Office 365:
Everything You Wanted to Know
How to Use this Document?

The intended audience of this document are the IT Pros (Primary) and Developers (Secondary) in Organizations using or planning to deploy Office 365. They can use this document as a reference to learn Office 365 capabilities, plan the adoption journey and develop applications.

This document is meant to complement existing Office 365 resources available online on TechNet, MSDN, Office Blogs and Support websites, and draws heavily from them for content. High-level information on Office 365 and its service is aggregated and made available in one place. Readers are encouraged to refer to the online resources shared, in each section, for more information.

Information on new and updated Office 365 services are given at multiple places in this document. Please refer to the online Office 365 Roadmap and your tenant’s Message Center for current status of the updates.

A successful Office 365 rollout focuses on driving adoption and helping everyone understand the benefits of working in a new way. The sections – Four steps towards successful adoption and Getting Started Scenarios give walkthrough of the guidance and resources available from Microsoft for successful adoption.

Microsoft is using Microsoft Azure, Office 365 and Microsoft Dynamics to deliver the industry’s most complete cloud — for every business, every industry, and every geography. Microsoft’s Enterprise Cloud Roadmap section summarizes and compares Microsoft’s offerings across SaaS, PaaS, IaaS, and private cloud offerings.

Important Note

Keeping pace with the Office 365 innovation, this document would get updated at least once in a month. Please don’t refer to this document if the last modified date shown below is more than 2 months old. Request for the latest copy using your work email address.

Last modified: Friday, June 23, 2017.
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Office 365 is the most complete, secure cloud productivity service to help companies empower employees on the digital transformation journey.

To help companies maximize opportunities while going through digital transformation, we are delivering innovation in Office 365 against these key technology investment areas:

- **Collaboration**: Only Office 365 delivers a robust collaboration solution that meets the needs of diverse groups and provides the option to collaborate as a team across applications.

- **Mobility**: Office 365 enables mobile productivity across many scenarios from any corporate or personal device and protects both users and company data with built-in security.

- **Intelligence**: In addition to delivering powerful visualizations and insights for everyone with Power BI and Excel, Office 365 has the Microsoft Graph which uses machine learning to infuse intelligence into each application to connect people and information faster.

- **Trust**: Office 365 is secure & compliant, manageable, extensible, and always up to date with ongoing cloud updates. We provide a 99.9% uptime financially-backed SLA, Fast Track benefits, the transparency and enterprise commitment of a public roadmap.

Office 365 is designed meet the unique collaboration needs of every group. For every collaboration category, Office 365 includes a purpose-built application. Together, these create a holistic solution that embrace diverse needs and workstyles and makes us different than any other vendor on the market.

As of April 2017, Office 365 commercial monthly active users number more than 100M and 90% of Fortune 500 companies now have Office 365.

Choice and Flexibility

Large enterprises are not usually ready to move all of their workloads to the cloud at once. With Office 365, customers can choose between a cloud deployment, an on-premises solution, or a hybrid environment that integrates cloud services into an on-premises IT infrastructure.

Customers can move some users to the cloud and keep other on-premises for compliance or operational reasons. This enables customers to move to the cloud at a pace that makes sense for their unique business needs. If they choose a hybrid infrastructure, users will probably never know the difference, and customers can use the same management tools across online and on-premises servers.

Change Management Discipline

When implementing new solutions, enterprises rely on change-management processes and workflow to minimize the impact on their organizations. Enterprises cannot be hampered by unpredictable changes, inconsistent delivery, or the sudden disappearance of features. The power of cloud-based services is that they are always up-to-date and offer an experience that gradually improves over time. We realize that change can be daunting, and IT administrators need tools and information to manage ongoing change.

We provide visibility for planned updates that are in development and in the process of being rolled out to the service, as well as items that have been launched and are now generally available for all eligible customers.

Office 365 Roadmap

The Office 365 Roadmap lists updates that are currently planned. Updates are at various stages from being in development to rolling-out to customers to being generally available for applicable customers world-wide.

The roadmap provides customers a centralized place to learn more about pending updates before those changes come to the service. It provides a forward-looking view of new features, enhancements, and major updates, which in some cases may extend farther than just a few months.

Privacy, Security and Compliance

While end-user expectations and demand for the latest tools is high, IT has to balance this pressure to meet users’ needs with
the requirement to adhere to corporate policies, industry regulations, and applicable laws.

Historically, security and compliance technologies and mandates were perceived as disruptive to productivity, driving down employee satisfaction while driving up IT costs. If users feel impeded by the technology they’re given, they often look for ways around it, which in turn can create new corporate non-compliance issues and bring the problem full circle.

It’s difficult to run a competitive business with information and access totally locked down—the trade-offs on agility and decision making are too great.

This is why we believe that the most well-run organizations are those in which people are empowered to do their best work, on any device, while IT is able to responsibly manage security and compliance requirements.

Office 365 includes two equally important capabilities:
1. **Service-level capabilities** that include technical features, operational procedures, and policies that are enabled by default for customers using the service
2. **Customer controls** that include features that enable businesses to customize the Office 365 environment based on the specific needs of their organization

**Office 365 Trust Center**

[Office 365 Trust Center](#) is the place where we share our commitments and information on trust-related topics.

### Microsoft’s Trusted Cloud principles

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<tr>
<th>Security</th>
<th>Safeguarding your data with state-of-the-art technology, processes, and encryption is our priority.</th>
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<tr>
<td>Privacy &amp; Control</td>
<td>Privacy by design with a commitment to use customers’ information only to deliver services and not for advertisements.</td>
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<tr>
<td>Compliance</td>
<td>The largest portfolio of compliance standards and certifications in the industry.</td>
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<tr>
<td>Transparency</td>
<td>We explain what we do with your data, and how it is secured and managed, in clear, plain language.</td>
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**Service Assurance**

Use [Service assurance in the Office 365 Security & Compliance Center](#) to access documents that describe a variety of topics, including:

- Microsoft security practices for customer data that is stored in Office 365.
- Independent third-party audit reports of Office 365.
- Implementation and testing details for security, privacy, and compliance controls that Office 365 uses to protect your data.

You can also find out how Office 365 can help comply with standards, laws, and regulations across industries.

<table>
<thead>
<tr>
<th>Content available</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Compliance reports</strong></td>
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<tr>
<td>• FedRamp</td>
<td>Use service compliance reports to review audit assessments performed by third-party independent auditors of Office 365 Service Delivery Operations.</td>
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<td>• GRC Assessment</td>
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<td>• ISO</td>
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<td>• SOC/SSAE</td>
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<td><strong>Trust documents</strong></td>
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<tr>
<td>• FAQ and White Papers</td>
<td>Use white papers, FAQs, end-of-year reports and other Microsoft Confidential resources that are made available to you under non-disclosure agreement for your review / risk assessments.</td>
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<tr>
<td>• Risk Management Reports</td>
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<td><strong>Audited controls</strong></td>
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<td>Global standards and regulations that Office 365 has implemented.</td>
<td>Help with risk-assessment when you’re evaluating, onboarding, or using Office 365 services.</td>
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For more details, refer to the [Service assurance in the Office 365 Security & Compliance Center](#) article.

### Security in a Cloud-Enabled World

The security of your Microsoft cloud services is a partnership between you and Microsoft.

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<th>Microsoft</th>
<th>You</th>
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<tr>
<td>Microsoft cloud services are built on a foundation of trust and security. Microsoft provides you security controls and capabilities to help you protect your data and applications.</td>
<td>You own your data and identities and the responsibility for protecting them, the security of your on-premises resources, and the security of cloud components you control (varies by service type).</td>
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Enterprise organizations benefit from taking a methodical approach to cloud security. This involves investing in core capabilities within the organization that lead to secure environments.

**Governance & Security Policy**

Microsoft recommends developing policies for how to evaluate, adopt, and use cloud services to minimize creation of inconsistencies and vulnerabilities that attackers can exploit.

Ensure governance and security policies are updated for cloud services and implemented across the organization:

- Identity policies
- Data policies
- Compliance policies and documentation

**Administrative Privilege Management**
Your IT administrators have control over the cloud services and identity management services. Consistent access control policies are a dependency for cloud security.

Privileged accounts, credentials, and workstations where the accounts are used must be protected and monitored.

**Identity Systems and Identity Management**

Identity services provide the foundation of security systems. Most enterprise organizations use existing identities for cloud services, and these identity systems need to be secured at or above the level of cloud services.

**Threat Awareness**

Organizations face a variety of security threats with varying motivations. Evaluate the threats that apply to your organization and put them into context by leveraging resources like threat intelligence and Information Sharing and Analysis Centers (ISACs).

**Data Protection**

You own your data and control how it should be used, shared, updated, and published.

You should classify your sensitive data and ensure it is protected and monitored with appropriate access control policies wherever it is stored and while it is in transit.

**MSIT Showcase: Changing our approach to information security at Microsoft**

With collaboration on the rise, Microsoft IT is rethinking information security. Social collaboration, ubiquitous connectivity, and new ways of collecting data and storing content encourage innovation and content sharing—but they also pose potential security risks for organizations. We help protect content through technologies like Microsoft Office Delve, Azure Information Protection, and Microsoft Teams—securing content wherever it exists, and in ways that go beyond traditional IT security.

**General Data Protection Regulation (GDPR)**

**Preparing for a new era in privacy regulation**

In May 2018, a European privacy law, the General Data Protection Regulation (GDPR), is due to take effect. The GDPR imposes new rules on companies, government agencies, non-profits, and other organizations that offer goods and services to people in the European Union (EU), or that collect and analyze data tied to EU residents. The GDPR applies no matter where you are located.

Microsoft has extensive expertise in protecting data, championing privacy, and complying with complex regulations. We believe that the GDPR is an important step forward for clarifying and enabling individual privacy rights. We want to help you focus on your core business while efficiently preparing for the GDPR.

We are committed to GDPR compliance across our cloud services when enforcement begins May 25, 2018, and provide GDPR related assurances in our contractual commitments.

**Microsoft Office and Office 365 and the GDPR**

Microsoft designed Office and Office 365 with industry-leading security measures and privacy policies to safeguard your data in the cloud, including the categories of personal data identified by the GDPR. Office and Office 365 can help you on your journey to reducing risks and achieving compliance with the GDPR.

One essential step to meeting the GDPR obligations is discovering and controlling what personal data you hold and where it resides. There are many Office 365 solutions that can help you identify or manage access to personal data:

- **Data Loss Prevention (DLP)** in Office and Office 365 can identify over 80 common sensitive data types including financial, medical, and personally identifiable information. In addition, DLP allows organizations to configure actions to be taken upon identification to protect sensitive information and prevent its accidental disclosure.

- **Advanced Data Governance** uses intelligence and machine-assisted insights to help you find, classify, set policies on, and take action to manage the lifecycle of the data that is most important to your organization.

- **Office 365 eDiscovery** search can be used to find text and metadata in content across your Office 365 assets—SharePoint Online, OneDrive for Business, Skype for Business Online, and Exchange Online. In addition, powered by machine learning technologies, Office 365 Advanced eDiscovery can help you identify documents that are relevant to a particular subject (for example, a compliance investigation) quickly and with better precision than traditional keyword searches or manual reviews of vast quantities of documents.

- **Customer Lockbox** for Office 365 can help you meet compliance obligations for explicit data access authorization during service operations. When a Microsoft service engineer needs access to your data, access control is extended to you so that you can grant final approval for access. Actions taken are logged and accessible to you so that they can be audited.

Another core requirement of the GDPR is protecting personal data against security threats. Current Office 365 features that safeguard data and identify when a data breach occurs include:

- **Advanced Threat Protection** in Exchange Online Protection helps protect your email against new, sophisticated malware attacks in real time. It also allows you to create policies that help prevent your users from accessing malicious attachments or malicious websites linked through email.

- **Threat Intelligence** helps you proactively uncover and protect against advanced threats in Office 365. Deep insights into threats—provided by Microsoft’s global presence, the Intelligent Security Graph, and input from cyber threat hunters—help you quickly and effectively enable alerts, dynamic policies, and security solutions.

- **Advanced Security Management** enables you to identify high-risk and abnormal usage, alerting you to potential
Accessibility

At Microsoft, we envision a future where people with permanent disabilities or situational limitations have the technology they need to work efficiently and independently from any device. We’re committed to helping people of all abilities access information and have fulfilling interactions everywhere, both in person and virtually.

Office 365 is continually updated with accessible features that your organization can use to:

**Boost productivity for everyone**
Office 365 makes it easier for people with limited vision, hearing, speech, mobility, and learning abilities to create, communicate and collaborate on content. We enhance the usability of our experiences with assistive technologies, ease of access settings, and alternative input devices on an ongoing basis, based on insights from research studies and customer feedback. We also offer built-in settings to enhance your reading and writing experiences.

- Read about recent accessibility enhancements in Office 365
- Learn new ways to consume, create, collaborate and organize
- See how Learning Tools in Office 365 aid comprehension with dyslexia

**Foster inclusive interactions**
Office 365 applications offer several built-in capabilities that make it easier for everyone to create content that can be accessed without barriers by people with disabilities, share content on accessible channels, and make virtual meetings more inclusive.

- Create an accessible document with Microsoft Word
- Create an accessible intranet site with SharePoint Online
- Make your meetings more accessible with Skype for Business

**Achieve compliance**
Microsoft believes in transparency and ensuring that organizations have the information they need to understand how the products they use meet accessibility laws and standards. Office 365 applications on various platforms are designed with the requirements of EN 301 549, WCAG 2.0 AA and US Section 508 in mind, and we work with external suppliers under the U.S. Department of Homeland Services Trusted Tester Program to verify conformance to accessibility standards.

- Learn about our conformance and usability testing process
- Review how Office 365 products meet global accessibility standards

**Resources**

- Discover the latest accessibility updates
- Watch demonstrations of key capabilities
- Find detailed support articles per product

**Industry Leadership**

Leading technology research companies Gartner Inc. and Forrester evaluate technology vendors and their solutions on a regular basis, and then publish research reports for customers. Both research companies have recognized Microsoft Office 365 as a “leader” and rated it “positive” in their research reports.

| Gartner’s Magic Quadrant for Access Management | Jun 2017 | Leader |
| Forrester Wave™: Enterprise Content Management — Business Content Services, Q2 ’17 | Apr 2017 | Leader |
| Magic Quadrant for Business Intelligence and Analytics Platforms | Feb 2017 | Leader |
| The Forrester Wave™: Enterprise Collaboration, Q4 2016 | Dec 2016 | Leader |
| Magic Quadrant for Unified Communications as a Service, Worldwide | Aug 2016 | Challenger |
| Magic Quadrant for Sales Force Automation | Aug 2016 | Leader |
| Magic Quadrant for Unified Communications | Jul 2016 | Leader |
| Magic Quadrant for Mobile App Development Platforms | Jun 2016 | Leader |
| Magic Quadrant for Enterprise Mobility Management Suites | Jun 2016 | Visionary |
| The Forrester Wave: Enterprise File Sync And Share Platforms, Cloud Solutions, Q1 2016 | Mar 2016 | Leader |
| Gartner Magic Quadrant for Web Conferencing | Dec 2015 | Leader |
| Gartner Magic Quadrant for Social Software in the Workplace | Oct 2015 | Leader |
| The Forrester Wave: Agile Business Intelligence Platforms, Q3 2015 | Sep 2015 | Leader |
| Gartner Magic Quadrant for Unified Communications as a Service | Sep 2015 | Challenger |
| Gartner Magic Quadrant for Unified Communications | Aug 2015 | Leader |
| Gartner Magic Quadrant for Secure Email Gateways | Jun 2015 | Leader |

Refer to Analyst Relations – Reports page for a collection of reports published by leading independent analyst firms.
## Office 365 Services

Office 365 Enterprise E5 includes:

<table>
<thead>
<tr>
<th>Office suite</th>
<th>Always have latest versions of Office apps:</th>
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<tr>
<td></td>
<td>• Capture your ideas however you work best—using a keyboard, pen, or a touchscreen.</td>
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<td>• Easily format information in Excel with tools that recognize your pattern and autocomplete data.</td>
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<td>• Easily incorporate content from PDFs to create your own great-looking Word documents</td>
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| Office on PCs, tablets, and phones | Enjoy a fully installed Office experience across PCs, Macs, Windows tablets, iPad® and Android™ tablets, and most mobile devices. Each user can install Office on 5 PCs or Macs, 5 tablets (Windows, iPad, and Android), and 5 phones |

Plus, these online services:

| Online Meetings | Host online meetings with audio, HD video, and web conferencing over the Internet. Join meetings with a single touch or click from the smartphone, tablet, or PC of your choice |
| Meeting Broadcast | Broadcast Skype for Business meetings on the Internet for up to 10,000 people, who can attend in a browser on nearly any device. Meetings include real-time polling and sentiment tracking, plus Yammer, to enable dialogue during the broadcast |
| PSTN conferencing | Enable attendees to join Skype for Business from any telephone by dialing a local access number, and dial out from a meeting to add others when needed. The dial-in capability is in addition to single-touch join options on PC, smartphone, and browser, and allows people to join an online meeting even in places with no Internet access. Consumption rates are available. |
| Modern voice with Cloud PBX | Make, receive, and transfer business calls in the office, at home, or on the road, using phone, PC, and mobile without the need for a traditional phone system. Choose PSTN calling plans delivered by Microsoft where available, or use existing phone lines at your locations. |
| Instant messaging and Skype connectivity | Connect with other Skype for Business users via instant message, voice calls, and video calls, and let people know your availability with your online status. Share presence, IM, and audio calling with Skype users |
| Chat-based workspace | Connect your team with Microsoft Teams in Office 365, where chat, content, people, and tools live together, so your teams have instant access to everything they need. |
| Email and calendars | Use business-class email through a rich and familiar Outlook experience you can access from your desktop or from a web browser using Outlook on the web. |

### Advanced email
- Use retention capabilities, plus unlimited storage, for compliance needs. Use data loss prevention (DLP) policies and policy tips that educate your users for additional compliance enforcement in email.

### Document and email access control
- Rights Management Services enables you to restrict access to documents and email to specific people and to prevent anyone else from viewing or editing them, even if they are sent outside the organization.

### Advanced information protection
- Data loss prevention and encryption across Exchange Online, Skype for Business, and SharePoint Online help keep your content safe in email, IM and meetings, and team sites.

### Threat Intelligence
- Threat intelligence provides broad visibility into the threat landscape, which helps deliver actionable insights, and enables proactive cybersecurity to ultimately help reduce your costs.

### Advanced security
- Advanced Threat Protection helps defend users against sophisticated threats hidden in emails, attachments, and links. Customer Lockbox lets you limit data access to only pre-assigned, two-factor-authenticated administrator approvals for greater control and transparency. And the built-in features of Office 365 Advanced Security Management give you enhanced visibility and control of your Office 365 environment.

### Analytics tools
- With the live dashboards and interactive reports of Power BI non-technical users can visualize and analyze data with greater speed, efficiency, and understanding. With its interactive dashboards, Microsoft MyAnalytics enables you to surface personal and organizational insights based on information across Office 365.

### File storage and sharing
- OneDrive for Business gives each user personal cloud storage that can be accessed from anywhere and syncs with their PC/Mac for offline access. Easily share documents with others inside and outside your organization and control who can see and edit each file.

### Intranet and Team Sites
- Inform and engage your organization with a company-wide intranet. Use team sites to connect people to the content, expertise, and processes that power teamwork.

### Corporate social network
- Yammer collaboration software and business applications allow your employees to connect with the right people, share information across teams, and organize around projects so they can communicate further, faster.

### Office Online
- Create and edit Word, OneNote, PowerPoint, and Excel documents from any modern browser.

### Work management
- Planner makes it easy for your team to create new plans, organize and assign tasks,
share files, chat about what you’re working on, and get updates on progress.

**Professional digital storytelling**
With Sway, a new Office 365 app, you can easily create engaging, interactive web-based reports, presentations, newsletters, trainings and more—right from your phone, tablet, or browser. Sways are easy to share and look great on any screen.

**Mobility**
Sync email, calendar, and contacts; access SharePoint sites; view and edit Office documents with Office Online using a browser on Windows Phone, iOS, and Android devices.

**Enterprise management of apps**
Simplify management of apps in your organization with Group Policy, Telemetry, and Shared Computer Activation.

**Search and discovery**
Stay in the know. Search and discover content across Office 365 based on personalized insights. Office Delve is the first experience to be powered by Office Graph, a collection of analyzed signals or insights derived from each user’s behavior and relationships to content, topics, and contacts.

**Corporate video portal**
Easily manage videos within your organization. Office 365 Video is a company-wide destination for video upload, sharing and discovery, and smooth playback across devices.

**Voicemail integration (Unified Messaging)**
Hosted voicemail support integrated with Cloud PBX. Voicemails are recorded to Exchange Online and users can access them from Outlook, Outlook Web App, or compatible mobile and IP phones.

**Intelligence Compliance solutions**
With the Security and Compliance Center, you can search in-place across Exchange, Skype for Business, OneDrive for Business, and SharePoint. Advanced eDiscovery leverages machine learning, predictive coding, and text analytics platform to reduce the costs and challenges that come with sorting through large quantities of data for eDiscovery purposes by quickly zeroing in on what is relevant.

**Apps for Office and SharePoint**
New third-party and customer-developed apps work with Office and SharePoint to bring web services right into your documents and sites.

**Privacy**
Your data is yours. We safeguard it and protect your privacy

**Administration**
The admin portal provides IT detailed configuration options for your services, either from an online portal or through automated management with PowerShell commands. You can use the Admin app to manage your services on the go.

**Up to date**
No need to pay for version upgrades; updates are included in your subscription. New features are rolled out to Office 365 customers in an IT-configurable experience.

**Active Directory Integration**
Manage user credentials and permissions. Single sign-on and synchronization with Active Directory.

**Support**
24/7 phone support for all IT issues. For less urgent issues, you can make service requests directly through the admin portal.

For more information, refer to [Office 365 for Enterprises](#) and [Office 365 Service Descriptions](#).

### Plans & Services Mapping
Office 365 is available in a variety of plans in order to best meet the needs of your organization.

<table>
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<th>Office 365 Plans</th>
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<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>StaffHub</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>
Updates to Enterprise K1 Plan

We have expanded the Office 365 Enterprise K1 plan to include the following additional products:

- OneDrive for Business with 2 GB of cloud storage
- Skype for Business presence and instant messaging
- Microsoft Teams
- Office 365 Video
- Microsoft PowerApps and Microsoft Flow (coming soon)

These additional products build upon the core value already offered with the Office 365 Enterprise K1 plan and unlock important scenarios for frontline workers, including the ability to **view and swap shifts**, take advantage of **video-based employee training and onboarding**, exchange **best practices across the company** and even participate in live, company-wide town hall meetings.

