# ThousandEyes on Every Service!

DEVNET-1172

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DEVNET-1172

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07-Dec-22 13:00 Breakout DEVNET-1172 - ThousandEyes on every service!

When applications are the business, user experience is the defacto currency. What if the service you build does not have clients but is still part of the internal ecosystem of applications or automation tasks that makes your company competitive and a market leader.

As an application developer you are generating an overload of tickets with painfully long resolution times and endless finger-pointing is not a good way to start. How do you provide value to your organisation and minimise your impact?

In this session, you will go through a demo to understand how to teams can use ThousandEyes to create a better user experience by continuously monitoring business-critical services and hybrid applications. As a developer it's good to know how the world sees your creations and how they are monitored. Speed up the mean time to innocence, be part of the solution and not the problem.

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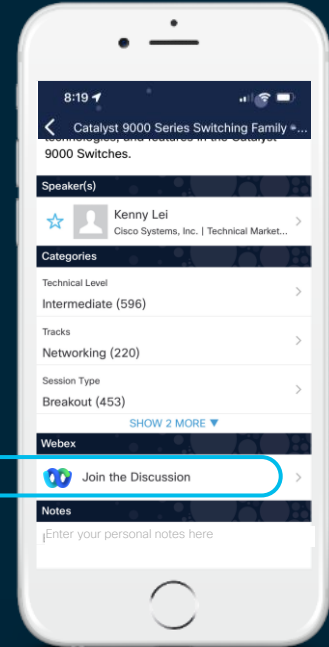
# Agenda

- Introduction

- What Problem does ThousandEyes Solve

- How? Show me

- Getting your hands dirty

# What Problem does ThousandEyes Solve?

# Blindness cost Time, $$$ and Reputation

| Detection (MTTD) | Extremely Long Problem Identification (MTTI) | Resolution (MTTR) |
|---|---|---|



Reactive detection of service disruption



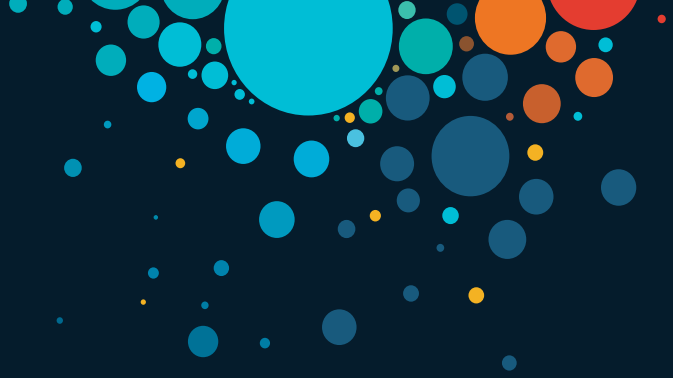Multiple dependencies outside of Operations control



Costly war-rooms wasteful finger pointing



No common understanding across teams



Contention vs collaboration with everyone

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*Our Mission is to improve the quality of the Internet, to improve the quality of life.*

