GUIDE

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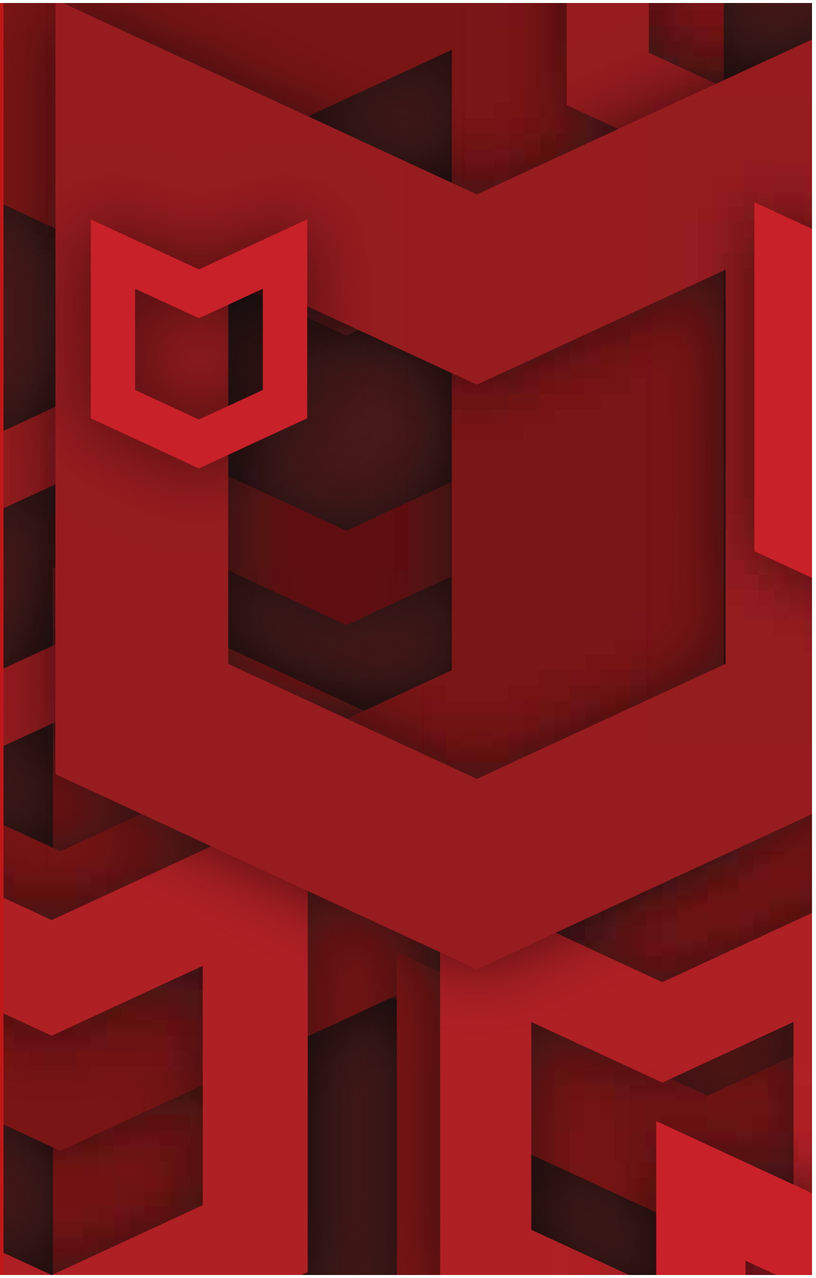
The Definitive Guide to Office 365 Security



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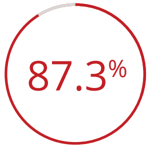
The Definitive Guide to Office 365 Security

Introduction

Microsoft Office 365 has become incredibly popular because of the mobility and collaboration it enables. With Office 365, companies always have the latest versions of Excel, Word, PowerPoint and Outlook, as well as cloud-based collaboration and productivity platforms OneDrive, Exchange Online, Yammer, and SharePoint Online. McAfee research[1] has found that 87.3% of enterprises have at least 100 active Office 365 users, but just 6.8% of corporate users have fully migrated to Office 365.



of enterprises have at least 100 active Office 365 users.

This disparity is due to the fact that most organizations are migrating users in stages. It also reflects the fact that most organizations have a hybrid on-premises and cloud environment today, where Office 365 users coexist with other employees using on-premises versions of Exchange, SharePoint, and Windows file servers. By taking a phased approach, organizations can build up their expertise in managing cloud environments and work out any uncertainties before rolling out Office 365 for the entire company. One of those uncertainties is how to secure employee usage of Office 365.

Whether you are evaluating Office 365, have deployed it to all users, or are somewhere in between, this guide offers best practices to make the most of your deployment and ensure that you continue to meet your security, compliance, and governance requirements as data moves to the cloud.

We've distilled these best practices from working with over 500 enterprises to securely enable cloud services that drive business success. First, we'll examine how enterprises are using Office 365. Next, we'll look at common security and compliance questions that

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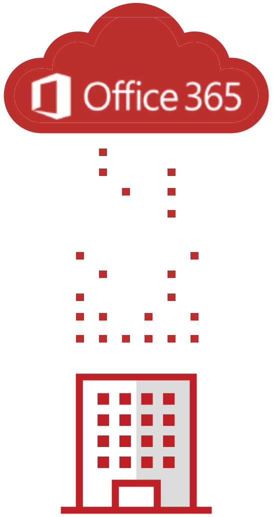
companies encounter as they migrate to Office 365. We'll offer tips to make the most of Microsoft's robust built-in service-level security. Finally, we'll cover how a cloud access security broker can enhance the security of Office 365.



