



Citrix On Azure Solution



agenda

- Citrix and Microsoft Solution Alignment
- Getting Up To Speed
- Citrix XenDesktop Essentials – Windows 10 VDI on Azure
- Citrix XenApp Essentials – Virtualized Win32 Apps on Azure
- EM+S and Citrix
- O365 ProPlus on Citrix

CITRIX AND MICROSOFT SOLUTION ALIGNMENT



Solution alignment

O365

- Optimized Skype for Business Experience

Private and Public Cloud

- Azure First Solutions
- Day 0 support for Windows Server 2016

Mobile

- NetScaler
- XenMobile
- EM+S

Windows in Azure

- First to enable Win10 VDI in Azure
- XenDesktop Essentials

Virtual Apps in Azure

- Deliver secure apps to any device
- XenApp Essentials



**GETTING UP
TO SPEED**

What's Driving Security Challenges Today?

Reputation



Regulatory Compliance



Breach Response

Special Cases



Nation-state



Industrial Espionage

Everyday



Insiders



Disruptive Technologies



Hacktivists



Criminal Enterprises



Source: The 2014 U.S. State of Cybercrime Survey. CSO Magazine, USSS, the CERT division of the SEI, and PWC.

Perimeter is Expanding With a Complex Mix of Assets & Data

Endpoints



Mobile/BYO



Remote Workers

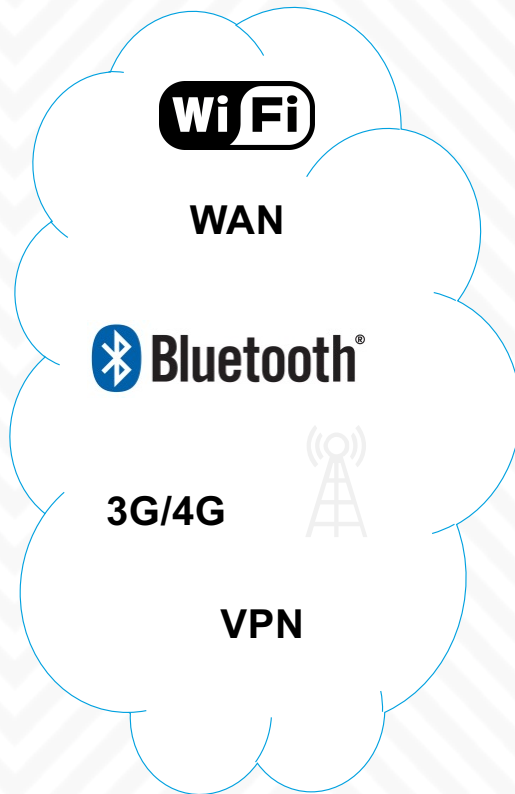


Enterprise Endpoints

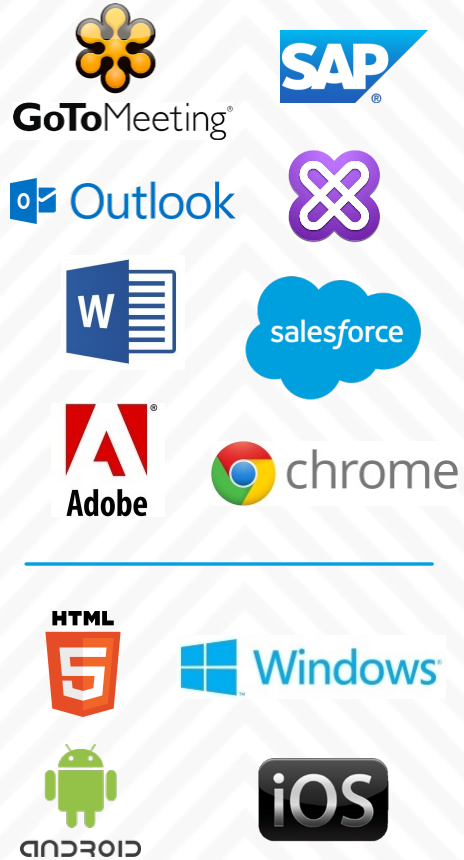


IoT/Wearables

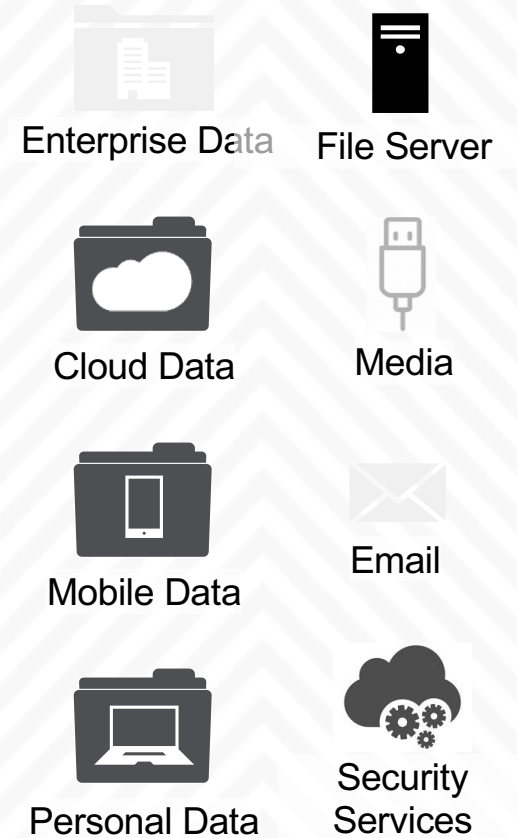
Network



Applications

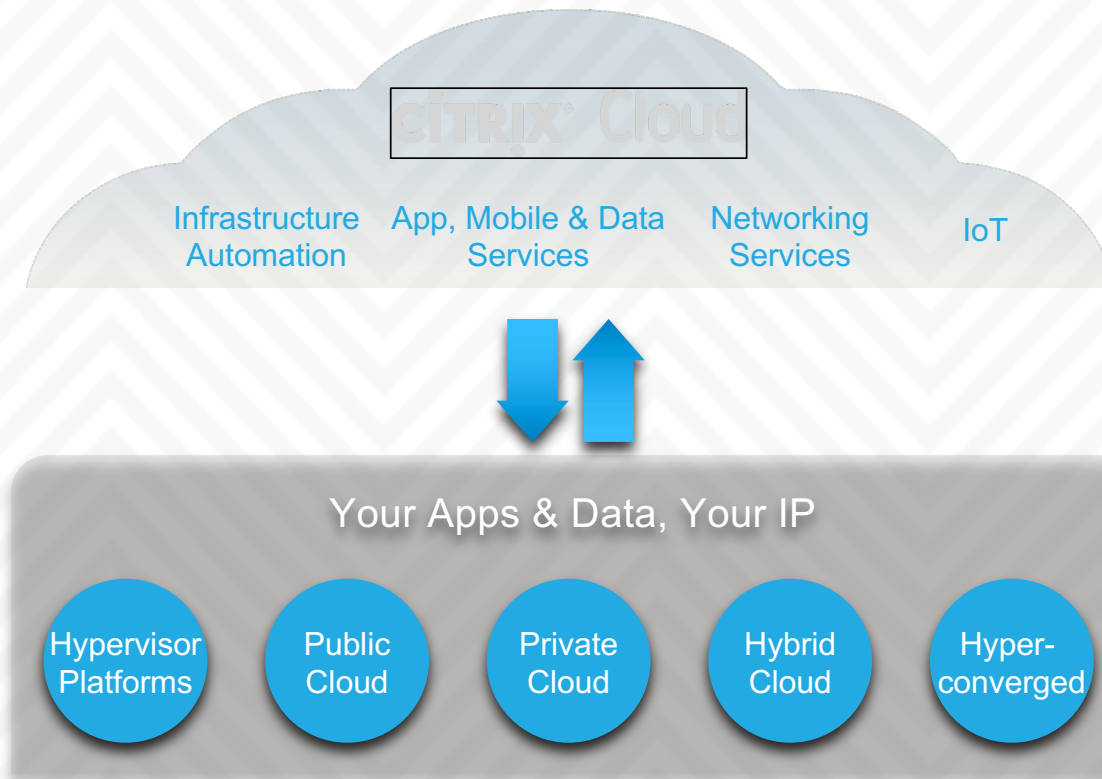


Data



Modern Approach

More Flexibility, Simplicity, And IT Efficiency



Management in the cloud

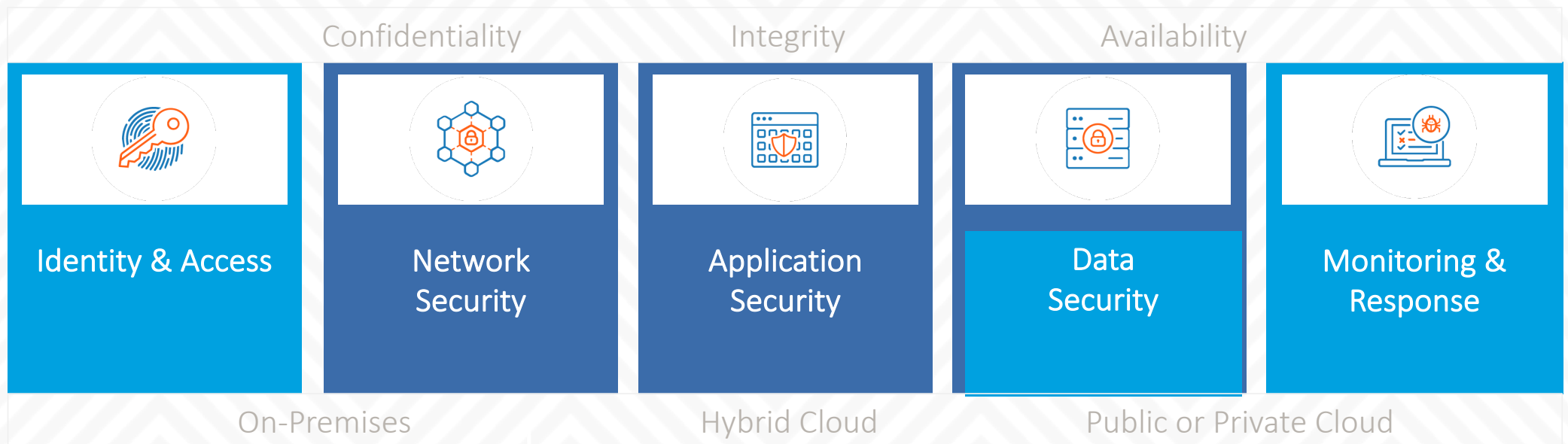
- Consistent user experience
- Single, unified administration
- Service integrations
- Automatic updates

IP wherever you want it

- Better compliance
- Better security
- Better data sovereignty
- Choice of economics

Citrix: Secure Delivery of Apps & Data

Enhanced IT and Security Operations Reduce Risk



Security Benefits of Citrix Products

Citrix
XenApp

Apps and data

are centrally managed in the data center and accessed via granular access control

Citrix
XenDesktop

Desktops and data

are centrally managed in the data center and accessed via granular access control