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# The Challenge

Visibility and
control is shrinking

External
dependencies are
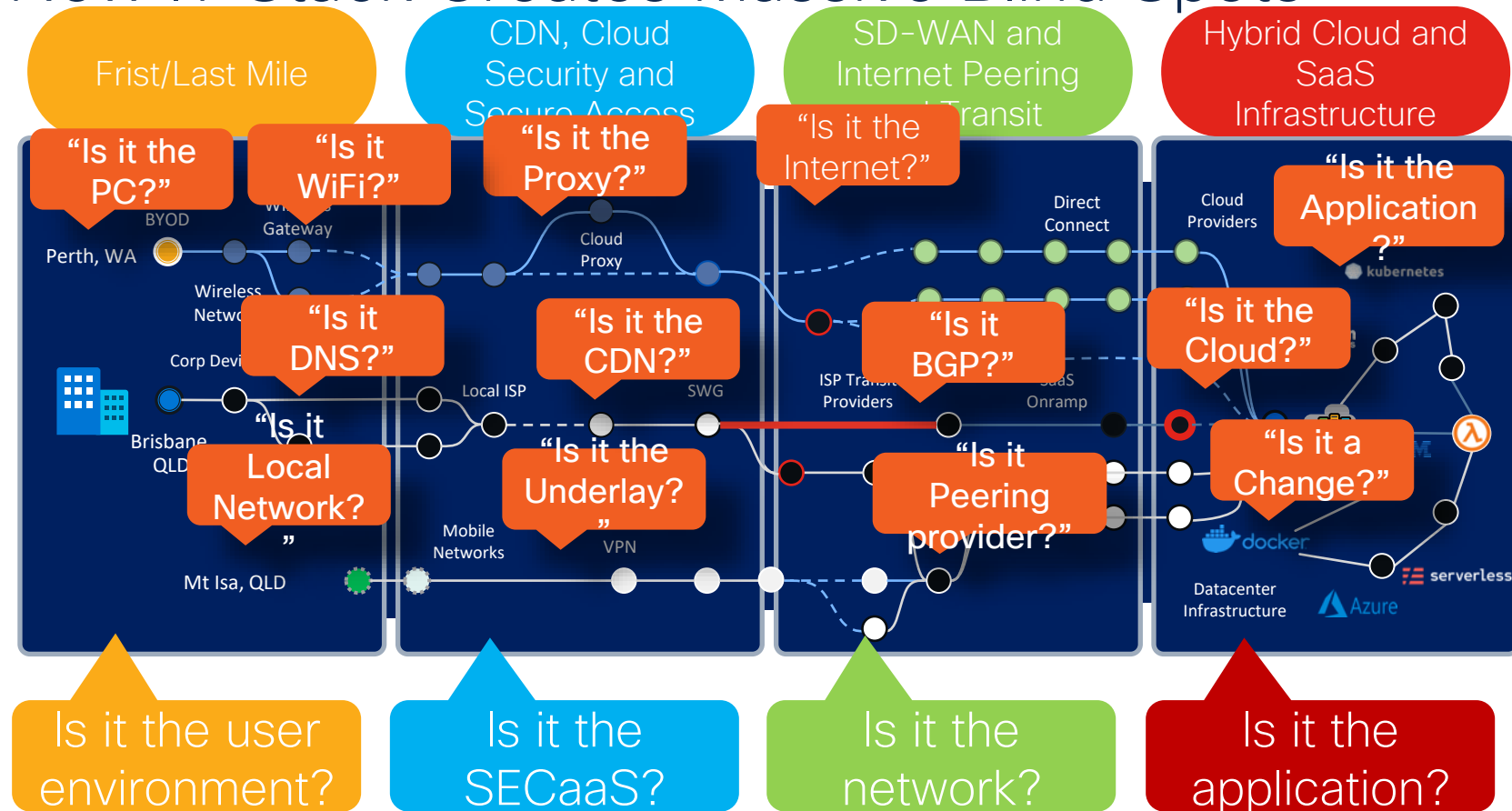exponentially
growing

Data Center ➝ Cloud

App Stack ➝ SaaS + API

Office ➝ Home

Network ➝ Internet

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# New IT Stack Creates Massive Blind Spots

# How do we do this

We run TESTs to collect Metrics

- Tests run from Cloud agents and/or Enterprise Agents

- Test Metrics include DNS, BGP, QoS, MPLS, Loss, Latency, Jitter and others

- Tests are displayed with Path Visualisation

- Oh and there is also Endpoint Agents as well
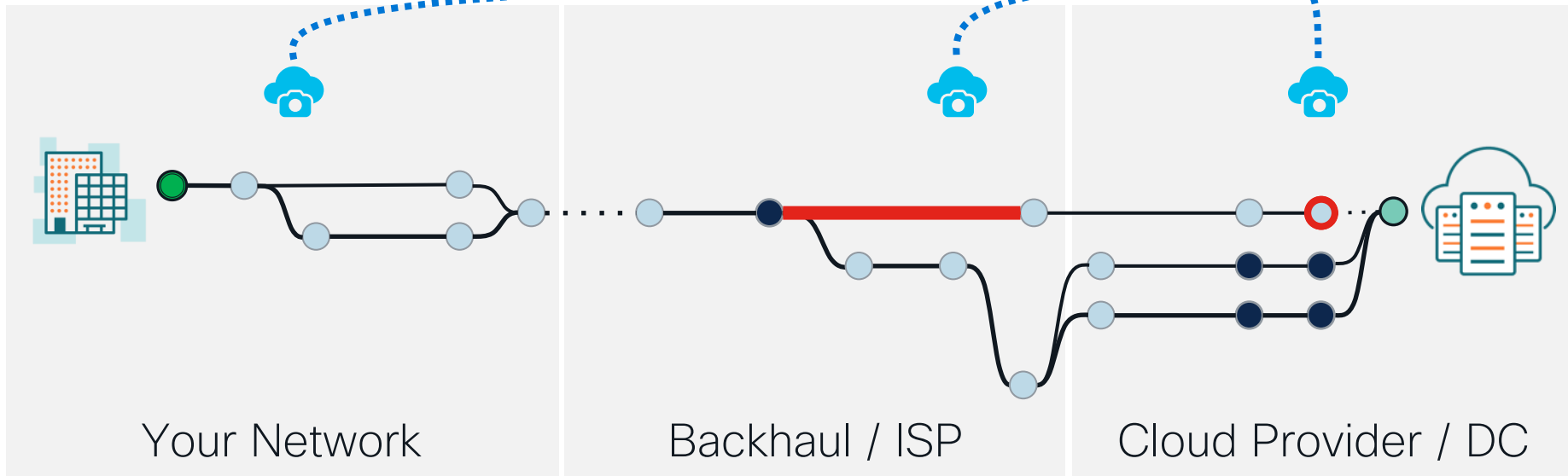
# The four steps to success