How Enterprises Use Office 365

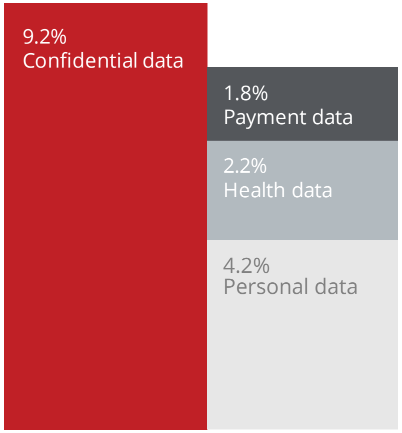
Analyzing the usage data of over 21 million users at hundreds of companies worldwide, we found that Office 365 has gained a foothold in the vast majority of enterprises. An overwhelming 87.3% of enterprises have at least 100 Office 365 users. While companies already store a significant amount of corporate data in Office 365, the volume of that data is growing rapidly.

Data uploaded to Office 365

The average organization uploads 1.37 TB of data to Yammer, SharePoint Online, and OneDrive each month. That's the equivalent of 120 million pages of Microsoft Word documents. As adoption of Office 365 increases, the velocity of data uploaded is also likely to increase. A clear indication that companies have confidence in the Office 365 platform is how much of this data is business-critical and sensitive. Analyzing documents stored in OneDrive and SharePoint Online, we found that 17.4% of documents contain sensitive data, split as shown in the diagram.

17.4%

of files in OneDrive and SharePoint Online contain sensitive data.

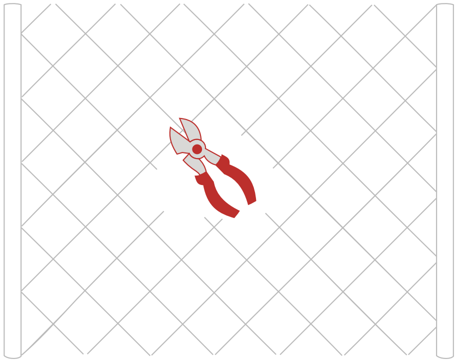


The average enterprise uploads 1.37 TB to Office 365 each month.

Collaboration internally and with business partners

A key driver of SharePoint Online and OneDrive adoption is the ability to invite co-workers and business partners to access and edit documents and other content in real-time. This intersection between sensitive content and external sharing, however, causes concern for many organizations in terms of security and compliance of corporate data. The average company collaborates with 72 external business partners via these two applications, more than any other cloud-based collaboration platform.

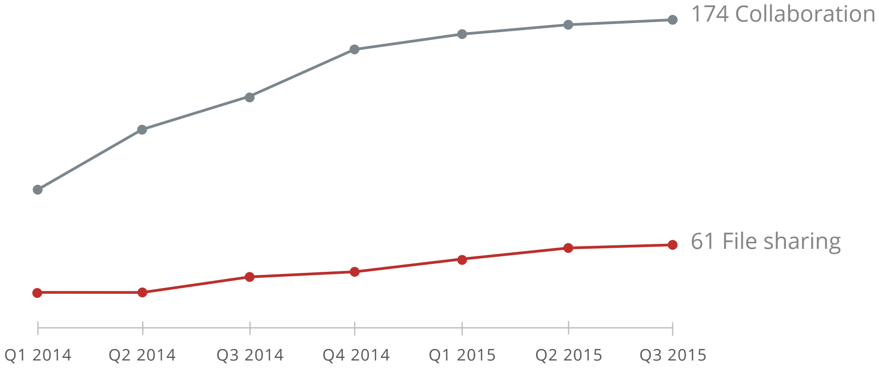
The security controls of business partners are an emerging area of risk, as platforms such as Office 365 enable more data flows with third-party partners. While the Target breach that cost the company $148 million is well known, less well known is the fact that a compromised heating and cooling (HVAC) vendor was responsible. Our own analysis finds that 8% of business partners are at high risk from a cybersecurity standpoint, but that 29% of data is shared with high-risk partners.



Use of redundant collaboration services

Even companies that standardize on an enterprise-wide platform such as Office 365 find that users continue to rely on "shadow" cloud services—that is, those that have not been provided or approved by corporate IT. The average company uses 61 distinct file-sharing services and an astonishing 174 different collaboration services. Not only that, but these numbers are growing every quarter as users continually discover more cloud services, and new services enter the market.

Of course, using multiple services can actually impede collaboration by forcing users to log into multiple applications to collaborate with different teams. This can also increase the risk of data loss, since most file-sharing and collaboration services have fewer security measures than Office 365. For example, some services claim ownership of the data you upload, don't encrypt data at rest, or permit anonymous use, making them unsuitable to store corporate data.



8% of business partners have a high cyber risk.

29% of data is shared with high-risk partners.

When attackers act like insiders

McAfee research has found that 92% of companies have user cloud credentials for sale on the Darknet. Additionally, companies on average experience 5.1 incidents each month in which an unauthorized third party logs into a corporate cloud service using stolen or guessed login credentials. These credentials are not necessarily forcibly extracted from the cloud services that they are attempting to access. Clever hackers employ a range of approaches including social engineering, using passwords belonging to the user stolen from other services in cases where they reused the same password, and guessing unsecure passwords that users frequently use.

