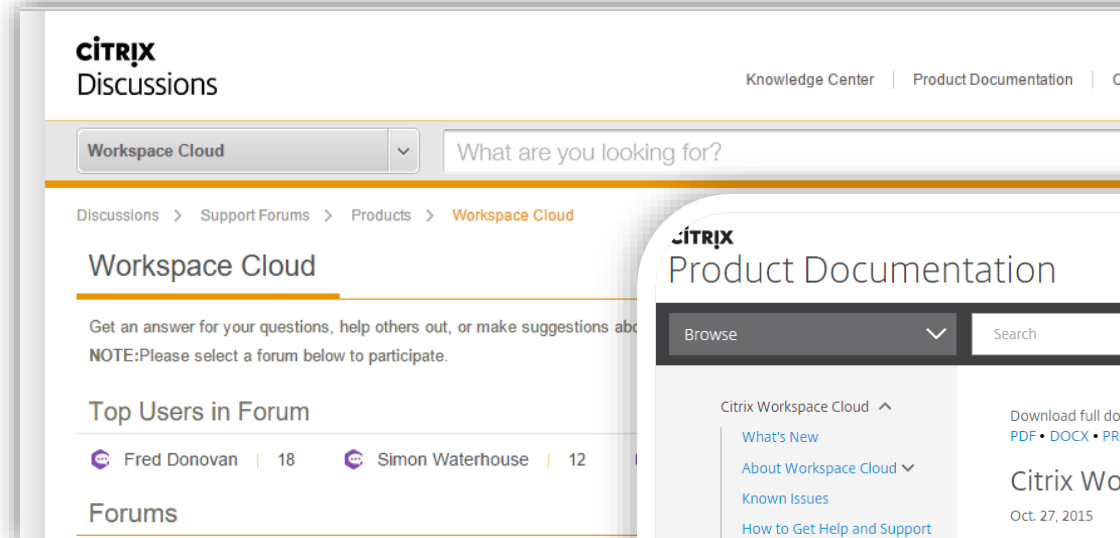
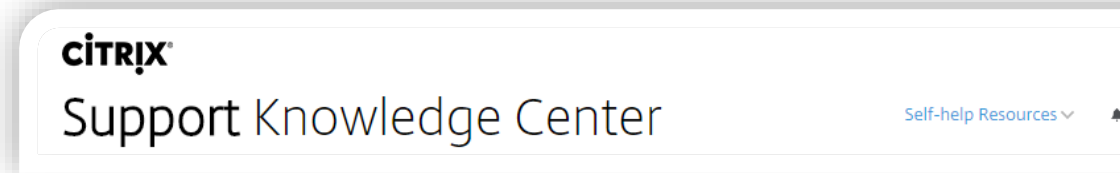
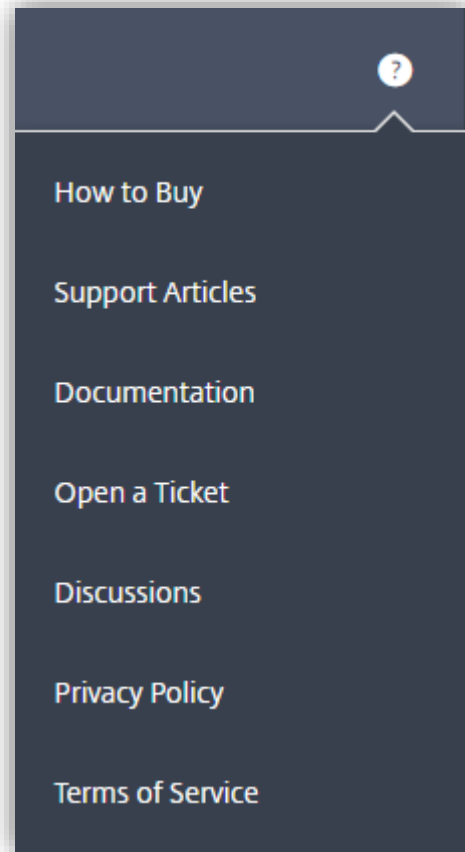
Unified Admin Experience

Single Sign on across all services in the control plane



Integrated Support

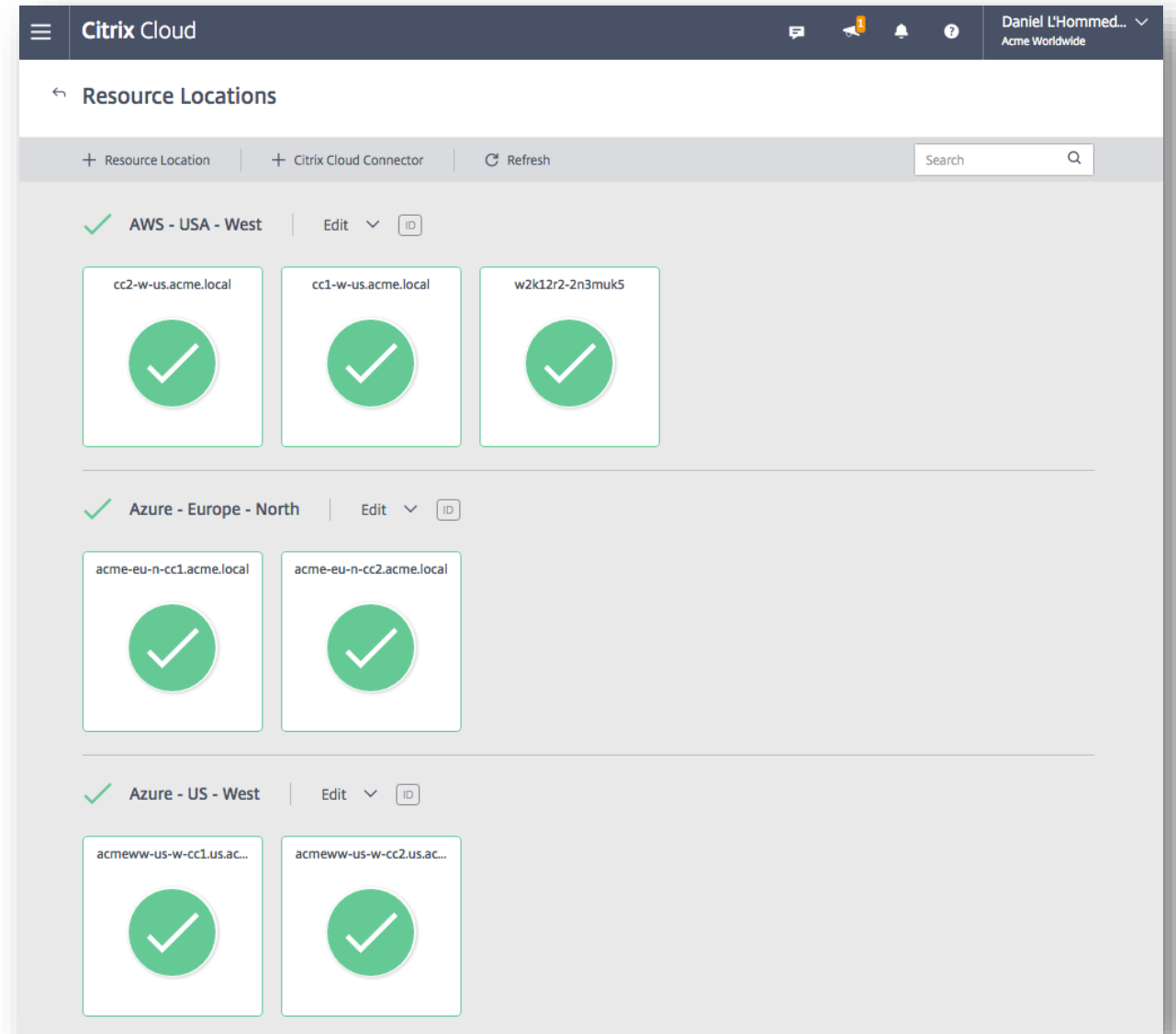
Create tickets and quickly access documentation and support resources



Resource Locations

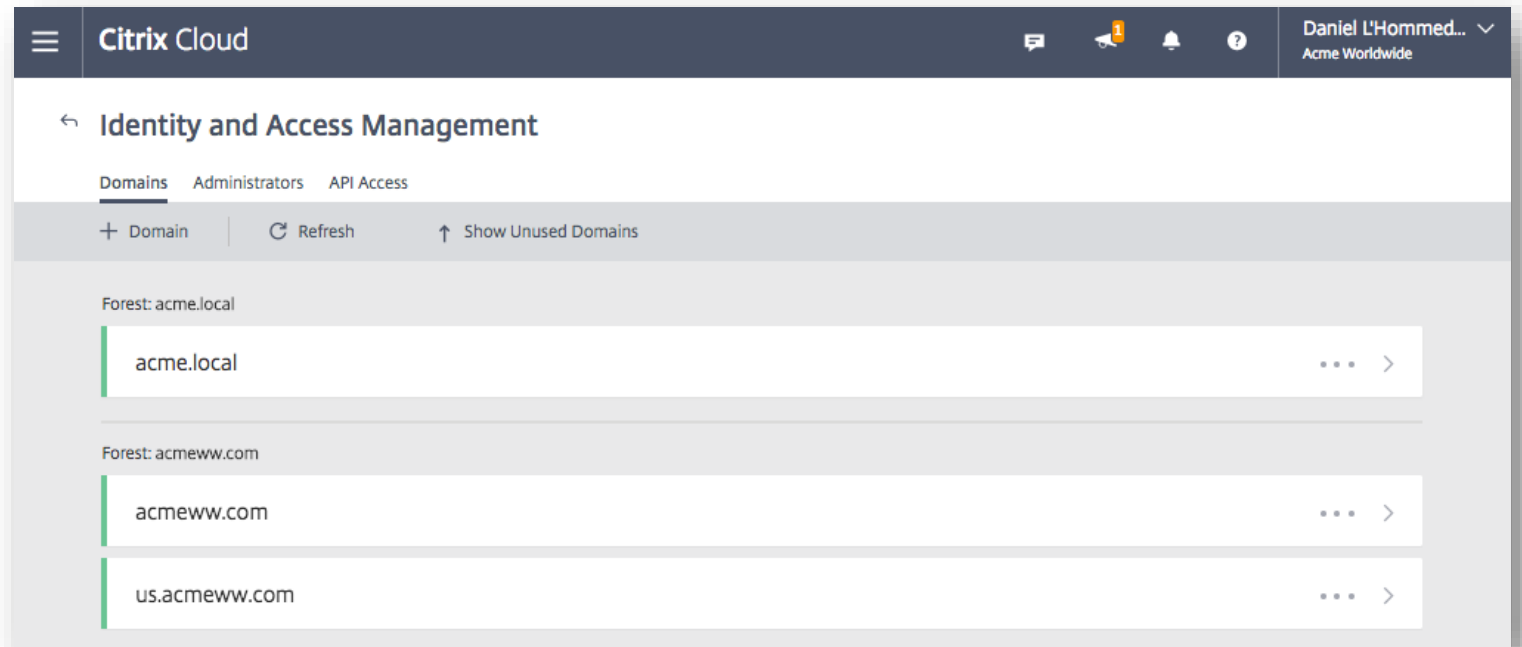
Powered by Cloud Connectors

- Create multiple resource locations to manage many datacenters and clouds
- Easily view health of connectors in each resource location; view any related alerts and messages
- Add/Remove resource locations including Network & AD
- Quickly download and deploy new connectors