Refer to blog post - *New value in Office 365 Enterprise K1 for frontline workers* and the Mechanics video - *Office 365 K1 updates for your frontline workers + How to: Bulk provisioning.*

Mobile Apps

<table>
<thead>
<tr>
<th>Application</th>
<th>Windows</th>
<th>Apple</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word, Excel, PowerPoint, OneNote</td>
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<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Microsoft Outlook, OWA</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Skype for Business</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>OneDrive</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>SharePoint</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Outlook Groups</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Microsoft Teams</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Planner</td>
<td>✓</td>
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<td>✗</td>
</tr>
<tr>
<td>Yammer</td>
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<td>✗</td>
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<tr>
<td>Office 365 Videos</td>
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<td>✗</td>
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<td>Delve</td>
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<td>PowerApps</td>
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<td>Power BI</td>
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<tr>
<td>RMS Sharing</td>
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<tr>
<td>O365 Message Encryption Viewer</td>
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<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Office 365 Admin</td>
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<td>✓</td>
<td>✗</td>
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</table>

Bundled Storage

<table>
<thead>
<tr>
<th>Service</th>
<th>Storage per user</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange Online (K1)</td>
<td>2GB</td>
</tr>
<tr>
<td>Exchange Online (E1)</td>
<td>50GB</td>
</tr>
</tbody>
</table>
Moving to Office 365

FastTrack Center Benefit for Office 365

With FastTrack Center Benefit for Office 365, you work remotely with Microsoft specialists to get your Office 365 environment ready for use. FastTrack Center provides assistance for the following Office 365 services:

- Exchange Online
- SharePoint Online
- OneDrive for Business
- Skype for Business Online
- Project Online
- Project Pro for Office 365
- Yammer Enterprise
- Office 365 ProPlus
- Microsoft Teams

Your services are eligible if you purchase at least 50 licenses for an Office 365 tenant using the Enterprise E or K Plans or one of the plans listed here: Eligible Services and Plans. Onboarding has two major components:

- **Core onboarding** — These are tasks required for tenant configuration and integration with Azure Active Directory if needed. Core onboarding also provides the baseline for onboarding other eligible services.
- **Service onboarding** — These are the eligible services that licensed users can access.

The FastTrack Center Benefit Overview article provides an overview of the benefit process, lists the expectations for your source environment, describes the onboarding phases, and defines who’s responsible for what in each phase.

Another important resource is the Microsoft Virtual Academy Course: Microsoft FastTrack: The Customer Success Service.

Planning the Transition

"The secret of change is to focus all your energy not on fighting the old, but on building the new"

Reimagine Productivity. New way to work

Enterprises today are focusing more than ever on how to give employees access to information, provide collaboration tools for internal and external use, and do it all across a multitude of devices.

The first step is all about understanding Office 365 Services and their capabilities and how these can help you transition to the new way to work. People are empowered to do their best work, on any device, while IT is able to responsibly manage security and compliance requirements.

Some examples of the technology transition can be …

- from Exchange DLs and Team Sites to Microsoft Teams
- from File Servers to SharePoint Online or OneDrive for Business based on usage scenario or,
- from Exchange Public Folders to Yammer

Drive Office 365 Adoption. More Services, More Usage

A successful Office 365 rollout focuses on driving adoption and helping everyone understand the benefits of working in a new way.

The Four Steps Towards Successful Adoption section in this document gives a walkthrough of a four-step approach to help you successfully drive Office 365 adoption. Defining a clear, concise, and comprehensive vision as a first step and outlining your desired business scenarios is always good for adoption in long term.

You can also start building scenarios using the Productivity Library available in FastTrack site as a reference. Office Blogs also provides useful tips related to collaboration and productivity in the Business Academy section.

Migrate from On-Premises. Less Servers, Less Usage

Reducing the on-premises IT infrastructure footprint is an important pillar for the ROI on investment in Office 365.

As users and applications are enabled on Office 365, IT needs to work with business to plan and migrate all relevant applications and content from on-premises to Office 365.

Gradual and sustained reduction also leads to simpler IT landscape and a better Office 365 adoption in long term.

Measuring the Progress

Best way to capture your transition to Office 365 and illustrate ROI to business is to spend time with them, enable scenarios and then create Success Stories which can be shared with everyone in the Organization.

Some ways to capture the progress statistically …

- **Increase** in Office 365 Consumption. Frequency: Monthly
- **Decrease** in on-premises Server Farms, Storage and related Licenses. Frequency: Quarterly
- **Decrease** in Vendors. Frequency: Quarterly
**Customer Stories**

- Advocate Health Care - Improving patient health through collaboration, innovation and efficiency with Office 365
- L Walter Thompson pioneers new brands on a global scale with Office 365
- TD banks on the security of the cloud with Office 365
- Willis Towers Watson - increasing business agility with global commitment to Office 365
- eBay makes a bid for flexibility in the workplace using Office 365
- Mediterraean Shipping Company builds a global productivity network with Office 365
- Liberty Mutual launches an IT transformation
- Sanofi Pasteur unlocks quality excellence and unleashes innovation with Yammer
- Flex—delivering supply chain innovation on a global scale with Office 365
- Georgia State University tackles malware with Office 365 Advanced Threat Protection
- NGA Human Resources builds a more engaging employee experience with move to Office 365
- Renault Sport: Racing ahead with collaboration, analytics and data security using Office 365
- easyJet soars into a collaborative digital future with Office 365
- Macy's sets the standard for empowering employees using Office 365
- Land O'Lakes: advancing agriculture for a new generation
- The Hershey Company: where collaboration and productivity are a recipe for goodness
- Carhartt—building a durable, agile workplace with Office 365
- Grundfos makes global business happen with Office 365
- Carvalias switches to Office 365 for faster business, reduced costs
- Assurant: transforming a risk management solutions business with Office 365
- Democratizing data - Atkins goes digital by default with Office 365 E5
- Kelly Services - putting nearly one million people to work every year, one great hire at a time
- Discovery Communications embraces Office 365 to foster creative culture of innovation
- Kennametal saves more than $750,000 annually with move to Skype for Business Online
- Guardian Industries - connect, collaborate and innovate from anywhere
- Why Facebook is betting on Office 365 and the Microsoft Cloud
- CSC elevates workplace agility, cultivates new market opportunities with Office 365
- Polycom dials up business value using Office 365
- Mindtree uses Office 365 to create digital experiences, deliver innovative solutions
- Telefónica uses Yammer to stay engaged, aligned and more competitive
- Smithfield Foods: many brands, a single mission
- Marks & Spencer uses Office 365 to boost competitive edge in global business
- Jabil - Global manufacturer moves to Office 365 to capture promise of digital manufacturing
- Atkins to become "digital by default" with move to Office 365
- Carlsberg continues to brew local favorites with global efficiency using Office 365
- Cushman & Wakefield - New opportunities for real estate on a global scale, supported by Office 365
- Quintiles quickly transforms into global modern workplace with Office 365
- Wolters Kluwer promotes global collaboration using Office 365
- Goodyear brings spirit of innovation to every facet of product development and delivery
- Employee engagement at KLM reaches new heights as crew share expertise on enterprise social platform
- Connected on day one - The Kraft Heinz Company creates united workforce quickly and smoothly
- Yammer posts top one million—British Airways inspires innovative teamwork
- AIA Group - Digitalizing teamwork to transform customer care in the insurance industry
- ABB - sparking innovation through the collective power of knowledge
- Booz Allen Hamilton increases staff engagement and collaboration with Office 365 and SharePoint Online
- Louis Vuitton - Building on a global culture of tradition and innovation to boost customer service and artistic excellence
- UL—product safety leader maintaining security and moving at the speed of innovation with Office 365
- At Aon, collaboration is key
- BASF - IT leader of world's no. 1 chemical company talks 'business-centered technology'
- TESCO - Democratizing a global business while building brand and customer loyalty
- 3M races forward to enable enterprise-wide collaboration
- Merck - A new foundation for connected business processes at a German pharmaceutical and chemical company
- Air Canada employees use the cloud to learn, share, develop ideas and collaborate
SERVICES: MESSAGING AND COMMUNICATION

Exchange Online (EXO)

Use business-class email through a rich and familiar Outlook experience you can access from your desktop or from a web browser using Outlook Web App.

Features

- **Large mailboxes**: Each user gets 2GB (K1), 50GB (E1) or 100GB (E3) of mailbox storage and can send messages up to 150 MB in size. Unlimited In-Place Archive for E3 users.
- **Outlook support**: Users can connect supported versions of Outlook to Exchange Online, so they can use the rich client application they already know.
- **Web-based access**: For web-client access, Outlook on the web provides a premium browser-based experience that matches the look and feel of the full Outlook client.
- **Outlook app**: Get more done on your phone and tablet with the Outlook mobile app.
- **Document collaboration**: Save attachments directly to OneDrive for Business with just one click and share the link to the file—right from Outlook on the web.
- **Groups**: Simplify collaboration with Outlook Groups, which lets teams self-organize, work together across tools and devices, and build upon the expertise of others.
- **Shared calendar and contacts**: Compare calendars to schedule meetings and access collaboration features, including shared calendars, groups, the global address list, external contacts, tasks, conference rooms, and delegation capabilities.
- **In-Place Archive**: Keep your inbox clean by automatically moving old messages to an In-Place Archive.
- **In-Place Hold**: Use In-Place Hold to preserve deleted and edited mailbox items from users’ primary mailboxes and In-Place Archives.
- **Data loss prevention (DLP)**: Control sensitive business data with built-in DLP policies based on regulatory standards such as PII and PCI, which help to identify, monitor, and protect sensitive data through deep content analysis.

For more comprehensive information, refer to Exchange Online Service Description.

**Change how much mail to keep offline**

You can decide how much mail is available in Outlook 2013/2016 when working offline with a slow or no network connection. Click File > Account Settings > Account Settings

Set the slider to the desired amount of time. You can change this setting at any time.

<table>
<thead>
<tr>
<th>Disk size</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smaller than or equal to 32 GB</td>
<td>1 month</td>
</tr>
<tr>
<td>Greater than 32 GB, but smaller than 64 GB</td>
<td>3 months</td>
</tr>
<tr>
<td>Equal to or greater than 64 GB</td>
<td>1 year</td>
</tr>
</tbody>
</table>

**Focus on what matters to you**

We are being inundated with more information, more communication and more email vying for our attention. It is more critical than ever to have tools that help us cut through the noise and focus on what matters most. Outlook provides 2 new experiences to do that—Focused Inbox and @mentions.

**Focused Inbox**

For many, the inbox is the command center for their day. It’s the way to keep track of what is going on and what needs to get done. Outlook’s Focused Inbox makes this process easier by helping you focus on the emails that matter most to you. It separates your inbox into two tabs—Focused and Other.

Emails that matter most to you are in the Focused tab, while the rest remain easily accessible—but out of the way in the Other tab. You’ll be informed about email flowing to Other, and you can switch between tabs at any time to take a quick look.

Office 365 admins will have mailbox and tenant level control of the feature to stage the rollout in a manner that works best for their organization.

For more information, refer to: Focused Inbox for Outlook.

**@mentions**

@mentions make collaborating on email fast and easy. Simply type the @ symbol anywhere in the body of your email and start typing to pick the person you want to address. Once you pick the person you want to address their name is highlighted in the message in blue, helping them know they are being asked to take an action in your message.
If the person isn’t part of the email conversation already, they will be automatically added to the To… line so they receive a copy of your email.

Resources

**Microsoft Virtual Academy Courses** ...

- What’s New in Exchange Online
- Manage Exchange Online Services
- Exchange Hybrid Deployment

Read …

For Admins

- Exchange Online migration performance and best practices
- Security and compliance for Exchange Online
- Exchange admin center in Exchange Online
- Monitoring, reporting, and message tracing in Exchange Online
- Use Office 365 tools for security investigations in Exchange Online and SharePoint Online
- Restrict access to email and O365 services with Microsoft Intune

For Users

- What’s new in Exchange Online
- Change how much mail to keep offline
- Ways to migrate multiple email accounts to Office 365
- Clients and mobile in Exchange Online
- Focused Inbox for Outlook

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**Exchange Online Archiving (EOA)**

Microsoft Exchange Online Archiving is a cloud-based, enterprise-class archiving solution that helps you to solve archiving, compliance, regulatory, and eDiscovery challenges. It is compatible with Exchange Server 2016, 2013, and 2010. It’s also available as an add-on service for mailboxes that are hosted online.

Features

**Archive mailbox**

- An archive mailbox is a specialized mailbox that appears alongside the users’ primary mailbox folders in Outlook or Outlook Web App.
- Users can access the archive in the same way that they access their primary mailboxes. In addition, they can search both their archives and primary mailboxes.

**Move messages to Exchange Online Archiving**

- Users can drag and drop messages from .pst files into the archive, for easy online access.
- Users can also move email items from the primary mailbox to the archive mailbox automatically, using Archive Polices, to reduce the size and improve the performance of the primary mailbox.

**Deleted item recovery**

- Users can restore items they have deleted from any email folder in their archive.
- When an item is deleted, it is kept in the archive’s Deleted Items folder. It remains there until it is manually removed by the user, or automatically removed by retention policies.
- After an item has been removed from the archive’s Deleted Items folder, the item is kept in the archive’s Recoverable Items folder for an additional 14 days before being permanently removed.
- Users can recover these items using the Recover Deleted Items feature in Microsoft Outlook or Outlook Web App.
- If a user has manually purged an item from the Recoverable Items folder, an administrator can recover the item within the same 14-day window, through a feature called Single Item Recovery.

**Retention policies**

- Helps organizations reduce the liabilities associated with email and other communications.
- Administrators can apply retention settings to specific folders in users’ inboxes.
- Administrators can also give users a menu of retention policies and let them apply the policies to specific items, conversations, or folders.
- Offers two types of policies: archive and delete. Both types can be applied to the same item or folder. For example, a user can tag an email message so that it is automatically moved to the personal archive in a specified number of days and deleted after another span of days.

**In-Place eDiscovery**

- Supports In-Place eDiscovery for searching the contents of mailboxes, primary mailboxes and archives.
- Administrators or authorized Discovery managers can search a variety of mailbox items – including email messages, attachments, calendar appointments, tasks, and contacts.

For more comprehensive information, refer to [Exchange Online Archiving Service Description](#).

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**Unlimited archiving in Office 365**

In Office 365, archive mailboxes provide users with additional mailbox storage space. After a user’s archive mailbox is enabled, up to 100 GB of additional storage is available. When the 100 GB storage quota is reached, organizations had to contact Microsoft to request additional storage space for an archive mailbox. That’s no longer the case. The new unlimited archiving feature in Office 365 (called auto-expanding archiving) provides an unlimited amount of storage in archive mailboxes.

Now, when the storage quota in the archive mailbox is reached, Office 365 automatically increases the size of the archive, which means that users won’t run out of mailbox storage space and
administrators won’t have to request additional storage for archive mailboxes.

Here’s a quick overview of the process:

1. Archiving is enabled for a user mailbox. An archive mailbox with 100 GB of storage space is created.
2. When the storage quota for the archive mailbox is reached, it’s converted to an auto-expanding archive, and Office 365 adds storage space to the archive.
3. Office 365 automatically adds more storage space to the archive when necessary

For step-by-step instructions for turning on auto-expanding archiving, see Enable unlimited archiving in Office 365.

To access messages that are stored in an auto-expanded archive, users have to use one of the following Outlook clients:

- Outlook 2016 for Windows
- Outlook on the web
- Outlook 2016 for Mac

Read Overview of unlimited archiving in Office 365 article for more information.

Scenarios

Exchange Online Archiving assists these organizations with their archiving, compliance, regulatory, and eDiscovery challenges while simplifying on-premises infrastructure, and thereby reducing costs and easing IT burdens.

- **Reduce potential liabilities.** Archive and delete emails as per business needs. Employees don’t have to create and manage multiple PST files on their devices any more
- **Reduce Risk.** Compliance search and eDiscovery gives your Legal/Compliance teams ability to search all emails
- **Drive Mobile Productivity.** Employees can search and view all their emails from Outlook, Outlook on the Web and mobile devices.

**Resources**

- Exchange Online Archiving Service Description
- Enable or disable archive mailboxes in Exchange Online
- Archive mailboxes in Exchange Online
- Enable unlimited archiving in Office 365
- Retention Tags and Retention Policies
- Enable or disable single item recovery for a mailbox
- In-Place Hold and Litigation Hold

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**Skype for Business Online (Skype)**

Microsoft Skype for Business Online is a hosted communications service that connects people anytime and from virtually anywhere. It gives users access to presence, instant messaging, audio and video calling, rich online meetings, and extensive web conferencing capabilities.

**Features**

Features given below are based on the Skype for Business Online service working together with Skype for Business client app on the user’s PC.

**Presence**

- Display presence status—for example, Available, Away, Do Not Disturb, or Offline—to let others know of your availability.
- Presence information is presented throughout the Office 365 suite.
- When Outlook calendar integration is enabled, check another user’s schedule and get up-to-date availability information directly from that person’s calendar

**Instant Messaging**

- Available for both Skype-to-Skype and multiparty communication. IM text is encrypted for enhanced security
- Within the IM window, photos of the sender/receiver appear inline with the conversation.

**Contacts List Configuration**

- Create a persistent list of contacts for all Skype for Business users
- Organize, and group these contacts in different ways (by department, for example).
- Search address books to find other users.

**Skype-to-Skype Audio and Video Calls**

- Make one-to-one computer-based audio and video calls to other Skype for Business users using a PC and a web camera.
High-definition video (1920 x 1080) is supported for peer-to-peer calls between users running Skype for Business on high-end computers.

File Transfer
- Provides PC-to-PC file transfer that lets users transfer files as part of a Skype for Business session.

Desktop and Application Sharing
- Desktop sharing enables presenters to broadcast any visuals, applications, webpages, documents, software, or part of their desktops to remote participants in real time.
- Audience members can follow along with mouse movements and keyboard input. Presenters can choose to share the entire screen or only a portion.
- Enables presenters to share control of software on their desktops without losing sight of participant feedback or text questions.
- Presenters can also delegate control of the application to meeting participants.

Ad-Hoc Skype for Business Meetings
- Start or join an ad-hoc Skype for Business Meeting with just a few clicks in the Skype for Business client or in Office.
- Escalate simple instant messaging conversations or email conversations to PC-based, multiparty audio and video meetings with shared desktops, applications, and documents.

Skype for Business Multiparty Audio and Video
- Provides for Skype for Business-based, multiparty (three or more users) audio conferencing capabilities.
- Provides users with an adaptive audio codec for optimal performance under varying bandwidth conditions, visual call and roster controls, network quality indicator, and powerful user management features.
- Gallery View shows videos of participants in the conference.

Presenter Controls
- Mute or unmute all attendees, or mute individual attendees.
- Block attendees from starting video.
- Hide names on the pictures.
- Change permissions so that all participants are attendees instead of presenters.
- Send email invitations to additional people.
- Backstage content preview if the user is a presenter.

Participant Views
- **Gallery View** shows all the participants’ pictures, or videos, plus meeting content.
- **Speaker View** shows the presenter’s picture or video at the lower-right corner of the meeting window, plus meeting content.
- **Presentation View** shows only the meeting content.
- **Compact View** shows the tiles of the participants’ pictures in a compact window.

PowerPoint
- Provides multiparty PowerPoint presentation, with higher-resolution displays and support for PowerPoint capabilities, such as animations, slide transitions, and embedded video.

Web Conferencing Tools
- Provides multiparty web conferencing capabilities including virtual whiteboard and annotations.
- Annotations made on whiteboards can be seen by all meeting participants.
- Enhances collaboration by enabling meeting participants to discuss ideas, brainstorm, take notes, and so on.

Polling
- Enhances collaboration by enabling presenters to quickly determine participants’ preferences.
- During online meetings and conversations, presenters can use polling to gather anonymous responses from participants.
- All presenters can see the results and can either hide the results or show them to all attendees.

Recording and Playback
- Allows organizers and presenters to record all aspects of a Skype for Business session, including who entered the meeting, audio and video, and content from IM conversations, program sharing sessions, PowerPoint presentations, handouts, whiteboards, and so on.
- Organizers and presenters can choose 480p, 720p HD, or 1080p Full HD as their preferred resolution for client-side recordings.
- Recordings are saved to the presenter’s computer.
- Recordings can also be uploaded to the Office 365 Videos service for sharing with a larger audience.

Meeting Lobby
- Decide who gets into the meeting directly, and who waits until the presenter lets them in.
- Different Lobby options can be set for users who are connecting through a Skype for Business client and users who are dialing in.

Scheduled Meetings from Outlook
- Skype for Business desktop client includes an Outlook plug-in that provides users with single-click scheduling of online meetings in Outlook.
- Participants can join with a single click from the Outlook reminder, or through the Outlook meeting itself.

Federation and Public IM Connectivity
- External connectivity (federation) enables a Skype for Business user to connect with users in other organizations that use Skype for Business as well as those that host their own Skype for Business Server on-premises.
- Federated contacts can see presence, communicate by using IM, and make Skype-to-Skype audio and video calls.

Interoperability with Third-Party Dial-in Audio Conferencing Services
- Dial-in audio conferencing, which is the ability to dial into a scheduled Skype for Business meeting/conference from.
fixed-line or mobile phones, can be achieved through interoperability with leading third-party audio conferencing services.

For more comprehensive information, refer to Skype for Business Online Service Description.

## Device Apps

You can connect with your team anywhere using clients across Windows, Mac, iOS, and Android, or bring remote participants into meeting spaces of all sizes with Skype for Business. Refer to: [Download Skype for Business across all your devices](#).

Skype for Business Mac is now publicly available for download. The Mac client offers edge-to-edge video and full immersive content sharing and viewing. The result is a great first-class experience for Mac users.

## Scenarios

- **Meetings and calls with anyone.** Meet with up to 250 people, even if they're not on Skype for Business. All they need is a phone or internet connection.
  - Financial Sector – Bringing Relationship based and Anonymous customer contact to their web and mobile properties
  - Healthcare – Bringing remote advisory services to patients and connecting doctors around the world
  - Retail – Bringing customer advice to their web properties to upsell and increase sell through
  - Insurance and Travel – To Support brokers and customers with real time communications in the field and in branch locations
  - Recruitment Teams – Connecting Interviewers and candidates to conduct interviews
  - Employee Onboarding – Shorten the time for onboarding by conducting online sessions for new hires even before their joining date.

- **Enable Work from home.** Home office or field-based employee can rely on the real-time collaboration technologies in Skype for Business to develop and maintain relationships as well as do their job.