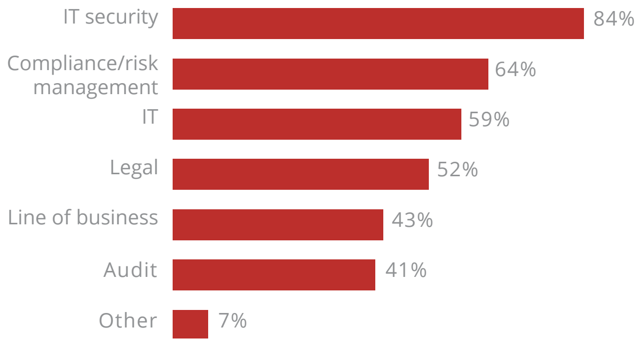
The average company experiences
5.1 insider threat incidents each month.

Common Office 365 Security and Compliance Questions

There are numerous factors to consider when embarking on a project to migrate from on-premises applications and data stores to their Office 365 equivalents. One key element to success is mapping out how you will continue to meet your security, compliance, and governance requirements as data moves to the cloud. This process starts with defining and updating policies, and it's critical to involve the right internal stakeholders.

Companies with an official group to establish and Guide on cloud policies, referred to as a cloud governance committee, are better equipped to manage this transition. These committees commonly include representatives from IT security, IT, legal, and compliance/risk. It's crucial to involve the line of business, since Office 365 is often driven by the business' need to improve productivity and agility. Many companies today are failing to include the line of business when defining and guiding on cloud policies, which can hurt the success of these initiatives.

Who has a seat at the table?



Office 365

As you plan your move to the cloud or look to bolster the security of your Office 365 deployment, here are some common questions that companies encounter:

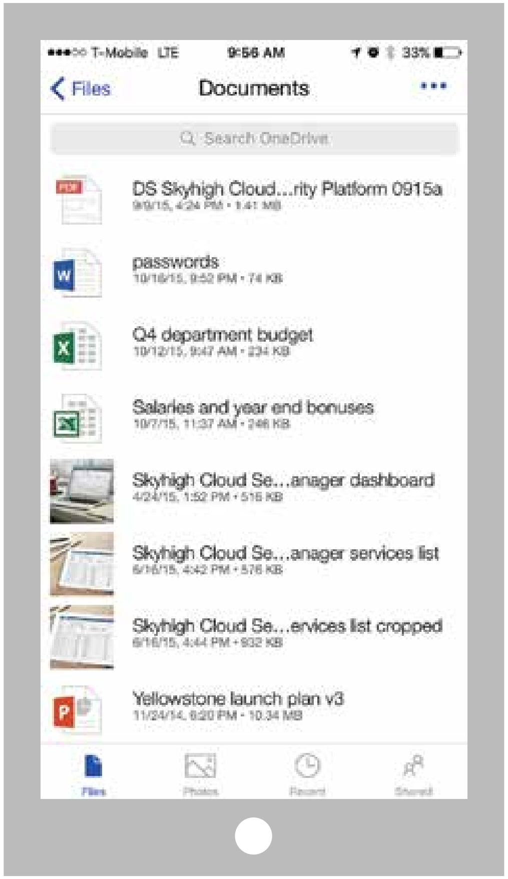
1. Which file-sharing and collaboration services are in use by which employees?
2. What is the risk of shadow IT file-sharing and collaboration services?
3. How many of our users have account credentials for sale on the Darknet?
4. Which industry regulations are we required to meet? How do these requirements affect how we store and share data in the cloud?
5. What are our security and data privacy policies? How do these policies affect how we store and share data in the cloud?
6. Do we store any data on behalf of EU residents or other individuals whose data is covered by data residency laws?
7. What on-premises security functionality do we currently rely on (such as encryption, data loss prevention, access control, digital rights management, and others)?

OneDrive

There are numerous reasons that companies deploy OneDrive. These include consolidating multiple shadow cloud-based file-sharing services, making corporate data from file servers more accessible to an increasingly mobile workforce, or because, as companies adopt Office 365 starting with email, OneDrive is included for free. OneDrive is a powerful platform that allows users synchronize data across their Devices, share with other users in their organization, and share with business partners.

However, many organizations find that users upload sensitive data to cloud-based file-sharing services as part of their normal workflow, and some of this data is shared externally. McAfee research has found that 9.2% of documents in file-sharing services that are shared externally contain sensitive data.

And of shared files, 12.9% are accessible by everyone in the company, which can be risky for certain types of data. The average company stores 6,097 files with “salary” in the file name in file-sharing services, and 1,156 files with “password” in the file name. This underscores the fact that users often fail to consider even basic security best practices when storing data in the cloud.