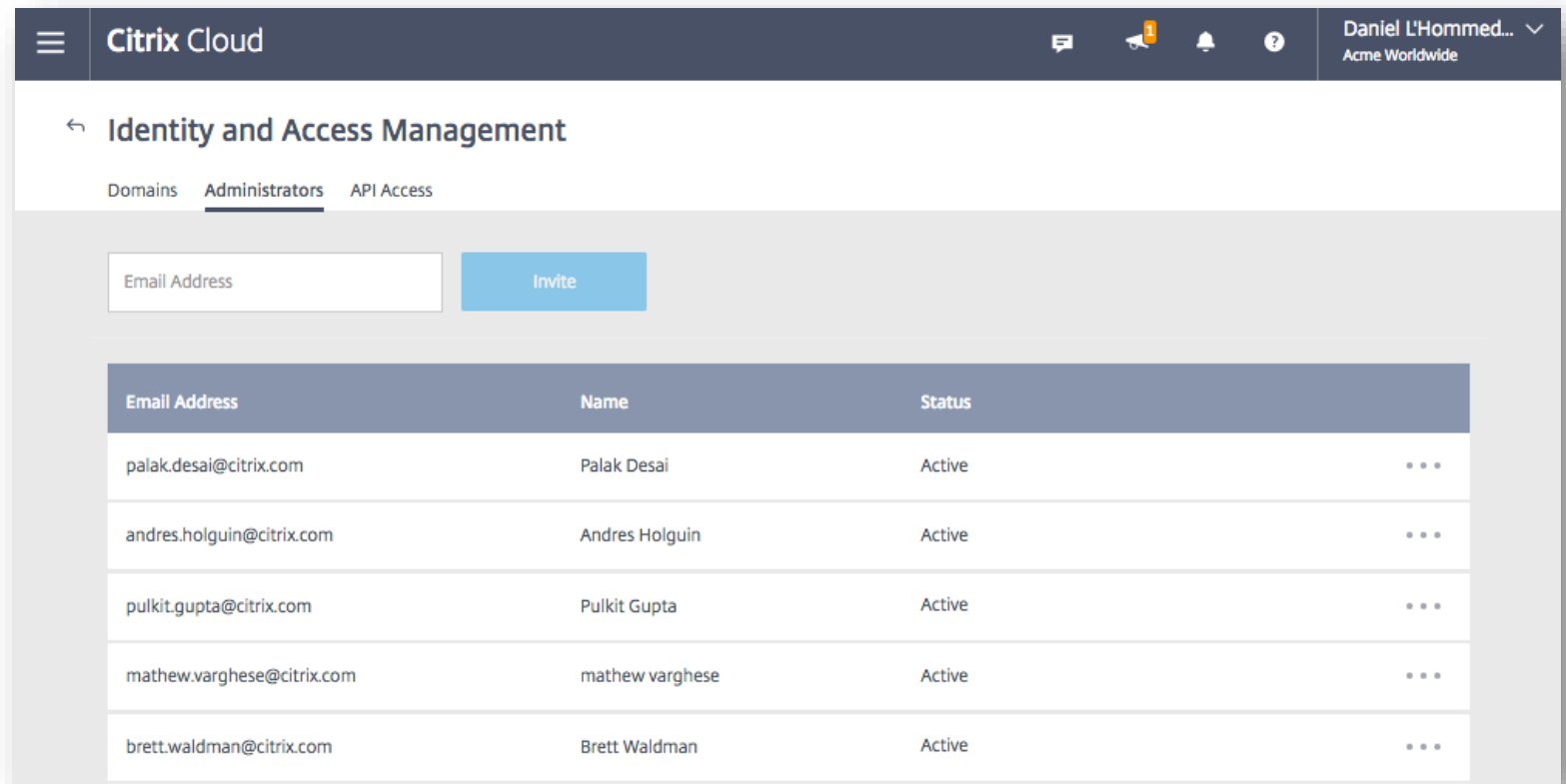
Domains

- Manage one or more domains within each resource location
- Cloud Connector discovers domains automatically during deployment
- Manage across AD forests, user and resource domains



Administrators

- Easily invite and manage administrators on the account

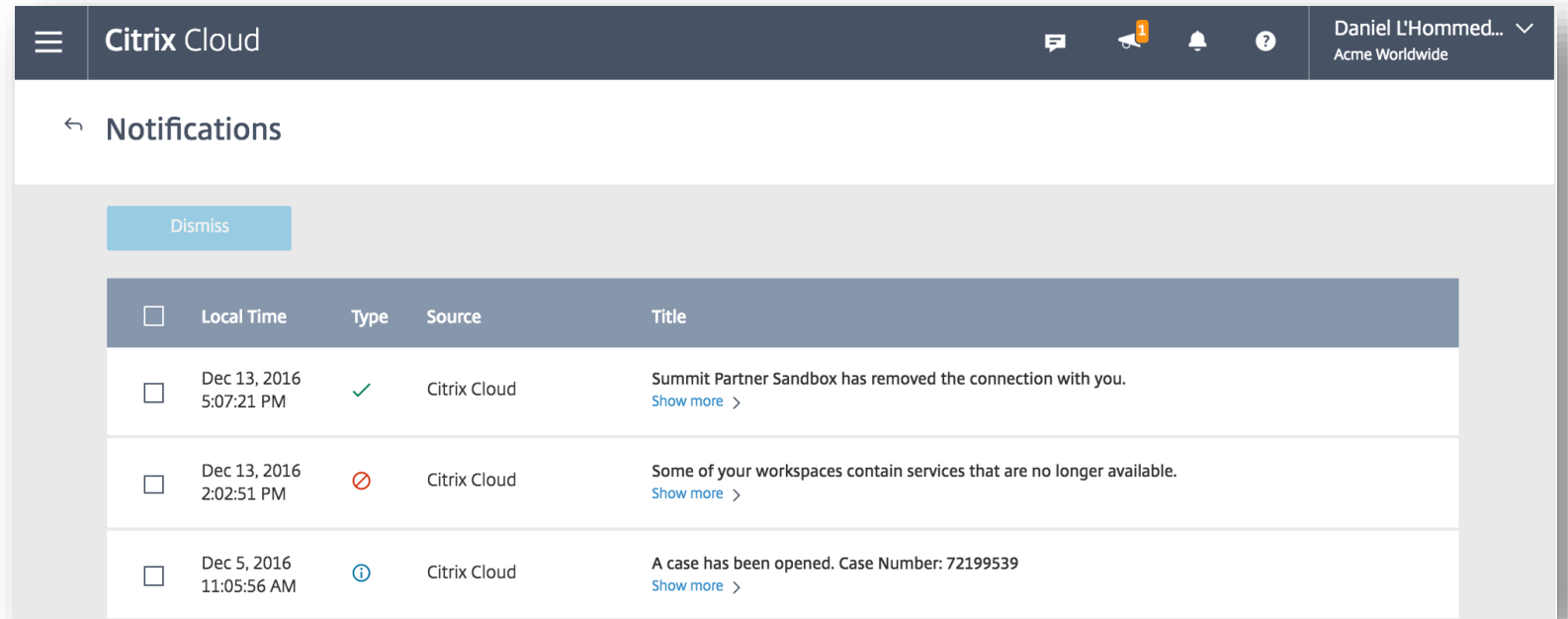


The screenshot displays the Citrix Cloud management interface. At the top, the 'Citrix Cloud' header is visible alongside user information for Daniel L'Hommedieu at Acme Worldwide. The main section is titled 'Identity and Access Management' and includes tabs for 'Domains', 'Administrators' (which is selected), and 'API Access'. Below the tabs, there is an 'Invite' button next to an 'Email Address' input field. A table lists the current administrators, each with an email address, name, status, and a menu icon.

Email Address	Name	Status	
palak.desai@citrix.com	Palak Desai	Active	...
andres.holguin@citrix.com	Andres Holguin	Active	...
pulkit.gupta@citrix.com	Pulkit Gupta	Active	...
mathew.varghese@citrix.com	mathew varghese	Active	...
brett.waldman@citrix.com	Brett Waldman	Active	...

Notifications

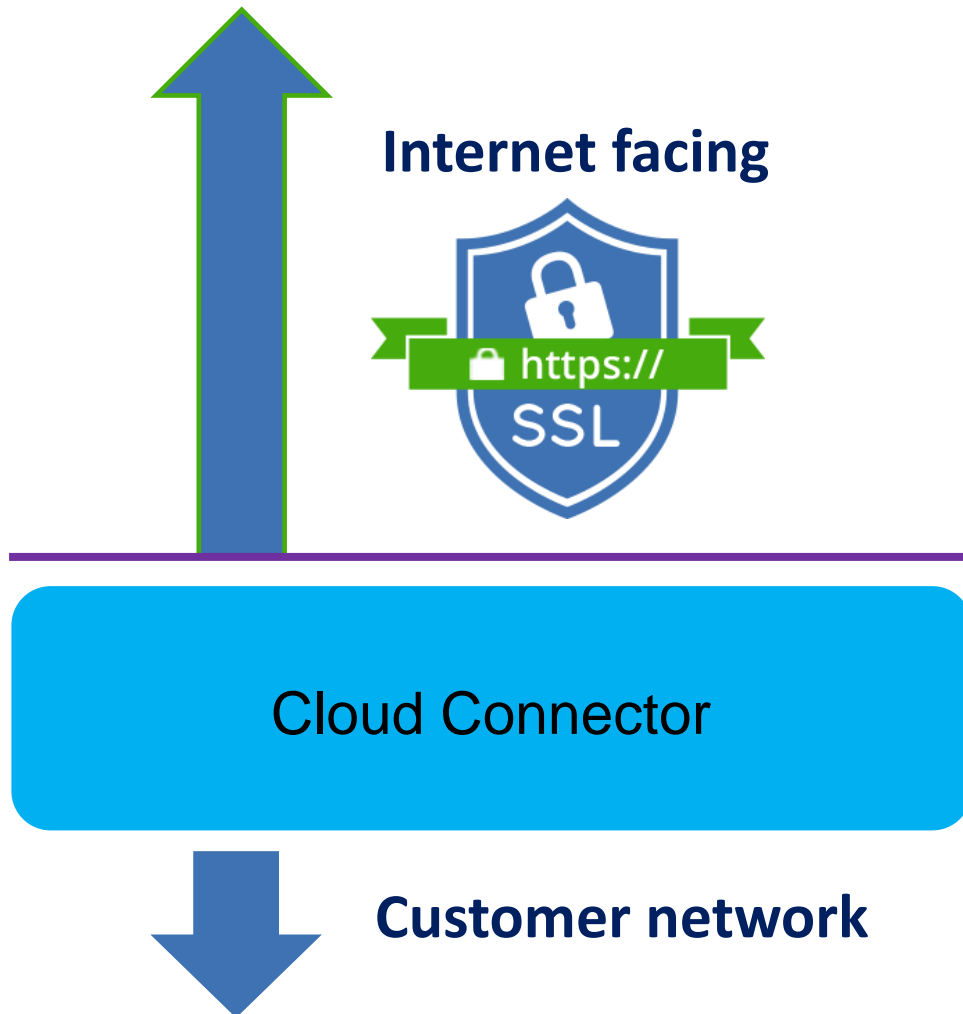
- Centralized hub for notifications coming from Citrix Cloud platform and services
- Differentiate severity of notification based on type
- Act on and dismiss notifications to resolve issues



