BeyondCorp: A New Approach to Enterprise Security

Ameet Jani, Google
Atul Tulshibagwale, Google
McCall McIntyre, Google

#vmworld #UEM3592BUS
Today’s Speakers

Ameet Jani
Product Manager
Google Cloud Security

Atul Tulshibagwale
Software Engineer
Google Cloud Identity

McCall McIntyre
Identity Partnerships Lead
Google Cloud

Google Cloud
Isn’t BeyondCorp just zero-trust?
BeyondCorp is too good to be true.
but my workloads are not on GCP.
What about my Workspace ONE deployment?
Agenda

01. Customer Challenges
02. BeyondCorp Overview
03. Better Together with Workspace ONE
04. Takeaways + Q&A
Customer Challenges
Customers have many solutions to protect business critical data

Business critical data can live on endpoints

Business critical data can live in servers

When security status changes in one solution, the other is unaware
Customers use devices to access data
Device-side protections

VMware’s Workspace One offers...

- protection for data on devices
- remediation for violations it discovers on devices
- rich device management capabilities
Device-side protections

VMware’s Workspace One offers:
- protection for data on devices
- remediation for violations it discovers on devices
- rich device management capabilities

What about applications and server side data?

Cloud
- RDS
- EC2

SaaS
- Github
- Slack

On-Prem
- CRM
- HRIS

Google Cloud Platform
- Google Cloud

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Application-specific protections

Google’s Context-Aware Access offers...

- zero-trust access to G Suite, apps on GCP, other clouds and on-prem
- evaluation of access patterns, high level device signals and location awareness for application access requests
- rich, dynamic access decisions
Application-specific protections

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- rich, dynamic access decisions

What about using rich device signals?
Imagine a world where vendors work together to make unified security decisions.
BeyondCorp Overview
Many Access Patterns

Contractor
Mobile device

Home
Personal device

Office
Corp device

Starbucks
Corp device

Github
Slack
Google Cloud Platform

RDS
EC2

CRM
HRIS

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The workplace is transforming

User expectations have changed with mobile devices

Core productivity apps and data are in the cloud

Enterprises want a connected and collaborative workplace

By 2022 70% of organizations will have a formal cloud strategy.*

*Gartner, Formulate a Cloud Strategy in the Context of your Overall Strategy, March 2019
BeyondCorp (zero trust) security model

- Access is granted based on a user’s identity and context of the request.
- Shifts controls from the network layer to the application layer.
- Allows users to work from any location & device.
BeyondCorp **solution components**

- **User trust** (Identity + Behavior)
- **Device trust** (Identity + Posture)

- **Global Frontend** (Context, Location and time)
- **Rules engine**
- **Enforcement point**

- **Web apps**
- **VMs**
- **SaaS apps**
- **Infrastructure**
- **APIs**
- **Apps and data**
Enabling BeyondCorp with **context-aware access**

Cloud Identity

- Cloud Identity Endpoint Verification
- Google Frontend
- Access Context Manager
- Cloud IAP
- Cloud IAM
- Cloud Identity
- VPC Service Controls

- Web apps
- VMs
- SaaS apps
- Infrastructure
- APIs
Context-aware access

- Enable access to apps and infrastructure from virtually any device, anywhere
- Verify that user, device, and location are trusted
- Enforce granular access controls during every request rather than just at login
Context-Aware Access is one of the best features in Google Cloud. It has allowed my dev team to focus on our business use cases and rely on Google Cloud IAP to handle the heavy lifting of authentication, authorization, and context awareness. IAP alone is worth the investment in Google Cloud Platform."

Principal engineer, The Home Depot
Download and install Endpoint Verification

Endpoint Verification collects critical context information about enterprise laptop and desktop devices.
Use case 1:

Require a secure device when accessing Drive & Docs outside the corporate network
Better Together with Workspace ONE
Working together to meet customers where they are.

We believe in partnering with best-in-breed solutions to provide our customers with what meets their business needs most.
Google Cloud Security partnerships

- Identity & Access Management
- Scanning and Vuln Mgmt
- Application Security
- SIEM
- Governance, Risk & Compliance
- Next Generation Firewall
- Container Security
- Endpoint Security
- Encryption and Key Management
- Cloud Access Security Broker (CASB)
- Email Security & Phishing

Google Cloud
BeyondCorp Alliance

Working together with key endpoint management and security partners to make BeyondCorp a reality for our customers.
Enhancing Context-Aware Access with BeyondCorp Devices API

Cloud Identity

Partner

Google Frontend

Access Context Manager

Cloud IAP
Cloud IAM
Cloud Identity
VPC Service Controls

Web apps

VMs

SaaS apps

Infrastructure

APIs
Enhancing Context-Aware Access with Workspace ONE

Cloud Identity

Google Frontend

Access Context Manager

Cloud IAP
Cloud IAM
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VPC Service Controls

Web apps
VMs
SaaS apps
Infrastructure
APIs
Use case 2:
BeyondCorp Alliance Demo with VMWare Workspace One
Takeaways
Takeaways

Security doesn’t have to live in silos; extend your access control policies with Workspace One signals.

Start your journey to BeyondCorp with context-aware access today, irrespective of where your data is stored.
Getting started

01 Identify POC application
02 Deploy an enforcement point
03 Implement user-based rule
04 Extend rule to be context-aware
05 Strengthen authentication
Next steps

Learn more at...

cloud.google.com/context-aware-access/

Pilot with Google Cloud & Workspace ONE...

BeyondCorp.Alliance@google.com
Please Fill Out Your Survey

Take a survey and enter a drawing for a VMware store gift card.
Thank you!