- **Drive Knowledge sharing.** Empowers employees to share ideas, best practices and knowledge on processes, products, services, customers and competitors with colleagues across regions, departments and teams. These sessions can be recorded and uploaded to Office 365 Videos for those who couldn’t attend the live session.

- **Light up Mobile apps.** Enable custom Mobile apps with real time collaboration. Skype for Business can provide IM and Presence in mobile applications through APIs. Skype URI integration into mobile apps can launch first party clients for audio/video connectivity.

- **Reduce cost and complexity with one solution.** Skype for Business will work with most communications technology, so you can still make and receive calls on PBX phones and join meetings with video teleconferencing systems. You’ll also reduce the cost of supporting multiple services by upgrading to one solution that includes everything—voice, video, and online meetings.

## Resources

**Microsoft Virtual Academy Courses ...**

- [Bring Your Communications to the Cloud with Skype for Business](#)
- [Manage Skype for Business](#)
- [Optimize Your Network for Skype for Business](#)
- [The Voice of Skype for Business: Cloud and Hybrid](#)

**Read / Watch ...**

- [What’s Skype for Business?](#)
- [Skype for Business Blog](#)
- [Video Training: Communicate your way](#)
- [Skype for Business Quick Start Guides](#)
- [Restrict access to Skype for Business Online with Microsoft Intune](#)

## Skype Meeting Broadcast

Skype Meeting Broadcast enables organizations to broadcast a Skype for Business meeting on the Internet to up to 10,000 people, who can attend from a browser on nearly any device. Meeting broadcast makes it easy to host large virtual meetings like internal ‘Town Hall’ style meetings and public webinars.

The service includes integration with Bing Pulse, for real-time polling and sentiment tracking, and Yammer, to enable attendee dialogue during the broadcast.

### Communicate to the size of your audience

Broadcast meetings are the perfect solution for reaching large audiences. See which modes of communication will best help you achieve your goals.

<table>
<thead>
<tr>
<th>Communication type</th>
<th># of people*</th>
<th>Use cases + benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instant message</td>
<td>2+</td>
<td>Quick, informal communication and collaboration</td>
</tr>
<tr>
<td>Email</td>
<td>2+</td>
<td>Written communication that is typically longer that instant messages and is best memorialized in an email thread.</td>
</tr>
<tr>
<td>Phone Call</td>
<td>2</td>
<td>Real-time collaboration. An efficient way to get people up to speed; helps eliminate miscommunications.</td>
</tr>
<tr>
<td>Conference call</td>
<td>3+</td>
<td>Collaborative phone conversation with multiple parties in various locations.</td>
</tr>
</tbody>
</table>

*Numbers represent the maximum number of attendees for each type of communication.
<table>
<thead>
<tr>
<th>Communication type</th>
<th># of people*</th>
<th>Use cases + benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video call</td>
<td>2–10</td>
<td>When face-to-face communication is best for a meeting's success, but people are in different locations.</td>
</tr>
<tr>
<td>Webinar</td>
<td>10–250</td>
<td>Presenting information to a medium-sized or largescale audience. May or may not require or allow audience participation</td>
</tr>
<tr>
<td>Broadcast</td>
<td>250–10,000</td>
<td>One-way presentation or town-hall style meeting, catered to reach a large audience in many locations</td>
</tr>
</tbody>
</table>

*Based on general numbers and software; actual numbers may vary with different platforms.

**When to meet and when to broadcast?**

A typical video call or meeting can pose problems when accommodating more than a few attendees—while they’re great for one-on-one collaboration sessions, background noise, a lack of control, and scaling capabilities limit their effectiveness. A larger audience requires a more robust alternative. Consider a broadcast solution for meetings you’d hold in an auditorium if everyone were in the same location. Online meetings are comparable to the type of meeting you’d hold in a conference room.

**Skype Meeting Broadcast roles**

- **Organizer.** Creates the meeting request and invites attendees. Reviews meeting reports.
- **Producer.** Manages the meeting sources (live presentations, dial-in presentations, audio, video, and PowerPoint decks), records the event, and posts the recording to Office 365 Video.
- **Event team member.** Participates in the meeting by presenting live or dialing in from a remote location.
- **Attendee.** Watches the event online.

**Attendee options**

- **Anonymous:** anyone with the meeting link can join the meeting
- **Secure:** only attendees listed below can join the meeting
- **All Company:** anyone from my company can join the meeting

**Features**

- **Schedule your meeting:** use the Skype Meeting Broadcast scheduling and management portal to schedule a meeting
- **Manage an Event:** Upload PowerPoint decks, cue live feeds from Camera sources, activate feeds and, switch sources during event. You can have one feed providing audio and another providing video.
- **Customize your meeting:** add a Yammer feed or Bing Pulse to your meeting so your audience can participate during the event and you can gauge their involvement and satisfaction

**Set up Skype Meeting Broadcast**

Distribution of the media content of a broadcast meeting utilizes Microsoft Azure’s Content Delivery Network (CDN) to achieve very high scale, supporting thousands of people watching a broadcast. The chunked media content passing through the CDN is encrypted, and the CDN cache has a limited lifetime. Because Azure CDN is not included in the services that commit to meet the EU Standard Contractual Clauses, Skype Meeting Broadcast has been disabled by default for all locations worldwide.

Customers with EU Standard Contractual clauses must choose whether or not to opt into the service after reviewing the information in our communication to them. In the regions not affected by the EU Standard Contractual Clauses, the IT Admin can manually activate the Skype Meeting Broadcast feature.
To setup …

- **Enable Skype Meeting Broadcast for your organization:**
  You need to enable Skype Meeting Broadcast for your organization. See, [Enable your organization for Skype Meeting Broadcast](#) to have us walk you through this.

- **Enable external access and setting up allowed domains:**
  You can use either Skype for Business admin center or the Office 365 admin center to enable external access and allow access. See, [Set up Skype Meeting Broadcast](#) for the walkthrough.

The Skype Meeting Broadcast portal can be found at [portal.broadcast.skype.com](http://portal.broadcast.skype.com). You can also go to [broadcast.skype.com](http://broadcast.skype.com) and go to the main Skype Meeting Broadcast page.

---

**Resources**

**Watch Videos …**

- [First look at Skype Meeting Broadcast](#)

**Read …**

- [What is Skype Meeting Broadcast?](#)
- [Schedule a Skype Meeting Broadcast event](#)
- [Manage a Skype Meeting Broadcast event](#)
- [Join a Skype Meeting Broadcast](#)
- [Set up Skype Meeting Broadcast](#)
- [Enable your organization for Skype Meeting Broadcast](#)
SERVICES: VOICE

Microsoft offers a variety of options for enabling your users to call landlines and mobile phones through the Public Switched Telephone Network (PSTN).

Skype for Business Server - Enterprise Voice

Enterprise Voice is Microsoft’s world-class software-powered Voice over Internet Protocol (VoIP) solution, included in on-premises deployments of Skype for Business Server. Enterprise Voice offers a rich set of capabilities and features, including Response Groups, Call Park, Enhanced 9-1-1, and much more. Enterprise Voice is a full PBX system for your organization, including PSTN connectivity through your local operator. Read more here: Plan for Enterprise Voice in Skype for Business Server 2015.

Skype for Business Online – Advanced Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Cloud PBX</th>
<th>PSTN Conf</th>
<th>PSTN Calling</th>
</tr>
</thead>
<tbody>
<tr>
<td>End-user call handling (answer, hold, transfer, ring)</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Setup and use call designation</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team Calling</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use IP Desk Phone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set and enforce calling policies</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Emergency calling</td>
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<td></td>
<td></td>
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<tr>
<td>Skype for Business Plus CAL</td>
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<td></td>
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<tr>
<td>Dial-in for Skype Meetings</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Meeting dial out to PBX/PSTN users</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Default join from PBX/PSTN phones</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone number assignment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inbound calling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outbound calling (domestic/int’l)</td>
<td></td>
<td></td>
<td>●</td>
</tr>
</tbody>
</table>

Note: Cloud PBX and PSTN Conferencing are part of E5 plan. PSTN Calling is an add-on service.

Cloud PBX

Cloud PBX is Microsoft’s technology for enabling call control and PBX capabilities in the Office 365 cloud with Skype for Business Online. Skype for Business Cloud PBX allows you to replace your existing PBX system with a set of features directly delivered from Office 365 and tightly integrated into the company’s cloud productivity experience.

With Cloud PBX, your users can use Skype for Business Online to take care of basic call control tasks, such as placing and receiving calls, transferring calls, and muting and unmuting calls. Cloud PBX users can click a name in their address book, and Skype for Business places a call to that person. To place and receive calls, Cloud PBX users can use their mobile devices, a headset with a laptop or PC, or one of many IP phones that work with Skype for Business.

To enable calls to landlines and mobile phones, Cloud PBX can be connected to the PSTN in one of two ways:

- By purchasing the PSTN Calling service add-on to Office 365.
- By using on-premises PSTN connectivity, where software on-premises connects with your existing telephony infrastructure.

On-premises PSTN connectivity

With Cloud Connector Edition

Cloud Connector is a set of packaged Virtual Machines (VMs) that implement on-premises PSTN connectivity with Cloud PBX. This hybrid offering is designed for organizations that want to enable their Skype for Business Online users to use their existing on-premises PSTN connection, with Skype for Business call control in the cloud.

With this option, you deploy a set of packaged VMs that contain a minimal Skype for Business Server topology—consisting of an Edge component, Mediation component, and a Central Management Store (CMS) role. These services are configured for hybrid with your Office 365 tenant that includes Skype for Business Online services.

With an existing Skype server deployment

You can implement a hybrid solution using your existing Skype for Business Server deployment and PSTN connectivity. In this topology, users are homed in the cloud on Skype for Business Online instead of being homed on the on-premises
deployment. You can choose this option if you currently have users homed in the cloud or if you want to start migrating users to the cloud.

With this option, your Skype for Business Online users get their PSTN connectivity through Enterprise Voice on your on-premises Skype for Business Server deployment, with Skype for Business call control in the cloud.

Resources
- Plan your Cloud PBX solution in Skype for Business 2015 or Lync Server 2013
- Plan Cloud PBX with on-premises PSTN connectivity in Skype for Business Server 2015 or Lync Server 2013
- Plan for Skype for Business Cloud Connector Edition

PSTN Conferencing

Boost team collaboration with dial-in conferencing options from virtually any device. With PSTN Conferencing, you can consolidate your meeting solutions and reduce complexity while enabling employees to attend meetings by phone wherever they are.

Benefits

**Skype Meeting phone access**

Enjoy convenient dial-in access to Skype Meetings, allowing participants to join your meetings from any telephone.

**Rich calling features**

Meeting participants can join Skype Meetings using local dial-in numbers from regions around the world, or have the service call them back on their landline or mobile phone.

**Office 365 management**

PSTN Conferencing works seamlessly with Office 365 and provides you with a single point of administration.

Features

- Join the audio portion of a meeting from virtually anywhere by dialing a PSTN phone number and entering a conference passcode. Simplify your meetings by creating a single phone number for all attendees to dial in

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**PSTN Calling**

**PSTN Calling service** is the service that works with Cloud PBX allowing users to make calls to landlines and mobile phones. Because the PSTN Calling service operates out of Office 365, this is a completely-in-the-cloud offering that does not require an on-premises server deployment.

Users of this option are homed in Skype for Business Online in Office 365 and have access to Skype for Business Online voice services. Microsoft is the provider of both core calling and PSTN services and can even provide or port your users' phone numbers.

**Resources**
- PSTN Conferencing
- Check rates for toll free dial-in and for international dial-out

**PSTN Calling**

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**Resources**
- What is PSTN Calling?
- Skype for Business add-on licensing
- PSTN Calling plans for Skype for Business
- Countries and regions that are supported for Skype for Business Online PSTN Services
OneDrive for Business (OneDrive)

Store your files with the industry leader in enterprise-grade software, not a startup or consumer-focused company.

OneDrive for Business is a place where you can store, sync, and share your work files. OneDrive lets you update and share your files from anywhere and work on Office documents with others at the same time.

**Features**

- **Store.** Securely store all your files and share them with coworkers. Each user gets 1TB (E1) or 5TB (E3) of storage.
- **Sync.** Sync files across devices and access them anywhere, even when you’re offline.
- **Search.** Find the files you need in seconds with simple search. Or use Office Delve to discover new relevant content.

Get work done together with anyone at any time

- **Share.** Securely share your files with colleagues, business partners, or customers. You control who can see and edit each file.
- **Contribute.** OneDrive for Business lets you use familiar tools to create, edit, and review documents in real time and even discuss them on Yammer.
- **Manage.** Keep everyone working on the most recent version of a document, and view or restore previous versions if you need to.

Modern Attachments

In Outlook 2016 you can easily attach documents you most recently worked on to your emails from the Insert tab. When you attach files from OneDrive for Business or SharePoint Online, you can share them as View only, or give the recipients Edit permissions, which helps them collaborate easily on one copy that everyone works on.

- **Recent items.** Outlook provides you with a list of the recent files you saved or worked with. These files could be saved locally, or they might exist on internal network locations, such as OneDrive, Group Files, and SharePoint.

**Browse Web Locations.** This option lets you select files from your OneDrive, SharePoint sites, or Group Files that you’ve accessed before.

Manage the items attached to an email

After you’ve attached an item, select the drop-down menu next to the attachment to take other actions, such as Open, Remove, Print and so on.

If you’ve attached a file from a shared location, you can also choose:

- **Attach as copy.** If you want to send a local copy of a file, instead of the file on a shared location.

**Change permissions.** If you want to select edit or view only permissions on a shared file.
Next Generation Sync Client for Windows and Mac

Office 365 ProPlus software available for download, **doesn’t include** the next generation sync client for PCs.

Setup Guidance

Step-by-step guidance for IT administrators to deploy the OneDrive for Business Next Generation Sync Client to your organization is available for both **Windows** and **Mac OS X**.

For users who want to set up Next Generation Sync Client on their own there are setup guides for **Windows** and **Mac OS X**.

To block users in your tenant from syncing OneDrive for Business libraries using the old OneDrive for Business sync client (groove.exe), set the **GrooveBlockOption** parameter value to **HardOptIn** in `Set-SPOTenantSyncClientRestriction` cmdlet.

New and Upcoming features

Information in this section is based on blog post: Major OneDrive updates at Ignite 2016 include SharePoint Online sync preview.

Powerful new sync options

**Public preview** of a single sync experience for all your files in Office 365, across OneDrive and SharePoint has been announced. Refer to Get started syncing SharePoint sites with the new OneDrive sync client – Preview article.

- SharePoint sync is being added to the OneDrive sync client.
- **Shared folder sync** is another powerful capability shipping with this preview. If a colleague in your organization shares a folder with you from their OneDrive, then you can choose to take that folder offline.
- For better visibility of what is going on with your sync client, we’re rolling out the **activity center**. When a file is added, deleted or changed in a folder that you are syncing, the activity center shows you exactly what happened—so you can catch up on the most recent activity and see current sync status.

Better previews and thumbnails

OneDrive offers deep integration with Office Online, so you can view, edit and create Office files from any browser. There are times you want to view other types of files in the browser without downloading them. Rich previews for your most commonly used business file types are being enabled. We’ve integrated Visio (VSD, VSDX) viewing as well, making it much easier to share your ideas with the world using OneDrive and Visio together.

Without leaving OneDrive, you can preview Adobe files, including Illustrator (.ai), Photoshop (.psd) and Encapsulated PostScript (.eps), 3D formats (3MF, FBX, OBJ, PLY, STL) and DICOM images. Email files (.msg and .eml), almost all photo files (including many RAW formats) and streaming video are also supported.

Read more here: Announcing New File Viewers Available for OneDrive For Business.

Access all your Office 365 files through the OneDrive browser experience

Our mission is to enable you to work with all your Office 365 files wherever you are. We’re releasing an update to the OneDrive browser experience that enables you to access, edit and share all files and folders in SharePoint Online that you own or follow. Combined with the single experience in mobile apps and sync, you have one consistent way to work with the Office 365 files you care about.
Download multiple files as a .zip file

In the OneDrive browser experience, you can select multiple files and folders and download them in a .zip file.

Keep informed with mobile notifications

For iOS or Android users, we've added notifications when a colleague shares a file with you. You can now open the file directly from the notification.

Extending the Scan function to handle multiple photos

Earlier this year we released the Scan function on Android, which enables you to take single photos that are then converted to PDF files and uploaded to OneDrive. We've now expanded this allow you to add multiple photos and combine them in the one PDF file. Now you can scan your multi-page expense receipt or extensive notes across multiple whiteboards into a single PDF that's uploaded and stored in OneDrive.

This feature will be rolling out to iOS in the coming weeks.

Understand the reach and impact of your work

When you copy from OneDrive to SharePoint, your file becomes accessible and discoverable by your team. On iOS, you can see over time how many people have discovered and viewed your files. This provides simple insight into the impact of your work.

We'll add this capability to Android and Windows in future updates.

New deeper Office 2016 integration

In the top right of the Office 2016 ribbon, you can see (available in First Release) the users who are currently editing the file and launch Skype for Business to converse in real-time. You can also share the file, see the history of all activity on the file as well.

Per-user controls for OneDrive

We'll add per-user controls for OneDrive directly in the Office 365 User Management console. As an admin, you will be able to set the storage quota and external sharing permissions for a specific user, as well as help a user who misplaced a file or inadvertently shared the wrong file with others. In emergencies, such as a lost device, you can sign a user out of OneDrive on all devices. And, when an employee leaves the organization or is terminated, you can take over the user’s OneDrive to move or copy important files to other locations.

Dedicated admin console for OneDrive

This provides one place to discover and configure OneDrive-specific settings and perform administrative tasks—many of which used to require PowerShell. Once deployed to your tenant, all tenant and SharePoint admins will have permissions to access the OneDrive admin center preview at https://admin.onedrive.com

Key features by section include:

- **Home**: This is the dashboard for the admin center and will soon show recent Office 365 Message Center posts and usage reporting related to OneDrive for Business.
- **Sharing**: This section helps admins gain control over how and with whom your users are sharing information. This includes controlling the use of external sharing and anonymous links, as well as limiting which external domains users can share with.
- **Sync**: Admins can block syncing of specific file types and deny syncing to non-domain joined PCs.
- **Storage**: This section allows admins to easily set default storage limits and document retention durations.
- **Device Access**: This gives admins control over how and from where a user can access their files. This includes allow/deny access from personal devices or specific networks as well as rich Mobile Application Management Intune policies for iOS and Android.
- **Compliance**: Admins can find quick links to the Office 365 Security and Compliance Center for key scenarios like auditing, data loss prevention, retention, and eDiscovery.

Options to secure OneDrive

Control provisioning of OneDrive
OneDrive for a user is created when they click on OneDrive tile or access the service first time. Their ability to create OneDrive site is governed by the create personal site permission in SharePoint Online. By default, the permission is assigned to all users.

If your Organization is looking for a phased rollout then you can create specific user groups and assign the create personal site permission to them.

Enable Sync client restrictions

SharePoint Online administrator can use PowerShell cmdlets to enable the OneDrive for Business sync client from only the domains present in the safe recipients list. For more information, read Use Windows PowerShell cmdlets to enable OneDrive sync for domains that are on the safe recipients list.

After that, if the version of sync client on a user’s PC is earlier than 15.0.4693.1000, sync client is considered outdated and user will not be able to sync documents.

Configure restricted Domain sharing

At a tenant level, administrators can configure external sharing by using either the Allow List or Deny List feature. Administrators can limit sharing invitations to a limited number of email domains by listing them in the Allow List or opt to use the Deny List, listing email domains to which users are prohibited to extend invitations.

Additional parameters have been added to the PowerShell cmdlet, Set-SPOTenant, to allow configuration of restricted domains using PowerShell.

All external sharing invitation emails will blind copied to set mailboxes using BccExternalSharingInvitations and BccExternalSharingInvitationsList parameters.

Additional parameters have been added to the PowerShell cmdlet, Set-SPOTenantSyncClientRestriction, to allow configuration of restricted domains using PowerShell.

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Do not hallucinate.
For more information, refer to Administrative settings for the new OneDrive sync client support article.

OneDrive for Business usage reports

The new Office 365 Reports dashboard shows you the activity overview across the Office 365 products in your organization. The OneDrive card on the dashboard gives you a high-level view of the value you are getting from OneDrive in terms of the total number of files and storage used across all the OneDrive accounts in your organization. You can then drill into it to understand the trends of active OneDrive accounts, how many files are users interacting with as well as the storage used. It also gives you the per OneDrive account details.

You can get a view into OneDrive for Business usage by looking at the Sites, Files, and Storage views.

Refer to: Activity Reports in the Office 365 admin center and Office 365 Reports in the new Admin Center - OneDrive for Business usage articles for more details.

Scenarios

- Drive Personal productivity. Be Productive from anywhere and from any device.
- Protect your critical business information. Cloud saved files are not lost when local hard drives fail or are stolen, or if an employee leaves the company and takes the computer & files with them.

Resources

Watch Videos …
- OneDrive for Business: Sync client updates demo
- OneDrive for Business: Demo of mobile device updates
- OneDrive for Business: Updates to web experiences
- OneDrive for Business: Demo of IT control updates
- OneDrive for Business: Demo tour of updates to sync client, mobile and web
- New IT management options in OneDrive for Business

Read …
- File Security in Microsoft SharePoint and OneDrive for Business
- Manage My Site settings for SharePoint Online
- How user profiles are deleted in SharePoint Online and OneDrive for Business
- Attach a file to an email in Outlook 2016 for Windows
- Use Windows PowerShell cmdlets to enable OneDrive sync for domains that are on the safe recipients list
- RestrictedDomains Sharing in O365 SharePoint Online and OneDrive for Business
- How to determine the version of OneDrive for Business Sync client
- How to enumerate a domain GUID in an Active Directory forest
- Transition from the existing OneDrive for Business sync client
- Deploying the OneDrive for Business Next Generation Sync Client in an enterprise environment
- Deploying the OneDrive Next Generation Sync Client on OS X and configuring work or school accounts
- Office 365 Reports in the new Admin Center - OneDrive for Business usage

SharePoint Online (SPO)

SharePoint is about giving you and the people you work with a better way to get things done together. That means your content is stored and organized in one place. You can access it from virtually anywhere and share it with anyone.

SharePoint Online delivers the powerful features of SharePoint without the associated overhead of managing the infrastructure on your own. Flexible management options ensure that you still retain the control you need to meet the compliance requirements of your organization.

Features

Content

The following Content features makes Enterprise Content Management (ECM) easy for everyone. It’s the combination of traditional content management, social capabilities, and powerful search.