<input type="checkbox"/>	Local Time	Type	Source	Title
<input type="checkbox"/>	Dec 13, 2016 5:07:21 PM	✓	Citrix Cloud	Summit Partner Sandbox has removed the connection with you. Show more >
<input type="checkbox"/>	Dec 13, 2016 2:02:51 PM	✗	Citrix Cloud	Some of your workspaces contain services that are no longer available. Show more >
<input type="checkbox"/>	Dec 5, 2016 11:05:56 AM	i	Citrix Cloud	A case has been opened. Case Number: 72199539 Show more >

What is the cloud connector?

Bridge the gap between the cloud and the customer's resource location



- Simply to deploy; cloud managed
- Does not operate as a VPN
- All connections are egress (port 443 only)
- Supports enterprise web proxies
- Secured by service key per-connector
- Self updating, evergreen

Connector Communication

Connector to/from the cloud

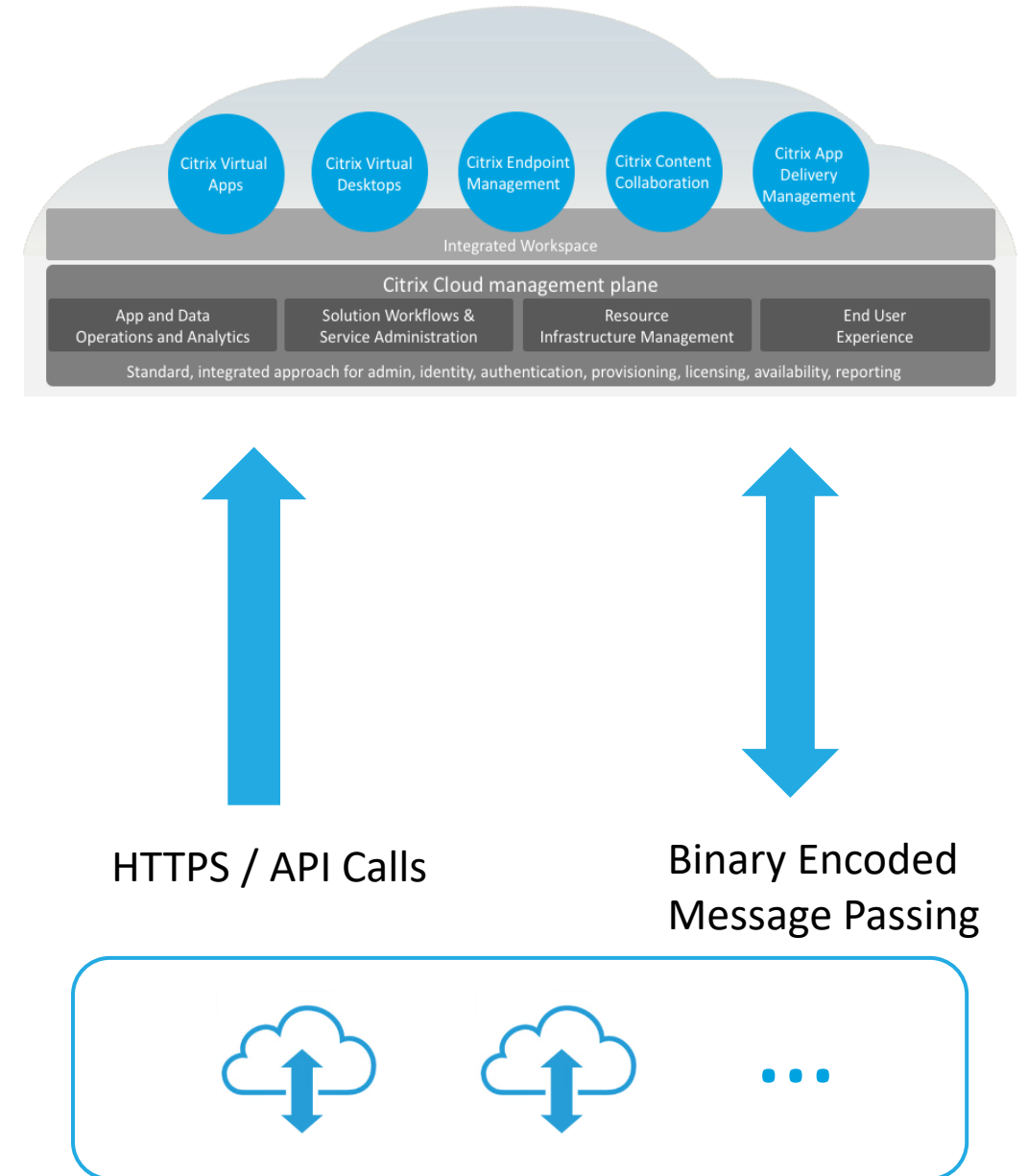


Inbound

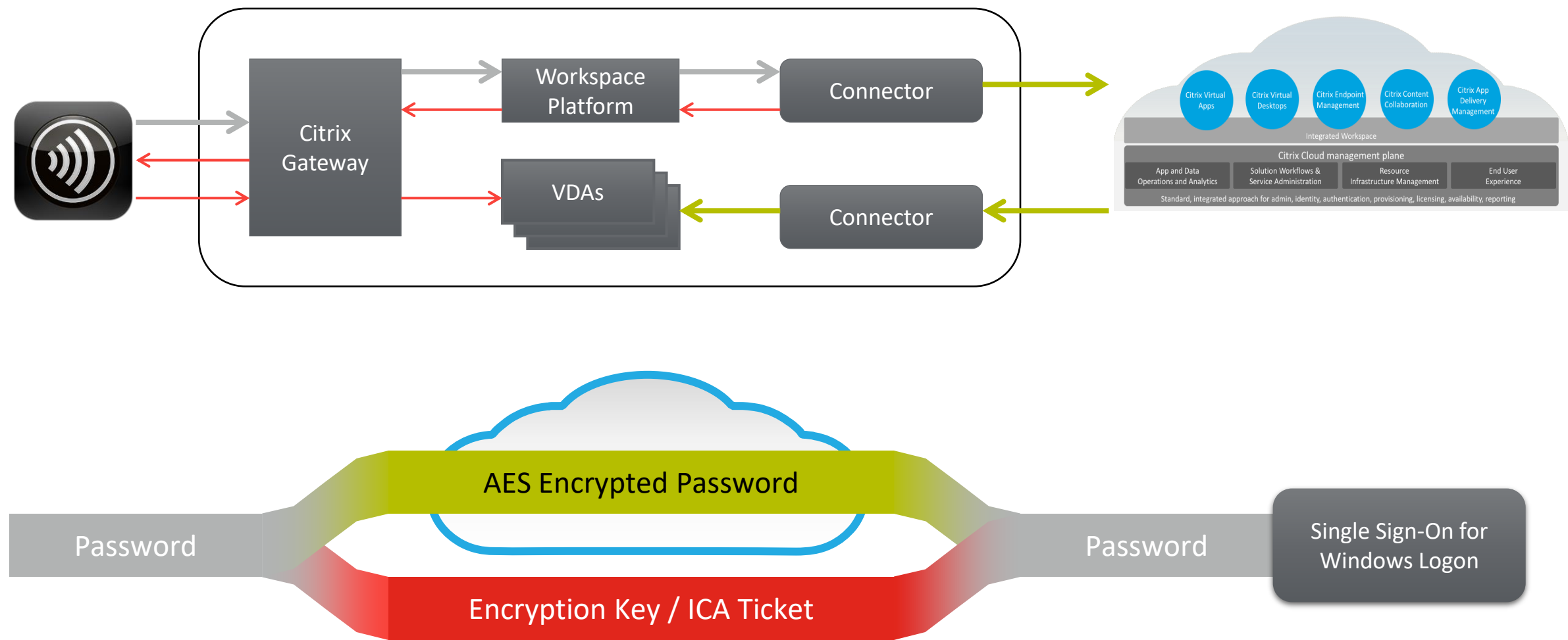
- Messages sent to the connector(s) rendezvous in the cloud at a special cloud service. Messages are then transferred via a Web Socket architecture
- These messages are load balanced across connectors

Outbound

- Standard HTTPs Web requests



Password Encryption



Cloud

Kept Simple

☰ Citrix Cloud

← Resource Locations

+ Resource Location

+ Citrix Cloud Connector

↻ Refresh

✓ Citrix Hybrid

Edit ▼ ID

connector1.citrite.net

✓

connector2.citrite.net

✓

✓ My Company Hybrid

Edit ▼ ID

connector4.mycompany.c...

✓

connector3.mycompany.c...

○

Connecting...

☰ Citrix Cloud

← Resource Locations

+ Resource Location

+ Citrix Cloud Connector

↻ Refresh

✓ Citrix Hybrid

Edit ▼ ID

connector1.citrite.net

✓

connector2.citrite.net

✓

✓ My Company Hybrid

Edit ▼ ID

connector4.mycompany.c...