Alerts → Dashboards / Reports → ShareLinks

Your Network | Backhaul / ISP | Cloud Provider / DC

# Summary

- Create great Tests

- Create brilliant Dashboards

- Set Alerts and send them


- Sharelinks / Saved Event

# Use Case:

# Internal Application developed by us

# Use Case – Scenario

- Internal Application developed inhouse

- Customer is moving to Azure

- Application makes calls to public and private APIs

- Recently private APIs were moved to Azure backend API service

# Use Case – Questions

- We already have a APM (Application Performance Monitoring) platform, do we need ThousandEyes as well?

- Isn't ThousandEyes only for the Internet?

# Modern Operations Visibility Architecture

| Monitoring Category | IT Management Domain |
|---|---|
| Presentation Layer | All |
| IT Service Management | All |
| Application Performance Management (APM) | Internally Developed Apps & Services |
| **ThousandEyes** | Digital Experience<br>ISP, DNS, CDN, DDoS. CASB providers<br>SaaS providers<br>SD-WAN Internet transport<br>Internet Routing |
| Cloud-Specific Management | |
| IT Infrastructure Management (SNMP) | |
| Network Perf Management & Diagnostics (Flow/PCAP) | Cloud Infrastructure |
| Network Capacity Management (Flow) | Internal Data Center & WAN infrastructure |
| Log Management | All |

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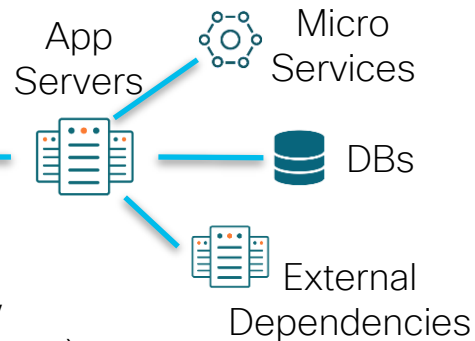
# Complete Application Service Visibility