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OneDrive

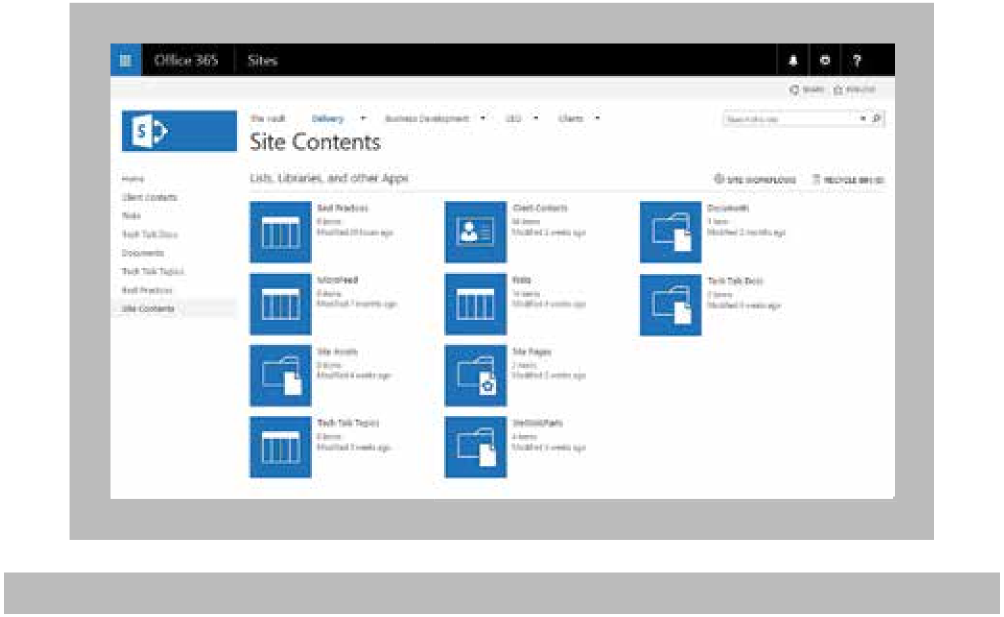
As you plan your move to OneDrive or look to bolster the security of your deployment, here are some common questions that companies encounter:

1. What sensitive data is being uploaded to OneDrive?
2. Which users have access to what information?
3. Is sensitive data being shared with third parties outside the company? Are they business partners? Competitors? Personal email accounts?
4. How many files have shared links that allow anyone with the link to access or edit the file?
5. Are any users downloading an unusual volume of data, particularly sensitive types of data?
6. What devices are accessing data stored in OneDrive, and which geographic locations are those devices accessing OneDrive from?
7. Are unauthorized third parties logging in to view our data using stolen usernames/passwords?
8. Are administrators viewing or downloading data they shouldn’t?
9. What information rights management policies (if any) apply to data in OneDrive?

SharePoint Online

Many enterprises have built sizable on-premises SharePoint environments with hundreds and sometimes even thousands of site collections. Migrating to SharePoint Online usually occurs in phases, with enterprises running hybrid on-premises and cloud environments while they make the transition. As they move to the cloud, companies often look at the security controls for SharePoint Online and compare them to the controls they have implemented for data in SharePoint on premises.

Some of the security practices that companies have implemented for on-premises deployments, which they commonly look to mirror in their cloud-based deployments, include Rights Management Services (RMS) and data loss prevention (DLP). There are specific deployment considerations that organizations encounter with rights management. SharePoint Online Information Rights Management (IRM) requires the use of Azure Active Directory Rights Management (AD RM, Microsoft's new cloud offering.



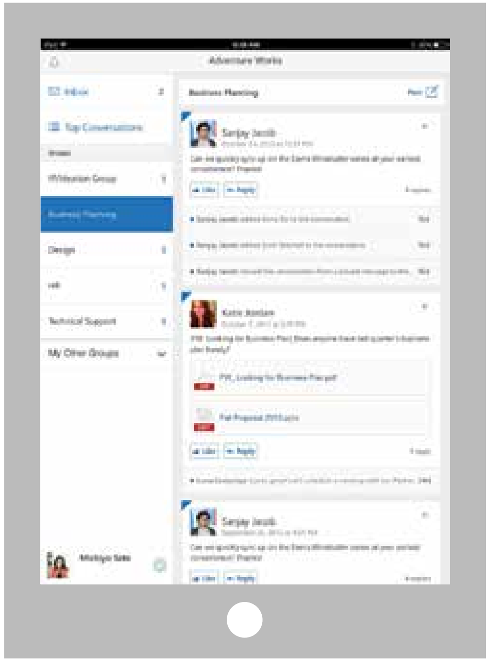
SharePoint Online

As you plan your move to SharePoint Online or look to bolster the security of your deployment, here are some common questions that companies encounter:

1. What sensitive data is stored in which site collections?
2. Which SharePoint users have access to what information at which sites?
3. Which sites are shared externally and can be accessed by third parties?
4. Are we using rights management for SharePoint on premises? What is the migration path for our RMS deployment to Azure AD RM?
5. Are users accessing or downloading an unusual amount of sensitive content in SharePoint Online?
6. Which devices are accessing data stored in SharePoint Online, and where are those devices accessing from?
7. Are unauthorized third parties logging in to view our data using stolen usernames/passwords?
8. Are administrators viewing or downloading data they shouldn't?

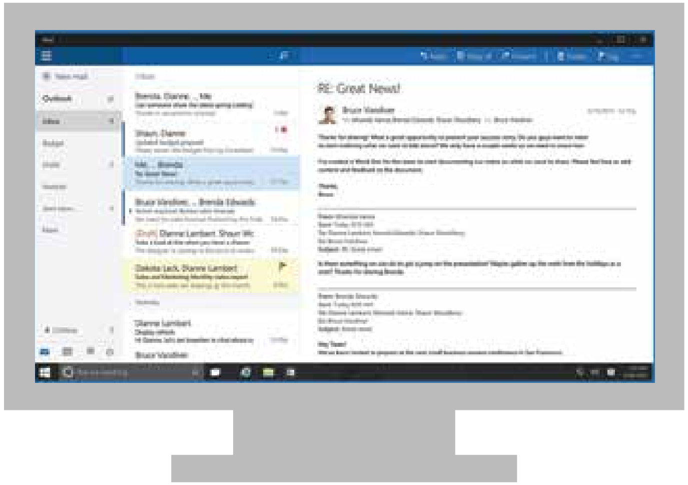
Yammer

Companies are embracing Yammer to help employees collaborate using the tools they're now familiar with using through consumer apps. It's well known that emails often contain highly sensitive information, which is why on-premises DLP solutions are focused on protecting email. As the collaboration tools on Yammer supplant some email communication, companies are naturally concerned about the sensitive data that employees upload to the service. That data can take the form of unstructured comments and posts, or documents that are uploaded to the service.