✓

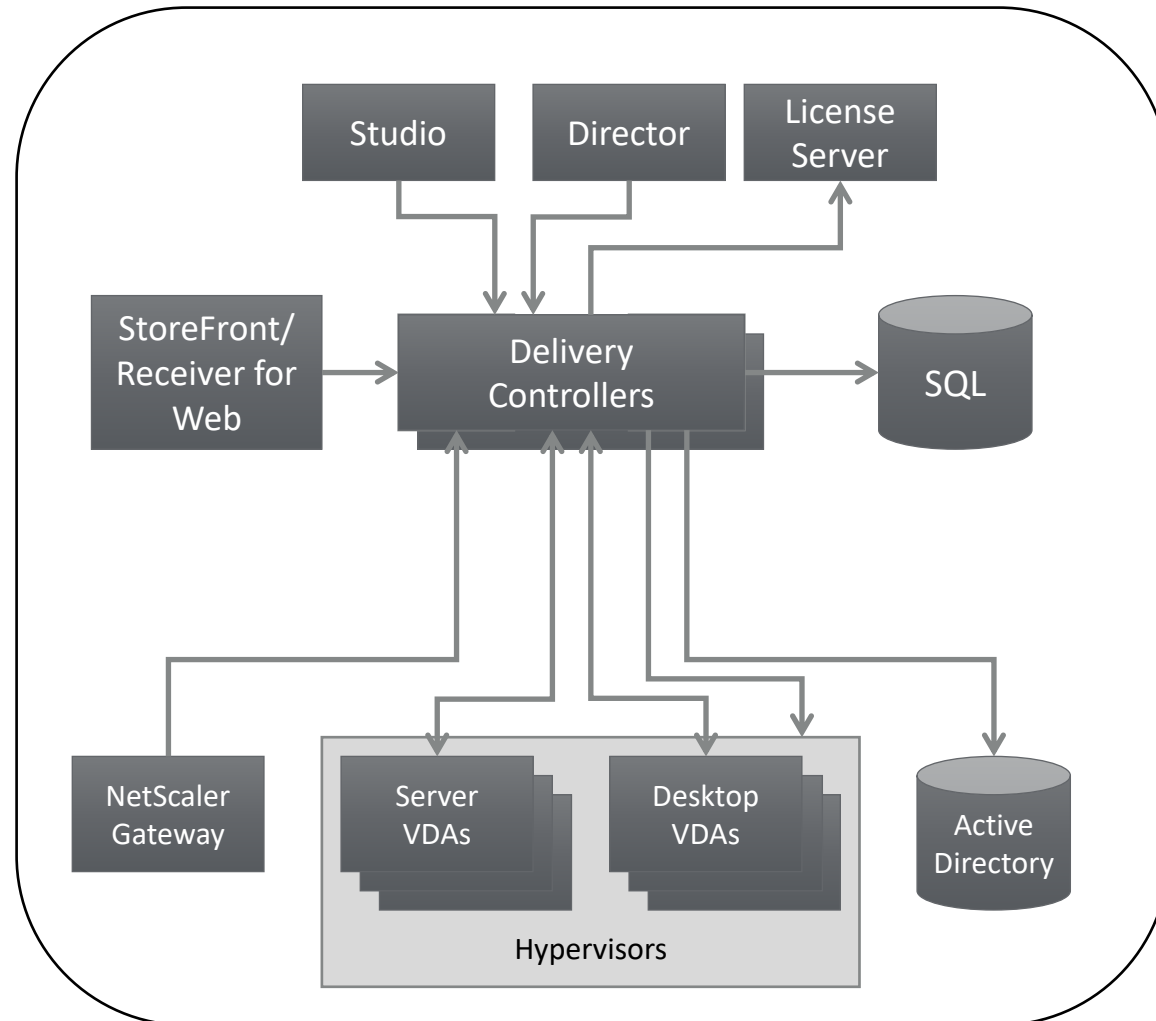
connector3.mycompany.c...

