

# Discovery of Shadow IT with Microsoft Cloud App Security

The rise of cloud-based services has led to a significant increase in productivity for organizations. While it allows IT to outsource operations and makes collaboration among end users much easier, it also allows organizations to be much more flexible in adapting to new market conditions. As a result, users continuously find new cloud services to support their work process, ahead of IT support.

Our data shows that on average more than 1,000 cloud applications are used in large enterprises today, of which >60% go unmonitored and unmanaged by IT. This is what we call Shadow IT and can introduce significant security and compliance risks into your organization.

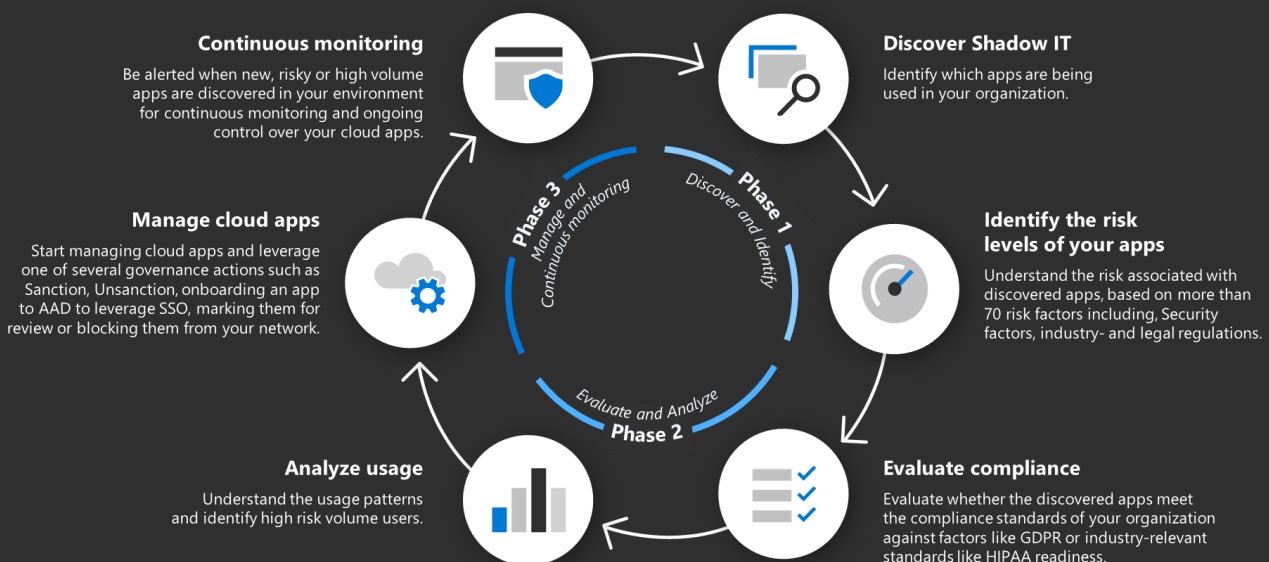
Microsoft Cloud App Security is a Cloud Access Security Broker (CASB) solution that enables you to identify, assess and manage the cloud apps used by your organization and establish a lifecycle management approach for your cloud services. In addition it detects resources that are hosted on IaaS and Platform-as-a-Service (PaaS) solutions across Microsoft Azure, Amazon Web Services (AWS), and Google Cloud Platform (GCP)

“Using Cloud App Security as a magnifying glass, we gain amazing visibility into our SaaS environment, giving us the confidence we need to deliver on our digital workplace transformation,” says

- Yasir Khan, Head of IT Infrastructure at Nakilat”

## Lifecycle Management for a secure adoption of cloud apps

Enabling seamless Discovery in Microsoft Cloud App Security is the first step in creating a sophisticated lifecycle management approach, to ensure that your organization securely accesses cloud apps and services. Leverage the breadth of capabilities to identify which apps are being used in your organization, assess their potential risk and enable continuous monitoring to take immediate action when new cloud apps are discovered.



# Discover Shadow IT across IaaS and PaaS

Infrastructure-as-a-Service (IaaS) initiated the decline of traditional data center strategies. Today, modern cloud-focused IT strategies enable organizations to implement new processes and scale their infrastructure up and down as needed, allowing them to reach cost efficiencies and high levels of flexibility.