Exchange Online

There are undeniably cost advantages for many companies that migrate from on-premises versions of Exchange to Exchange Online. However, as data moves to the cloud, concerns can arise, because some of the most sensitive information in the company is stored in email mailboxes. That information could be accessed with only a username and password, in some cases. And, users may be sending sensitive content outside the company, even if they only unintentionally send an email to the wrong person whose email address was added by auto-fill.



Yammer

As you plan your move to Yammer or look to bolster the security of your deployment, here are some common questions that companies encounter:

1. What types of sensitive data are users uploading?
2. Which devices have access to our data in the cloud?
3. Are unauthorized third parties logging in to view our data?
4. Are administrators viewing or downloading data they shouldn't?
5. What devices have access to our data in the cloud?

Exchange Online

As you plan your move to Exchange Online or look to bolster the security of your deployment, here are some common questions that companies encounter:

1. Do third parties have access to mailboxes using stolen or guessed credentials? If so, which mailboxes?
2. What sensitive data is being shared via email, and what sensitive data, if any, is being sent to emails outside the company?
3. Are users storing their emails in unapproved offline locations, such as file-sharing services, which can complicate the e-discovery process?

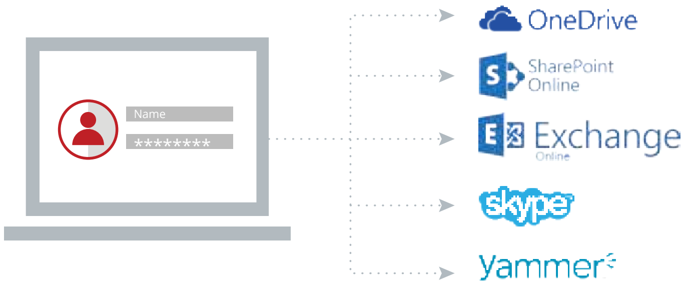
Making the Most of Office 365 Built-In Security

Office 365's robust service-level security makes it one of the 8.1% of cloud services that earn the highest McAfee® Skyhigh Cloud Trust Rating of "Enterprise-Ready." For every customer, Microsoft's platform encrypts data in transit and at rest in the cloud, and offers device pinning. Microsoft's cloud-based productivity suite also boasts numerous certifications including ISO 27001, ISO 27018, SAS 70, SSAE16, and ISAE 3401.

Additional Office 365 security capabilities can be enabled by the organization. In order to ensure the highest level of protection for data stored in the cloud, security experts recommend that companies utilize multi-factor authentication, IP filtering, single sign-on, rights management, S/MIME, and message encryption. Each of these capabilities strengthens the protection of corporate data.

Single sign-on

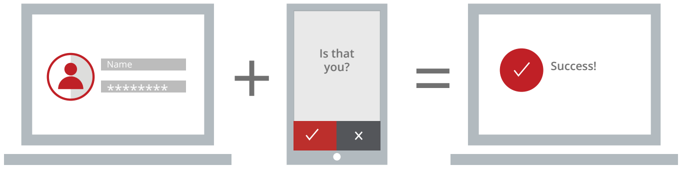
Giving users one password to use across their applications is not just more convenient; it also allows password policies to be managed in a centralized place. Office 365 supports popular third-party identity providers including Okta, One Login, Ping Identity, and Centrify. Microsoft also offers its own single sign-on solution, Azure Active Directory, which allows users to log in using the same password as they do for on-premises Microsoft products, as well as cloud products from other providers.



Multi-factor authentication

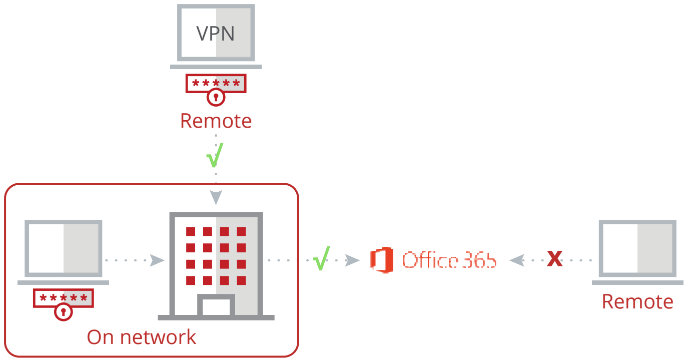
Multi-factor authentication makes it more difficult for a third party to gain access to an account by requiring an additional authentication measure after submitting the username and password. Organizations that use single sign-on solutions such as Azure AD, Okta, One Login, Ping Identity, and Centrify for identity and authentication across all cloud services, including Office 365, can immediately roll out multi-factor authentication to Office 365.

For organizations without one of these solutions, Office 365 includes multi-factor authentication options built into the platform. The secondary authentication methods supported by Office 365 include the use of mobile app notification, a one-time password generated by a mobile app or sent to the user via a phone call or SMS text message, and per-app passwords used with clients such as Outlook.