- Accessibility Standards Support: Most SharePoint user interface (UI) elements, such as links, form controls, and buttons are designed to use Microsoft Active Accessibility (MSAA).
- Asset Library: Library pre-configured to use special features that help users manage rich media assets, such as image, audio, and video files
- Content Organizer: Acts as a gatekeeper for documents. You can automatically manage some important library tasks, such as managing folder sizes and routing documents to different libraries or folders.
- Document Sets: Let users store, act on, export, and add a description to multiple files as a single entity. Policies, tagging, and templates can be applied to any document set that is created.
- External Sharing: External Access: You can use sites to share content with people outside your organization. When a site is shared in SharePoint Online, an email message is
sent to the external user containing the invitation to join the site.

- **External Sharing: Guest Link**: Site users can generate a Guest Link to share documents stored in SharePoint Online with external users without requiring the external user to sign in.

- **Information Rights Management (IRM)**: IRM uses Azure Rights Management (RMS), an information protection technology in Office 365.

- **Managed metadata service**: Provides multiple taxonomies and folksonomies from a tenant-level store service that can be consumed at the site collection level. Metadata fields can even be embedded in documents.

- **Metadata-driven Navigation**: Makes it easier to discover content in large lists and libraries. User tagging incentives are introduced and offer anticipatory suggestions of appropriate metadata based on location and context.

- **Multi-stage Disposition**: Retentions policies can have multiple stages, allowing you to specify the entire document lifecycle as one policy. For example, review contracts every year, and delete after seven years.

- **Preservation hold library**: Content that is placed on hold is preserved, but users can still change it. The state of the content at the time of preservation is recorded. If a user changes the content or even deletes it, the item is retained at the time of deletion and the original, preserved version is still available.

- **Records management**: In SharePoint, you can manage records in an archive or you can manage records in-place in the same document repository as active documents.

- **Recycle Bin (SharePoint admin center)**: SharePoint Online administrators can restore a deleted site collection by using SharePoint admin center.

- **Recycle Bin (site collection)**: SharePoint users have a Recycle Bin where deleted content is stored. They can access the Recycle Bin to recover deleted documents and lists, if they need to. Items in the Recycle Bin are retained for 90 days.

- **Unique Document IDs**: Improves the managing and tracking of information by assigning a unique, human-readable identifier to every piece of content, making it easier to locate, even if the content was moved from its original location.

- **Managed navigation**: Navigation method that lets you define and maintain your site navigation by using term sets.

**Insights**

The following Insights features allow organizations to use the information in databases, reports, and business applications to address their specific business needs.

- **Excel Services**: Enables you to share workbooks with others, interact with reports, view and explore information in a browser window, and refresh data.

- **Power View for Excel in SharePoint**: You can use Excel Online to view and interact with workbooks that contain Power View sheets in a browser window.

- **Power Pivot for Excel in SharePoint**: You can use Excel Online to view and interact with charts, tables, PivotChart reports and PivotTable reports in a browser window.

- **Visio Services**: Lets users share and view Microsoft Visio Drawing (*.vsdx) and Visio 2010 Web drawing (*.vdw) files using Web Browser.

Also, refer to the Power BI section later in this document.

**Search**

The following Search features help people find the information that they need to do their jobs. Search is a combination of relevance, refinement, and people.

- **Advanced content processing**: To improve search relevance, the document parsing functionality in the content processing component analyzes both the structure and content of documents.

- **Continuous crawls**: Help keep search results fresh by frequently crawling content in SharePoint sites.

- **Deep links**: Search system automatically creates links directly to sub-sections of a main page that is frequently visited.

- **Event-based relevancy**: Determines the relevance of search results in part by how content is connected, how often an item appears in search results, and which search results people click.

- **Phonetic name matching**: Improved phonetic name matching finds search results for similar sounding names (is it John or Jon?).

- **Query rules—add promoted results**: In a query rule, specify conditions and correlated actions. The “Add promoted results” action lets you promote individual results so that they appear at the top of search results.

- **Query rules—advanced actions**: The “Add result blocks” action lets you display a subset of the search results as a group. The “Change ranked results by changing the query” action lets you change the ranking of the returned search results.

- **Query spelling correction**: Edit exclusions and inclusions lists to decide which queries the search results page should display alternative query spellings for. This feature is often called “Did you mean:?”.

- **Query suggestions**: Suggested phrases that users have already searched for. The suggestions appear in a list below the Search Box as a user types a query. Query suggestions are generated automatically, and phrases can be added to the system as “always” or “never” suggest.

- **Quick preview**: Users can rest the pointer over a search result to preview and interact with the document or site content in the hover panel to the right of the result. The preview shows rich metadata and has deep links to the main sections of the document or site.

- **Refiners**: Categorize the top documents in search results into groups that let users filter the search results.

**Sites**

- **Change the look**: Quickly customize your team site so that it’s easier to use and reflects your professional style and brand.

- **Governance**: Important but often invisible part of any site is its governance model—the set of policies, roles, responsibilities, and processes that you establish to determine how the people in your group use SharePoint.
Mobile Connectivity: You can access SharePoint sites on the go from an Internet-connected mobile phone or tablet. You can view and update documents, lists, and other site content and collaborate with colleagues, all from your mobile device.

Permissions Management: Three key security elements work together to control user access to sites and site content: permissions inheritance, permission levels, and SharePoint groups.

SharePoint Lists: List is a collection of data that you can share with site users. For example, you can create a sign-up sheet for an event or track team events on a calendar by using a list.

Drag & Drop: Upload documents, pictures, and other types of files to your site by dragging them from your computer to a library on your site.

Editing text on sites: Embed videos, cut and paste from Microsoft Word without losing your formatting, and drag and drop images into the rich text editor.

Notebook: When you create a team site, a OneNote shared notebook is automatically created as part of the site. You can use this notebook to capture, compile, and share information.

Simplified Access: When you share a site, you invite other people to have access to the site. You can share any site in which you have the required permissions.

Templates: When you create a new site in SharePoint, you start by selecting a site template to base your site on. Site templates contain lists, libraries, pages, and other elements or features that support the needs of an organization.

Themes: Quickly customize your team site so that it’s easier to use and reflects your professional style and brand. Themes are a quick way to apply colors and fonts to sites.

Usage Analytics: Web Analytics reports are pre-built reports in SharePoint that use usage data to analyze various aspects of sites and site collections.

Social

Blogs: Enable an organization to quickly share information among employees, partners, or customers. People can add insight to a difficult subject area, provide inspiration and guidance, or explain a new guideline or procedure.

One Click Sharing: Share documents and sites with others in your organization helping promote team collaboration

Ratings: Add ratings to document libraries that allow sites visitors to ‘Like’ a library document or to use a ‘star’ tool to rate it.

Wikis: Site designed for groups of people to quickly capture and share ideas by creating simple pages and linking them together. Every team site is a wiki, but you can also add a separate wiki page library to a site, or create a large-scale Enterprise wiki as a separate site or site collection

Developer

The following features support developers who want to build apps and solutions to extend SharePoint functionality.

Access Services: Build web databases and publish them to a SharePoint site.

App Catalog (SharePoint): Publish your apps to an internal corporate catalog to make them available to users

Provider-hosted Add-in: Add-ins that include at least one remote component and may also include SharePoint-hosted components

SharePoint-Hosted Add-in: Allows you to reuse common SharePoint artifacts, such as lists and Web Parts. When you take this approach, you can use only JavaScript and you cannot use any server-side code

Browser-based customizations: Customize your site without any special tools or coding expertise just by using the site settings. For example, you can change the look, title, and logo, change the navigation links, change the contents of a page, or change the appearance of views for lists and libraries.

Developer Site: Use an Office 365 Developer Site as a development and testing environment to shorten your setup time and start creating, testing, and deploying your apps for SharePoint.

JavaScript Object Model: SharePoint provides a JavaScript object model for use in either inline script or separate .js files. It includes all the same functionality as the .NET Framework and Silverlight client object models.

Office 365 APIs: Provide access to your SharePoint Online data using REST APIs. You can access the Office 365 APIs from solutions across all mobile, web, and desktop platforms

Remote Event Receiver: To handle events in an app for SharePoint, developers can create remote event receivers and app event receivers. Remote event receivers handle events that occur to an item in the app, such as a list, a list item, or a web.

Also, refer to the Office 365 Application Development section later in this document.

IT Professional

Anti-malware protection: Provides anti-malware protection for files uploaded and saved to document libraries, using the Microsoft anti-malware engine that is also integrated into Exchange.

Data loss prevention: Identifies sensitive data stored in SharePoint Online. Identifying sensitive data can help you reduce risks to your organization. You can search for the sensitive information types in your organization using the eDiscovery Center.

Encryption at rest: There are two levels of encryption at rest for SharePoint Online- BitLocker encryption and Per-file encryption.

Minimal Download Strategy (MDS): Uses a single .aspx file (start.aspx) for your pages, with the actual URL encoded in the text following the hashmark (“#”). When moving from page to page, only the changes between two compatible pages will be downloaded. Fewer bytes will be downloaded and the pages will appear more quickly.

SharePoint admin center: Enables administrators to manage features such as: Site collections, User Profiles, Managed metadata and the Term Store, Records management, Search, Apps for SharePoint, External sharing, Information Rights Management and, Self-service site creation
Windows PowerShell Support: Administrators can use SharePoint Online Windows PowerShell cmdlets to script and automate administrative tasks.

For more comprehensive feature list, refer to SharePoint Online Service Description.

Keep track of monthly updates to SharePoint Online here: What's new in Microsoft SharePoint Online.

Per-File Encryption

Encryption at rest includes two components: BitLocker disk-level encryption and per-file encryption of customer content.

File-level encryption at rest takes advantage of blob storage to provide for virtually unlimited storage growth and to enable unprecedented protection.

Refer to following online resources for more details:

- File Security in Microsoft SharePoint and OneDrive for Business
- Enhanced conditional access controls, encryption controls and site classification in SharePoint and OneDrive
- Ignite video: Learn how SharePoint safeguards your data in the cloud

Governance Model

An important but often invisible part of any site is its governance model—the set of policies, roles, responsibilities, and processes that you establish to determine how the people in your group use SharePoint.

A governance model makes it easier to:

- Let site users know when they should create a new sub-site, as opposed to creating a list or other site content.
- Make sure sub-sites and content are retired when they’re obsolete, rather than using up your storage space and diluting your search results.
- Ensure that the right people have access to the right content.
- Let sub-site owners know what templates and themes they can use.
- Smoothly transition ownership of a site from one person to another.

Elements of a governance model

Your governance model needs to address the following issues:

- Site creation
- Permissions management
- Information architecture
- Site lifecycle and retirement
- Storage limits
- Classification of information
- Customization
- Data protection
- Navigation

Search

Roles and responsibilities for supporting the site

Information architecture

A site’s information architecture is like the table of contents for a book: it determines how the information in that site — its webpages, documents, lists, and data — is organized and presented to the site’s users. Information architecture is often recorded as a hierarchical list of site content, search keywords, data types, and other concepts.

To create an information architecture, you must analyze the information to be presented in the site. Here are some of the questions you can use to develop an information architecture:

- What kind of content will you have on the site? How will that translate into sub-sites, lists, libraries, and so on?
- How will information be presented in the site?
- How will site users navigate through the site?
- How will information be targeted at specific audiences?
- How will search be configured and optimized?

Part of your information architecture might include classification of information.

If the information you’re dealing with has high value to the company, requires special security, or is covered by regulatory compliance rules, you might want to set up a classification scheme to identify specific types of content that need to be managed carefully. After you’ve organized information into specific lists and libraries, you can use governance features to manage how the content is managed.

Please refer to the article - Best practices for creating and managing team sites for more information on Governance and Best Practices.

Using SharePoint Online as a B2B Extranet solution

With SharePoint Online, partners connect directly to a members-only site in Office 365, without access to the corporate on-premises environment or any other Office 365 site. Office 365 Extranet sites can be accessed anywhere.

Industry verticals where business-to-business (B2B) collaboration is key to their business success include the automotive, manufacturing, retail and energy. The following example depicts Contoso Ltd, a company whose core of their business is collaboration with partners and vendors.
SharePoint Online B2B collaboration features

- **SPO Cloud B2B**: You can have both Intranet and Extranet (B2B) sites in the same SharePoint online tenant. You can allow sharing with user initiated invitations but with added IT control.

- **Site-owners only sharing**: Ability to have site collections where only Owners can bring in or share with new users. Site Members, which are typically external partner users, can see only the existing site members in the site. This helps in governing what partners can see and with whom they can share your corporate partnership documents. See Create a partner-facing Extranet Site in Office 365 for more details.

- **Allow users to Invite new partner users**: In certain Site Collections, Admins can optionally allow users to invite new partner users. In this model, an email invite is sent to the partner user and the user must redeem that invite to access the resource. See Manage external sharing for your SharePoint Online environment for details.

- **Restricted Domains Sharing**: Admins can control the list of partner domains that their employees can share with outside the organization. Either an allow list of email domains or a deny list of email domains can be configured. See Restricted Domains Sharing in O365 SharePoint Online and OneDrive for Business more details.

- **Auditing & Reporting**: Activities of the business partner users are audited and reports can be viewed in Office 365 Activity Reports.

For more details, please refer to the support article - SharePoint Business to Business Collaboration: Extranet for Partners with Office 365.

**New and Upcoming Features**

Keep track of monthly updates to SharePoint Online here: What's new in Microsoft SharePoint Online.

Microsoft’s vision for SharePoint Online focuses on four areas of innovation:

- **Simple and powerful file sharing** and collaboration on any device.

- The **mobile and intelligent intranet**, with modern team sites, publishing, and business applications on your desktop and in your pocket.

- An **open and connected platform** that evolves SharePoint extensibility to embrace modern web development.

- Investments in security, privacy and compliance across Office 365.

Please refer the blog post and watch the Microsoft Mechanics playlist to learn about great new features coming to SharePoint Online.

**SharePoint home page in Office 365**

The SharePoint home page in Office 365 is where you can easily find and access SharePoint sites and portals within your organization. If enabled by your administrator, you can also quickly create new team sites from the SharePoint home page.

1. A search box where you can search for sites you've recently visited or files you've recently viewed or edited. You can also search for other sites, files, or people in your organization.
2. A link to start a new team site if enabled by your administrator. For help starting a new team site, see Create a site.
3. SharePoint sites you're following.
4. Recent SharePoint sites you've visited. Clicking See all will take you to a page that lists all recent SharePoint sites you've visited.
5. Links to SharePoint sites and portals featured by your organization. If you're an Office 365 administrator, you can set which links appear in this section. For more information, see Change the Links list on the SharePoint Home page.
6. SharePoint sites you visit frequently or, if enabled by your administrator, a list of recommended SharePoint sites generated by Office Delve. In addition to the site name and link, you will also see recent activity information about the site.
7. Suggested SharePoint sites based on recent searches or, if enabled by your administrator, a list of recommended SharePoint sites generated by Delve.

For more details, refer to the Find sites and portals in Office 365 article.
Modern Experiences in SharePoint Online

The modern experiences in SharePoint Online are:

- **Modern team sites**
- **Modern list and library experiences**
- **Modern site pages**

"Modern" experiences are gradually released in SharePoint Online and you can control how they are taken into use from tenant or site level. If you have a lot of existing important customizations, you can defer taking new experiences into use until needed customizations scenarios can be enabled with them as well.

Modern Team Site

The home page of a SharePoint Online modern team site gives you immediate visibility into site activity and important documents, with quick access to Office 365 Groups, its members and associated Office 365 apps.

You can access your team site from the SharePoint Home page, from the Files section of your Office 365 Group, or on the go with the SharePoint mobile app.

For more details, refer to [What is a team site?](#) and [Keep your team updated with News on your team site](#) articles.

Integration with Office 365 Groups

Office 365 Groups is a powerful and productive platform that brings together conversations and calendar from Outlook, information and files from SharePoint, tasks from Planner, and a shared OneNote notebook into a single collaboration space for your team. All new and existing Office 365 Groups get a team site.

When you create an Office 365 Group in Office 365, a SharePoint team site is automatically created and any users you add to your Office 365 Group get added to the team site. All members of the Office 365 Group have access to the team site and can add additional document libraries, lists, and web apps as needed. There’s no need to create a distribution list or a SharePoint group.

SharePoint Mobile App

The SharePoint mobile app helps keep your work moving forward by providing quick access to your team sites, organizational portals and the people you work with throughout Office 365 by letting you search for content and people across your organization. We leverage the Microsoft Graph to power several of the in-app experiences, providing you relevant information to get to the content and people you work with most frequently.

You can use the SharePoint mobile app to:

- Navigate from Sites to team sites you follow or frequently visit.
- Navigate from Links to important sites configured by your organization.
- Catch up on what’s happened with the Activity view, which shows recent file activity in your team site.
- Open your document libraries with the OneDrive app and then edit your files using Office mobile apps like Word, Excel, PowerPoint and OneNote.
- Learn more about people you work with and discover what they are working on.
- Perform an enterprise-wide search to find sites, files and people throughout your organization.

Learn more about [SharePoint mobile app for iOS](#), [SharePoint mobile app for Android](#) and the [SharePoint mobile app for Windows 10 Mobile](#).

Team site publishing pages and new web parts

Modern team site pages are fast, easy to author and support rich multimedia content. And pages look great on any device, in a browser or from within the SharePoint app. Using pages is a great way to communicate and share your ideas—such as status and trip reports, how-to write-ups, know-before-you-go guides and frequently asked questions.
Modern Lists

We’re delivering a modern list experience that looks great and is responsive, accessible and easy to use on any device.

With modern SharePoint lists you can:

- Improve ease of use by empowering users to add columns to lists and sort, filter and group data in place.
- Elevate data quality by viewing and editing all item details in the information panel without leaving the list.
- Improve productivity by bulk editing list items with Quick Edit.
- Automate simple business processes with versions, approvals and alerts.
- Enrich static information with rich data types including people, images and managed metadata tags.

In addition, modern SharePoint lists look great on the SharePoint mobile app — making every location and every device a first-class component of business processes.

Integrating PowerApps and Microsoft Flow

Customers regularly exchange data between SharePoint lists and other systems to support business processes. Flow automates workflow and data exchange between SharePoint and a variety of Microsoft and third-party services. Now, you can create and launch Flows directly from a SharePoint list and store and modify that data within SharePoint.

To learn more about Microsoft Flow, see Get started with Microsoft Flow.

With PowerApps, you can connect, create and share business apps on any device in minutes. You can build efficient mobile forms and apps directly from a SharePoint list, without needing to write code. PowerApps and Flow share a common connector framework that allows you to weave in dozens of data sources on-premises and in the cloud, including Exchange, SQL, Dynamics, Salesforce, Google, Mail Chimp, Twitter, Wunderlist and more.
To get more on using PowerApps, see Getting started with PowerApps.

SharePoint Site Contents page

The new SharePoint Online Site contents page has been redesigned to help site owners, members and visitors get an immediate view into the activities within the site, like site visits and trending content. Plus, it provides clearer access to add lists, document libraries, subsites and apps.

Site visits and Trending content

You can view the number of visits to your site within a rolling 7-day period. You can also view trending content - the most popular content on your site - over a rolling 2-week period.

Tips

Need help getting started creating and setting up content? Check the Tips box. You can go directly to the pages where you can set up and customize your site, lists, libraries, and more.

Refer to The SharePoint Site Contents page article for more information.

Support for # and % in File and Folder names

We’ll be shipping support for # and % as supported characters in file and folder names across document libraries in SharePoint Online and OneDrive for Business. This will allow people to create, store, and sync files containing # and % characters whether those characters are used as a prefix or suffix to the file or folder name.

# and % will be limited to use in file names in addition to SharePoint Online and OneDrive for Business document libraries and related folders. The use of # and % outside of document libraries is not supported at this time.

Refer to New support for # and % in SharePoint Online and OneDrive for Business and Upcoming changes to SharePoint and OneDrive for Business APIs to support # and % in file names articles for more information.

SharePoint Online sync preview

Public preview of a single sync experience for all your files in Office 365, across OneDrive and SharePoint has been announced. Refer to the new sync options in OneDrive section later in this document.

Auto-acceleration for your SharePoint Online tenancy

SharePoint Online now supports home realm discovery when users log on by using third-party identity providers, such as Active Directory Federation Services (ADFS). This feature reduces logon prompts for users by “accelerating” the user through the Azure Active Directory home realm discovery logon page. This feature is called auto-acceleration and is applied by running a Windows PowerShell cmdlet in the SharePoint Online Management Shell.

Refer to Enable auto-acceleration for your SharePoint Online tenancy article for configuration details.

Scenarios

This section provides a walkthrough of some of the scenarios where SharePoint Online can be used in an Organization. In most of these scenarios, related services like OneDrive, Groups, RMS, Yammer, O365 Videos also play a role.

Onboard new employees

First days are stressful—for both new employees and the HR department. There’s a lot to learn and a lot to tell. SharePoint can be the single hub for everything that a new hire needs on its first day, and beyond.

You can make it easier for people to understand the business, and ramp up rapidly. You can take advantage of automatic task routing and use forms built right into your site, leading to less paperwork and faster completion.

- Onboarding Site with all the information new hires would need – Company information, Employee handbook, onboarding processes, Forms to fill and, documents to submit.
- New Hire Training material. Wikis, Videos, Documents and, links to LMS Courses/Modules
- Welcome Videos from the Leadership Team published in the New Hire Channel on O365 Videos
- Scan, OCR and Upload all the statutory documents submitted by Employees. Search/retrieve as per need later
- Business Process Workflows to gather Employee information and complete joining formalities
- Yammer integration. Share content on Yammer and engage new hires in 2-way conversations

Share your knowledge
With SharePoint, your knowledge isn’t limited to the people in your immediate circle. SharePoint lets you share what you know with as many people as you want, whether they’re in your department or in another country.

- Knowledge Management Portal with one or more Site Collections having one or more document libraries each to store content as per the appropriate information architecture
- Assign Viewers, Members and Owners Permissions to users as per the business need
- Rights Management integration in document libraries containing sensitive documents
- Approval workflows to review the content being submitted
- Term Store hierarchies to create a Taxonomy to tag, navigate and search documents
- Retention Policies to expire/archive old content
- Show Videos published in Office 365 Videos
- Yammer integration to share the documents on Yammer for feedback, discussion and updates
- Delve powers the content discovery

**Digitize your records**

All Organizations handle a lot of paper documents – employee records, Know Your Customer (KYC) documents, legal agreements, land records, project files, purchase orders etc. Storing paper can be costly, particularly when offline storage is required, and offers no return on investment. Retrieving paper documents is time consuming and the possibility exists that they can be misplaced.