Whether organizations have chosen a single- or multi-cloud vendor strategy, they are often surprised when they find that a business unit has servers on a platform without any IT oversight. PaaS adoption is commonly driven by developers working on custom applications, or even business-users. When the use of IaaS and PaaS services are leveraged by these user groups, it often happens without any IT oversight and can go unmonitored for extended periods of time - posing significant security risks to an organization.

Microsoft Cloud App Security provides Shadow IT Discovery capabilities to detect resources that are hosted on IaaS and Platform-as-a-Service (PaaS) solutions across Microsoft Azure, Amazon Web Services (AWS), and Google Cloud Platform (GCP).

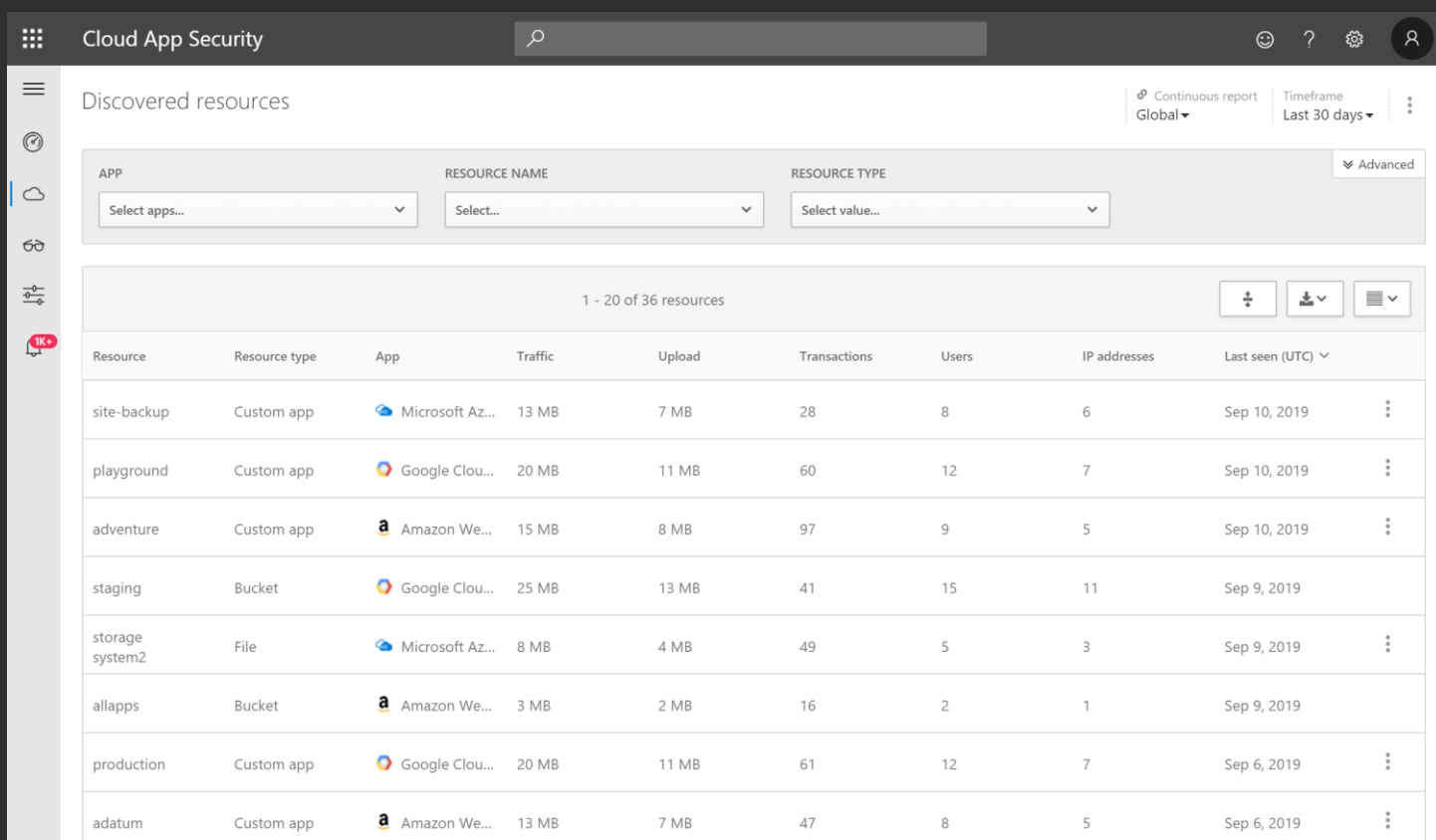
## Discover Shadow IT across IaaS and PaaS with Microsoft's Cloud Access Security Broker