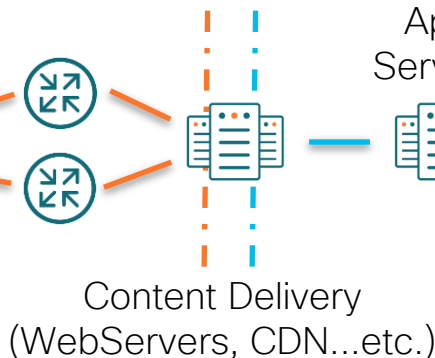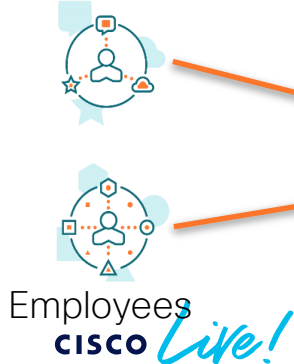

ThousandEyes
Digital Experience and
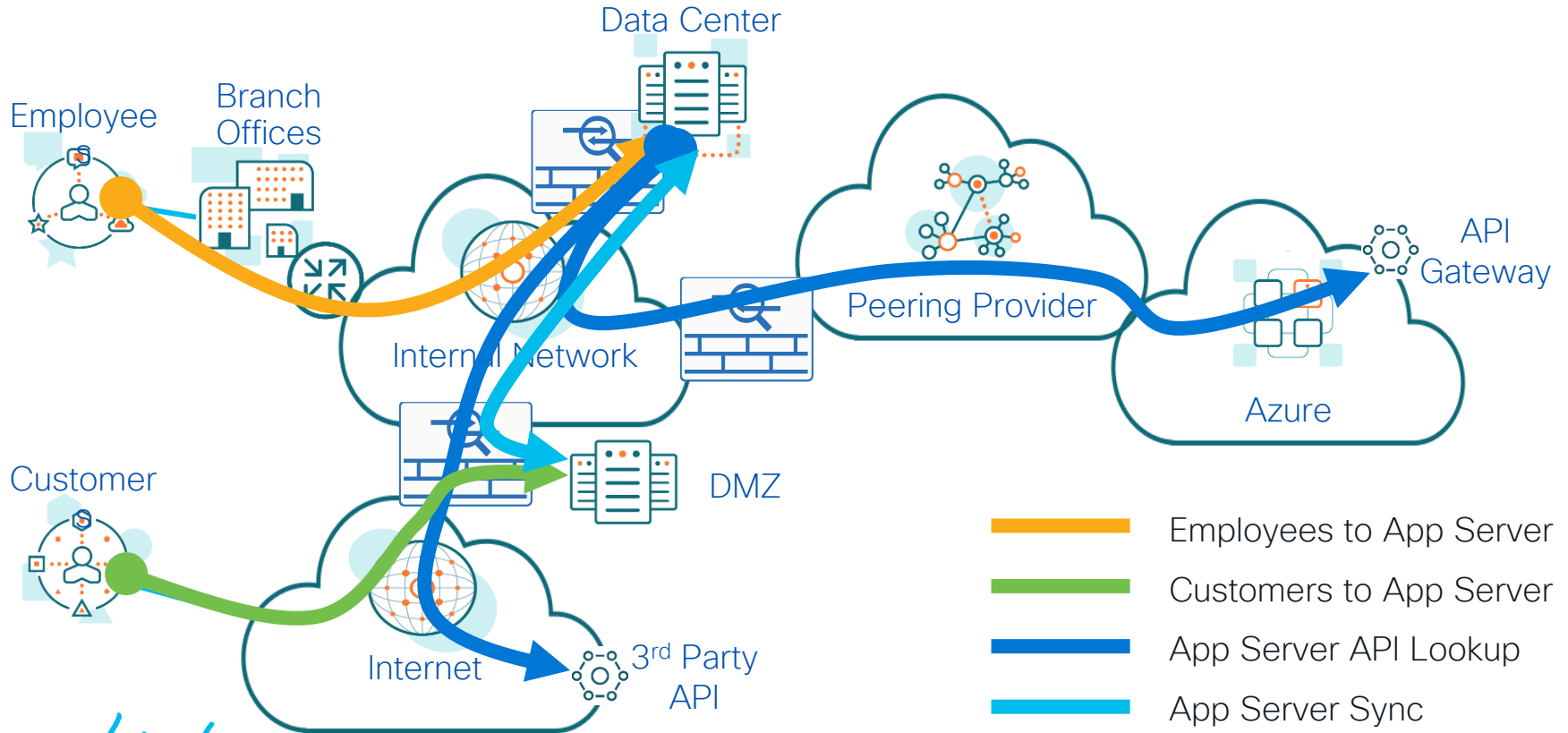Internet Visibility