Document digitization is the process of converting paper documents into digital format. SharePoint lets you manage these digital records securely and meet legal and compliance needs through its content encryption, retention policies, auditing and ediscovery capabilities.

Microsoft Partners provide scanning solutions integrated with SharePoint Online to support your document input lifecycle needs through scanning, OCR, barcode recognition, indexing and many more other features.

- Share and Track records. Scanning can help you share the information in those records instantly with users across multiple locations. They can eliminate the need for costly reproduction and mailing and are also easier to track electronically.
- Prepare for disasters. Scanned records can be an integral part of your disaster recovery plan. This provides extra assurance that you will be able to access the information in the records should disaster strike.
- Respond to audits and discoveries. Records are subject to audits, discovery demands, and related legal inquiries. These requests are often high-profile and extremely time sensitive. Digital records are easy to store & search and can help you quickly comply with these kinds of requests.
- Protect aging paper originals. In case of fragile paper records, scanning can offer significant benefits. Digitizing fragile records preserves the integrity of the originals by allowing them to be handled less. And often, the scanning process increases legibility of aging or hard-to-read records.
- Save money and free up office space. Storing paper records in your office is extremely costly. If you have paper records that are currently taking up space in your office, digitizing these records can save you both storage space and money.

**Boost business processes**

With SharePoint you could improve your business processes and help people save time. Automating recurring approval or review processes is easy and doesn’t take much time with built-in workflows. With Visio you can work with others to design and model processes that run in SharePoint.

- Employee Self Service Portal. Automate all employee processes like Leaves, Expense Reimbursement, Employee Benefits, Investment Declaration, Voluntary Provident Fund, LTA
- Automate IT Service requests like SmartCard, Hardware procurement, Software procurement, Software download, Installation and, Support
- Other requests like Travel, Cab, Visa, Company Letter, Employment Certificate, Salary Certificate

**Align your teams**

Deals are won and lost depending on how closely marketing and sales teams are aligned. That’s how important communication is and that’s why SharePoint gives people a better way to stay in sync.

- SharePoint site (Sales Portal) where sales representatives can access the most up-to-date marketing information, even when on the road, so that messaging is consistent.
- Sales and Marketing teams can work together, refine content and keep it up to date
- Sales Excellence team can publish Sales reports, campaigns, promotions, contests and other relevant updates
- Rights Management integration in document libraries containing sensitive documents
- O365 Video Channels to host videos on service offerings, product updates, selling it right, major announcements, how to compete and, win & loss analysis
- Yammer Groups where teams can have conversations, share ideas, share best practices, knowledge on customers, competitors, or sales processes, making it easier to act on new opportunities and close deals more quickly.

**Crunch the numbers together**

Crunching the numbers doesn’t have to be difficult. SharePoint lets you gather a lot of information from different people and different departments into a single spreadsheet or multiple. Best of all, you can work with more than one person—even your whole team if you want—on the same spreadsheet at the same time.

Crunching the numbers together doesn’t just make your life easier, but it also helps boost productivity and can lead to more insights that can be easily shared with anyone in your organization.

- Budgeting or Quota setting exercises where multiple teams need to come together and provide inputs which need analysis and discussion
Help meet compliance needs

Trying to make sense of all the rules, laws, and regulations you need to follow is hard enough without retrofitting your whole IT infrastructure to comply with them. You won’t run into this problem with SharePoint because it’s built to make compliance easy and straightforward.

- Digitize and preserve important Paper documents and files like land records, employee records, contracts and other legal agreements
- Automate many of the processes for managing, protecting, and preserving critical data
- Create retention schedules to manage the entire life cycle of your organization’s digital assets.
- Respond quickly to litigation or audits by using self-service eDiscovery to help get what you need immediately without involving IT.

Provide the right support

SharePoint and Yammer working together can help you take your IT support beyond the telephone - way beyond. Think of it as a virtual helpdesk.

- A one-stop shop where people can get in touch with IT, browse through a shared knowledge base, and submit ticket requests to get help.
- Enterprise Wiki to capture and share all the support and troubleshooting information. Quicker answers to common problems.
- Office 365 Videos channel to host videos on common tasks and self-service troubleshooting
- Yammer Groups for faster, more focused conversations between people and IT—all without ever being placed on hold.

Other scenarios

With its rich feature set SharePoint can help you solve lot more business problems. Some of these would require study of existing processes and applications and Organization’s vision and priorities.

- **Intranet Portal.** Corporate news, Industry News, company history, founders, leadership team, offices, CSR activities, award winners
- **Department Sites.** HR, Finance, Legal, Sales, Marketing, Travel, Quality etc. – structure, leaders, locations, useful documents, FAQs, Yammer presence, Video channels.
- **Country sites.** Travel information for employees visiting different countries. Cities, Culture, Stay, Food, Currency, Things to see, Local contacts, Helpline numbers, useful Yammer Groups and Video Channels
- **Careers website.** Career profiles, Roles in technical / non-technical streams, training opportunities, mentoring programs, soft skill programs, part-time education, work from home programs and, current openings.

Resources

**General Information**

- [SharePoint Online Service Descriptions](#)
- [Data Encryption in OneDrive for Business and SharePoint Online](#)
- [Find content about SharePoint Online for Office 365 for business](#)
- [Should I save my documents to OneDrive for Business or a team site?](#)
- [What is a team site?](#)
- [What is a document library?](#)

**Microsoft Virtual Academy (MVA) Courses**

- [The Modern Intranet Powered by SharePoint Services](#)
- [Plan a Collaboration Solution Using Office 365](#)
- [SharePoint and Office 365 Cloud-Connected Hybrid Scenarios](#)
- [Office Graph, Delve, and SharePoint: Better Together](#)
- [Transform SharePoint Customizations to SharePoint App Model](#)
- [SharePoint Online Migration Planning](#)

**Planning**

- [Plan sites and manage users](#)
- [Plan content on sites](#)
- [Plan the content for your Team Site](#)
- [Best practices for creating and managing team sites](#)

**Performance**

- [Diagnosing performance issues with SharePoint Online](#)
- [Navigation options for SharePoint Online](#)
- [Using content delivery networks in SharePoint Online](#)
- [Delay loading images and JavaScript in SharePoint Online](#)

**Developers**

- [Customize your Office 365 team site for file storage and sharing](#)
- [SharePoint Add-ins](#)
- [Use the App Catalog to make custom business apps available for your SharePoint Online environment](#)

Also, refer to the [Office 365 Application Development](#) section later in this document.

**Administrators**

- [Find content about the SharePoint Online admin center](#)
- [Manage site collections and global settings in the SharePoint admin center](#)
- [SharePoint Online: software boundaries and limits](#)
- [Introduction to the SharePoint Online Management Shell](#)
- [Enable auto-acceleration for your SharePoint Online tenancy](#)
- [Introduction: Control user access with permissions](#)
- [Types of files that cannot be added to a list or library](#)
- [SharePoint Business to Business Collaboration: Extranet for Partners with Office 365](#)
- [Restricted Domains Sharing in O365 SharePoint Online and OneDrive for Business](#)
Outlook Groups

If your team uses distribution lists, file sharing, and collaborative note-taking to get things done, then you’ll love Office 365 Groups in Outlook. Outlook Groups is a powerful and productive platform that brings together conversations and calendar from Outlook, files from SharePoint, tasks from Planner, and a shared OneNote notebook into a single collaboration space for your team.

When you subscribe to a group, all the email messages and meeting invitations are sent directly to your inbox. But they’re also stored in your group folder. So, don’t worry about accidentally deleting something or creating a rule to move mail from your inbox to a private folder. Delete it from your inbox after reading it and know there’s still a copy safely stored in your searchable group folder; in fact, all the messages since the group began are stored in the group folder. Even if you weren’t a member at the beginning, you’ll get to see the full history once you join.

Features

Conversations
- In the Group inbox, all messages sent to the Group are displayed in a list view.
- Conversation details are displayed in the reading pane using a new conversation model
- Start a new conversation with Group members or reply inline to a conversation
- Send an email to a Group from your inbox, just like using a distribution list

Files
- File storage for Groups is accessed through a dedicated document library connected to the Group.
- Familiar OneDrive document management actions are available in the Group document library, such as document creation and upload.
- Provides some powerful scenarios involving co-authoring and attachment management

Calendar Events
- Helps you to track all your group events in one place, visible to everyone in the group.
- Visualize how group events will work into your schedule in Outlook Web App by overlaying your calendar with the group calendar.
- Any member of the group can create and update events, making it easy to keep the schedule up to date.
- For meetings scheduled on your personal calendar, you can add the group to the attendee list

Navigation
- The left navigation pane in Outlook Web App and Outlook makes it easy to navigate to any Group you have joined.
- Groups which you have marked as “favorites” are displayed first, ensuring that your key Groups are always just one click away.
- The Group header makes it easy to switch between Group components, and provides easy access to Group management features such as favorites and subscription

Group Administration Features

The following new capabilities are available:

- **Ability to update privacy type.** Group owners can change the privacy setting from public to private or vice versa by editing the group properties in Outlook on the web.
- **Multi-domain support.** Administrators have control to create groups in specific domains of their choosing.
- **Guidance to configure Office 365 Groups with on-premises Exchange mailbox users.** You can make groups created in Office 365 available to your on-premises users.
- **Allow users to send as the Office 365 group.** If you want to enable your group’s shared mailbox to “Send As,” you can now use the PowerShell cmdlets to configure this. Users can go to the group, create a new email and change the “Send As” field to the group’s email address.
- **Creation policy in Azure Active Directory.** Allows administrators to restrict group creation to certain users. This ensures that the creation of Office 365 groups through all endpoints, such as Planner and Power BI, can be given to selected users. The existing Exchange Mailbox policy only applies to creation in Exchange.
- **Usage guidelines.** Define usage guidelines for Group to educate your users about best practices that help keep their groups effective and educate them on internal content policies.
- **Exchange Admin Center (EAC) UI for migrating Distribution Lists (DLs) to groups.** Migrate a DL to a group directly from the Exchange Admin Center with one click.
- **Naming policy in Azure Active Directory.** Administrators will be able to configure a policy for appending text to the beginning or end of a group’s name and email address no matter where the group is created (e.g., Outlook, Planner, Power BI, etc.). Administrators can also configure a list of specific blocked words that can’t be used in group names and also rely on the native list of thousands of blocked words to keep their directories clean.

- **Restrict access to SharePoint Online with Microsoft Intune**
• **Ability to search for private Groups files.** Groups files (stored in a SharePoint document library and surfaced in OneDrive for Business) and Office Delve are integrated. So, users can search content from both public and private groups as long as they’re a member.

**Guest Access**

Guest access enables you and your team to collaborate with people from outside your organization by granting them access to group conversations, files, calendar invitations, and the group notebook. Access can be granted to a guest—including partners, vendors, suppliers, or consultants—by any group owner.

**How it works**

Office 365 users can use Outlook on the web to add and manage guests in their Office 365 groups. Guests can have any email address, and the email account can be a work, personal, or school account.

• **Step 1** A group owner adds a guest to the group or a guest is nominated by group members. The group owner approves the nominees.

• **Step 2** The group owner is informed of what the guest can access within the group. A combination of text and icons give all group members clear indication of guest participation.

• **Step 3** The guest receives a welcome email and can participate in group conversations, receive and respond to calendar invitations, and access the group files.

• **Step 4** Guests can leave the group at any time via a link in the footer of all group emails and calendar invites.

Guest access is a tenant-level setting and is enabled by default. A tenant admin can manage the guests and their access to Office 365 group resources using PowerShell. See Allow external people guest access to Office 365 groups for instructions.

**Evolving Distribution Lists with Groups**

Distribution Lists (DL) are the leading way users share information with a set of people today. Office 365 Groups provide a way to improve that experience.

**Groups increase productivity** – Enabling a richer and immersive experience, yet familiar in integrating with email & existing business workflows

• Appear alongside your Inbox & require no context switching. Make them favorites and access them offline.

• Addressable in emails just like DL’s but provide a better down-level experience.

• Allows you to focus & immerse on a topic or project. Modern Reading experience helps you communicate @speed of social.

**Groups allow you to self-organize,** create dynamic teams & work as a network. Benefit from the collective wisdom of your team.

• Get access to complete history and context.

• **Find & discover new groups & joining them easily.**

• **Form and create groups instantly and to work with your teams.**

**Groups enable frictionless collaboration & sharing** by integrating with O365. Empowers teams to accomplish goals and milestones!

• Enable frictionless collaboration by accessing and sharing files from any conversation. View all group files at a glance.

• Meet milestone and goals by scheduling meetings on team calendar.

• Make better & faster decisions with your team via Skype meetings.

• Access them from anywhere, across all devices and Outlook experiences

**Resources**

• [Upgrade distribution lists to Office 365 Groups in Outlook](#)

• [Which distribution lists can be upgraded](#)

• [What to do if the upgrade doesn’t work](#)

**Outlook Groups mobile app**

The Outlook Groups mobile app brings the Office 365 Groups shared mailbox to your mobile device so you can collaborate with your team while on the go.

With Outlook Groups you can:

• Easily participate in group email conversations

• View and co-author Office documents (Word, Excel, PowerPoint) shared with your group

• Schedule events on the group calendar

• Upload files to the group document library

• “Like” a message, or @mention a person or a group

You can also work together using the group’s shared OneNote notebook and discover and join Office 365 Groups relevant to you. To see a list of Office 365 Groups features available on the various platforms, see Compare Outlook Groups on all platforms.

**Connectors for Groups**

Office 365 Connectors are a great way to get useful information and content into your Group. Any user can connect their group to services like Trello, Bing News, Twitter, etc., and get notified of the group’s activity in that service. From tracking a team’s progress in Trello, to following important hashtags in Twitter, Office 365 Connectors make it easier for an Office 365 group to stay in sync and get more done.
How connectors work

When you connect a tool or service to a group, everyone in the group can see the messages delivered by that service. For example, let’s say your group wants to follow news reports about your company’s new product that’s hitting the market. You could add the Bing News connector to your group, configure it to send you links to topics of interest, and specify the frequency of delivery. When news headlines are sent to your group, everyone in the group will be able to read and respond to them.

The messages are delivered as rich connector cards, which can be viewed in multiple clients including Outlook on the web, Outlook for Windows, and in the Groups app for iOS and Android. Here’s an example of what the UserVoice connector card would look like:

Microsoft Teams

**Microsoft Teams** is a chat-centered workspace in Office 365 that’s a hub for teamwork. It’s extensible and customizable, so you can tailor it for the information, your team needs. Microsoft Teams supports flexible communication, including chats, calls, meetings, and private and group conversations.

**Core Values**

Microsoft Teams is designed for highly engaged teams that work closely together to get things done:

- Share updates and give feedback in the open
- Make quick decisions and stay in the loop with team activities
- Coordinate on projects and tasks, including co-create content and deliverables

**Key Differentiators**

Being part of Office 365 means Microsoft Teams comes with built-in integrations to Azure Active Directory, SharePoint, OneNote, Office 365 Groups and more. This allows you to maximize your Office 365 investments, while providing a simple and secure user experience across tools.

**Chat for today’s teams**

First and foremost, Microsoft Teams provides a modern conversation experience for today’s teams. Microsoft Teams supports not only persistent but also threaded chats to keep everyone engaged. Team conversations are, by default, visible to the entire team, but there is of course the ability for private discussions. Skype is deeply integrated, so teams can participate in voice and video conferences. And everyone can add personality to their digital workspace with emojis, stickers, GIFs and custom memes to make it their own.
Hub for teamwork

Second, Microsoft Teams brings together the full breadth and depth of Office 365 to provide a true hub for teamwork. Word, Excel, PowerPoint, SharePoint, OneNote, Planner, Power BI and Delve are all built into Microsoft Teams so people have all the information and tools they need at their fingertips. Backed by the Microsoft Graph, intelligent services are surfaced throughout the workspace to help with information relevancy, discovery and sharing. Microsoft Teams is also built on Office 365 Groups—our cross-application membership service that makes it easy for people to move naturally from one collaboration tool to another, preserve their sense of context and share with others.

Customizable for each team

Third, since all teams are unique, we’ve invested deeply in ways for people to customize their workspace, with rich extensibility and open APIs available at general availability. For example, Tabs provides quick access to frequently used documents and cloud services. Microsoft Teams also shares the same Connector model as Exchange, providing notifications and updates from third-party services like Twitter or GitHub. Further, we are including full support for the Microsoft Bot Framework to bring intelligent first- and third-party services into your team environment.

Security teams trust

Finally, Microsoft Teams provides the advanced security and compliance capabilities that our Office 365 customers expect. Data is encrypted in transit and at rest. Like all our commercial services, we have a transparent operational model with no standing access to customer data. Microsoft Teams will support key compliance standards including EU Model Clauses, ISO 27001, SOC 2, HIPAA and more. And, as customers would expect, Microsoft Teams is served out of our hyper-scale global network of data centers, automatically provisioned within Office 365 and managed centrally, just as any other Office 365 service.

Features

Teams and Channels

- Teams are collections of people, content, and tools surrounding different projects and jobs within an organization. Team members can share conversations, files, notes, and more!
- Keep team conversations organized in specific channels. You can dedicate channels to specific topics, projects, disciplines—whatever you like!

Creating Teams

- Click on Create a Team below the Team list to create a team
- Some organizations might decide to only let certain people create teams
- A team owner can add people to the team by clicking on Add members option

- Let people know that you created team. In the General channel, you can @mention the team by typing `@team` or `@{team name}` in the compose box.

Channels

- Create a new Channel by clicking on Add a Channel option in the team list
- Let people know you created a channel. In the compose box of your brand new channel, you can mention people’s names (`@somebody`) to get their attention
- See all the Channels in the team by selecting the Channels tab

Managing Teams

- Team owner can change team settings by clicking View Team option and going to Setting tab
- Team owner can change the team picture in team settings
- Leave a team at any time by clicking ... next to the team name and selecting Leave the team option

Uploading Files

- To upload a file to a channel, click the Files tab at the top, then click Upload a file. When you upload a file, everyone on the team can see and edit it from the Files tab.
- You can also upload a file by sending a message with a file attachment to a channel. This will add the file to the channel’s Files tab and share it with everyone on the channel.

Ownership

- Team owners can change the name of team channels anytime they like using the Edit this channel option
- Team owners can delete a Team using Delete the team option. Your team will be permanently

Other Admin Settings for Team owners....

- Set team members’ permissions for channels, tabs, and connectors.
- Control `@{team name}` mentions that will notify everyone on the team.
- Allow `@channel` or `@{channel name}` mentions, which will notify members who’ve favorited the channel.
- Allow usage of Giphy, stickers, and memes

Meetings and Calling

Team Meetings

- Team meetings are a quick and easy way for people in a channel to go from a conversation to an impromptu meeting.
- Anyone from the team can join, so people work in the open.
- Team meetings include audio, video, and sharing
- Start a new meeting, by clicking the meeting icon in a new conversation
- Keep the context of the conversation and bring in the people you’re already talking to by clicking the meeting icon in an existing conversation
- Desktop sharing lets you see what someone is presenting and is an easy way to work together on a shared document

Scheduling Team Meeting
• Clicking on the Schedule icon on the left side of the app will show you a list of all your currently scheduled meetings.
• Click “Schedule Meeting” to schedule a new meeting.

Joining a Team Meeting
There are three ways to join meetings in Microsoft Teams:
• You can join from a message within a conversation.
• If you're working in another channel and your messages aren't currently in view, you can join a meeting from a notification that will appear in the top right corner of your screen.
• You'll receive a notification that you've been invited to a meeting, and you can join from there.

Multitasking in a Meeting
• Multitasking during a meeting is easy—you can check on what's going on in other channels or catch up on your messages.
• Whenever you click away from a meeting, a call monitor will appear. From there, you can click back in an instant.

Managing My Space
Availability
• Change your status by clicking on your picture or avatar, and update.

Personalizing
• Reorder your teams by clicking and dragging the team name anywhere in your team list.
• Channels follow the alphabet, and there's no reordering the alphabet.
• To change your profile image, just click on your avatar on the left-hand side of your screen, then click Change picture.
• All the channels you've already favorited will be listed underneath the team they belong to in your Teams view.
• To favorite a new channel, click on the overflow menu that appears under your current favorites for each team. Scroll down to the channel you want to favorite. Click on favorite icon next to the channel name.

Keeping up with information updates
There are lots of things you can do to stay up-to-date. You can:
• Arrange your teams in an order that makes sense to you, putting the busiest teams at the top of your list.
• Favorite the channels you use the most. This way, they'll stay visible in your team list, and you'll see when new messages have been posted.
• @mention people so they @mention you. You'll see you've been @mentioned in your notifications. Also, a red circle with a number in it will appear next to the channel name.
• And watch the Activity button. That lets you know whenever you've got notifications.

Connectors
• You can set up a connector, which lets you get real-time updates from your external apps and services sent directly to a channel. Some examples are Twitter, Bing News, Trello, and GitHub.

• We have connectors that let you integrate apps and services right into the conversation.
• To add connectors, click on the channel name, click ..., and then click Connectors.
• We support incoming webhooks, which can be set up by creating a connector. They allow you to build custom integrations with other apps and services.
• You can see connector messages in the mobile app, but you can only add them in the desktop or web app.
• Team owner can disable the setting that allows non-owners to add connectors.

Files
• To share files with a team, go to the Files tab at the top of a conversation, and click Upload. You can also attach a file directly to a message and it will still appear in your Files tab.
• The easiest way to send a file in a direct message or channel is to click paperclip icon in the compose box.
• In a one-on-one or group conversation, you can upload a file to your OneDrive for Business and share it or choose an existing OneDrive file. Everyone in the conversation will automatically be given permission to view, edit, and share the file.
• In a channel, you can choose to upload a file from your Microsoft Teams, Recent files, OneDrive for Business, or desktop. The entire team will be able to access it instantly.

Manage Microsoft Teams
Office 365 admins can enable and manage Microsoft Teams directly from the Office 365 admin center.

In the Services & add-ins page, admins will find a new Microsoft Teams section where they can enable/disable the service for their organization. Admins can configure Microsoft Teams for their organization, including notifications, feedback, bots and screen sharing in meetings.
Scenarios

Microsoft Teams is particularly well suited for teams where team members are highly engaged, iterating on shared deliverables. There are such scenarios across Sales, Marketing, Project Management, Engineering and Customer Service.