Amazon Web Services

Google Cloud Platform

Microsoft Azure

The new "Discovered resources" tab in the Microsoft Cloud App Security portal provides you with visibility into the custom apps that run on top of your IaaS and PaaS subscriptions. You can use this new capability to gain full visibility into the resources that exist within your organization, which users are accessing them, transactions, IP addresses, and how much traffic is being transmitted.



Resource	Resource type	App	Traffic	Upload	Transactions	Users	IP addresses	Last seen (UTC)
site-backup	Custom app	Microsoft Az...	13 MB	7 MB	28	8	6	Sep 10, 2019
playground	Custom app	Google Clou...	20 MB	11 MB	60	12	7	Sep 10, 2019
adventure	Custom app	Amazon We...	15 MB	8 MB	97	9	5	Sep 10, 2019
staging	Bucket	Google Clou...	25 MB	13 MB	41	15	11	Sep 9, 2019
storage system2	File	Microsoft Az...	8 MB	4 MB	49	5	3	Sep 9, 2019
allapps	Bucket	Amazon We...	3 MB	2 MB	16	2	1	Sep 9, 2019
production	Custom app	Google Clou...	20 MB	11 MB	61	12	7	Sep 6, 2019
adatum	Custom app	Amazon We...	13 MB	7 MB	47	8	5	Sep 6, 2019

# Streamlined Discovery by integrating with Microsoft Defender ATP

Microsoft Cloud App Security uniquely integrates with Microsoft Defender Advanced Threat Protection (MDATP) to enhance the Discovery of Shadow IT in your organization. It provides a simplified roll out of Cloud Discovery, extends the capabilities beyond your corporate network, and enables machine-based investigation.

Microsoft Cloud App Security leverages Microsoft Defender ATP to collect traffic information about the cloud apps and services being accessed from IT-managed Windows 10 machines – covering client- and browser-based apps. This seamless integration does not require any additional deployment and gives admins a more complete view of the cloud app- and services usage in their organization.

“Onboarding MDATP data in Microsoft Cloud App Security was a breeze, just flip the switch in the portal and go”

- DevOps Infrastructure Engineer

## How it works

Microsoft Defender ATP is an integrated part of Windows 10 Enterprise. To leverage the existing sensors and send traffic information to Microsoft Cloud App Security, you need to enable this integration via a simple toggle in the Windows Defender Security Center. Once activated, MDATP continuously logs resource usage and reports it back to Microsoft Cloud App Security, with signals shared via the Microsoft Intelligent Security Graph.

Microsoft Cloud App Security will then leverage the traffic information from Microsoft Defender ATP's log store to surface all relevant details in the Discovery Dashboard and provide relevant insights for discovered apps, users, IP addresses and a new, machine-centric view.

Admins now have visibility into the cloud apps that are being accessed, on and off the corporate network. In addition, they will be able to see how many and which devices are accessing each one of the apps that are discovered.

## Integration Highlights



### Discovery beyond the corporate network

Discovery of cloud apps, IaaS and PaaS resources accessed from managed Windows 10 machines, regardless of the network.



### Ease of deployment

All it takes is a simple checkbox in the Windows Defender Security Center to enable the new Discovery integration.