IP filtering

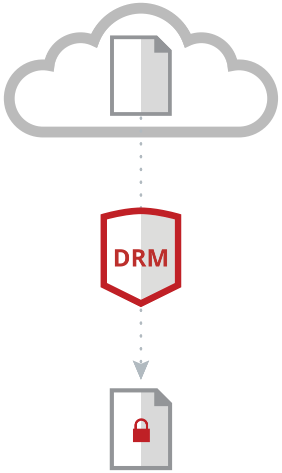
Another way to reduce the risk of account compromise is to disallow extranet access to corporate cloud services such as Office 365. If an attacker were to obtain an account credential, they would be unable to successfully log into the account, unless he or she is on the corporate network or accessing via virtual private network (VPN). Microsoft supports IP filtering, referred to variously as "IP Whitelist" and "Trusted IPs," for customers using either Azure Active Directory or federating user identity with their on-premises Active Directory. Some third-party single sign-on solutions also offer this capability.



Rights management service

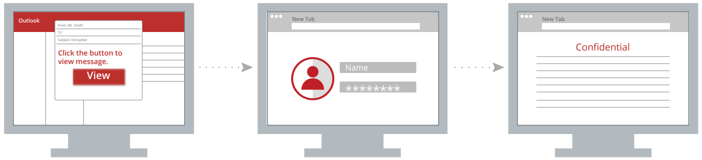
For companies using Microsoft RMS to protect documents stored on premises, Azure RMS is an attractive option for extending information rights management policies to OneDrive, Exchange Online, and SharePoint Online. At the time of writing, organizations are required to use Azure Active Directory paired with Azure Rights Management. For companies running the on-premises version of Active Directory, you don't need to migrate everything to the cloud right away. You can federate Windows Active Directory Server with Azure Active Directory and run a hybrid environment.

However, one potential issue in using RMS with Office 365 is that your encryption keys used to enforce RMS policies will be stored in the cloud. For some organizations, this can create concerns. In SharePoint Online, RMS applies rules across an entire site collection. Since RMS requires the user to be running client software to access the document (or to print, edit, or save new versions of the document), it can be inconvenient to apply blanket RMS protections to documents that do not need these policies enforced because they do not contain sensitive data.



Office 365 message encryption

It's well known that emails are sent across the Internet with about as much privacy as a postcard. This can be problematic in many instances where you need to send sensitive content, such as a bank employee sending a credit card statement to a customer or a healthcare provider sending health-related information to a patient. Message encryption allows you to send a message to a recipient encrypted. The recipient receives an email with a link to a page on a download portal, where they authenticate using their Office login or a one-time passcode to view the message.



Step 1: Open email and click link

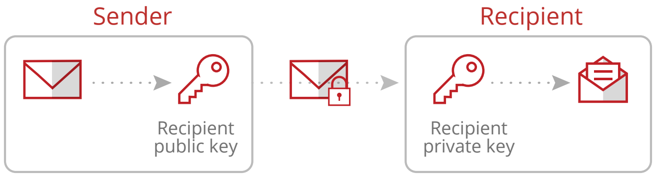
Step 2: Sign into web portal

Step 3: View encrypted message

Secure multipurpose internet mail extension (S/MIME)

Unlike message encryption, which is based on policies defined by an administrator, S/MIME is controlled by the end user, who decides whether to use it. While message encryption is browser-based, and requires no client software or certificates, S/MIME uses certificates to digitally sign and optionally encrypt the email content itself. Digitally signing the email ensures that the message content is what the sender originally wrote, and that the message hasn't been altered or tampered with.

S/MIME requires users to access their email through a client like Outlook, not a web browser. And, since you need to set up user certificates, it takes more effort to get up and running than message encryption. Certain government use cases mandate the use of S/MIME, and Office 365 supports S/MIME for customers who use Azure Active Directory, or who federate their on-premises Active Directory with Azure AD.



Sender's email client encrypts message with recipient's public key before sending message.

Recipient's email client decrypts message with recipient's private key and validates sender's certificate.

How a Cloud Access Security Broker (CASB) Helps

Like most major cloud providers, Microsoft operates on a shared responsibility model. The company takes responsibility for protecting its cloud infrastructure; they detect fraud and abuse and respond to incidents by notifying customers. That leaves the customer responsible for ensuring that their data is not shared with someone it shouldn't be shared with inside or outside the company, identifying when a user misuses corporate data, and enforcing compliance and governance policies.

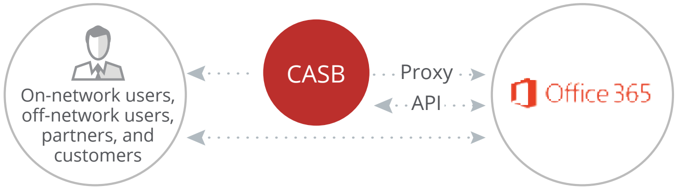
Enter the cloud access security broker (CASB). Gartner explains that CASBs act as the control point for cloud services, providing greater visibility into user activity in the cloud and the ability to enforce a wide range of security, compliance, and governance policies. In the past, companies have relied on an ecosystem of third-party security providers to enforce these policies for data in on-premises applications. CASBs offer the ability to extend enforcement of these policies to Office 365 and other cloud services.

Common functionality found in CASBs includes the ability to detect when a user or administrator is taking a high-risk action with sensitive data, regardless of whether that activity is accidental or malicious. CASBs also provide the ability to identify third parties logging in with compromised account credentials. Within Office 365, a CASB can help you understand the flow of information and enforce data loss prevention (DLP) policies based on types of sensitive content, as well as internal and external sharing policies.