Sales
- Close deals faster: get answers to customer questions, advice on objections and approvals
- Spend more time selling: digitize status meetings, sales training and expert Q&A sessions
- Stay ahead of customers: know the latest company, product and competitor news
- Build a winning culture: share customer feedback and wins with valuable context
- Update the account team with customer feedback and implications for account management

Marketing
- Execute marketing campaigns and events flawlessly: coordinate tasks and deliverables, share updates across multiple stakeholders
- Manage the creative process from concept to launch: share designs, gather feedback and approvals
- Work closer with field marketers: keep the field in the loop, get their input and feedback
- Build a creative team culture: share ideas, inspiration and best practices

Project Management
- Collaborate engineering and development across a distributed team
- Streamline product launches and releases: coordinate tasks and deliverables, share status and updates
- Speed up issue resolution: spin up digital war rooms for escalations and track progress

Engineering
- Develop faster across distributed teams: enable continuous communication and smooth handoffs between teams
- Build a collaborative culture: discuss ideas and requirements, gather inputs and feedback in the open

Customer Support
- Enable continuous knowledge-sharing: share known issues and fixes between shifts
- Build a collective knowledge base: document customer FAQs and subject matter Q&A
- Speed up issue resolution: troubleshoot critical issues together in various subject matter experts
- Stay ahead of customers: know the latest product updates and customer offers

Resources

Watch
- Short video: *Introducing Microsoft Teams*
- *Introduction to Microsoft Teams*
- *Deploying and Operating Microsoft Teams*
- *Microsoft Teams: New Features Released at General Availability*

For Users
- Blog post: *Introducing Microsoft Teams—the chat-based workspace in Office 365*
- *The Ultimate Guide to Chat-Based Tools*
- *Microsoft Teams Help, FAQ*
- *Teams and Channels*
- *Meetings and Calling*
- *Managing My Space*
- *Managing Notifications and Staying Focused*

For Admins
- *Microsoft Teams Customer Success Kit*
- *Frequently asked questions about Microsoft Teams – Admin Help*
- *Microsoft Teams: Step-by-step intro for using, enabling and managing the experience*
- *Administrator settings for Microsoft Teams*

Microsoft Planner

Planner makes it easy for your team to create new plans, organize and assign tasks, share files, chat about what you’re working on, and get updates on progress.

Get Organized Quickly
- **Easy to use.** Launch Planner from the Office 365 app launcher with a single click. You can then create a new plan, build a team, assign tasks, and update status—in a few easy steps.
- **Organize work visually.** Each plan has its own board, where you can organize tasks into buckets. You can categorize tasks based on their status or on whom they’re assigned to.
To update the status or change assignments, just drag and drop tasks between columns.

**Work together effortlessly**

- **Visibility and transparency.** The My Tasks view provides a comprehensive list of all your tasks and their status across all your plans. When working together on a plan, team members always know who is working on what.
- **Collaborate around tasks.** Built for Office 365, Planner lets you attach files to tasks, work together on those files, and even have conversations around tasks without switching between apps. With Planner, all your team’s discussions and deliverables stay with the plan and don’t get locked away across disparate applications.

**Never miss a beat**

- **Works across devices.** Planner works across all your devices. And with Planner, everyone is always on the same page. A glance at Charts is all it takes to know where things stand and if the team is making enough progress towards their goal.
- **Email notifications.** With Planner, you’ll never miss a beat! Receive email notifications whenever you’re assigned a new task or added to a conversation.

**Features**

- **Create a Plan.** Creating a plan also creates a new Office 365 Group, making it easy for you and the people you’re working with to collaborate not only in Planner, but also in OneNote, Outlook, OneDrive, and more.
- **Public or Private Plans.** Public plans are visible by everyone in your organization. Private plans are only visible by people you’ve added to the plan. When people in your organization search for plans, only public plans come up in search results.
- **Open a Plan.** Select a plan under Favorite plans or All plans.
- **Add People.** In Planner, select Add Members, and then enter the name of the person you want to add.
- **Remove People.** If you no longer need someone on your plan, select the arrow next to the plan members, point to the person you’re removing, select the three dots, and then remove them.
- **Add Tasks.** Once you’ve started a plan, you can add tasks to list what needs to get done.
- **Add details to a task.** Tasks can have a lot of different details in Planner. You can decide what you want to include or leave out, and how you want your tasks to appear on the Board.
- **Attach files, photos, or links to a task.** In Planner, you can attach files, photos, and links directly to the tasks themselves, making the plan a central location for everyone to collaborate and get work done.
- **Preview Picture for Tasks.** The first time you attach a file, photo, or link to a task, that attachment becomes the task’s preview picture.
- **Work on the attachments.** With real time co-authoring in Office Online, you can make changes at the same time as your teammates without worrying about losing work.
- **Add comments to chat with your team.** Your team can read and respond to comments in the task, in Outlook, or in the Outlook Groups app.
- **Schedule events with your plan’s calendar.** Every plan also has a calendar, which is helpful for capturing events that people working on the plan should attend.
- **Capture and organize meeting notes.** Meeting notes don’t need to live on paper or in random Word docs and emails. Instead, use your plan’s notebook to get organized.
- **Add Checklist.** As you start planning your work, there may be lists of things you need to keep track of for each task. You can add a checklist to a task to help you stay on top of your to-do list.
- **Set the checklist as the task preview.** Make it easy to see what work is involved in a task.
- **Mark things completed.** From the Board view check them off as you complete them.
- **Turn a checklist item into a task.** If a checklist item starts to get more complicated, you can turn it into a separate task in your plan.
- **Delete a checklist item.** Don’t need a checklist item anymore? Select the task to bring up its details, point to a checklist item, and then remove the checklist item.
- **Create Buckets.** After adding tasks, you can sort them into buckets to help break things up into phases, types of work, departments, or whatever makes the most sense for your plan.
- **Move tasks into buckets.** Once you’ve created a bucket, you can drag tasks into the bucket to start getting organized.
- **All Labels.** You can flag tasks with multiple colored labels to help you see, at a glance, which tasks have certain things in common.
- **Assign People to Tasks.** When you’re ready to decide who’s doing what, there are several ways you can assign tasks to people in Planner.
- **Drag member photos onto tasks.** A quick way to assign someone is to drag the person’s photo from the plan members area down to their task.
- **Assign a task to more than one person.** When a task is being worked on by more than one team member, you can assign it to up to 11 people so that they can all see it in their My tasks list. When any team member marks the task complete, it’s marked complete for all team members.
- **Select names to change assignments.** If you need to change who a task is assigned to, select the name of the currently-assigned person on the task, and then choose a new person from the list.

**Resources**

- Microsoft Planner help
- Answers to top Microsoft Planner questions
- Microsoft Planner for admins
- Hybrid Exchange users can’t manage Favorite Plans and can’t add comments in Microsoft Planner
Yammer

Companies looking to become more agile and customer-focused need to move beyond traditional centralized models to a more interconnected, flexible way of working.

Yammer offers a smarter, faster way to connect and collaborate across a company. Yammer’s open, flexible workspaces are ideal for cross-company collaboration. With Yammer, individuals and teams at a company can:

- Share and collaborate with the right people inside and outside the organization
- Tap into knowledge across an organization
- Connect and engage everyone
- Work seamlessly with Office

By creating a dynamic network of people and knowledge across a company, Yammer enables employees to respond faster, accomplish more, and keep the business moving forward together.

Features

- **Groups**: From departmental communications to your next campaign launch or company event, set up a Group in seconds for any team, project or interest.
- **Related Groups**: You can add and prioritize groups related to the ones you’ve already joined so coworkers can discover even more relevant people, content, and conversations.
- **Announcements**: Share an announcement with a group to instantly notify members of important updates. Administrators can pin Announcements to a group for easy discovery.
- **User Profiles**: Upload a picture, fill in contact details and list your expertise. Profiles aggregate all your information, including conversations and files.
- **Expertise**: Reach across the company to find the experts you need. Because Expertise is instantly searchable, useful information can be found on demand.
- **Praise**: Give and receive recognition for a job well done. Accomplishments and badges appear on profiles in the Praise tab.
- **Publisher**: Use the publisher to share an update, add a conversation by @mentioning their name.
- **@Mention**: Notify other coworkers and loop them into a conversation by @mentioning their name.
- **Private Messages**: Start a private dialogue with one or more coworkers. You can add more participants at any time.
- **Share Conversations**: Share conversations to another group’s feed or via a private message to relay information and important messages.
- **Office Online support**: With Office Online support in Yammer, documents uploaded to Yammer can be viewed/edited with Office Online.
- **Polls**: Easily create a poll to survey coworkers and gather feedback from others to inform your decision-making.
- **Files**: Share Microsoft Office documents, PDFs, images and videos across teams and get feedback right away.
- **Notes**: Draft content, collect notes and create wikis with your team members right inside Yammer and see character-by-character changes in real time.
- **Email a File**: Easily and securely email documents directly from your team workspace. Provide access to a file or Note with a secure, one-time URL and revoke viewing rights at any time.
- **Official Content**: Mark files and Notes as official and read-only. Official Content appears higher in search results and content directories for easy access.
- **Inbox**: Inbox automatically aggregates your @mentions, group announcements, conversations and private messages so you can easily prioritize responses.
- **Feeds**: Stay on top of relevant conversations, files and projects happening across the company. Feeds let you quickly engage in conversations, @mention coworkers to loop them into a discussion and preview documents.
- **Recent Activity**: Discover what your coworkers are working on as it happens. Ticker shows you activity stories happening in real time, including page edits, file uploads and updates made in other business applications.
- **Topics**: Tag content with topics to help others quickly find related messages, files, Notes and more by adding a hashtag (#) before the word or by searching for existing topics.
- **Universal Search**: Full-text search lets you quickly find files, Notes, conversations, people and data across your Yammer network and integrated business apps.
- **External Networks**: Create a dedicated online workspace to collaborate with business contacts outside of your company’s Yammer network.
- **Fast Network Switching**: Seamlessly switch between internal and external networks. Easily monitor conversations within external networks and immediately share insights with your company’s internal network.
- **Embeddable Feeds**: simple code snippet lets you easily embed any Yammer feed into your business application.
- **Like and Follow Buttons**: Add Like and Follow buttons to your business applications so employees can engage with objects outside of Yammer.
- **Data Export**: Manage and export network data according to company policies with a single click. You can also schedule daily or weekly data exports to meet legal and regulatory compliance requirements.
- **Keyword Monitoring**: Monitor keywords to track sensitive content. When a user posts a message that includes a monitored keyword or phrase, all Verified Admins are notified.
- **Analytics**: Gain insights from network analytics to find out how employees are using Yammer. From usage metrics to member statistics, identify ways to drive growth and increase the value of your network.
- **Usage Policy**: Set a custom usage policy for your company’s network and require users to accept it.

Recently released features

- **External Groups**: Enables you to include people outside your company in a Yammer group—making it easier for extended teams to work together.
• **Integration with Office 365 Audit Log.** View Yammer events on users, groups, files, admins and network settings through the Office 365 Management Activity API and in the Office 365 Security & Compliance center. This will give you the ability to access and monitor various security and compliance-relevant Yammer events for your organization.

• **Integration with Office 365 Groups.** Yammer users can easily turn ideas into action with access to SharePoint sites and document repositories, a shared OneNote notebook, and lightweight task management with Planner.

• **Yammer file picker.** Uses can quickly share files in Yammer by uploading documents from a personal OneDrive, OneDrive for Business or SharePoint Online site.

#### Yammer and Office 365 Groups

Yammer now integrates with Office 365 Groups. This means that group experiences in Yammer will get access to Office 365 services, such as SharePoint Online, OneNote and Planner.

If you are interested in having Yammer integration with Office 365 Groups enabled in your Office 365 tenant, make sure you meet the following requirements:

- The Yammer’s integration with Office 365 Groups will be initially available only for 1:1 network configurations. This means you have one Yammer network that is associated with one Office 365 tenant.
- You must [enforce Office 365 identity](#) for Yammer users.

To start with, only internal, private-listed and public groups will be enabled. Private-unlisted and external groups are not in scope initially, but will be included in a later wave.

#### Scenarios

**How organizations use Yammer**

Here are some of the ways that organizations benefit from Yammer.

- **Centralize teams and projects.** Simplify collaboration by providing teams and projects flexible workspaces that allow them to communicate, share files, and find resources in one place.

- **Promote knowledge sharing.** Improve decision-making and reduce duplicate work by using Yammer to tap into knowledge across the organization and build on the work of others.

- **Foster innovation.** Foster innovation by connecting employees, ideas, and information without regard for time zones, geographies, or hierarchies.

- **Support remote/mobile workers.** Identify and resolve problems with the customer experience by giving employees on the front line an efficient way to communicate with headquarters and supporting teams.

- **Improve internal communications.** Improve the effectiveness of the corporate communications strategy by connecting employees to executives, groups, and feedback.

- **Expand external collaboration.** Extend collaboration to customers, partners, and vendors by sending them a Yammer message, inviting them into a Yammer group, or setting up an external network.

- **Empower sales.** Yammer can maximize your sales team’s effectiveness with better account insight, instant access to experts, and enhanced information when on the road.

- **Enhance HR practices.** Reduce cost and initial training cycles for new employees by creating a designated group with the onboarding resources they need, while giving them access to subject matter experts across the organization.

- **Extend the reach of IT.** Speed end-user adoption by sharing tips and tricks for new products. Enable self-help, access to peer expertise, and a searchable knowledge base to reduce total time to problem resolution.

#### Transform Your HR Organization

An engaged workforce means good things for your company’s HR and Corporate Communications Organizations. With Yammer, employees feel empowered to make a difference by contributing to recruiting efforts, recognizing peer performance, and learning from experts throughout the company or industry. Yammer increases employee engagement by giving every team member a voice and the tools and information to do more.

- **Onboard new hires quickly.** Enable new hires to ramp up faster and continue to develop their skills over time as they learn from their peers.

- **Recognize top talent.** Identify high performers and publicly recognize employees who do great work - increasing engagement, satisfaction, and retention.

- **Gain insight into performance.** Keep up to date with what your team is working on and the progress made.

- **Start a company dialogue.** Connect with your coworkers and encourage two-way dialogues in order to improve communication among teams, employees, managers, and executives.

- **Give employees a voice.** Spark creativity and innovation by allowing all employees to share ideas, offer feedback and help drive business results.

#### Transform Your Marketing Organization

Collaboration across teams and with customers is critical to your organization’s marketing success. With Yammer, you can engage with agencies to build high-impact campaigns across geographies, share customer insights, and drive refined go-to-market strategies. You can also improve execution through real-time collaboration of collateral. Empower your employees to become brand ambassadors and strengthen your competitive position with Yammer.
• **Centralize information.** Create one workspace where designated teams can sync up and get projects done.

• **Accelerate collateral development.** Develop quality collateral much faster and in real-time with colleagues, ensuring that the salesforce is always equipped with the latest materials.

• **Collaborate securely with agencies.** Share information and gather feedback easily with internal and external agencies through external private networks.

• **Plan and execute events.** Drive awareness of activities and promote interaction among attendees pre-, during-, and post-event.

• **Create brand ambassadors.** Easily ensure employees and partners are aligned with company messaging and positioning.

Empower Your Sales Organization

Finding the right information at the right time is critical to the success of your sales team. With Yammer, sales representatives can tap into the collective knowledge of your organization to close deals quickly and increase customer retention. Empower your teams to instantly access expertise and information, gain a competitive advantage, and secure deals faster.

• **Access and share key information.** Quickly distribute the latest key messaging out to the entire field.

• **Connect mobile workers.** Give your mobile and remote sellers access to key information in a timely manner with the Yammer mobile app.

• **Beat the competition.** Share in real-time what is and isn’t working in the field, giving your team a competitive advantage.

Resources

**Watch Video**

• 6 steps to a successful Yammer network - Check out this video to learn about Yammer rollout strategies and driving Yammer usage in your organization.

**Microsoft Virtual Academy Courses ...**

• Microsoft Yammer Essentials
• Yammer Administration and Power User Best Practices

**Read ...**

• Yammer Service Description
• Learning Path: Work like a network with Yammer. Training Material
• Yammer on the go
• Create and manage external groups in Yammer

**For Yammer administrators ...**

• Yammer admin guide
• Yammer security FAQ (Yammer admin guide)
• Monitor private content in Yammer (verified admins)
• Network migration: Consolidate multiple Yammer networks
• Yammer Events are included in the Office 365 Audit log and Management Activity API
• Yammer App with Intune MAM – now available!

**Office 365 Videos**

Office 365 Video is an intranet website portal where people in your organization can post and view videos. It’s a streaming video service for your organization that’s available with SharePoint Online in Office 365. It’s a great place to share videos of executive communications or recordings of classes, meetings, presentations, or training sessions.

**Features**

**Channels**

• Channel admins for Office 365 Video can create channels to organize videos.
• You can have channels for particular subjects, for example, or for specific groups such as departments or teams
• You see only the channels that you have permission to view

**Uploading videos**

• To upload a video, you upload it to a specific channel.
• You can upload multiple videos to a channel at the same time.
• Anyone in your organization who has edit permission for a particular channel can upload videos to it

**Editing information about a video**

• Providing information about a video will make it easier for other people to find it through search, and will provide additional context for it in Delve and the Office Graph
• You have to have owner or editor permission for the channel that the video is in

**Owner and people metadata**

• Office 365 Video also shows who uploaded the video and the various people who are in the video.
• This enhances the discoverability of the video and highlights the main speakers; it, too, enhances when and how your videos appear in other users’ Delve activity feeds pivoting off of the relevant context of who knows who

**Changing a thumbnail for a video**

• After a video you've uploaded to Office 365 Video has been processed and is ready to play, you can add a custom thumbnail for the video or you can choose from one of the auto-generated thumbnails provided.

**Add subtitles or captions**

• Subtitles or captions are lines of text that appear at the bottom of a video and provide a transcript of the audio portion of the video
• You can add subtitles or captions to any video by uploading one or more subtitle or caption files.
• Office 365 Video only supports the Web Video Text Track (.vtt) file format.

**Watching a video**
• You can watch videos from where they are featured on the Office 365 Video home page, and from specific channels.
• When you select a video thumbnail, the video plays right in your browser window.

**Sharing videos with others**
• Embed an Office 365 video on your site. You can display the video on a SharePoint Online site or other website by adding the embed code for that video to the page where you want the video to appear.
• Post to Yammer. You can post to Yammer about a video while you’re watching it, and your post will automatically include a link to the video that you’re watching.
• Send a link to a video in an email. To get a link for a video, select the video in Office 365 Video and then copy the URL from the browser address bar.

**Discover spotlighted channels and videos**
• Admin can spotlight up to three channels and four videos on the home page.
• Person with edit permission for a channel can spotlight up to five videos on the page for that channel.

**Find the most popular videos**
• See what videos are most popular for your entire organization, check the Trending section on the home page.
• See what videos are particularly popular in a certain channel, check the Trending section on that channel page.

**Find videos that you’ve uploaded**
• See what videos you’ve uploaded to a channel, select a channel, and then choose My Videos.

**Search for a video**
• Search for a particular video by typing what you are searching for in the Search videos box.
• Find videos that are in Office 365 Video by using SharePoint enterprise search.

**Restore a video in the Recycle Bin**
• Deleted videos sit in the Recycle Bin for 90 days, and it is now possible to recover and restore videos from the Recycle Bin.
• Admins can restore videos that have been deleted by a user.

**Channel permissions**
There are three types of channel permissions: owners, editors, and viewers. You must have owner permission to change permission settings.

• **Owners** - has full control over a channel. They can manage the channel from the channel settings page, upload videos, delete videos, and delete the channel.
• **Editors** - has edit permission for a channel. They can upload videos and delete videos. Then cannot manage the channel settings or delete the channel.
• **Viewers** - can view all of the videos that are in the channel. By default, everyone in your organization has viewer permission for a channel when the channel is created.

**View statistics for a video**
The video viewer statistics gives people insights into how their videos are being viewed. It shows aggregate data on how many people have watched your video and how long they spend watching it, visualizing the drop-off rates over time.

On the Video page, next to the date when the video was uploaded, you’ll see the cumulative number of video views. This information is updated every 15-20 minutes.

The **Statistics** link shows additional statistics for that video. The first graph shows:
• the total number of views by day for the last 14 days
• the total number of unique visitors by day for the last 14 days
• the total number of views per month for the last 36 months
• the sum of unique daily visitor counts per month for the last 36 months.

This information is updated once a day.

The second graph shows how viewers interacted with the video. For example, you can see which parts of your video users viewed the most or the least. This information is updated once a day.

**Client Requirements**

**Desktop Requirements**

<table>
<thead>
<tr>
<th>Browser</th>
<th>OS</th>
<th>Playback Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edge</td>
<td>Windows 10</td>
<td>HTML5</td>
</tr>
<tr>
<td>IE 11</td>
<td>Windows 10</td>
<td>HTML5</td>
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<td>IE 11</td>
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<tr>
<td>IE 11</td>
<td>Windows 7</td>
<td>Adobe Flash</td>
</tr>
<tr>
<td>IE 9 - 10</td>
<td>Windows</td>
<td>Adobe Flash</td>
</tr>
<tr>
<td>Chrome</td>
<td>Windows 7+ / OSX (latest)</td>
<td>HTML5</td>
</tr>
<tr>
<td>Firefox</td>
<td>Windows 7+ / OSX (latest)</td>
<td>HTML5</td>
</tr>
<tr>
<td>Safari</td>
<td>OSX (latest)</td>
<td>Native HTML5</td>
</tr>
</tbody>
</table>

**Mobile**
Microsoft Stream and Office 365 Video

In July 2016, Microsoft announced the preview of Microsoft Stream, a new business video service that makes it easier to access and discover video content inside your organization. Microsoft Stream builds upon the learnings and success of Office 365 Video, and over time the two experiences will converge, making Stream the de facto video experience in Office 365.

There is no change for customers using Office 365 Video during the Microsoft Stream preview. Microsoft Stream is currently in Preview, but Office 365 Video is a Generally Available (GA) product.

For the immediate term, nothing changes with O365 Video. Microsoft Stream and Office 365 Video are two distinct services at this time:

- If you have O365 E/A/G license use O365 Video.
- If you don't have O365 E/A/G license, now you can use Microsoft Stream Preview.

Over time, Microsoft Stream and Office 365 Video will converge into a single solution.

Scenarios

- On-demand Trainings
- Corporate Messages
- Community knowledge sharing
- Help & How to

Resources

Watch Videos ...

- Introducing Office 365 Video
- What’s New: Office 365 Video
- Overview of Office 365 Video and how to use it
- What happens to a video file when you upload it into Office 365 Video?
- Office 365 Video - Embed Video Throughout Your Intranet

Read ...