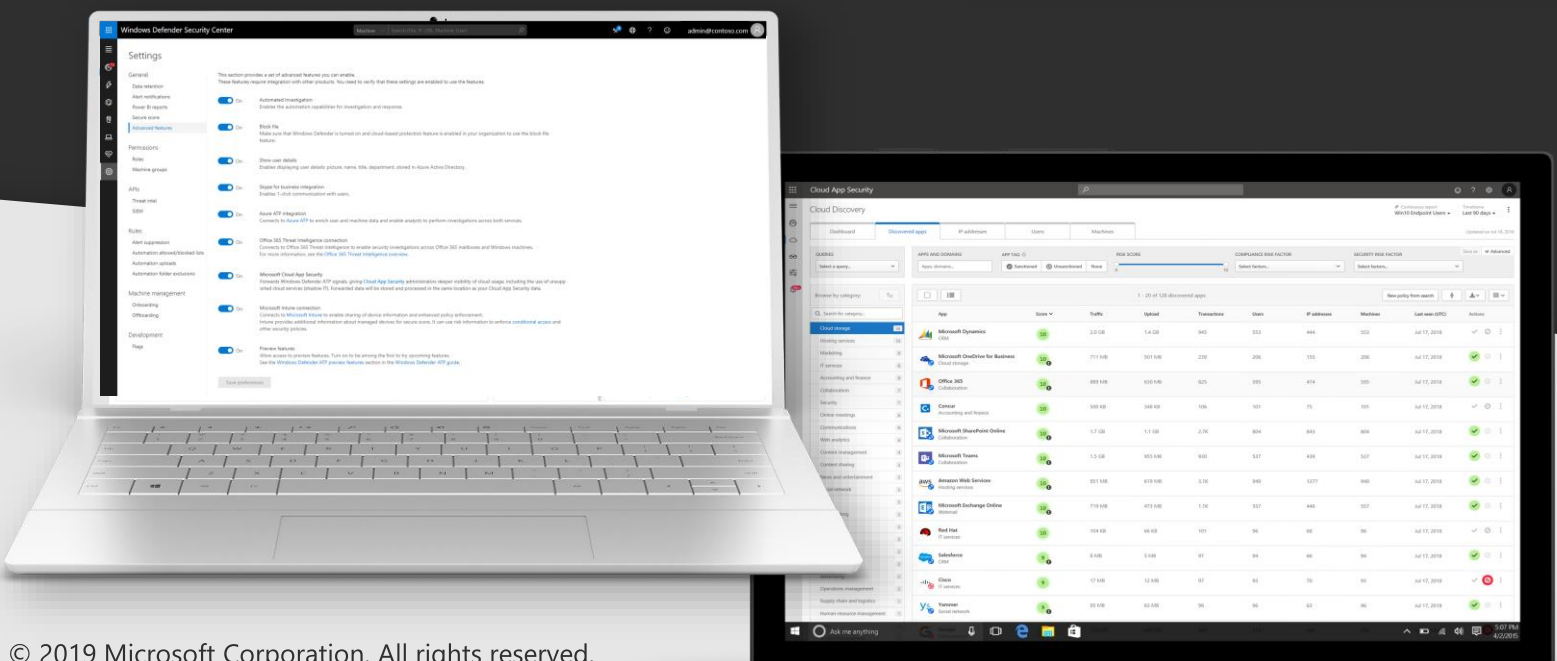
### Machine-based Discovery

Analyze your findings on a machine-basis to get a granular insight into the apps accessed from specific machines.



### Deep dive investigation in Microsoft Defender ATP

Continue your investigation in the Windows Defender Security Center for more granularity and visibility into all the different behaviors on a suspicious machine.



# Integration Architecture

Microsoft Defender ATP enables Discovery beyond the corporate network for Windows 10 machines. To ensure that all devices in your organization are captured, a hybrid deployment with a traditional log collector deployment against your firewall or proxy, in combination with the existing Microsoft Defender ATP integration will provide you with complete insight.

On its own, Cloud App Security analyzes logs from your network using logs you configured for automatic upload. This native integration enables you to take advantage of the network transactions Microsoft Defender ATP observes and monitors and utilizes them for Shadow IT discovery across the Windows machines on your network.

To enable you to perform Cloud Discovery across other platforms, it's best to use both the Cloud App Security log collector, as well as the integration with MDATP to monitor your Windows 10 machines.

## Prerequisites:

- ✓ Microsoft Cloud App Security
- ✓ Microsoft Defender ATP
- ✓ Windows 10

### Microsoft Cloud App Security

Microsoft Cloud App Security is a Cloud Access Security Broker (CASB) that gives you visibility into your cloud apps and services, provides sophisticated analytics to identify and combat cyberthreats and enables you to protect your data and control how it travels.

### Microsoft Defender Advanced Threat Protection

Microsoft Defender Advanced Threat Protection is a unified endpoint security platform for protection, detection, investigation and response. Windows Defender ATP protects endpoints from cyber threats;