Gartner estimates that 85% of enterprises will secure their cloud usage using a CASB by 2020. Numerous Fortune 500 companies including Aetna, Cargill, and Western Union have embraced cloud access security brokers to gain visibility into all cloud usage and enforce their security, compliance, and governance policies across Office 365. The next section will review examples of how these and other companies are using cloud access security brokers to add an additional layer of protection to their sensitive data stored in Office 365.

Detect insider threats and privileged user threats

The most common challenge faced by organizations using enterprise-ready cloud services such as Office 365 isn't the security of the platform; it's potentially risky user activity within the application. Gartner recommends that companies use a CASB solution to gain visibility and enforce policies in two ways: via the cloud service's APIs and by getting inline via a proxy. CASBs consume event logs using Office 365 APIs, providing a raw event stream of all user actions.


On-network users, off-network users, partners, and customers
CASB
Proxy
API
Office 365

Gartner recommends using both API and proxy-based integrations with a CASB.

CASBs act as the control point for cloud services, providing greater visibility into user activity in the cloud and the ability to enforce a wide range of security, compliance, and governance policies.

> "By 2020, 85% of large enterprises will use a cloud access security broker product for their cloud services, which is up from fewer than 5% today."
>
> Gartner

By applying machine learning algorithms to logs of activity within Office 365, a CASB can develop a model for typical user behavior and detect behavior that could indicate that a user is misusing data. One common example of an insider threat is an employee downloading a large volume of data before leaving to join a competitor. However, just as risky is a well-intentioned employee downloading data from OneDrive and storing it in a high-risk file-sharing service like FreakShare for convenient off-network access.

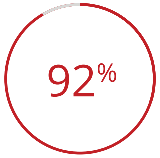
Privileged users can present a unique type of insider threat. Probably the most infamous example of privileged user misuse of information is Edward Snowden, who exploited his administrator-level privileges working as a contractor for the National Security Agency (NSA) to access a wide range of sensitive files. CASBs can analyze user privileges to assess whether the scope of their data access is appropriate, and analyze their behavior to detect unusual data access patterns. By detecting insider threats early, companies can stop them to limit their exposure.

Another risk that companies face is that, as employees and contractors leave the company, their accounts in Office 365 are not always de-provisioned. These "zombie" accounts can create risk if a third party is able to compromise the login and gain access, especially for accounts that have administrator-level privileges. Companies often use a CASB solution to audit all user accounts in Office 365, and identify dormant accounts that pose an ongoing risk and can be shut down.

Identifying and stopping compromised account activity

There are millions of cloud account credentials for sale on the Darknet today, and 92% of companies have at least one credential that's been compromised. Even if a user credential for Office 365 has not been stolen directly from Office 365, there are numerous ways for cybercriminals to acquire these logins, including guessing them using previously compromised credentials from other cloud services. A study by Joseph Bonneau from the University of Cambridge found that 31% of users reused passwords in multiple places.

A CASB solution can detect unusual login patterns, including users logging in from a new, untrusted location. For example, if a user generally logs in from Cleveland, Ohio, and one day logs in from Ukraine, a CASB can flag this access attempt and force additional authentication steps such as requiring multi-factor authentication. Another type of behavior that can indicate an account compromise is impossible travel. If a user logs in to Office 365 from one location, and then within five minutes logs in from another location 1,000 miles away, that could indicate a threat.

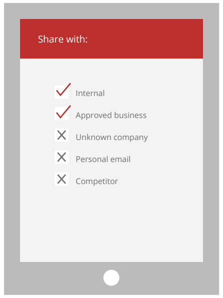


of companies have at least one credential that's been compromised.

Audit collaboration and enforce sharing policies

Storing sensitive data in the cloud is not necessarily a bad thing. Sharing that data with a business partner, or with the whole company, however, may result in a compliance or security incident. CASB solutions commonly have the ability to inspect the content of files and content in the cloud, and enforce internal and external sharing policies. For example, by analyzing sharing activity using a CASB, companies often find files being shared internally with employees and externally with business partners, personal email accounts, and sometimes even competitors.

As a next step, many companies use a CASB to enforce sharing policies. For instance, they may want to prohibit all external sharing of documents containing protected health information, payment data, or trade secrets. In some cases, companies want to prohibit all sharing with personal email accounts (such as Gmail or Yahoo! Mail) because it can be difficult to audit who is actually receiving the information. In cases where a business partner needs access to sensitive data, a security team can open a workflow in a CASB to create an exception for sharing to a trusted partner.



Share with:

✓ Internal
✓ Approved business
✗ Unknown company
✗ Personal email
✗ Competitor

Control access by context

For a variety of reasons, you may want to limit access to Office 365 applications in certain circumstances. Your reasons may vary, and they're likely context-dependent, such as the user's role, attributes of the device they're using, where they're logging in from (such as corporate network versus airport Wi-Fi), and the sensitivity of the data they're attempting to access. The policy actions that companies take for different scenarios also depend on a combination of multiple factors, but they range from blocking access to Office 365 entirely to allowing specific types of functionality.

Consider the example of an executive logging in from an unmanaged device accessing the Internet from the Wi-Fi at Starbucks. There's a risk here that, in turning around for even just a moment, a thief could take the laptop and all the corporate data stored on it. Since the device is unmanaged, the company would be unable to erase data on the device remotely. In this scenario, maybe you'd like the executive to be able to preview documents in OneDrive but not download them to the device if they contain sensitive or confidential data. That's where a CASB comes in.

CASB solutions can enforce real-time access control policies for Office 365 applications via a reverse proxy. The process for getting inline starts with the user going directly to Office 365 or to their single sign-on application portal. At the point of successful authentication, the session is seamlessly redirected via SAML through the CASB's reverse proxy, enabling it to enforce access control policies. According to Gartner, the "SAML redirection method is a popular way to force end-user traffic through the CASB so that it can perform inspection, even from unmanaged devices."