- Meet Office 365 Video
- What’s new—Office 365 Video
- Embed video throughout your intranet
- Create and manage a channel in Office 365 Video
- Manage your Office 365 Video portal
- Video formats that work in Office 365 Video
- Embed a video from Office 365 Video
- Add subtitles or captions to a video in Office 365 Video
- View statistics for a video in Office 365 Video

- Video REST API reference
- Office 365 Video networking Frequently Asked Questions (FAQ)

Delve

Delve helps you discover the information that’s likely to be most interesting to you right now - across Office 365. Find information about people - and through people - and help others find you.

You don’t have to remember the title of a document or where it’s stored. Delve shows you documents no matter where they’re stored in OneDrive for Business or SharePoint in Office 365.

Delve never changes any permissions, so you’ll only see documents that you already have access to. Other people will not see your private documents. Learn more about privacy.

- Click someone’s name or picture anywhere in Delve to see documents they’re working on or to learn more about them.
- When you find a document you’re interested in, add it as a favorite or to a board to easily get back to it later.
- Search for people, documents, or boards.

Features

View and edit your profile

The profile page in Delve makes it easy for you to update your profile information, and for others to find and connect with you. With the new profile page in Delve, you can also quickly get back to documents you’ve worked on recently, or go to other people’s profile pages to see what they’re up to.

You can go to your profile page by selecting Me from the left-hand menu. To change your information, choose Edit profile.
Connect and collaborate

You and everyone else in your organization have your own profile page in Delve. Use the profile pages to find information about people - and through people - and to help others find you. You can also connect with others directly from their profile page.

On your own page, you can quickly get back to documents you've worked on recently, go to other people’s pages to see what they’re up to, and update your personal information.

To go to your profile page, click Me in the left pane, or click your name or picture anywhere in Delve.

Get back to your recent documents

This section shows documents you've recently authored or modified, and that are stored in OneDrive for Business or SharePoint. Click a document to open it, or click See all to see more documents.

Click a person to see what they’re working on

In this section, you see some of the people you work with, or people you're connected to in the organization. Click a person to go to their profile page, or click See all to see more people.

Discover documents from people around you

This section shows a selection of popular documents from people around you. The selection of documents changes over time, and is based on what the people you work with have worked on or read. Click a document to open it, or click See all to see more documents.

If you find something you want to keep for later, add the document to your favorites or to a board.

Group and share documents

In Delve, you can use boards to group and share related documents. You can, for example, create a board to collect all project documents for your team. Boards make it easy to collect and discover content, and they are easy to share with others, too.

You can also keep track of documents in Delve by adding them to your Favorites. If you find a document you want to save for later, click the icon in the lower left corner to add it to your favorites.

Boards are open to everyone in your organization, and you can see, add documents to, or remove documents from any board in Delve. If a board has documents that you don’t have access to, those documents will not show up for you.

Share a board with others

To send a link to a board through email, click Send a link at the top of the board. Type in the email address, change the message if you want, and send.

Remove a document from a board

Click the board icon in the bottom left corner on a content card. In the dialog box that opens, click the X for the board you want to remove the card from.

Keep track of your favorite documents

To add a document to your Favorites, click the icon in the lower left corner of the card.

Share a document with others through email

To send a link to a document through email, click the three dots in the lower right corner on the content card and then Send a link. Type in the email address, change the message if you want, and send.
Give other people access to your document

To share a document with others from within Delve, click the three dots in the lower right corner on the content card, then Who can see this?, and then click Invite people.

Work with others on documents in Delve

When you open documents in Office Online, your colleagues can open them at the same time. That means you don’t have to wait for someone to finish adding information to a document before you can enter yours.

As you see each other’s updates you can discuss and share ideas, resulting in a document that’s truly a team effort.

Work together on documents by using Yammer

You can post documents to Yammer from Delve. You can also talk about the document on Yammer, or view existing conversations.

Find people and information

Discover new information on your Home page, get back to your own documents on your profile page (Me), and find information about other people on their profile pages. You can also find back to documents in Favorites or find documents through boards.

The Get back to your recent documents section shows the documents you’ve recently authored or modified, and that are stored in OneDrive for Business or in Sites.

Find information about other people

You can find information about other people by going to their profile page in Delve. The People list on the left shows some of the people you’ve recently viewed in Delve. To find other people:

- Click a person’s name or picture anywhere in Delve.
- Or, type their name in the search box, and then click their name.

Keep track of your favorite documents and boards

Whenever you see a document in Delve that you want to save for later, click the star to add it to your favorites.

Find people and information by using search

Start typing in the search box to find people, documents, or boards.

Office Graph

The Office Graph lives in Office 365. It stores data about Office 365 entities and the relationships between them as nodes and edges in a graph index. Examples of entities are person and document; examples of relationships are shared and modified.

The Office Graph uses advanced analytics and machine learning techniques to connect and complete the data coming from all of the Office 365 services. To present the most relevant content in different contexts, the Office Graph uses a two-step analysis.

- calculates which users in the graph are most relevant to the current context.
- retrieves the most relevant content associated with these users.

The Office Graph continuously collects and analyses signals that you and your colleagues send when you work in Office 365. For example, when you and a colleague modify or view the same document, it’s a signal that you’re likely to be working together.

Other signals are who you communicate with through e-mail, and who you’ve shared documents with, who your manager is, and who has the same manager as you.
Delve uses the result of the Office Graph analysis to show you documents that are most likely to be relevant to you right now. For example, the Office Graph will notice if several of the people you regularly work with, view a specific document. That document is most likely also interesting to you, so Delve shows it on your Home page.

The Microsoft Graph API allows developers to discover and modify entities in the Office Graph. Like other Office 365 APIs, the Office Graph API will follow REST and OData 4.0 standards for data transport, and use the OAuth 2.0 standard for authentication and authorization.

Refer to the Office 365 Application Development section later in this document.

Introduce Delve in your Organization

- SharePoint Online and OneDrive for Business are the primary sources of content in Delve. How you and users manage permissions on documents and sites affects what users see in Delve.
- You can download this email template to announce Delve in your organization.
- Let users know they can get Delve on their mobile phones, see Office Delve for Android or Office Delve for iPhone.
- You can point users to the Delve help articles. What is Office Delve? is a great starting point, and users may be particularly interested in the information in the articles - Are my documents safe in Office Delve?, What kind of information will I find in Office Delve? and Store your documents where Office Delve can get to them.

Resources

Watch Videos ...
- Introducing Office Delve Mobile Apps for Android and iPhone
- The Office 365 Authoring Canvas inside Office Delve

Read ...
- What is Office Delve?
- What kind of information will I find in Office Delve?
- How does Office Delve know what’s relevant to me?
- How to use the content cards in Delve
- View and edit your profile
- Connect and collaborate in Office Delve
- Group and share documents in Office Delve
- How can I find people and information in Office Delve?
- Are my documents safe in Office Delve?
- What decides the title on the card?

For Admins
- Office Delve for Office 365 admins
- What is the effect of allowing or not allowing access to the Office Graph?

StaffHub

<<<TBD>>>
Power BI Pro

Power BI enables anyone and everyone to easily connect to any of their data, create live dashboards and reports, and explore data through interactive visualizations at any time. With Power BI, you can make all of your data viewable in a single location, regardless of where the data resides, enabling a consolidated view of business operations.

Power BI includes two companion applications:

- **Power BI Desktop**, a visual data exploration and reporting tool.
- **Mobile applications** for Windows, iOS, and Android devices, providing secure access to live Power BI dashboards and reports from any device.

In addition, Power BI can be extended with a set of REST APIs which enable developers to integrate client and web solutions with Power BI or to build custom visualizations.

Power BI vs Power BI Pro

Power BI is a freemium offer that includes a free offer “Power BI” and a paid offer “Power BI Pro”

- **Power BI**: will enable anyone to get started quickly allowing them to create, view, and share personal dashboards and reports.
- **Power BI Pro**: will continue to offer the full range of Power BI capabilities ideal for corporate-wide use including extended data source support, enhanced data refresh options, and richer collaboration and sharing.

### Feature Table

<table>
<thead>
<tr>
<th>Feature</th>
<th>Power BI</th>
<th>Power BI Pro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data capacity limit</td>
<td>1 GB/ user</td>
<td>10 GB/ user</td>
</tr>
<tr>
<td>Create, view and share your personal dashboards and reports</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

### Feature

**Live dashboards**
• Set of data visualizations, or charts, from one or more underlying reports.
• When a visualization in a dashboard is connected to a real-time data source, the visualization updates continuously, enabling faster insights.
• May contain visualizations from multiple reports.
• Highly customizable - you may add, or “pin”, any chart from any report to any dashboard.

Interactive reports
• Enables anyone to create rich, interactive reports. Reports are the foundation for dashboards.
• Report is a set of charts, also known as visualizations, based on the same underlying dataset
• To create reports that use data from multiple sources, use Power BI Desktop or Power Pivot for Excel with multiple sources, then upload the Power BI Desktop or Excel file to Power BI.
• Construct a report from scratch, select a pre-authored report (such as a report generated in Power BI Desktop), or apply a default report for a given dataset.
• Can be customized - for example, by modifying visualizations in an existing report, or adding new visualizations.
• Once a report contains the desired visualizations, pin the report, or a subset of its contents, to a dashboard for ease of viewing.
• Reports can also be shared with other individuals in an organization, and consumed on both desktop computers and mobile devices.

Data visualizations
• Dashboards and reports are built using visualizations, or charts.

• Variety of visualization options are available, enabling you to present data in a compelling and visually appealing manner.
• Visualizations include: comparison charts (bar, line, basic area and waterfall charts), composition charts (treemaps, donut and pie charts), mixed comparison and composition charts (stacked charts), relationship charts (bubble charts), geographical charts, and gauges based on a percentage value.
• Use slicers to filter visualizations on the same report page so they display exactly what’s needed.

Mobile applications
• Supports live, secure dashboard access on any device through native, interactive apps for Windows, iOS, and Android.
• Dashboard user interface is optimized for smaller displays.
• Setting favorites makes it easier to access specific visualization tiles.
• Zoom in and out of visualizations to look at data more closely.
• Set up alerts, and receive a notification when data exceeds or drops below certain thresholds.
• Take a snapshot of a report or visualization, and make annotations using highlight features.
• Collaborate with others by sharing your annotated snapshot via SMS or email.

Natural Language Query
• Let’s you ask questions of your data phrased in plain English, and produces answers in the form of new visualizations, or charts.
• Intelligently filters, sorts, aggregates, groups, and displays data based on key words in the question asked.
• Generates a chart to answer the question, using the data from the underlying reports.
• Pin the chart to the dashboard if desired, and modify it by asking more questions.
• Because a dashboard can contain charts from multiple datasets, your questions can involve data from any one of the datasets.

Sharing with others
• By default, all of the data and reports you create and upload are privately visible only to you.
• Dashboards can be easily shared with other users in your organization if needed.
• Any subsequent changes to a shared dashboard automatically sync across all users - no manual updates required.
• To control access, you can specify whether another user can share that same dashboard with others.
• Dashboard and the underlying reports are shared in reading view.
• User who accesses the shared dashboard cannot create new reports or save changes to existing reports.
• Users of a shared dashboard cannot see or download a dataset that are used in the dashboard.
• Power BI groups offer a powerful collaborative experience built on Office 365 groups. Team of people can collaborate on dashboards and reports. The datasets for the dashboards and reports reside in the group’s workspace. You can manage your group workspaces directly from within Power BI.

Power BI data sources

Power BI integrates with a wide range of data sources, including both cloud and on-premises solutions. With a wide variety of data sources, you can quickly and easily connect to SaaS solutions, on-premises data living in SQL Server Analysis Services, Azure services, and Excel and Power BI Desktop files. Using REST APIs, you can even connect to custom data sources, such as proprietary corporate data or external data services.

SaaS solutions

• Users can connect directly to popular SaaS solutions.
• Power BI delivers a seamless user experience through solution-specific “content packs” and automatic data refresh.
• Content packs include pre-configured dashboards, reports, datasets, embedded queries, and metadata.
• Data is refreshed automatically, eliminating the need for time-consuming data provisioning.

Organizational content packs

• You can package up and share your own dashboard, reports, and datasets with your coworkers. For example, your finance team can use an organizational content pack to distribute finance data consistently and efficiently to executives across your organization.
• You can create the reports in Power BI and publish them as an organizational content pack to your team.
• Content packs are easy to find - they are all in one location, the content gallery.

• Organizational content packs can be used like the pre-defined content packs available for SaaS solutions, and offer a pre-packaged experience.

On-premises data sources

• The Analysis Services Connector functionality built into Power BI allows live queries to SSAS tabular models. There is no need to move data to the cloud or to schedule data refreshes - you can view live data in Power BI dashboards and reports. Communication between the connector and Power BI occurs through Azure Service Bus.
• With Power BI Desktop or Excel, business analysts can import data from a wide range of on-premises data sources and publish it to Power BI.

Integration with Azure services

• Power BI integrates with other Microsoft cloud services, including Azure SQL Database, Azure SQL Database Auditing, and Azure Stream Analytics.
• By extending existing Azure services capabilities into Power BI, you can build seamless, end-to-end BI solutions. For example, you can use Azure Stream Analytics to process streaming data, then push the data into Power BI, enabling real-time dashboard updates.

Excel and Power BI Desktop files

• Excel and Power BI Desktop files may be published directly to Power BI with a single click, where you can create dashboards and reports based on the data.
• When a file is uploaded, Power BI may automatically enhance the data by detecting key characteristics. For example, if a table in an uploaded Excel file includes a date field, Power BI may automatically create month and year columns to facilitate reporting based on those elements.
• Loading files from Power BI Desktop enables you to surface data from a variety of sources that do not directly connect to Power BI. For example, if you want to use Power BI to explore data from Facebook, a SharePoint list, or from your SAP system.

Gateway for the on-premises data

With Power BI gateways, you can keep your data fresh by connecting to on-premises data sources. Query large data sets while leveraging your existing investments. The gateways provide the flexibility you need to meet individual needs, and the needs of your organization.
• **Power BI Gateway – Personal**: Refresh your on-premises data quickly without waiting for an IT Admin. Designed for use with personal data sets, there is no central monitoring capabilities for this gateway.

• **Power BI Gateway - Enterprise (preview)**: This gateway is used by organizations to serve a large number of users. It also enables administrators to set up access control for individual data sources and monitor usage.

**Integration with SharePoint Online**

With Power BI's new report web part for SharePoint Online, you can easily embed interactive Power BI reports in SharePoint Online pages.

When using the new **Embed in SharePoint Online** option, the embedded reports are fully secure, so you can easily create secure internal portals. There are two ways to provide access to the report within the Power BI service.

• If you are using an Office 365 Group to build your SharePoint Online team site, you list the user as a member of the group workspace within the Power BI service. This will make sure that users can view the contents of that group. For more information, see [Creating groups in Power BI](# article).

• Alternatively, you can grant users access to your report by adding a tile from the report to a dashboard. Share the dashboard with the users that need access to the report. For more information, see [Share a dashboard with colleagues and others](#).

In order to embed your report into SharePoint Online, you will first need to get the URL for the report.

On a modern site page in SharePoint Online, select + and select the **Power BI (Preview)** web part.

There are a few requirements in order for **Embed in SharePoint Online** reports to work.

• The Power BI (Preview) web part for SharePoint Online requires new SharePoint features to be enabled. Your tenant needs to be enrolled in the [Set up the Standard or First Release options in Office 365](#) program to use this feature.

• The **First Release for everyone** option must be selected.

• The Power BI (Preview) web part for SharePoint Online requires [Modern Pages](#).

**Using auditing within your organization**

**Auditing with Power BI** has been available for a few months. This provides auditing on certain events to understand what your organization is doing with the service. You can look at the documentation for a [full list of activities audited by Power BI](#).

You will need to enable auditing for your organization in order to work with the reports. You can do this within the **tenant settings** of the admin portal. Power BI will start logging various activities that your users perform in Power BI. The logs take up to 48 hours to show up in the **O365 Security & Compliance Center**.

Refer to [Power BI Admin Portal](#) and [Using auditing within your organization articles](#) for more information.

**Resources**

- [Power BI - Overview and Learning](#)
- [Power BI - basic concepts](#)
- [Get started with Power BI](#)
- [Get data for Power BI](#)
- [Power BI Blog](#)
- [Power BI Personal Gateway](#)
- [Power BI Gateway - Enterprise](#)
- [Microsoft Power BI Desktop](#)
- [Accelerate Power BI deployments with solution templates](#)
- [Embed with report web part in SharePoint Online](#)
- [Propelling digital transformation in manufacturing operations with Power BI](#)
- [Download a Power BI app](#):
  - The **iPad app** (Power BI for iOS)
  - The **iPhone app** (Power BI for iOS)
  - The **Power BI app for Windows** devices (not Windows phones)
MyAnalytics

The decisions that each individual employee in an organization makes each day add up to a tremendous impact on the success or failure of an organization. We know that our most scarce resource is time, and when we make decisions on how to use our time we are literally choosing where to spend the capital of our organization. Now with the power of big data, we have a massive opportunity to understand how organizations work, and to optimize processes, activities, and interactions for the highest impact.

By understanding the building blocks on how work gets done – communication and collaboration – MyAnalytics creates a source of innovation and competitive advantage for individuals and organizations. The power of this capability is when it is harnessed in the context of a business or strategic initiative and leadership is seeking to solve a particular business problem.

Features

Personal work analytics dashboards

- Monitor personal dashboards the vital stats of your work
- Understand where you are spending time
- Establish feedback loops and set targets and monitor benchmarks
- Receive recommendations for ways to get your time back and spend it more effectively

Team analytics dashboards

Aggregated and anonymous data about teams of a certain size can help managers understand important aspects about the team is executing.

- Aggregated and anonymous data from your team
- Understand where time is going across your team
- Ensure your team is focused on the right activities for success

Analytics Platform & APIs

Pursue industry or initiative specific analysis with the analytics platform and API component of the offer.

- Customize dashboards with additional data sources
- Support business initiatives with data driven analysis
- Target specific queries with customized analysis

MyAnalytics Dashboard and Outlook add-in

MyAnalytics helps you understand how you collaborate with colleagues and spend your time at work. The dashboard gives you the tools you need to help you prioritize work and spend time more effectively. You can set weekly goals and measure your progress over time. The Outlook add-in gives you insight on how your colleagues respond to you in email.

Only you have access to your MyAnalytics dashboard and Outlook add-in. MyAnalytics does not include any settings that provide your manager or anyone else in your organization access to your dashboard or add-in.

What data do the personal dashboard and the Outlook add-in use?

MyAnalytics uses information from your Office 365 mailbox and calendar, such as how many emails you send and receive from different recipients, and meeting duration. However, we don’t collect content from the email body or calendar descriptions.

Can I opt out of MyAnalytics and the Outlook add-in?

You can opt out of your data being used to calculate aggregate statistics for your organization. For example, if you opt out, your data will not be used to calculate statistics on the average time people in your organization spend in meetings, or the percentage of recipients who have read an email.

- If you opt out, you will no longer be able to access your personal dashboard or the Outlook add-in.
- You can opt back in any time. You’ll get access to your personal dashboard and the Outlook add-in.

How are statistics calculated?

Meeting Hours

<table>
<thead>
<tr>
<th>What you see</th>
<th>Shows how much time you spent in meetings.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where the data comes from</td>
<td>Your data is collected from your Office 365 calendar. Company averages are based on aggregated data from other users in your organization.</td>
</tr>
<tr>
<td>How it’s calculated</td>
<td>The statistics are based on meetings in your calendar that you’ve accepted, and where your status is set to Busy. The following meetings are not included:</td>
</tr>
<tr>
<td></td>
<td>- Meetings with no other participants than yourself, for example when you block time in your calendar or set reminders.</td>
</tr>
<tr>
<td></td>
<td>- All-day meetings.</td>
</tr>
<tr>
<td></td>
<td>- Meetings marked as Private.</td>
</tr>
<tr>
<td></td>
<td>- Meetings with more than 500 attendees.</td>
</tr>
</tbody>
</table>

Email Hours

<table>
<thead>
<tr>
<th>What you see</th>
<th>An estimate of how much time you spent sending and reading emails. See how these compare to the company average and to your personal goals.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where the data comes from</td>
<td>Your data is collected from your Office 365 mailbox. Company averages are based on aggregated data from other users in your organization.</td>
</tr>
<tr>
<td>How it’s calculated</td>
<td>The main rules are:</td>
</tr>
<tr>
<td></td>
<td>- For each email you write (send), we assign 5 minutes.</td>
</tr>
<tr>
<td></td>
<td>- For each email you read (open), we assign 2.5 minutes.</td>
</tr>
<tr>
<td></td>
<td>However, there are exceptions:</td>
</tr>
</tbody>
</table>

52
- If you send one email and then open or send another one within 5 minutes, we assign the time between the two actions to the first email.
- If you open an email and then open or send another one within 2.5 minutes, we assign the time difference between the two actions to the first email.
- We register email across all devices, such as laptop or mobile phone.
- We only include emails where your name, or a group you’re a member of, is on the To or Cc lines.
- We don’t count emails you delete without opening.
- Email that you read or write outside the defined work hours are included in After hours.

Focus Hours

<table>
<thead>
<tr>
<th>What you see</th>
<th>Focus hours are defined as at least two consecutive hours of time without meetings.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where the data comes from</td>
<td>Your data is collected from your Office 365 calendar.</td>
</tr>
</tbody>
</table>
| How we calculate the numbers | • Sums up the total number of hours in your calendar where you have at least two consecutive hours without meetings.  
• Only includes focus hours within your defined work hours.  
• Sending or receiving emails during focus hours doesn’t interfere with the focus hour calculation. |

After Hours

<table>
<thead>
<tr>
<th>What you see</th>
<th>Shows time spent on email and in meetings outside defined work hours, for example emails read or sent on weekends.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where the data comes from</td>
<td>Your data is collected from your Office 365 calendar and mailbox. Company averages are based on aggregated data from other users in your organization.</td>
</tr>
<tr>
<td>How we calculate the numbers</td>
<td>See Meetings hours and Email hours tables above.</td>
</tr>
</tbody>
</table>

MyAnalytics Outlook add-in

The MyAnalytics Outlook add-in helps you understand the reach of your emails and your relationships with colleagues.

- For emails you send, the add-in shows the number of people who have read, forwarded, and replied, as well as a lifespan chart showing the email’s read activity. You’ll only see these statistics for emails you’ve sent to at least five people, and you can’t identify who read or forwarded the email.
- For emails you receive, the add-in gives you information about your relationships with colleagues, including the number of emails you’ve exchanged, your average response times, and the percentage of their email you read. Only you have access to your personal relationship statistics.

No statistics available - why?