Citrix
XenMobile

Secure mobile apps and data

with a great user experience

Citrix
ShareFile

Data access, storage and sharing

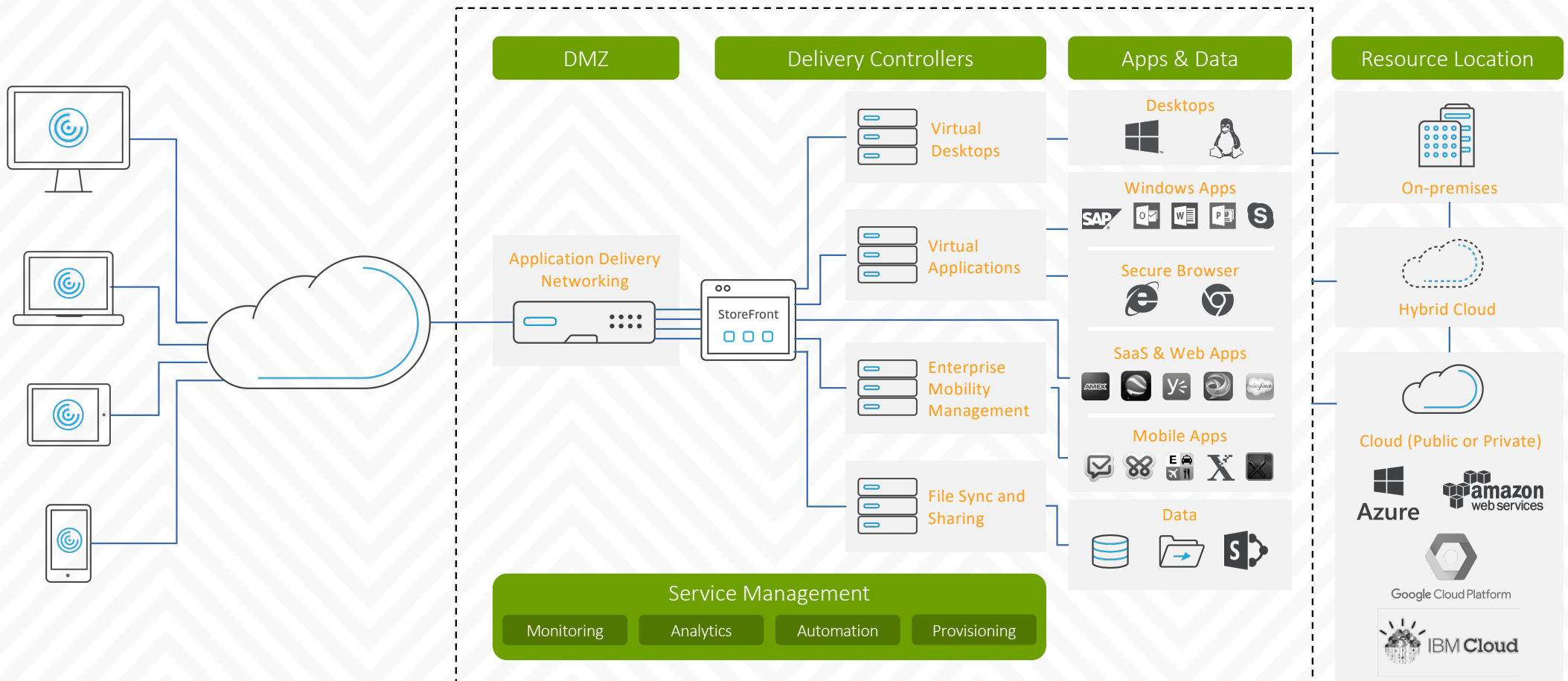
are controlled and audited on-prem and in the cloud