✓



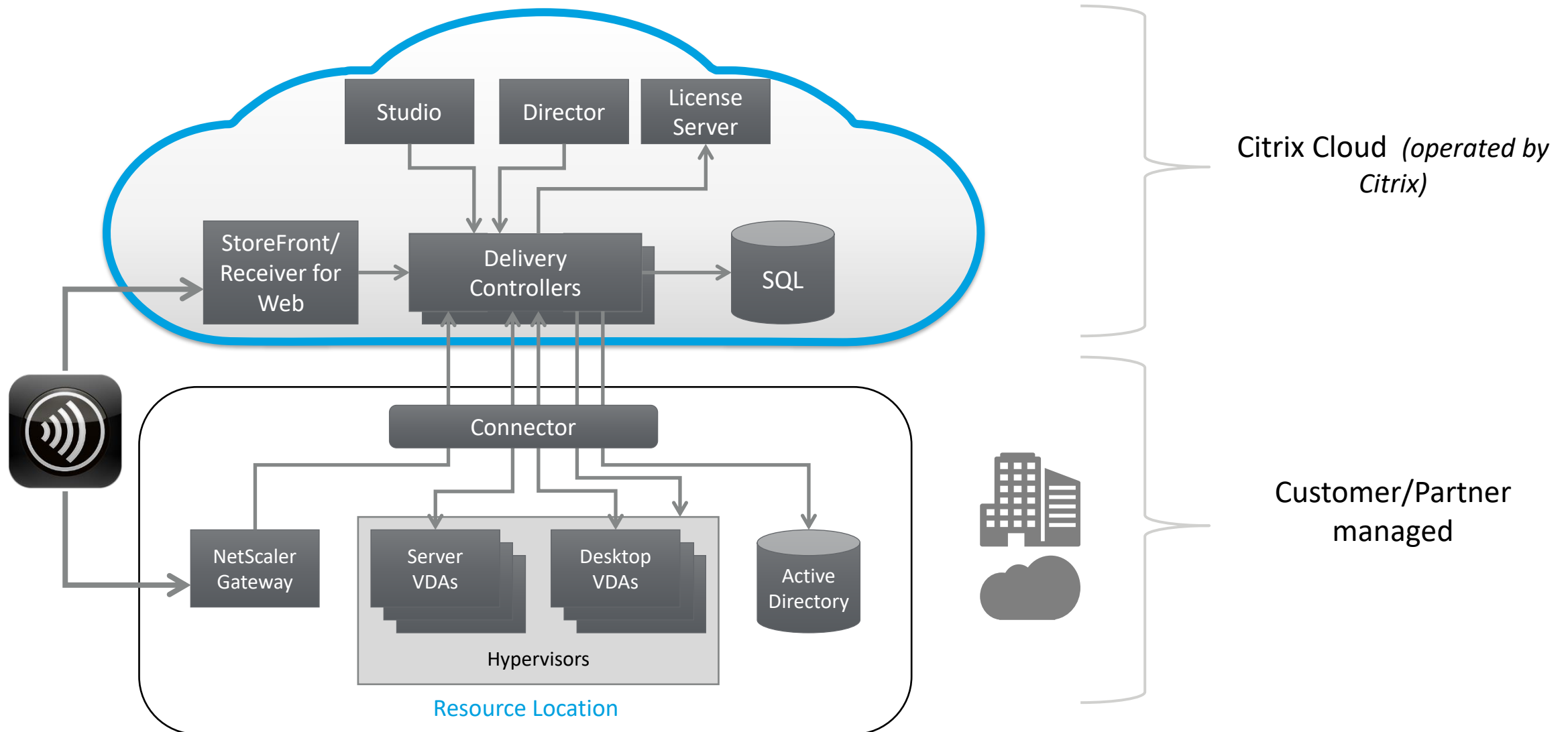
Citrix Virtual Apps and Desktops

Traditional Deployment

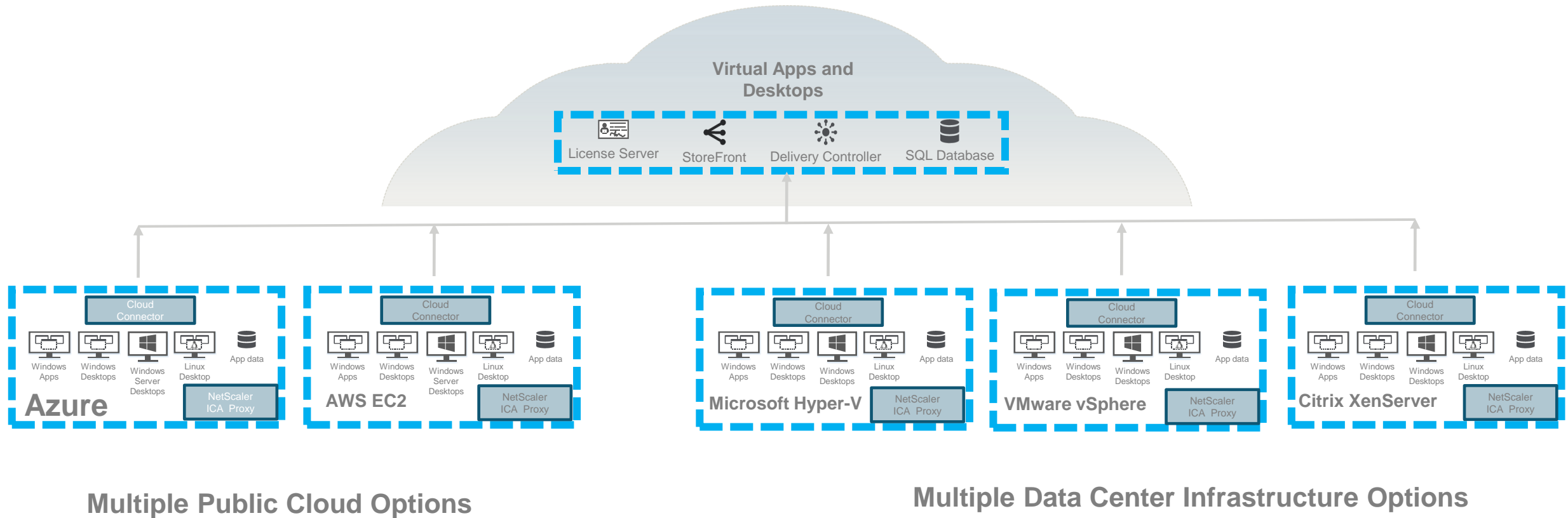


Customer/Partner
managed

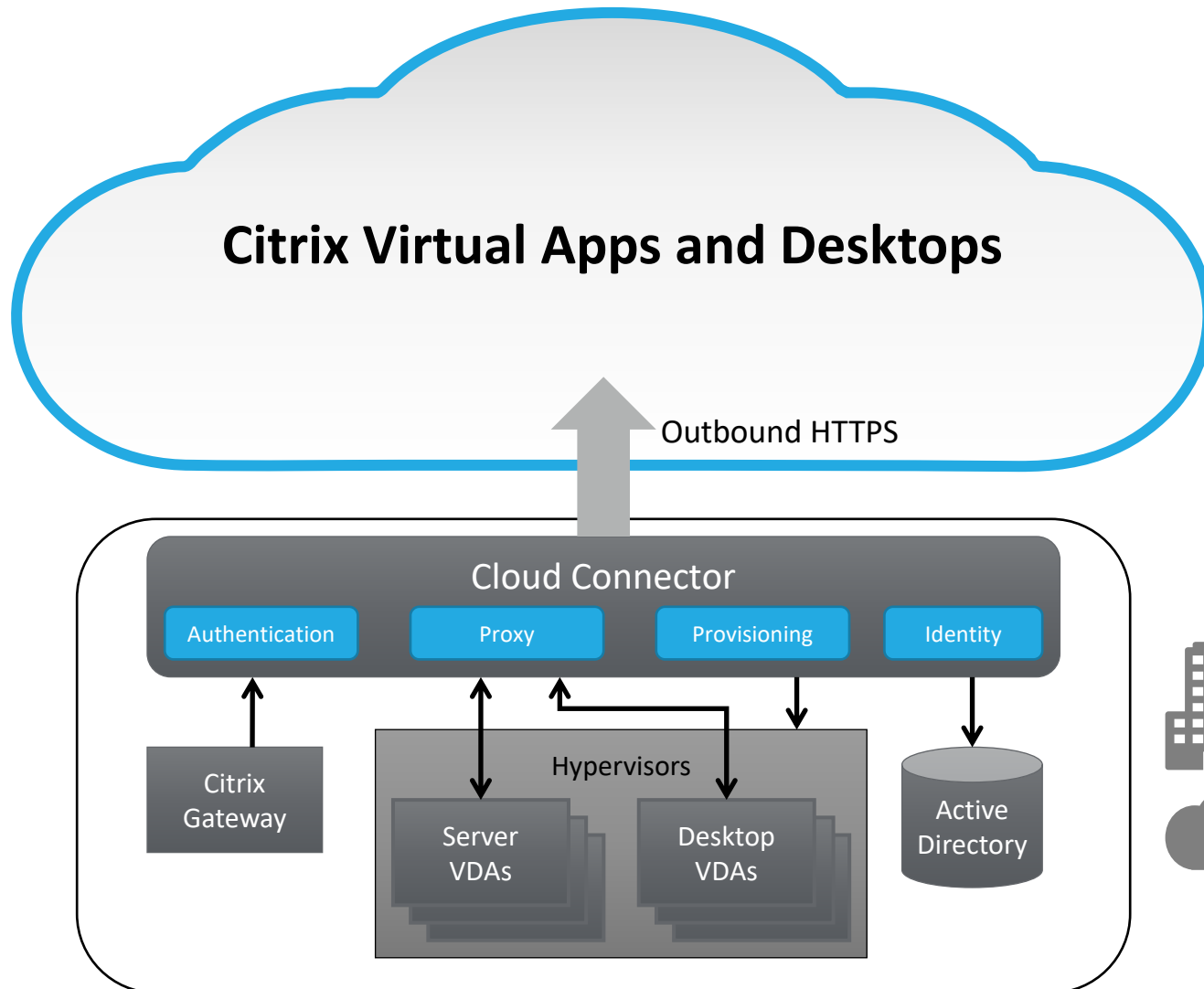
Citrix Virtual Apps and Desktops



Hybrid Cloud Architecture



What makes it work?



Cloud Connector Services
Architecture:

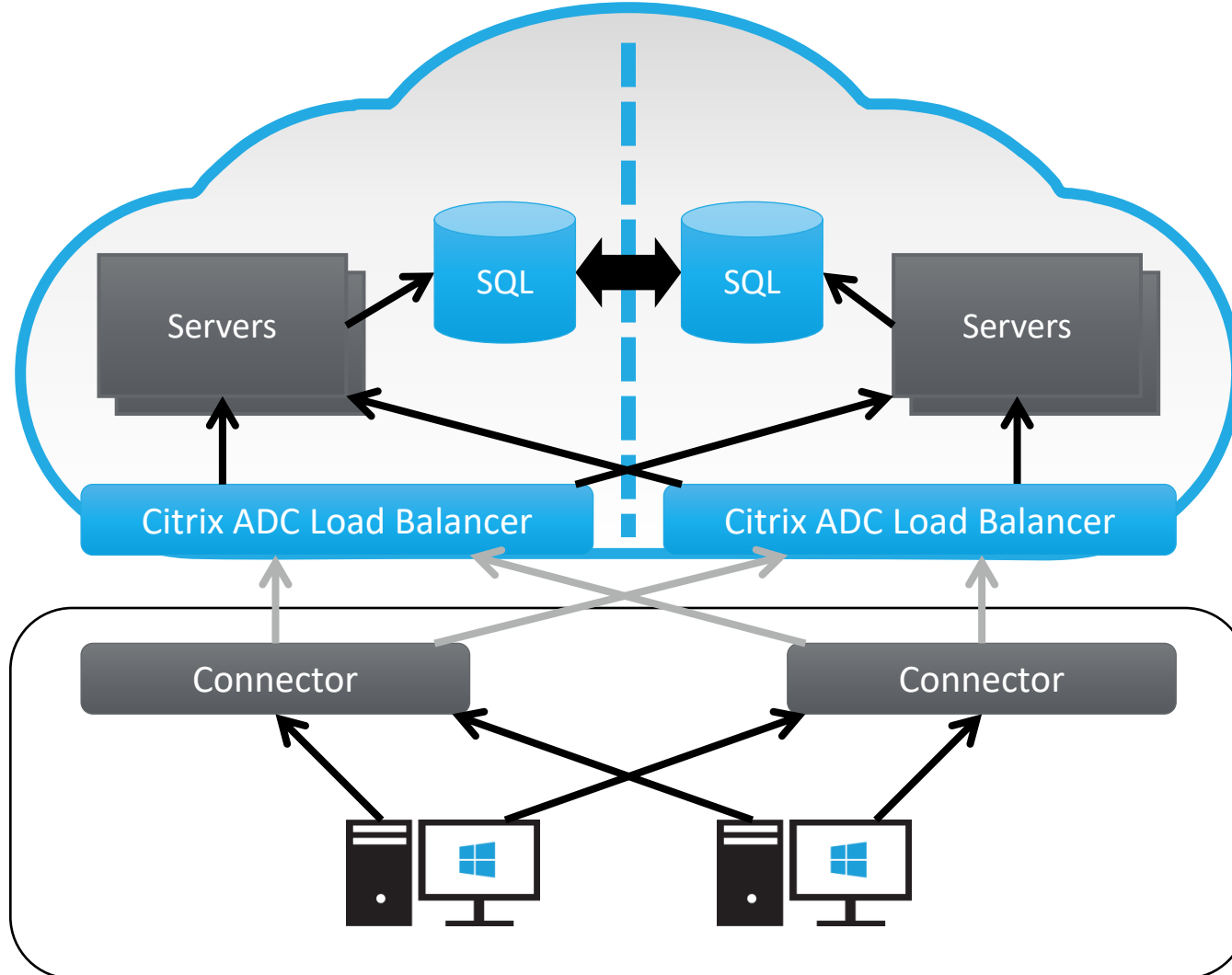
Provisioning for managing VM
workload on hypervisors

Proxy for VDA registration and
communication

Identity to support domain
discovery and access

Authentication to enable user
login and app launch

Citrix Cloud Services Architecture



Control Plane

- All components are mirrored in an active/active redundant configuration

Network Connectivity

- SLAs with ISP

Customer premises

- Connectors must be deployed in pairs for VDA failover

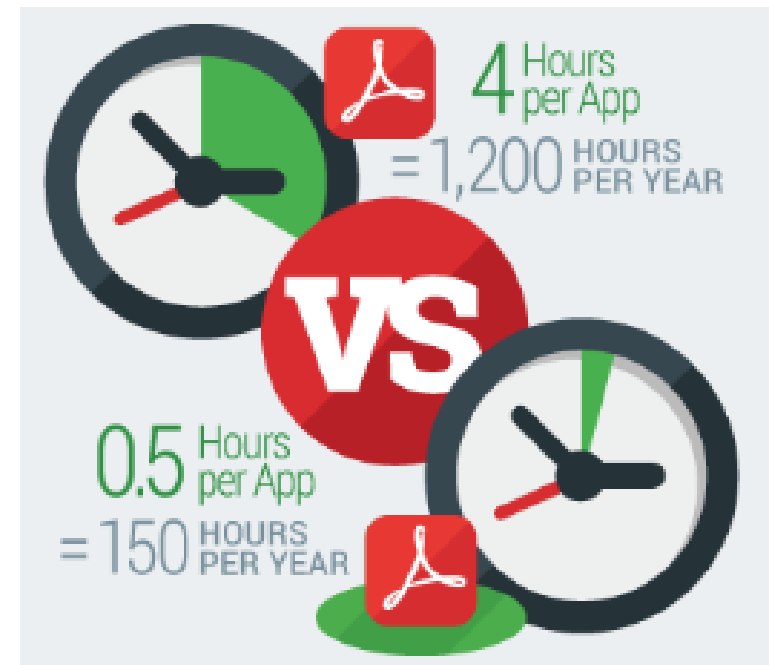
Image Management

Citrix App Layering allows for quick application packaging reducing golden image sprawl saving IT admins time while serving their users' diverse app requirements

OS & Hypervisor Layer: Enable OS Layer for multiple Hypervisors & Clouds

Apps & Middleware: Create independent App & Middleware packages

Benefit: Create packages once, assemble & deploy & manage lifecycle of your images

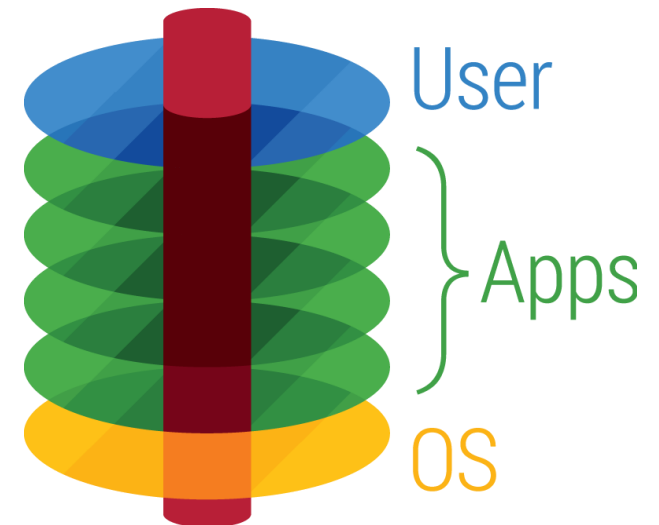


App Layering

Citrix App Layering empowers IT to better manage the entire lifecycle of apps from deployment to patching to retirement just by managing app layers once


THE ONLY LAYERING SOLUTION THAT...