Unified DLP engine for evey cloud service

Many companies rely on a data loss prevention (DLP) solution to prevent the unintended disclosure of sensitive data via email, printing, and endpoint devices. While some of the top cloud services, including Office 365, now offer built-in DLP functionality, it can be challenging to manage DLP policies and perform remediation in multiple places. A CASB offers a centralized place to manage DLP policies across all cloud services, whether that policy is configured in the CASB or in an on-premises DLP solution such as those from McAfee, Symantec, EMC RSA, and Websense.

DLP policies can be based on data identifiers (such as credit card numbers, Social Security numbers, and so forth), keywords (such as "password," "budget," "confidential," and others), and regular expressions (such as part numbers, IP addresses, and so forth), or any combination thereof. Depending on the policy, companies may want to simply generate an alert or take more concrete action. That can include preventing the file from being shared, or tombstoning it (replacing it with a message that says the file violated a DLP policy), and quarantining it until a security or compliance administrator reviews and either approves or rejects the upload.

For companies that have already deployed Office 365, a common use case is to use a CASB to perform a scan of all data currently stored in the cloud to identify any sensitive documents containing personal data, health care, confidential data, or payment data. Using the CASB, the organization can then take action, either on the file or on any internal or external sharing. As a next step, companies use a CASB to enforce these DLP policies in real time as users upload data to Office 365 and share files.

Standardize on Office 365

Once companies make the decision to standardize on Office 365, it's common for users to continue using unsanctioned alternatives out of habit. As mentioned earlier, the average organization uses 174 collaboration services and 61 file-sharing services. Using a CASB, companies can understand all of these services in use. They can then coach users to use OneDrive, SharePoint Online, and Yammer using just-in-time educational messages served from the CASB. For the highest-risk cloud services, you may want to block access to unsanctioned alternatives, or enable them in read-only mode, so that users can download data from these services but not upload data.

Rights management

A CASB solution can help you apply RMS policies based on the content and context of a document at a more granular level than is possible with these solutions out-of-the-box. For example, if an organization has identified a human resources site collection in SharePoint Online as containing sensitive information, they may want to apply RMS protections to this data. Rather than applying rights management to all documents in the site collection, a CASB can integrate with SharePoint Online and RMS to apply protection only on documents that contain Social Security numbers, for instance.

A CASB offers a centralized place to manage DLP policies across all cloud services.

Selecting the Right CASB to Use in Conjunction with Office 365

Not all CASB solutions are created equal, and it can be difficult to interpret some of the marketing claims made by vendors. In simple terms, there are four main things that companies should look for when evaluating which CASB solution to use.

1. Support for Sharepoint Online

Companies moving to SharePoint Online quickly find themselves storing terabytes of data and having little real visibility into how that data is being used. Due to the complexity of SharePoint Online's data model, not many cloud security solutions support a full range of policy controls. Companies that are considering moving to SharePoint Online should talk to customer references from the CASB vendors that they're evaluating to understand the scope of their support.

2. Proven integration with enterprise DLP

If you have an on-premises data loss prevention solution, it's likely that you'll want to configure policies in that system and continue to use your existing remediation workflow. It's not enough to simply push policies from your enterprise DLP system to a CASB. When a policy violation is triggered, security teams need the ability to review the violation in the enterprise DLP solution, make a decision, and then have the remediation action trigger an action in the CASB solution and in Office 365. Another key requirement is the ability to integrate with multiple enterprise DLP servers behind load balancers to support high availability (HA) and failover.

3. Proven at scale with the largest enterprises

The volume of events generated by daily activity within Office 365 is enormous, and data volumes uploaded to the cloud are increasing exponentially. Any security solution designed to inspect these events, analyze them, and take action to enforce policies needs to have the type of scale needed to handle your current and future Office 365 usage. A good way to judge scalability is to speak with current CASB customers with hundreds of thousands of employees.

4. Multiple modes of integration

Gartner recommends leveraging both proxy- and API-based modes of CASB deployments in order to offer flexibility and a full range of real-time policy enforcement. Certain policy enforcement capabilities, such as access control, are not possible via API-based integration, for example. Look for CASBs that support a frictionless approach for getting inline using a reverse proxy using SAML, rather than device agents, VPN, or other undesirable changes to the user experience.

Four Things Companies Should Look for when Evaluatong CASB Solutions

1. Support for Sharepoint Online
2. Proven integration with enterprise DLP
3. Proven at scale with the largest enterprises
4. Multiple modes of integration

Start with an Audit of Your Office 365 Environment

Get a free, personalized audit of your organization's Office 365 environment including:

- Documents containing sensitive data
- Collaboration and sharing with third parties
- Anomalous usage indicative of insider threats
- Events indicative of compromised accounts

*Offer valid for qualifying organizations with at least 500 employees.

Sign up for audit

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1. McAfee, "Office 365 Adoption and Risk Report."

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McAfee is the device-to-cloud cybersecurity company. Inspired by the power of working together, McAfee creates business and consumer solutions that make our world a safer place. By building solutions that work with other companies' products, McAfee helps businesses orchestrate cyber environments that are truly integrated, where protection, detection, and correction of threats happen simultaneously and collaboratively. By protecting consumers across all their devices, McAfee secures their digital lifestyle at home and away. By working with other security players, McAfee is leading the effort to unite against cybercriminals for the benefit of all.

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