Citrix
NetScaler

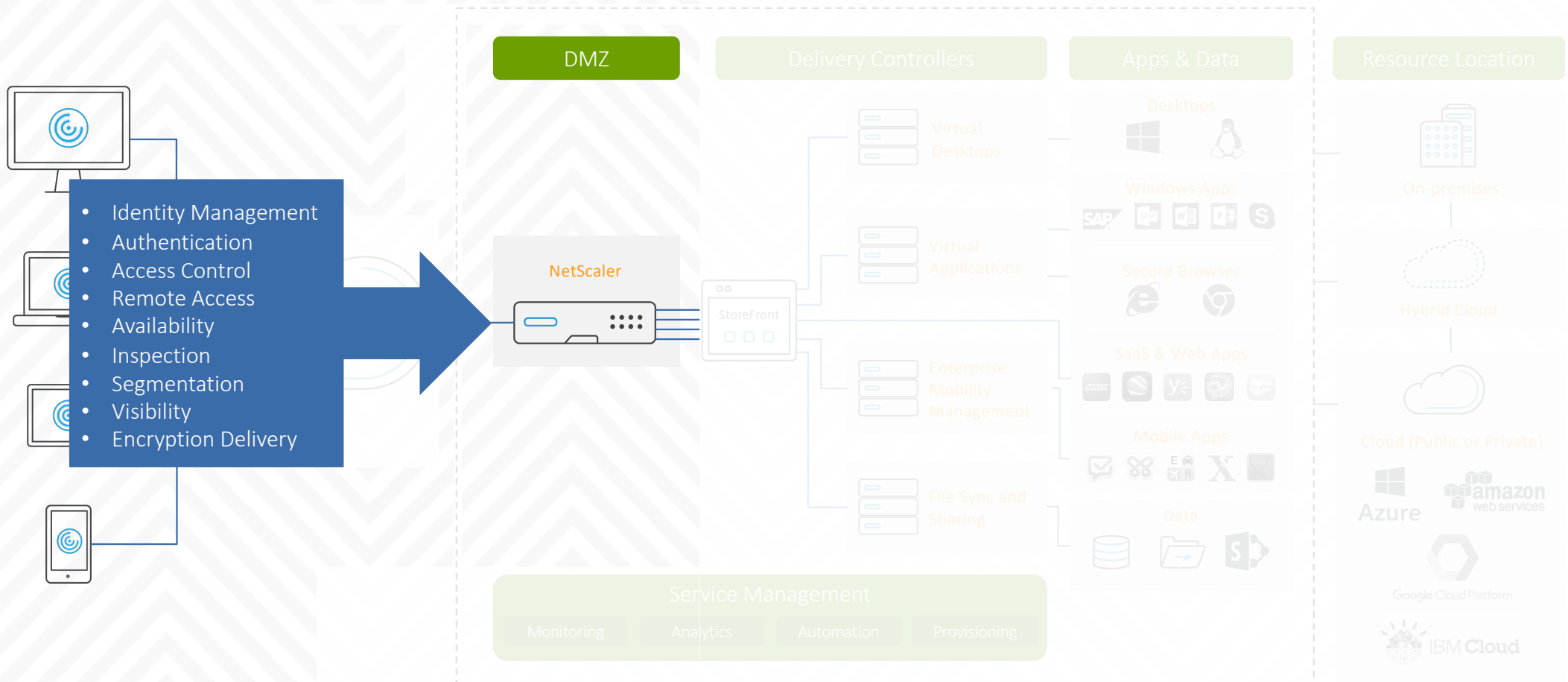
Access and control across the network

with assured app delivery and end-to-end visibility

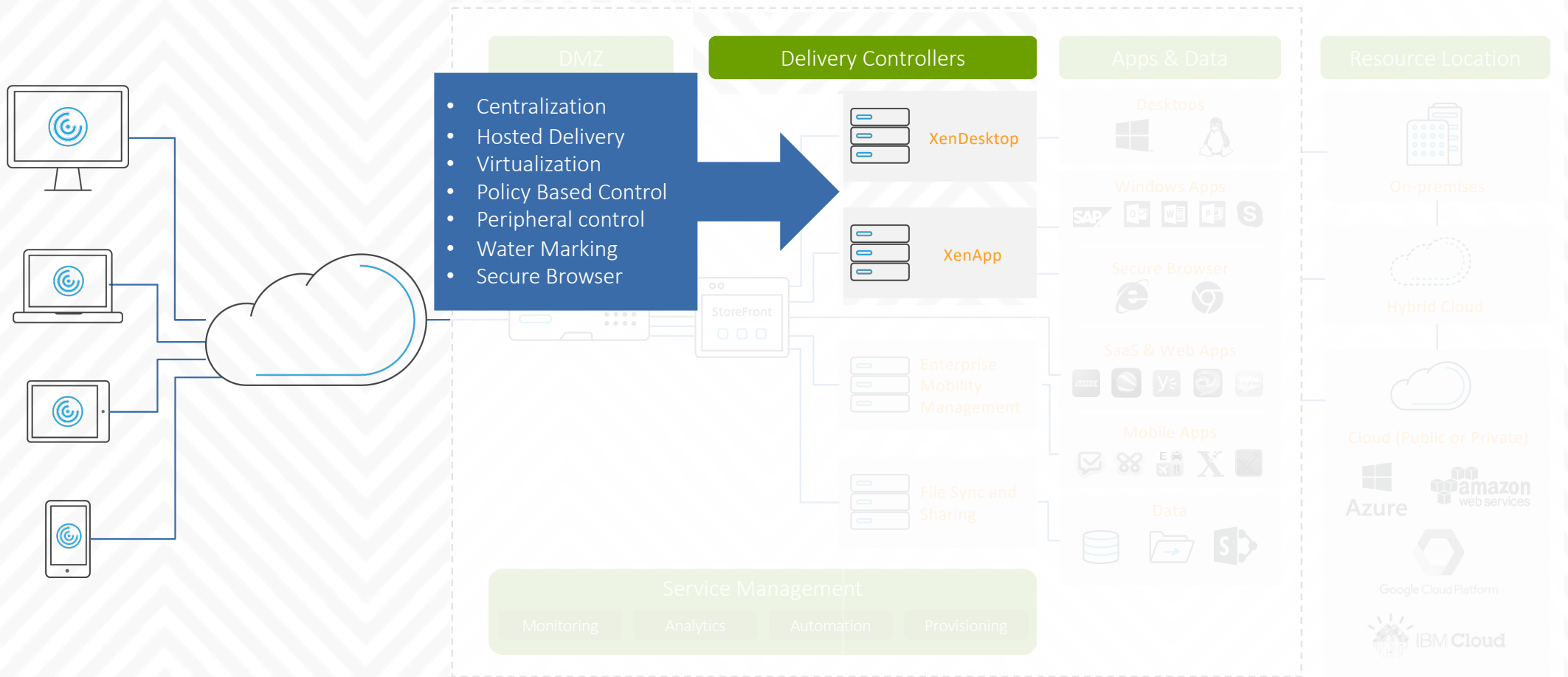
Citrix Technology



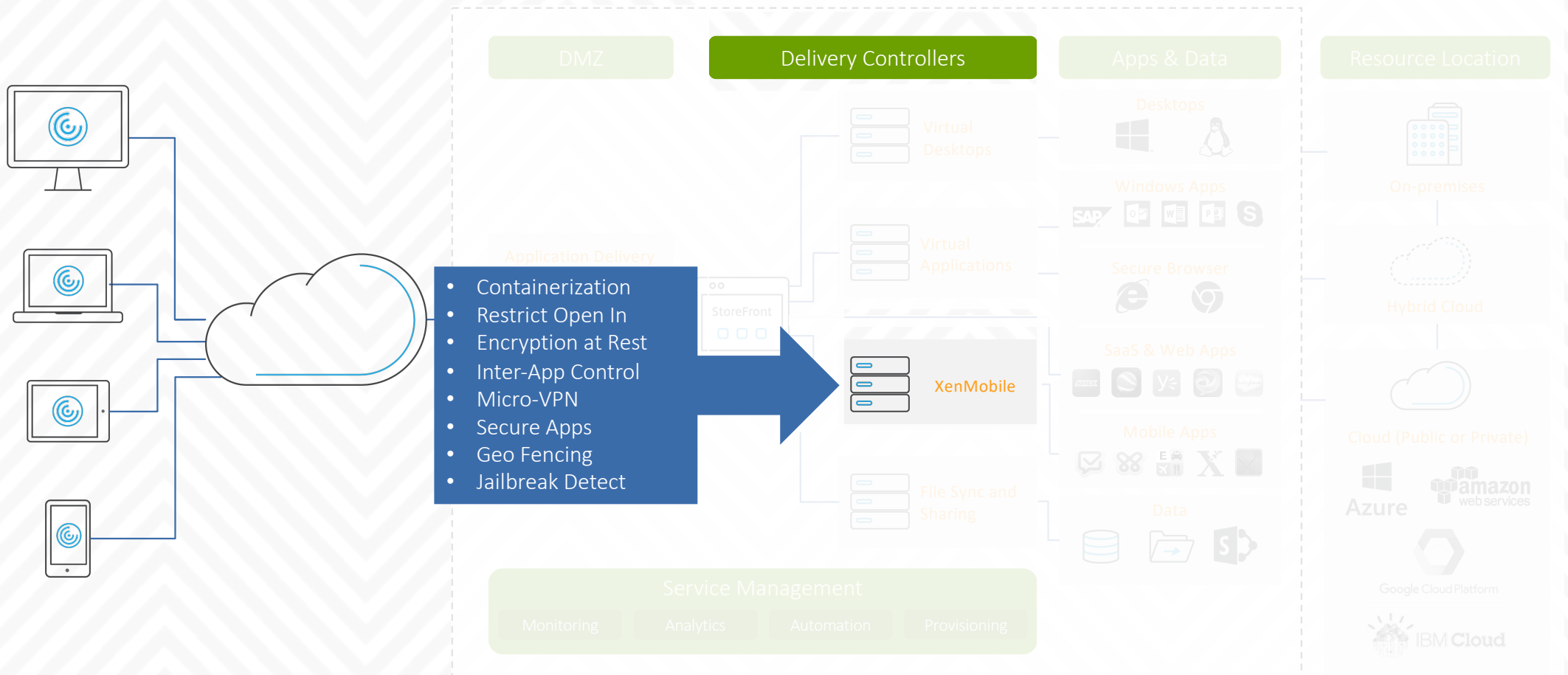
Citrix Technology



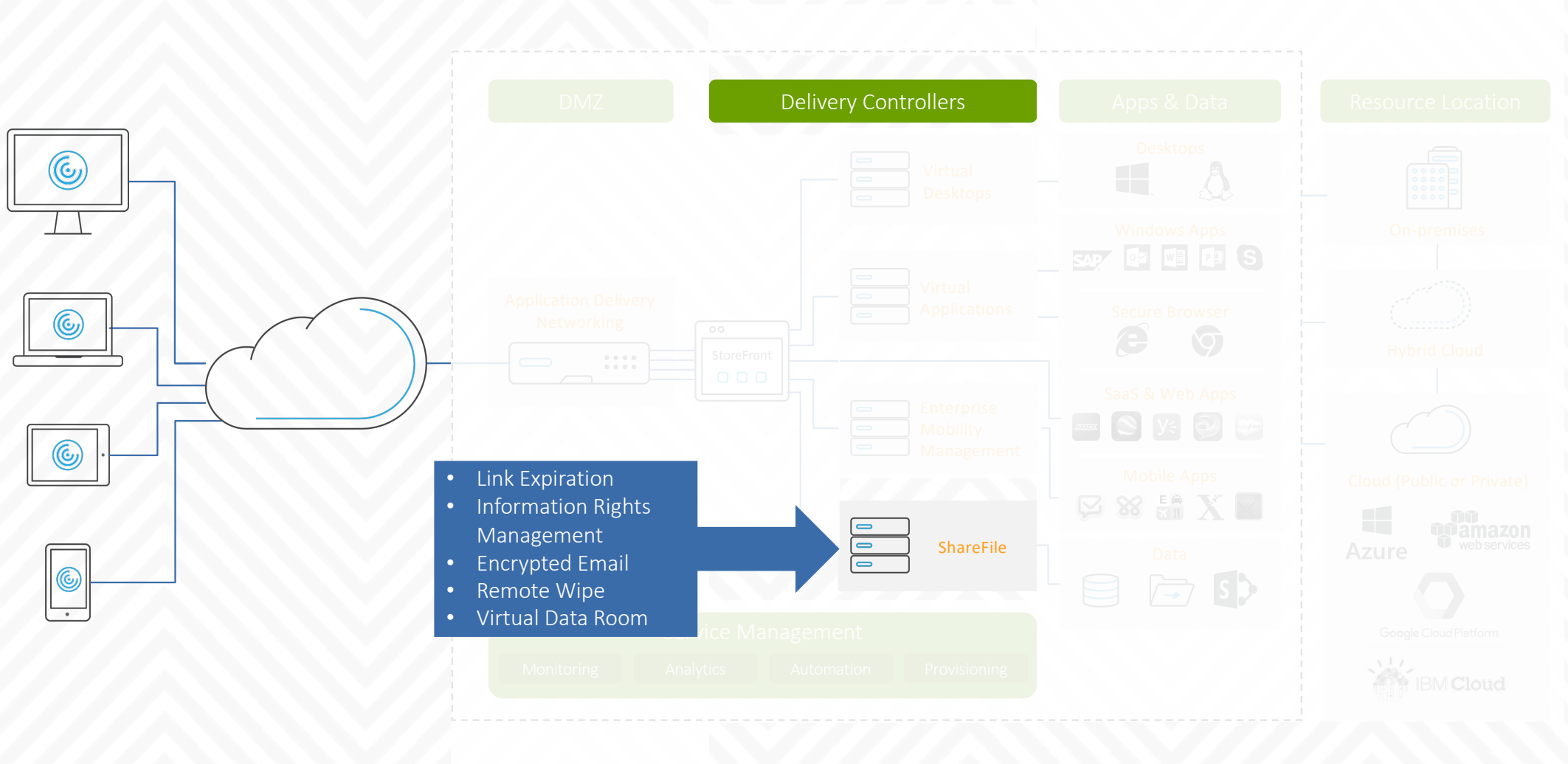
Citrix Technology



Citrix Technology



Citrix Technology



Security Best Practices

- ▶ Edit Master text styles
 - ▶ Second level
 - ▶ Third level
 - ▶ Fourth level
 - ▶ Fifth level

*Control the Security
Experience*

Why Citrix on Azure?

- When you have a Centralized Application that needs to be accessed by resources in different global geographies – especially for graphical requirements
- When you need “bursting” capabilities to meet temporary demand (Seasonal or event based demand)
- When you have large Citrix farms that are not utilized 24 X 7