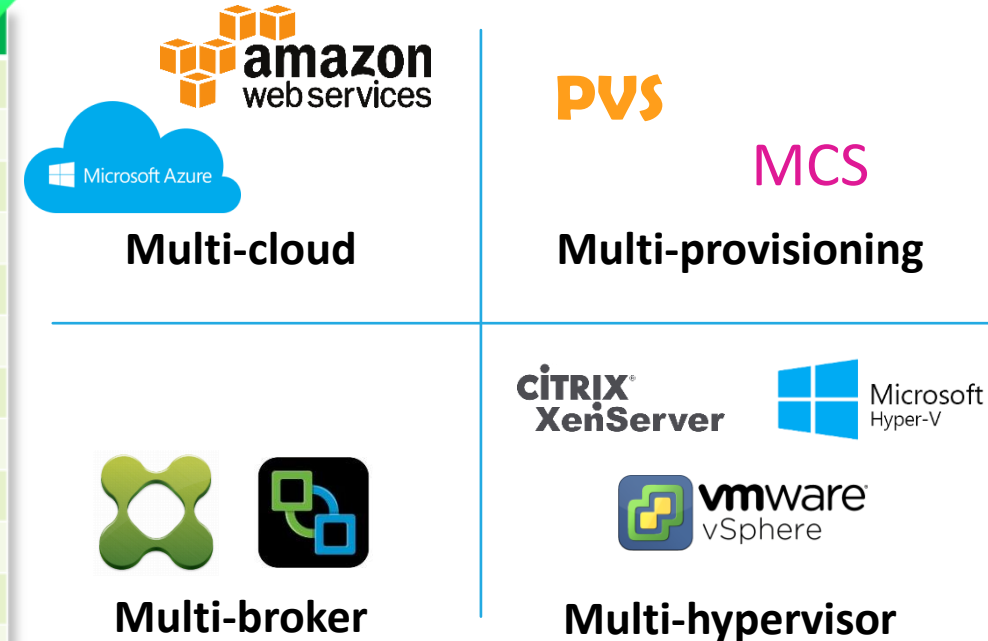
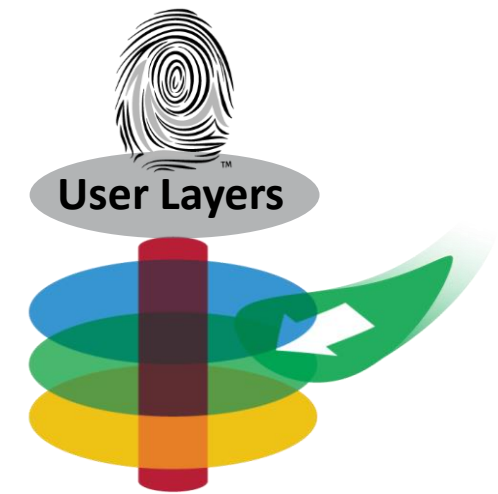
- Layers all of Windows
- Achieves app compatibility greater than 99.5%
- Enables packaging apps once for elastic or base image delivery
- Offers app and OS sharing across on-premises and hybrid cloud
- Eliminates golden images and 'image sprawl'
- Supports on-demand app delivery for both VDI and Citrix Virtual Apps
- Citrix Virtual Apps session personalization
- Portable to any hypervisor
- Portable to cloud, Azure-certified app layering solution



App Delivery

Citrix App Layering in Premium allows for **advanced configurations** with multiple: hypervisors, clouds, provisioning, and broker types. Additionally, **user layers** allow for personalization with user settings, apps, and data

Requirement	VMware App Volumes	Citrix App Layering 
Maturity	Medium	High
OS Layering	X	✓
App Compatibility	50% to 70%	99.5% +
Any Infrastructure	X	✓
Integrated with VDI/HSD	X	✓
Out of Band Layering	X	✓
Cloud Ready	Horizon Air	Yes
Enterprise Management	X	✓
Versioning	X	✓
Application rollback	X	✓
User Installed Apps	Yes	Yes
Instant layer delivery and removal	Yes	Yes
Layer Replication	Yes	Yes



Remote PC Access

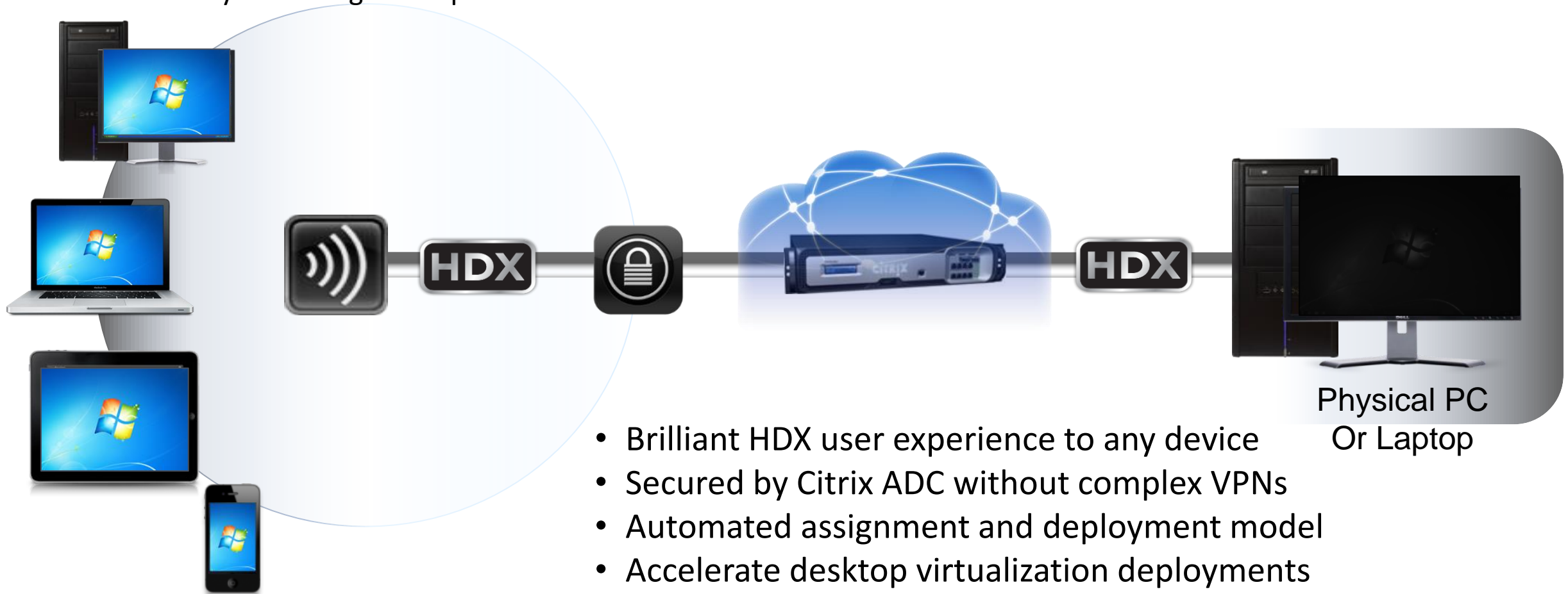
Automated remote access assignment of users to corporate PCs



- Secure, remote access to corporate PCs
 - New integrated catalog management
 - New hardware accelerated H.264 compression

Remote PC Access

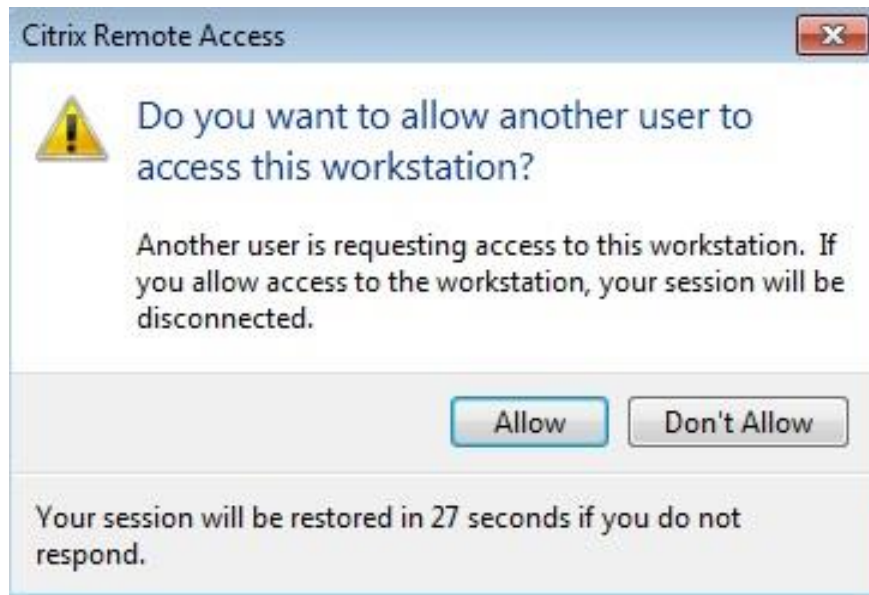
Embrace mobility to existing desktops



Remote PC Access

What's New in Citrix Virtual Apps and Desktops 7.6

- Icon Memory Location
 - Icons “remember” location on screen when returning to local workstation
- Remote Session Control
 - HDX users can now allow / deny a local user from disconnecting remote session



HDX



CTRL + ALT + DEL

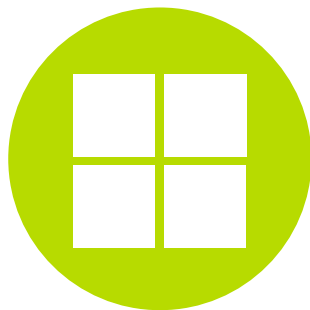
Top 5 Reasons to embrace Citrix Cloud Services

Do you care about?



Security

Is security top of mind for you? Did you know virtual desktops are 100 times less vulnerable than corporate PCs?



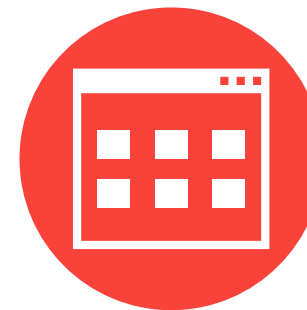
Transition

Are your apps and backends spread across On-Prem and Clouds?



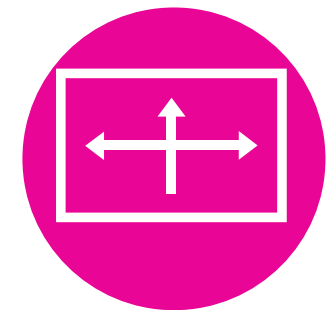
Monitoring

Do you want to integrate and expand service-, device- and operation monitoring?



Flexibility

Do you demand flexible and secure remote access to apps and data?



Cost Savings

Would you benefit from optimized and manageable WAN links?