APM
Application Performance
Monitoring
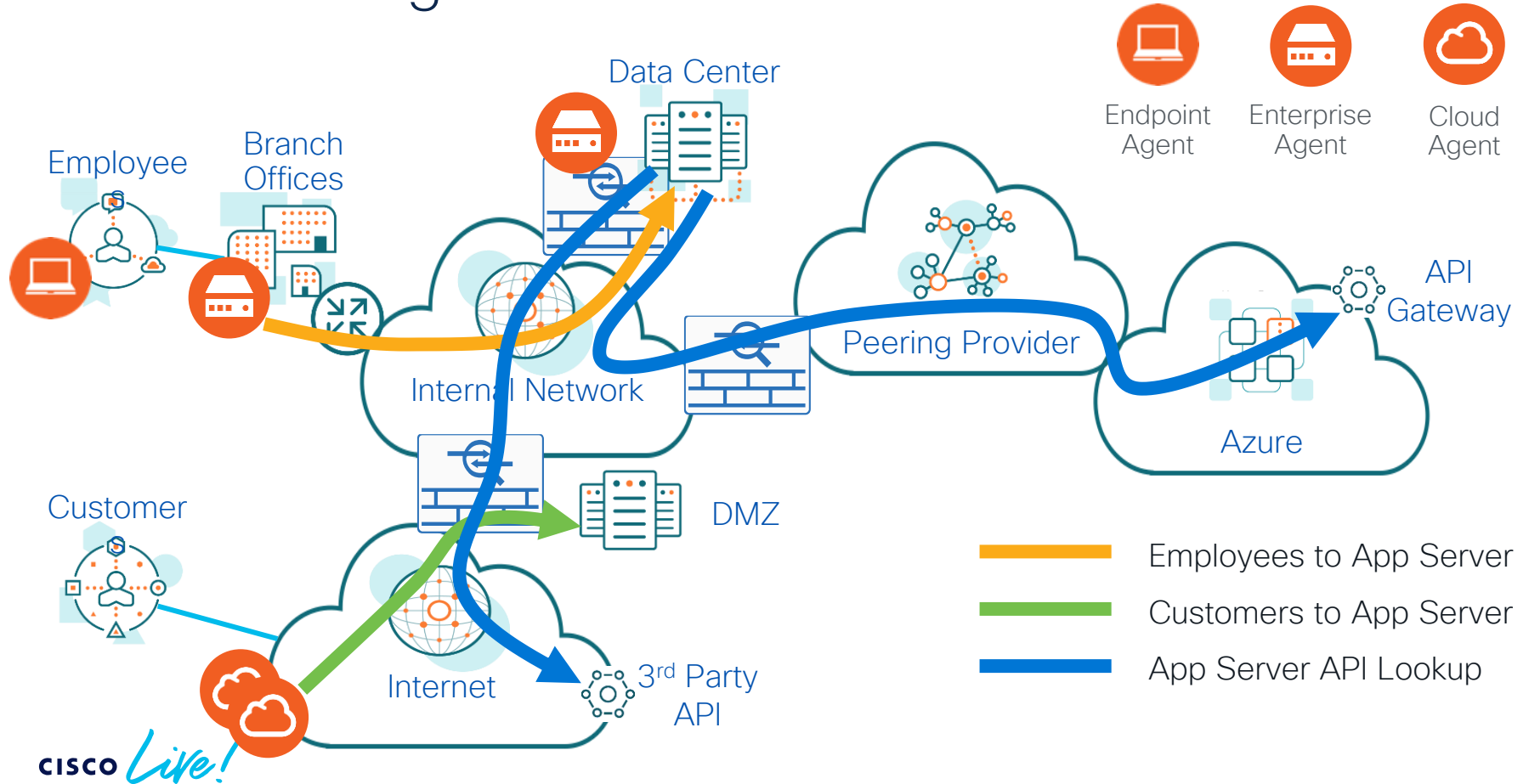
# Scenario Diagram



Data Center

Employee

Branch Offices

Internal Network

Customer

Internet

DMZ

3rd Party API

Peering Provider

Azure

API Gateway

Employees to App Server

Customers to App Server

App Server API Lookup

App Server Sync

# Scenario Diagram



Endpoint Agent

Enterprise Agent

Cloud Agent

Data Center

Employee

Branch Offices

Internal Network

Peering Provider

API Gateway

Azure

Customer

DMZ

Internet

3rd Party API

— Employees to App Server

— Customers to App Server

— App Server API Lookup

Lets See this in Action

# Key Takeaways

- ThousandEyes performs Synthetic tests to emulate the User Experience

- ThousandEyes has extensive Transaction capabilities for Application and API verification

- Create Dashboards to represent Data for everyone

- Create Alerts that make sense and optimise

- Understand workloads and where they are

# Where Next?

- ThousandEyes Documentation – [https://docs.thousandeyes.com](https://docs.thousandeyes.com)

- Cisco Devnet – [https://developer.cisco.com/thousandeyes/](https://developer.cisco.com/thousandeyes/)

- GitHub Repository – [https://github.com/thousandeyes](https://github.com/thousandeyes)

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