CITRIX IN AZURE DEPLOYMENT OPTIONS

Option 1 – XenApp and XenDesktop Essentials

Option 2 – Citrix Cloud Services

Option 3 – BYOL to Azure

CITRIX XENAPP ESSENTIALS

Virtualized Win32 Apps on Azure



XenApp Essentials Next Generation Service for Remoting Apps

Azure RemoteApp



Fast



Simple



Azure
Marketplace

XenApp Essentials



Citrix XenApp



Scalable



User
Experience

The fastest, simplest way to
access apps from the cloud

Delivering Apps and Desktops

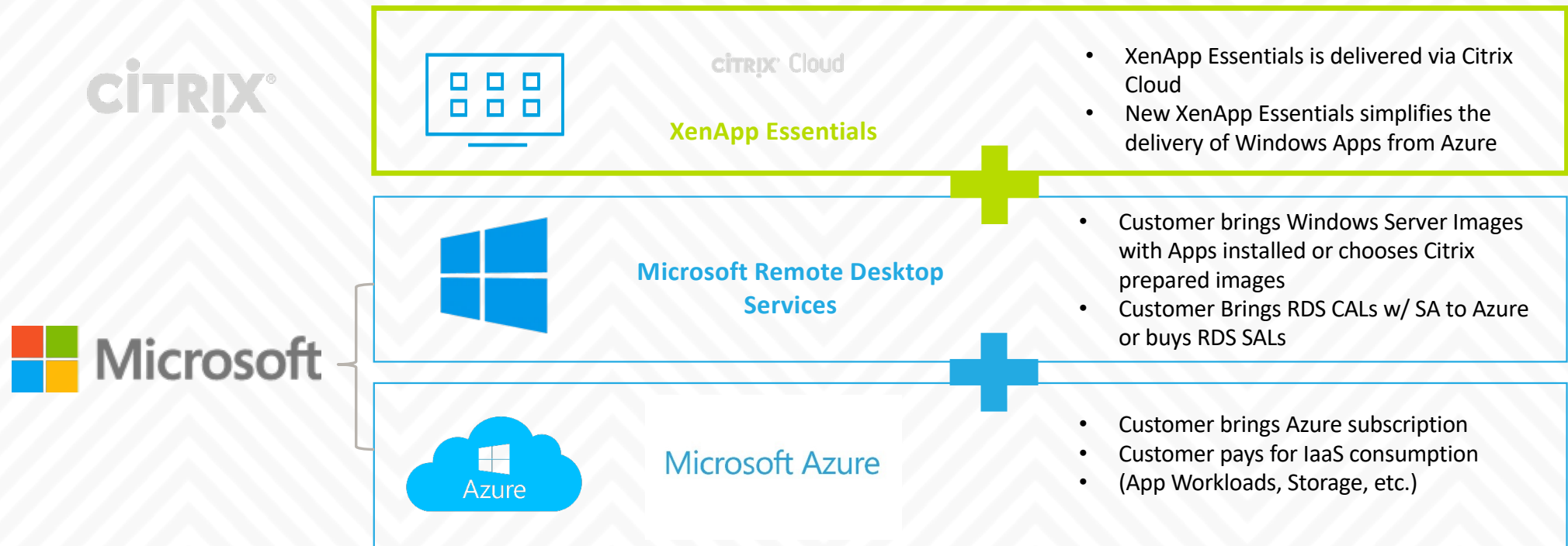


Deployment	On-premises	Service Provider Hosted	Cloud
Citrix Infrastructure	Customer IT	Partner	Managed by Citrix
Workload Management	Customer IT	Partner	Customer IT
Workload Location	Private or Public Cloud	Private or Public Cloud	Private or Public Cloud
Model	Single Tenant	Multi-Tenant	Single or Multi-Tenant
Licensing	Perpetual	Subscription (term varies)	Subscription (user/year)

Cloud	Cloud
Managed by Citrix	Managed by Citrix
Customer IT	Customer IT
Azure ONLY	Azure ONLY
Multi-Tenant	Multi-Tenant
Subscription (user/month)	Subscription (user/month)

Delivering Windows Apps from Azure

New! Citrix XenApp Essentials Service

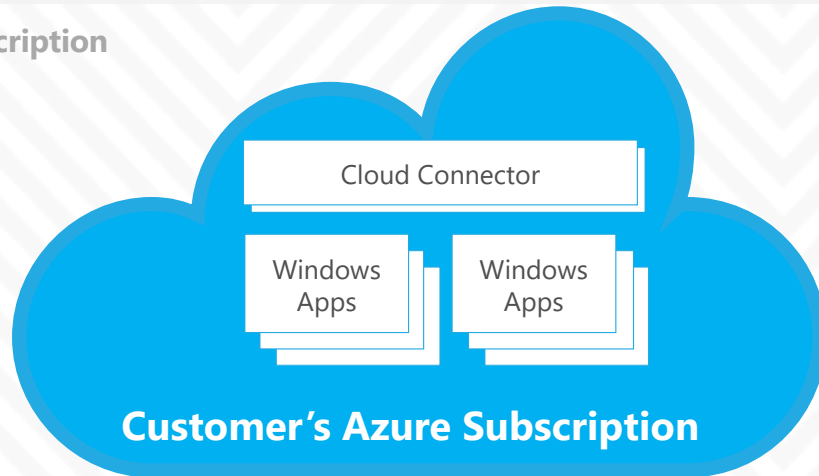


XenApp Essentials



Citrix Cloud

Customer Subscription



Operated **by Citrix**



Customer managed
Azure **subscription**



Customer also **pays**
for **IaaS** consumption

Adopting XenApp Essentials

- ▶ Edit Master text styles
 - ▶ Second level
 - ▶ Third level
 - ▶ Fourth level
 - ▶ Fifth level

Use Cases – XenApp Essentials

Temporary Workers



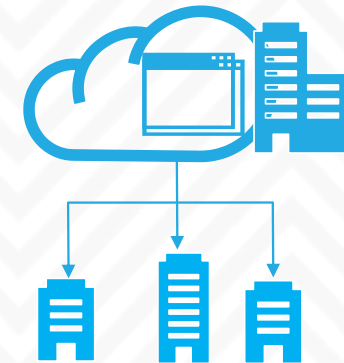
Scale app workloads easily in Azure for temporary or contract workers without acquiring expensive hardware.

Workforce Mobility



Help mobilize your workforce by providing access to legacy Windows App workloads from anywhere, at anytime and on any device.

Branch Office Expansion



Easily expand to branch offices across the world by centrally managing your app workloads and leveraging the Azure Data center.

XenApp Essentials Pricing

	XenApp Essentials Service	NetScaler Gateway Service 25 GB Data Transfer Add-on ¹
Monthly Price	\$12 per user	\$12 per pack
Microsoft Remote Access ²	\$6.25 per user or BYO RDS CAL	N/A
Bandwidth	1GB	25GB
User Minimum	25	N/A
Term	Monthly, auto-renew at end of month	
Discounts	None	

¹ 1 GB of data transfer per user per month is included. Additional NetScaler Gateway Service 25GB bandwidth add-on packs can be purchased if needed for more bandwidth-intensive workloads, such as 3D graphics. Add-on pack is \$12 per pack per month.

² XenApp Essentials accesses Windows Server remote session capabilities that would typically require an RDS CAL. With Remote Access, you can use the Citrix XenApp Essentials without purchasing a separate RDS CAL for this workload.



Live Demo – XenApp Essentials Management

CITRIX XENDESKTOP ESSENTIALS

Windows 10 VDI on Azure



Delivering Windows 10 on Azure with Citrix Cloud

New! XenDesktop service for Windows 10 on Azure

CITRIX®



CITRIX Cloud
XenApp and
XenDesktop service

- Citrix Cloud is hosted on Azure
- New XenDesktop service manages, monitors and provisions Windows 10 Enterprise CBB virtual desktops on Azure



Windows 10

- Customers under Windows EA/SA
- Windows 10 Enterprise CBB **per user** license
- Customer brings Windows 10 Enterprise CBB license

Microsoft



Microsoft Azure

- Customer brings Azure subscription
- *Customer* pays for IaaS consumption for Windows 10 Enterprise CBB virtual desktops

History in the making....