Citrix Endpoint Management



Citrix Endpoint Management

What is it

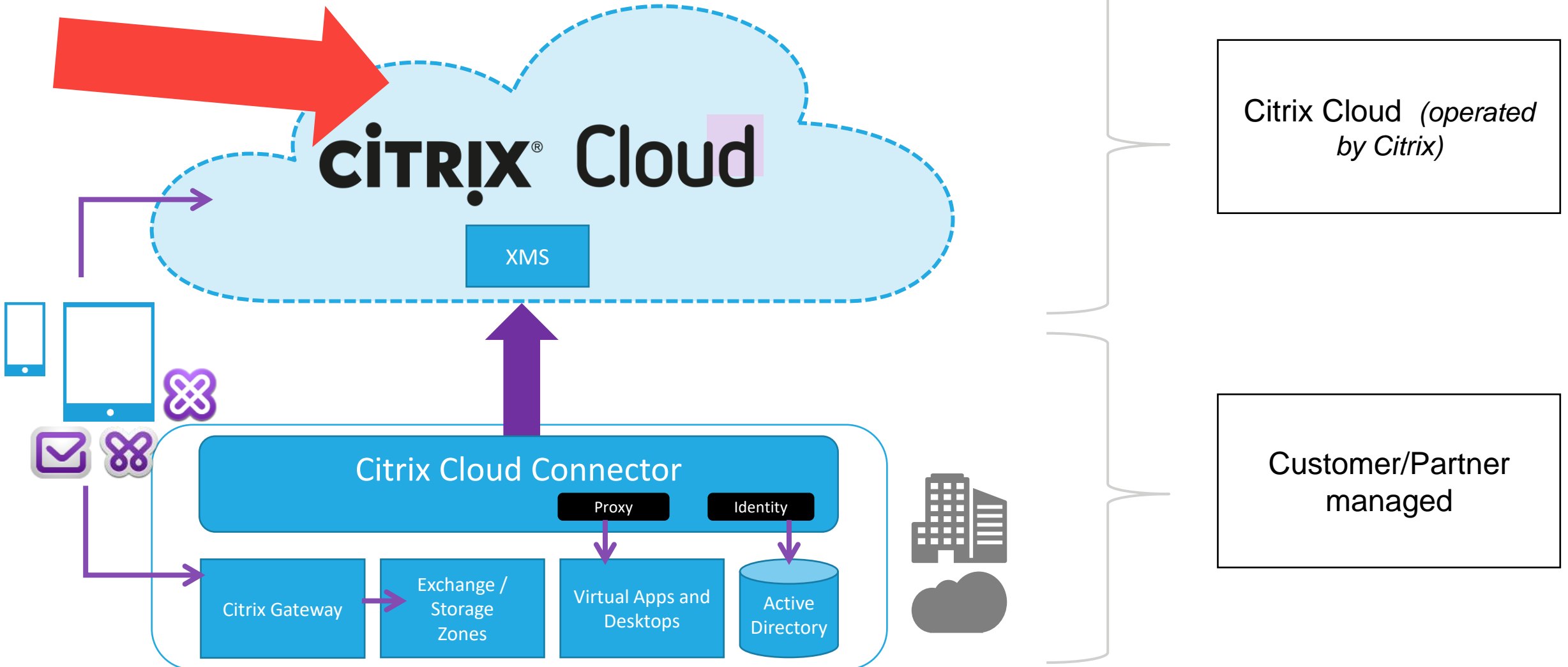
- Cloud based, comprehensive Enterprise Mobility Management (EMM) solution
- Enterprise grade productivity applications
- Simplifies user assignment/subscription

What can you do with it

- Benefits from straightforward customer onboarding and enterprise connectivity
- Locate instances close to enterprise data, apps and directory where conditions require

Citrix Endpoint Management

- What's Changed





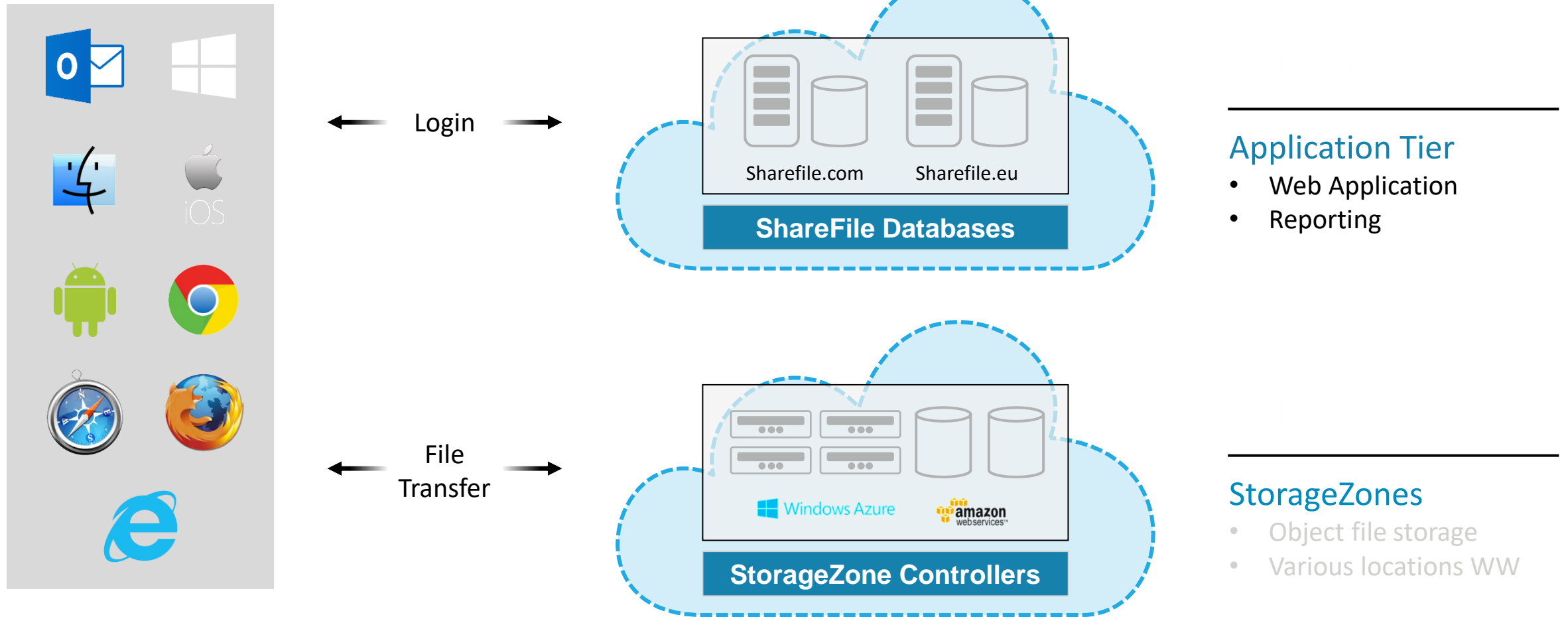
Citrix Content Collaboration



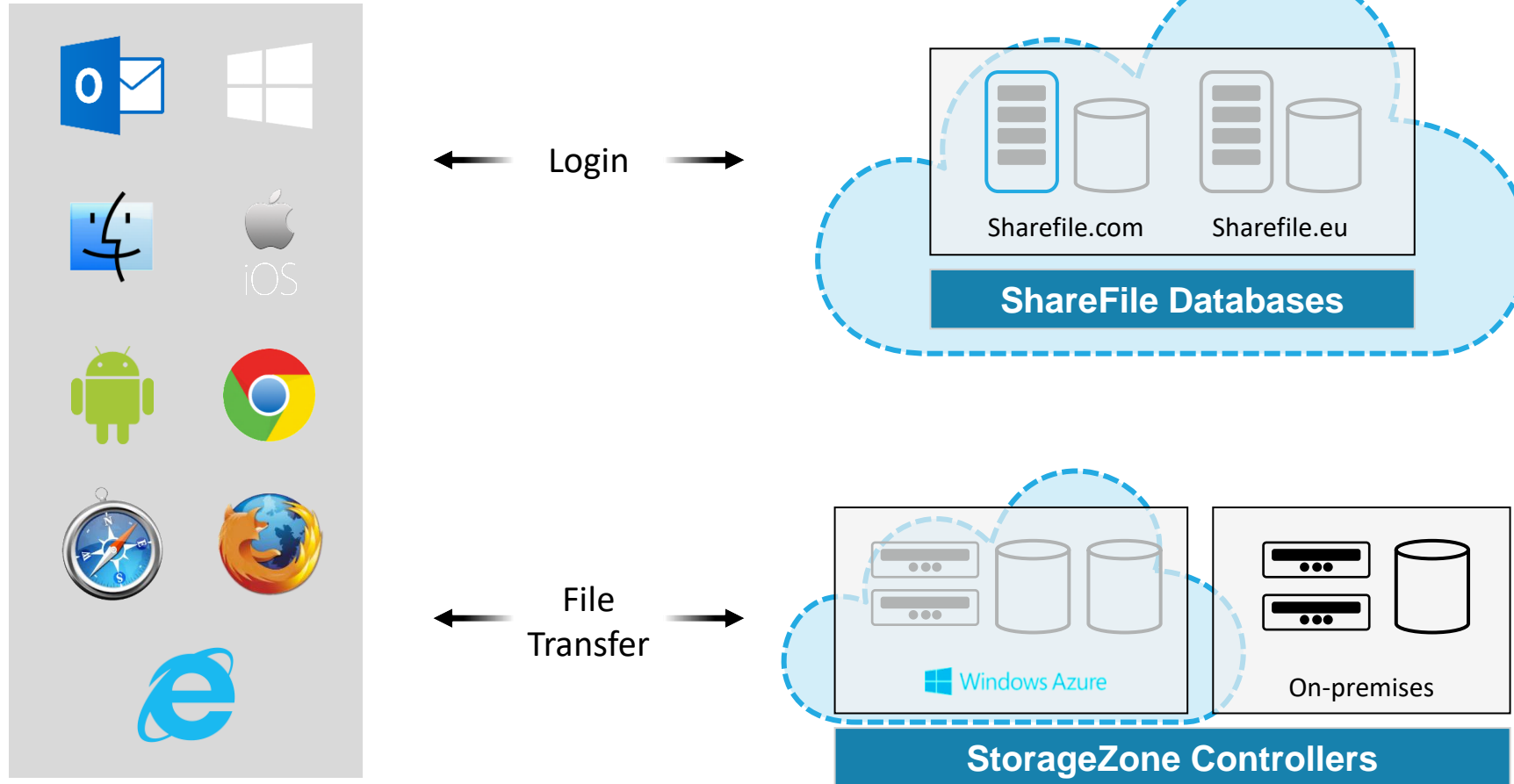
Citrix Content Collaboration

- What is it
 - Cloud based secure document management solution
 - Flexible storage options integrating cloud, on-premises and existing solutions
 - Keep business information safe on any device
- What can I do with it
 - Enable migration from ad-hoc personal cloud to securely managed IT cloud
 - Create & edit content across devices
 - Integrate workflow with Microsoft Outlook
 - Support privacy and compliance with robust reporting and auditing
 - Sync files automatically or on-demand across all devices

Citrix Managed StorageZones



Customer Managed StorageZones



Application Tier

- Web Application
- Reporting

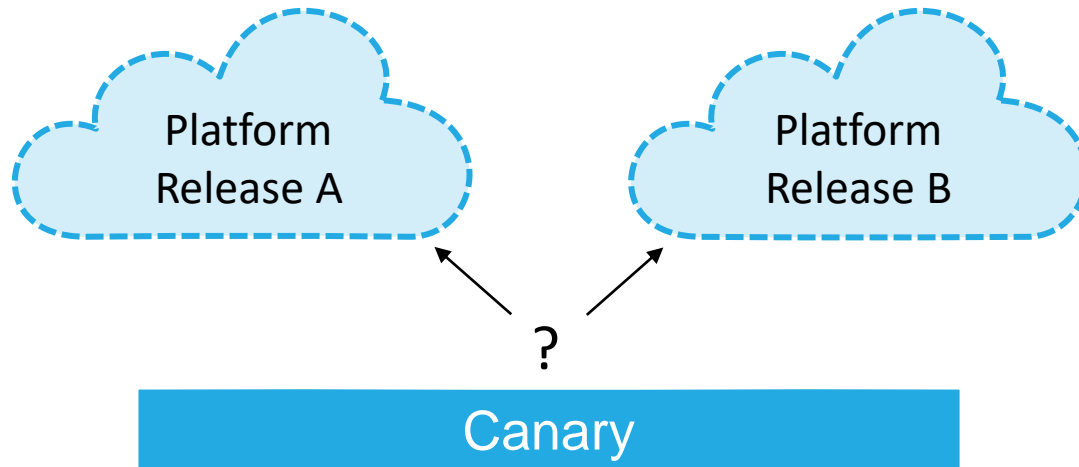
StorageZones

- Object file storage,
- Customer choice of location(s)

Rolling Out Updates

How do we roll out updates?