*Customers with Windows Per User License (Windows 10 E3 Per User or Windows VDA Per User) will be able to make use of a new virtualization benefit that will allow customers to also run **Windows 10 Enterprise Current Branch for Business (CBB) on Azure or approved 3rd Party Partners***

Key Use Cases

Rapidly deploy Windows 10
to all employees

Acceleration application
migration to Windows 10

Centralized desktop
management and monitoring



Windows 10 Migration



Contractors

Low-cost of ownership
Device independence
Consumption-based pricing

Cost and IT operational
benefits in employee device
management

Anywhere access to
Windows 10 desktop



BYOD



PC Refresh

Simplified operating system
patching and updates
Centralized access to every
Windows 10 workspace
Ability to repurpose PC
refresh funds for flexible
workstyles

XenDesktop Essentials & Microsoft Azure



Citrix Cloud

Customer Subscription



Operated **by Citrix**



Pricing

MONTHLY	
Price (PUPM)	\$12
User Minimum	25 Users
Payment Options	Pre-Pay
Renewal	Auto-Renew at end of month
Customer brings Windows 10 Enterprise CBB per user license	EA Annual Commitment

When XenDesktop Essentials is a good fit

- When you do not have existing Citrix licensing to leverage (ie - first time buyer)
- When you do not require different machine types to deliver images/Use Cases.
- If you are looking to go to strictly an operating "Pay-As-You-Go" Model, especially if you have "bursting" requirements throughout the year with end users (i.e. - A school system)
- If you are trying to avoid the ongoing maintenance costs/efforts of upgrading Citrix
- When you need flexibility and scale but do not have heavy customization requirements

When XenDesktop Essentials may NOT be a good fit

- When you already have all the Citrix Licensing investments that you need
- When you require different machine types to deliver images/Use Cases
- "When you have complexities or customization requirements such as:
 - ✓ Multi-Region Workloads
 - ✓ Multi-Machine Type Use Cases
 - ✓ User Profile Management
 - ✓ Store Front Customization
 - ✓ You need a hybrid solution
- You have a significant number of Images you want to manage via a tool like Unidesk
- If you WANT or NEED control when you Citrix Environment is upgraded.
- You need to deliver Windows Applications and you have needs to deliver Published Desktops
- You need to deliver WIN10 VDI Desktop AND you need to deliver applications via XenApp, especially if to the same user base

When BYOL is a good fit

- When you already have all the necessary Citrix Licensing investments
- When you need or want FULL control of Citrix upgrades
- When you need flexibility that requires Storefront servers to reside outside of Citrix Cloud

When BYOL may NOT be a good fit

- When you do not have existing Citrix licensing to leverage (first time buyer)
- If you are looking to go to strictly an operating "Pay-As-You-Go" Model, especially if you have "bursting" requirements throughout the year with end users (ie - A school system)
- You have simple requirements



EM+S AND
CITRIX
XENMOBILE

EM+S

- Only MDM/MAM that can manage native Office Mobile Apps
- Not just MDM/MAM – also includes:
 - Identity and access management
 - Information Protection
 - Advanced Threat Analytics

XenMobile

- Tight integration with Citrix:
 - NetScaler
 - XenApp/XenDesktop
 - ShareFile

Better together

Scenario – XenMobile MDM and Intune MAM w/o Enrollment

- Typically corporate owned devices (can be personal devices as well)
- Intune MAM manages Office Mobile Apps (and Intune “enlightened” apps)
 - Allows for copy/paste between Office Mobile Apps and Citrix Secure Apps

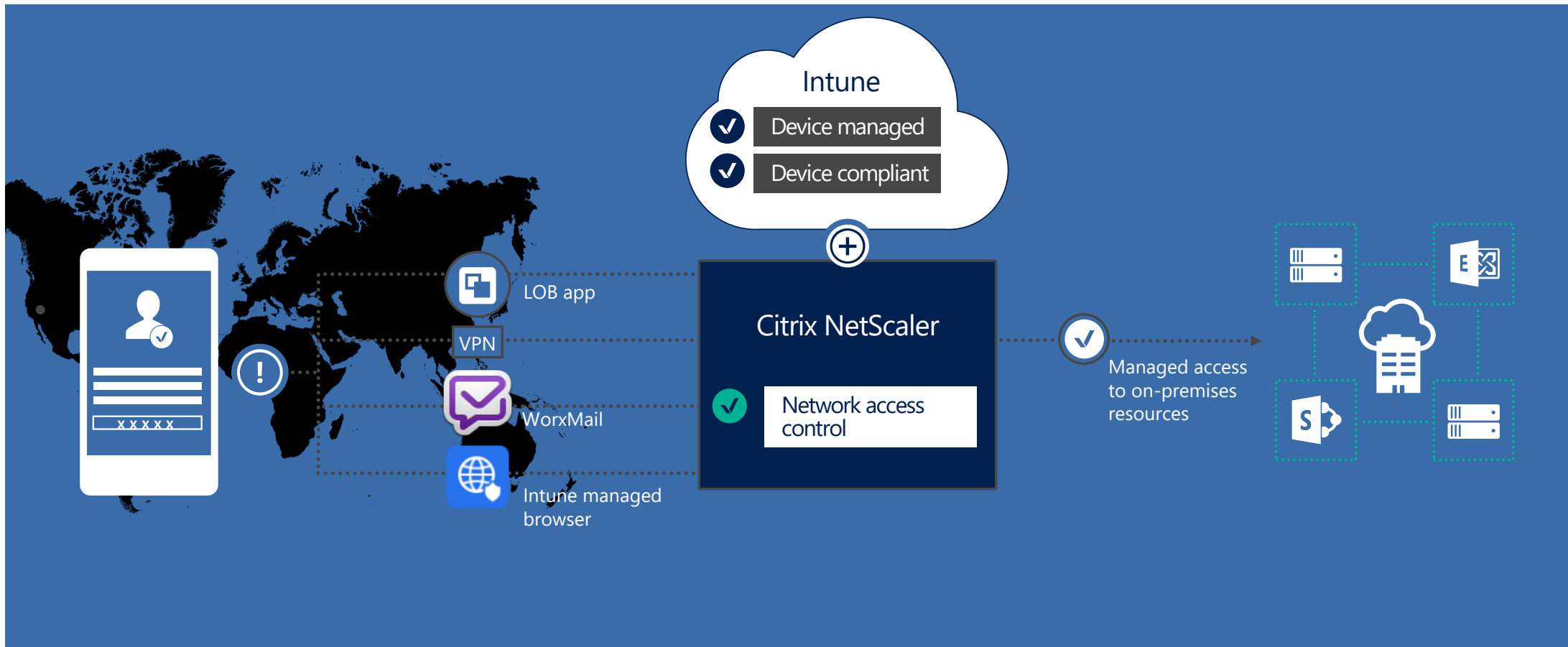
Access to on-prem apps

- Can use with Citrix NetScaler for granular access, MicroVPN and conditional access to on-prem apps

EMS + Citrix

On-premises conditional access

- Citrix network (VPN) checks for device enrollment and compliance (generally available)
- LOB app can connect to on-premises data only from managed and compliant device (Coming Soon)
- Device can access SharePoint on-premises only from Intune Managed Browser (Coming Soon)
- Worx email app access on-premises Exchange data only from managed and compliant device (Coming Soon)



Deep dive architecture

OFFICE 365 PROPLUS ON CITRIX



Challenges and considerations

- It is all about the caching of data:
 - Outlook profile
 - OneDrive for Business
- Is a challenge for any non-persistent VDI (XenDesktop) or Shared Session Host (XenApp)
 - If you use persistent VDI, then why are you even virtualizing? (It might be OK, but have a good reason for it)
- Servicing of Office 365 ProPlus
- Licensing (per-user)
 - What happens if a user isn't licensed?