- Customers are migrated gradually
- Features can be hidden or shown for A/B testing
- Cloud Connectors update 1 at a time



Platform Updates

- Release to Release

A new version of Citrix Workspace Cloud is available. You have 15 minutes to finish any tasks. When you're finished, refresh your browser.

OK

What's New with Citrix Workspace Cloud

Click below to check out the latest updates.

[Citrix Product Documentation](#)

What's New can also be found in the help menu.

Elements Network Sources Timeline Profiles Resources

Frames

- (workspace.cloud.com/)
- Fonts
- Images
- Scripts
- Stylesheets

workspace.cloud.com/

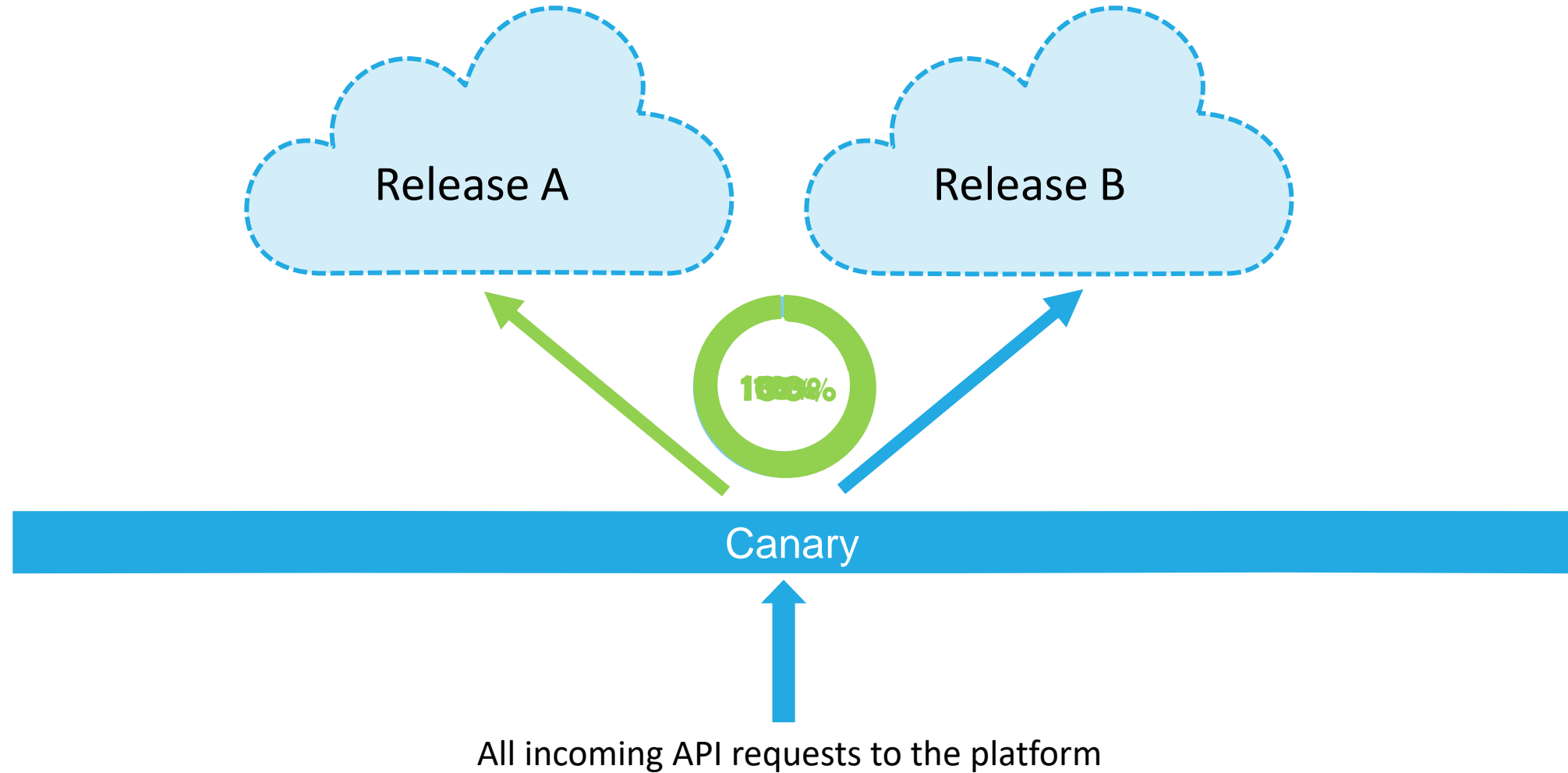
Web SQL

IndexedDB

```
1 <!doctype html>
2 <!--[if lt IE 7]> <html class="no-js lt-ie9 lt-ie8 lt-ie7"> <![endif]-->
3 <!--[if IE 7]> <html class="no-js lt-ie9 lt-ie8"> <![endif]-->
4 <!--[if IE 8]> <html class="no-js lt-ie9"> <![endif]-->
5 <!--[if gt IE 8]><!-->
6 <html class="no-js">
7 <!--<![endif]-->
8 <head>
9 <base href="https://console-eastus-release-a.citrixworkspacesapi.net">
10 <meta charset="utf-8">
11 <title>Citrix Workspace Cloud</title>
12 <link rel="shortcut icon" href="https://console-eastus-release-a.citrixworkspacesapi.net/favicon.ico">
```

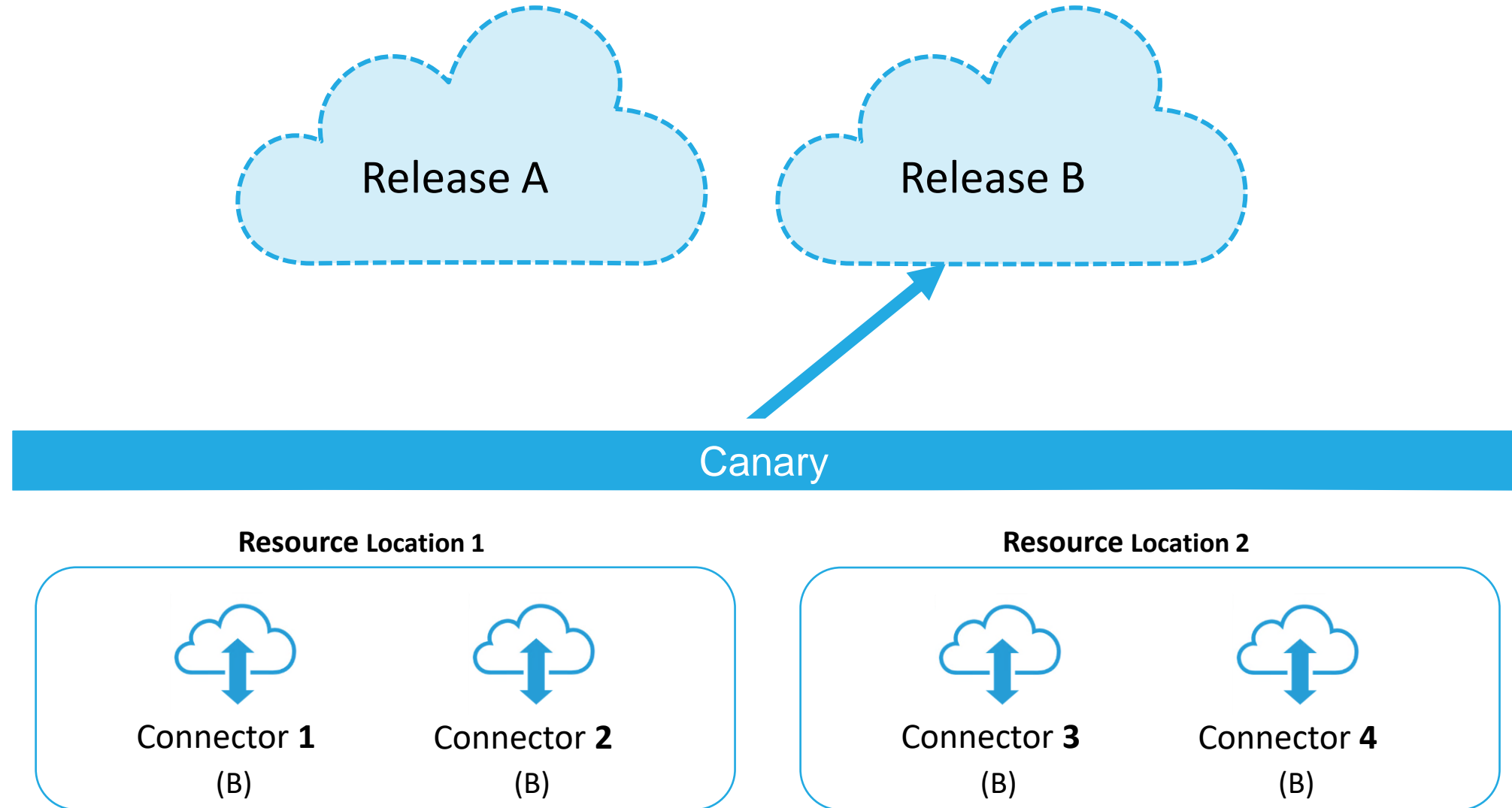
“Canary” over customers

- Percentage Based transition



What about Connectors?

- Updated one-at-a-time



Connector Canary

- Updated one-at-a-time