First and third party solutions

- Native solutions (Microsoft supported configurations)
 - Cached data only supported locally, but then requires re-download EVERY time (for non-persistent session/VDI)
- Citrix UPM / other profile management solutions
 - Works well for “profile” roaming, but not for cached data
- FSLogix – Office 365 Container
 - Simple, effective, great user experience – uses VHD located on network share or shared storage to store cached data
 - VHD is “mounted” at logon to the respective session/VDI instance

CITRIX ON AZURE SUCCESS STORIES

Large Union

Use Case Description:

- The ability to scale up and scale down with a pay as you go model to support activities like “organizing events”
- The ability to support a mobile, geographically dispersed workforce
- The need to expand IT services/support without expanding FTE count
- They wanted to collapse datacenter and get out of the datacenter business due to lack of skills/resources to support enterprise equipment

CITRIX ON AZURE SUCCESS STORIES

Large Union

Solution Description:

- Citrix published desktops delivered from Azure for training rooms, reception desktops, and office devices
- Citrix Server Based VDI for Power Users that required their own customized User Experience
- WIN10 delivered Operating Systems managed by Intune with One Click restore for anyone that required “off-line” access

CITRIX ON AZURE SUCCESS STORIES

Clothing Apparel /Shoe Company

Use Case Description:

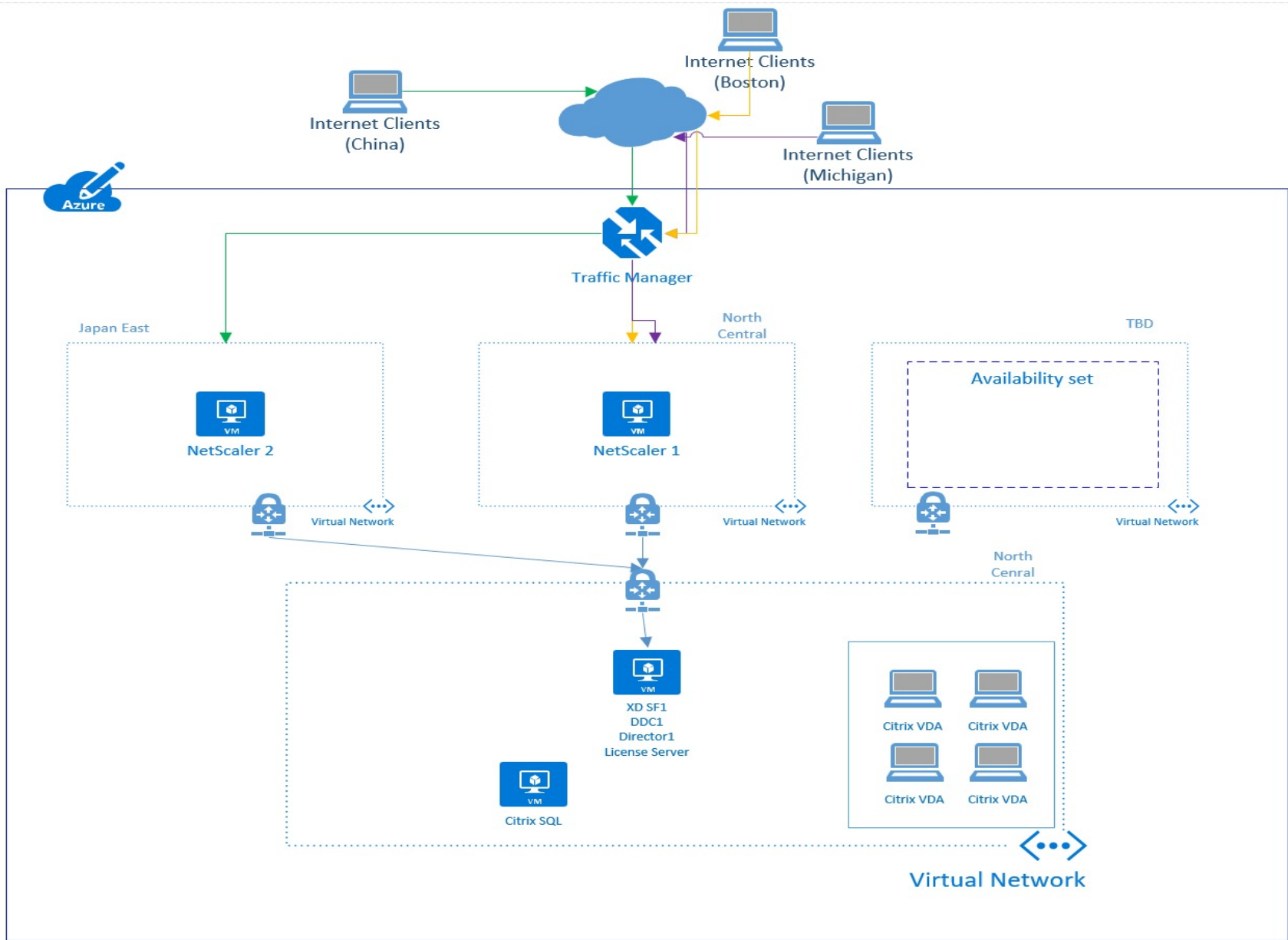
- Have a Centralized Engineering Application that requires access from engineers located in Michigan, Massachusetts, China, and within the next year London
- One set of users needs application access for Bill of Materials (BOM) data entry
- One set of users needs full application access including 3D Graphics modeling
- Application access from China has been unacceptable due to latency attributed to China firewalls and the distance of crossing the Internet from China to the US

CITRIX ON AZURE SUCCESS STORIES

Clothing Apparel /Shoe Company

Solution Description:

- Implemented NetScaler's within Strategic Azure Regions to have communications flow through the Azure network backbone as soon as possible
- Moved the Engineering Application into the North Central Data Center
- Created a XenApp Published Application to deliver the application for BOM data entry
- Created a XenApp Published Desktop using NVIDIA to deliver the 3D graphics use case





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