For privacy reasons, you will not be able to identify individual people from the MyAnalytics Outlook add-in. This means that MyAnalytics does not display statistics for emails sent to fewer than five people or show that 100% of recipients read an email.

<table>
<thead>
<tr>
<th>Too few recipients</th>
<th>We only show statistics for emails that are sent to at least five people.</th>
</tr>
</thead>
</table>
| Too few qualified recipients | We only show statistics for emails that are sent to at least five people who are also qualified for statistics. Qualified people are people within your organization who use Office 365 and Outlook/OWA, and who are not:  
• Opted out of MyAnalytics.  
• Excluded from MyAnalytics (for example legal departments). |
| Too old | We don’t show read statistics for emails that are older than seven days. |
| Too new | It takes some time to generate statistics for recent emails. |
| Low read activity | Fewer than two people have read the email. Check back later once more people have read the email. |
| 100% read your email | For privacy reasons, MyAnalytics does not provide an exact read rate when 100% (or close to 100%) of recipients read your email. The message will say: Essentially everyone read your email. |
| You opted out of MyAnalytics | If Delve isn’t permitted to use your email and meeting information, you will not see any statistics. You can opt in through Feature settings in Delve. |

How can these statistics help my work?

With insights about how effective your communication is, you can evaluate and make changes if necessary.

Check your read rate frequently to improve email effectiveness over time. For example, if a weekly digest email has low read rate, try these recommendations:

- Send it on a different day of the week to see if more people read it.
- Consider increasing the number of recipients or changing the recipient list.
• Try using different subject lines to engage your recipients or shorten the content to make it easier to read.
• Test new ways of broadcasting your message - maybe email isn’t the best medium.

MyAnalytics tips

These tips that can help you spend your time better and focus on what’s important in your work. All tips aren’t for everyone. What you can and should do always depends on your role and the organization you work in.

Meetings

Fewer meetings, shorter meetings, or more focused meetings. These are some options if you want to save time spent in meetings.
• Send recaps instead of invitations
• Shorten your meetings
• Rethink recurring meetings
• Rethink the attendee list
• Discourage “business tourism”

Email

Pick up the phone, don’t “reply all”, or unsubscribe from email lists that aren’t useful, are some alternatives for what you can do if you see that you spend too much time on emails.
• Remove unnecessary email recipients
• Send fewer emails - use Skype or pick up the phone
• Unsubscribe from groups that you don’t read
• Spare others’ inboxes

After hours

Be a thoughtful coworker!

• Condense emails and status updates with daily or weekly digests for “inform” type emails. This reduces the overall noise and randomization caused by email overload.
• Save drafts or delay delivery for email until the recipients’ normal business hours. Limit late night/early morning email to urgent email to cut through the noise.
• Turn off notifications on your phone and desktop when you are trying to focus.

As a team:
• For example: No meetings Wednesdays
• Agreed upon “team hours”
• Be respectful of people’s time
• Be intentional of meeting overruns and who you invite

Focus time

We define focus time as at least two consecutive hours of time without meetings. Focus time is meant to represent enough time so you can focus on deliverables or complete other important tasks.
• Block focus time on your calendar
• Fewer meetings
• More time for fostering relationships can translate to higher levels of productivity
• Make time for what’s important

Resources

• Learn more about the way you work with MyAnalytics
• MyAnalytics Outlook add-in
• MyAnalytics Dashboard and Outlook add-in
• MyAnalytics Tips
• MyAnalytics for Office 365 admins
Office 365 ProPlus (Office)

Office 365 ProPlus is the new Office, Office as a service. Office 365 ProPlus has the full set of application experiences you are used to, fully-customizable and available without a connection to the Internet, but it is licensed, deployed and updated as a service.

Full suite of rich productivity apps with the added value of a service.

Cloud – The ubiquity of the cloud shifts us from a world of individual creation to real-time, anytime, anywhere, collaboration and collective creation.
- Office 365 ProPlus roams documents and settings across your devices - so your dictionary and theme settings, your recent documents, as well as the last page or slide you were working on go with you. So users can switch from device to device and maintain cohesive, productive experience.
- Connected people are productive people. Office 365 keeps people connected to one another, and to content and data. Office 365 ProPlus is the front-end to a productivity platform to share, collaborate and create wherever, whenever.
- Office 365 ProPlus is updated like a service, with frequent, non-disruptive updates, for faster value delivery to users.

Mobility – The cloud powers our devices. We believe in a truly mobile world that revolves around us so that any device can become your device.
- As a user-based service, Office 365 ProPlus allows each person to install on multiple devices. Up to 5 PCs of Macs, 5 tablets and 5 smartphones.
- Per-user licensing provides business agility as your business grows and doesn’t penalize you for living a device-rich lifestyle.

Deployment – Full control of your Office
- Streaming from the cloud, Office 365 ProPlus can be up and running in 2-3 minutes. But moving to Office 365 ProPlus does not mean that you have to give up control over software updates. You can still use your existing software management tools and processes.
- As a service, Office 365 ProPlus uses smaller, easily managed updates instead of large, complex upgrades.
- Office 365 ProPlus can help free up IT time and resources to focus on other value added products.

Change Management for Office 365 Clients

Both Windows 10 and Office 365 have adopted the servicing model for client updates. This means that new features, non-security updates, and security updates are released regularly, so your users can have the latest functionality and improvements. The servicing model also includes time for enterprise organizations to test and validate releases before adopting them.

For the Office 2016 version of Office 365 ProPlus, Microsoft provides you three options, called update channels, to control how often Office 365 ProPlus is updated with new features. Here’s an overview of the three options.

<table>
<thead>
<tr>
<th>Update channel</th>
<th>Primary purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Channel</td>
<td>Provide users with the newest features of Office as soon as they’re available.</td>
</tr>
<tr>
<td>Deferred Channel</td>
<td>Provide users with new features of Office only a few times a year.</td>
</tr>
<tr>
<td>First Release for Deferred Channel</td>
<td>Provide pilot users and application compatibility testers the opportunity to test the next Deferred Channel.</td>
</tr>
</tbody>
</table>

What’s in it for Enterprise Organizations?

You want up-to-date features, but you also want the control and support you need to run your business. With the variety of release programs and branches for Windows 10 and Office 365, you can evaluate new features, pilot them with specific groups in your organization, and then deploy them widely to your organization. You can also keep specialty systems on a long-term build for control. Use the update option that’s right for your devices and your business needs.

Focus on your business, not managing the software

The following table explains ways you can focus on your business, not managing the software, with the Office 365 client applications.

<table>
<thead>
<tr>
<th>Stay up to date</th>
<th>Regular updates mean your users’ phones, tablets, and desktops stay up to date with the latest fixes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mix and match programs</td>
<td>Follow your business needs – not all systems need to follow the same deployment model. You can even use different models for Windows and Office on the same devices.</td>
</tr>
</tbody>
</table>
Security, always: You’ll always get the latest security updates, no waiting, whichever program you choose.

Default Branches for Client Applications

Office 365 includes different sets of client applications. Office 365 Business includes the core Office applications (Word, Excel, PowerPoint, Outlook, OneNote, and Publisher), and Office 365 ProPlus includes the core applications plus Skype for Business and Access. Project Online Desktop Client and Visio Pro for Office 365 also follow this release model.

By default, the client applications for Office 365 are set to use Deferred Channel. For Office 365 Business, Project Online Desktop Client, and Visio Pro for Office 365 are set to use Current Channel.

Office 365 ProPlus is set to use Deferred Channel.

Note: Learn more about what’s new for Office 365 subscribers this month at: Office 2016 | Office for Mac | Office Mobile for Windows | Office for iPhone and iPad | Office on Android.

Office 2016 for Mac

Microsoft Office 2016 for Mac enables you to do your best work – anywhere, anytime and with anyone. New, modern versions of Word, Excel, PowerPoint, Outlook, and OneNote have the familiar look and feel of Office, and are thoughtfully designed for Mac.

Unmistakably Office, designed for Mac

Get started quickly with new, modern versions of Word, Excel, PowerPoint, Outlook and OneNote – combining the familiarity of Office and the unique Mac features you love.

• The redesigned Ribbon menu organizes features in a similar way as Office for Windows and iPad, so you can quickly find what you need.
• The new task pane interface makes complex tasks easy, like formatting images in Word, designing animations in PowerPoint, and inserting formulas in Excel.
• Office offers unequalled file compatibility and layout fidelity. Documents will look how you intended in Office on Mac, PC, tablet and phone.
• Your document’s text and graphics are beautifully rendered and sharper than ever on your Mac’s Retina display, and presentations look absolutely stunning.
• Navigate your documents, spreadsheets and presentations intuitively with familiar Multi-Touch gestures.

Do your best work, anywhere, anytime

The new Office for Mac is cloud-connected, so you can create great-looking documents, gain new insights, and present with confidence - anywhere, anytime.

• Access your files whenever you need to, thanks to integration with OneDrive, OneDrive for Business and SharePoint.
• With roaming recent files, you can quickly pick up from where you left off on any device.
• The new **Insights pane** in Word, powered by Bing, shows relevant contextual information from the Web within the reading and authoring experience.
• Excel takes the guesswork out of visualizing your data: it recommends **charts** best suited for your numbers, and lets you preview different options.
• **Presenter View** in PowerPoint gives you the tools to present with confidence – displaying the current slide, next slide, speaker notes and a timer on your Mac, while projecting only the presentation to your audience on the big screen.
• Outlook automatically organizes your inbox in **conversations**, without inadvertently including messages with the same subject that belong to a different conversation.

**Made for teamwork**

Get more done by working together using built-in tools to share, review and co-edit documents, presentations and notes.

• **Easily share your documents** and invite others to review or edit them.
• **Co-authoring** in Word and PowerPoint enables several people to work simultaneously in the same document from different devices in different locations.
• **Threaded comments** in Word and PowerPoint enable you to have useful conversations right next to relevant text. You can quickly see who replied to whom and when.
• The new **Conflict Resolution view** in PowerPoint lets you visually compare conflicting changes, so you can easily decide what version to keep.
• **Share a OneNote notebook** with friends, family or colleagues so everyone can add their notes and work together on travel plans, household tasks or work projects.

**Touch Bar support**

Through the Touch Bar, Office intelligently puts the most common commands at your fingertips—all based on what you’re doing in the document.

**Word**

From the Touch Bar you can enter **Word Focus Mode**, a brand-new experience that hides all of the on-screen ribbons and commands so you can simply focus on your work. One tap and you can quickly apply a new style to a heading or paragraph.

**PowerPoint**

Touch Bar commands in PowerPoint allow you to easily manipulate graphic elements. The Reorder Objects button produces a graphical map of all the layers on a slide, making it easy to find the right object and move it where you want it. And by sliding your finger across the Touch Bar you can easily rotate an object to get just the right angle.

**Excel**

Typing an equals sign into a cell in Excel immediately pulls up the most recently used functions in the Touch Bar. For example, with a tap (for the formula) and another tap (for a named range) in the Touch Bar, you can quickly sum a range in your spreadsheet. The Touch Bar also provides quick access to borders, cell colors and recommended charts—making it easier than ever to organize and visualize your data.

**Outlook**

The Touch Bar in Outlook provides quick access to the most commonly used commands as you work on email and manage your calendar. When composing a new mail, the Touch Bar displays a list of recent documents. One tap and you can add a file—either as an attachment or a link. And from the Today view on the Touch Bar you can not only see your calendar events for the day, but even join a Skype for Business meeting.

Read more at: Office for Mac adds Touch Bar support.

**Resources**

- Watch: Office 2016 for Mac: Top 10 reasons to get the new version
- Download and install Office 2016 for Mac using Office 365 for business
- Outlook 2016 for Mac training
- Word 2016 for Mac training
- Excel 2016 for Mac training
- PowerPoint 2016 for Mac training
- OneNote 2016 for Mac training

**Office on iOS, Android, Windows**

Office for mobile device provides the same look and feel as Office on your desktop. Office also provides the same ability to store and share data on the cloud through Microsoft OneDrive for Business, allowing you to create, share, and edit data quickly and easily, even when you are on the go.

**Setup Mobile Device**

Office 365 Windows Phone setup
- Set up email on Windows Phone
- Set up Office on Windows Phone with Office 365

Office 365 iPhone or iPad setup
- Set up email on iPhone, iPad, or iPod Touch
- Install and set up Office on an iPhone or iPad with Office 365

Office 365 Android phone or tablet setup
- Set up email on an Android phone or tablet
- Install and set up Office on an Android with Office 365

After you have installed the Office apps, you can sign in with the Microsoft account that is connected to your Office 365 subscription to use the premium features of each app.
## Resources

- How Office mobile apps work on Android or iOS devices with an Office 365 plan
- Office for iPad videos
- Office for iPhone videos
- Getting started with Word for Android tablet
- Getting started with Excel for Android tablet
- Getting started with PowerPoint for Android tablet

## Sway

Sway is an intelligent digital storytelling app for business that helps you and your colleagues express ideas using an interactive, web-based canvas. Sway's built-in design engine helps you produce professional, visually-appealing reports, presentations, and more without the need for extensive formatting or additional training.

You can also modify the results to get the unique look and feel you want. Sway makes your creation look great in any browser on any screen, and it can be shared with colleagues and customers by simply sending a link. Sway helps you find and pull together all sorts of content without leaving the app, so you can drag and drop your images, text, videos, and charts right on to your canvas.

## Resources

Microsoft Sway Tutorials

- The Sway Way
- How to Build a Presentation in Sway
- How to Build a Presentation in Sway - Part 2
- How to Collaborate on a Sway
- How to Create a Newsletter in Sway
- How to Make a Tutorial in Sway
- How to Share a Sway
Office 365 Secure Score

The Office 365 Secure Score is a security analytics tool that will help you understand what you have done to reduce the risk to your data in Office 365, and show you what you can do to further reduce that risk.

The core idea is that it is useful to rationalize and contextualize all of your cloud security configuration and behavioral options into one simple, analytical framework, and to make it very easy for you to take incremental action to improve your score over time. Rather than constructing a model with findings slotted into critical, moderate, or low severity, we wanted to give you a non-reactive way to evaluate your risk and make incremental changes over time that add up to a very effective risk mitigation plan.

The Secure Score does not express an absolute measure of how likely you are to get breached. It expresses the extent to which you have adopted controls which can offset the risk of being breached.

No service can guarantee that you will not be breached, and the Secure Score should not be interpreted as a guarantee in any way.

How does it work?

Secure Score figures out what Office 365 services you’re using (like OneDrive, SharePoint, and Exchange) then looks at your settings and activities and compares them to a baseline established by Microsoft. You’ll get a score based on how aligned you are with best security practices.

If you want to improve your score, review the action queue to see what you can do to help increase security and reduce risks.

Expand an action to learn about what threats it’ll help protect you from and how you’ll get the job done.

The score is calculated once per day (around 1:00 AM PST). If you make a change to a measured action, the score will automatically update the next day. It takes up to 48 hours for a change to be reflected in your score.

To see the impact of your actions on your organization’s security, go to the Score Analyzer page and review your history.

Click any data point to see a breakdown of your score for that day. You can scroll down to see which controls were enabled and how many points you earned that day for each control.
How will it help me?

Using Secure Score helps increase your organization’s security by encouraging you to use the built-in security features in Office 365 (many of which you already purchased but might not be aware of). Learning more about these features as you use the tool will help give you piece of mind that you’re taking the right steps to protect your organization from threats.

Resources

- Introducing the Office 365 Secure Score
- Video: An introduction to Office 365 Secure score

Audit Log Search, Activity APIs

Need to find if a user viewed a specific document or purged an item from their mailbox? If so, you can use the Office 365 Security & Compliance Center to search the unified audit log to view user and administrator activity in your Office 365 organization. Why a unified audit log? Because you can search for the following types of user and admin activity in Office 365:

- User activity in SharePoint Online and OneDrive for Business
- User activity in Exchange Online (Exchange mailbox audit logging)
- Admin activity in SharePoint Online
- Admin activity in Azure Active Directory (the directory service for Office 365)
- Admin activity in Exchange Online (Exchange admin audit logging)
- User and admin activity in Sway
- User and admin activity in Power BI for Office 365
- User and admin activity in Microsoft Teams
- User and admin activity in Yammer

Before you begin

- Mailbox audit logging must be turned on for each user mailbox before user activity in Exchange Online will be logged.
- You (or another admin) must first turn on audit logging before you can start searching the Office 365 audit log. To turn it on, just click Start recording user and admin activity on the Audit log search page in the Security & Compliance Center.
- You have to be assigned the View-Only Audit Logs or Audit Logs role in Exchange Online to search the Office 365 audit log.
- You can search the Office 365 audit log for activities that were performed within the last 90 days.
- It can take up to 30 minutes or up to 24 hours after an event occurs for the corresponding audit log entry to be displayed in the search results. The following table shows the time it takes for the different services in Office 365.

<table>
<thead>
<tr>
<th>Office 365 service</th>
<th>30 minutes</th>
<th>24 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SharePoint Online and OneDrive for Business</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Exchange Online</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Azure Active Directory (user login events)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Azure Active Directory (admin events)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Sway</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Power BI</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Yammer</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Security &amp; Compliance Center</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Microsoft Teams</td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>

- As previously stated, Azure Active Directory (Azure AD) is the directory service for Office 365. The unified audit log contains user, group, application, domain, and directory activities performed in the Office 365 admin center or in the Azure management portal. For a complete list of Azure AD events, see Azure Active Directory Audit Report Events.

Search the Audit log

Configure the following search criteria:

A. **Activities**. Click the drop-down list to display the activities that you can search for. User and admin activities are organized in to groups of related activities.

B. **Start date and End date**. The last seven days are selected by default. Select a date and time range to display the events that occurred within that period.

C. **Users**. Click in this box and then select one or more users to display search results for.

D. **File, folder, or site**. Type some of all of a file or folder name to search for activity on the file of folder that contains the specified keyword.
Click **Search** to run the search using your search criteria. When the search is finished, the number of results found is displayed. Note that a maximum of 1000 events will be displayed: if more than 1000 events meet the search criteria, the newest 1000 events are displayed.

The results contain the following information about each event returned by the search.

- **Date**: The date and time (in UTC format) when the event occurred.
- **IP address**: The IP address of the device that was used when the activity was logged.
- **User**: The user (or service account) who performed the action that triggered the event.
- **Activity**: The activity performed by the user.
- **Item**: The object that was created or modified as a result of the corresponding activity.
- **Detail**: Additional detail about an activity. Again, not all activities will have a value.

If 1000 results are found, you can probably assume there are more than 1000 events that met the search criteria. You can either refine the search criteria and rerun the search to return fewer results, or you can export all of the search results by selecting Export results > Download all results. This option will download the raw data from the audit log to a CSV file, and contains additional information from the audit log entry in a column named **Detail**.

**Important**: You can download a maximum of 50,000 entries to a CSV file from a single audit log search.

### Activity API

You can use the **Office 365 Management Activity API** to retrieve information about user, admin, system, and policy actions and events from Office 365 and Azure AD activity logs. The actions and events from the logs can help create solutions that provide monitoring, analysis, and data visualization. These solutions give organizations greater visibility into actions taken on their content.

The Office 365 Management Activity API is a REST web service that you can use to develop solutions using any language and hosting environment that **supports HTTPS and X.509 certificates**. To access the API from your application, you'll need to first register it in Azure AD and configure it with appropriate permissions. This will enable your application to request the OAuth2 access tokens it needs to call the API. For more information, see [Get started with Office 365 Management APIs](https://docs.microsoft.com/en-us/office365/api/office365-management-activity-api).

The Office 365 Management Activity API aggregates actions and events into tenant-specific content blobs, which are classified by the type and source of the content they contain. Currently, these content types are supported:

- Audit.AzureActiveDirectory
- Audit.Exchange
- Audit.SharePoint
- Audit.General (includes all other workloads not included in the previous content types)

- DLP.All (DLP events only for all workloads)

For details about the events and properties associated with these content types, see [Office 365 Management Activity API schema](https://docs.microsoft.com/en-us/office365/api/office365-management-activity-api).

### Exchange Online Protection (EOP)

**Spam** is unsolicited (and typically unwanted) email messages. **Malware** is comprised of viruses and spyware. Viruses infect other programs and data, and they spread throughout your computer looking for programs to infect. Spyware refers to malware that gathers your personal information, such as sign-in information and personal data, and sends it back to the malware author.

Office 365 has built-in malware and spam filtering capabilities through **Exchange Online Protection (EOP)** that help protect inbound and outbound messages from malicious software and help protect you from spam. Admins don’t need to set up or maintain the filtering technologies, which are enabled by default.

To understand how EOP works, it helps to see how it processes incoming email:
Email anti-spam protection

Your email is protected from the moment you receive your first message. In order to help prevent spam in Office 365, you may want to change a protection setting to deal with a specific issue in your organization—say you’re receiving a lot of spam from a particular sender, for example—or to simply fine tune your settings so that they’re tailored to best meet the needs of your organization. To do this, you can change anti-spam settings in the Office 365 Security & Compliance Center.

Connection filtering: checks the reputation of the sender before allowing a message to get through. You can create an allow list, or safe sender list, to make sure you receive every message sent to you from a specific IP address or IP address range.

Spam filtering: checks for message characteristics consistent with spam. You can change what actions to take on messages identified as spam, and choose whether to filter messages written in specific languages, or sent from specific countries or regions.

Outbound filtering: checks to make sure your users don’t send spam. For instance, a user’s computer may get infected with malware that causes it to send spam messages, so we build protection against that into the product.

Transport rules: If you want to go beyond the built-in spam filtering and create custom rules that are based on your business policies, the Transport rules feature is another filter that will help you prevent spam in Office 365.

Email authentication: includes techniques that use the Domain Name System (DNS) to add verifiable information to email messages about the sender of an email message. More advanced Office 365 admins can make use of these email authentication technologies:

- **Sender Policy Framework (SPF)**. SPF validates the origin of email messages by verifying the IP address of the sender against the alleged owner of the sending domain.
- **Domain Keys Identified Mail (DKIM)**. DKIM lets you attach a digital signature to email messages in the message header of emails you send. Email systems that receive email from your domain use this digital signature to determine if incoming email that they receive is legitimate.
- **Domain-based Message Authentication, Reporting, and Conformance (DMARC)**. DMARC helps receiving mail systems determine what to do with messages that fail SPF or DKIM checks and provides another level of trust for your email partners.

If you’re concerned about spam, phishing, and spoofing in Office 365, use SPF, DKIM, and DMARC together to help prevent spam and unwanted spoofing.

**Zero-hour auto purge**

Zero-hour auto purge (ZAP) is an email protection feature that detects messages with spam or malware that have already been delivered to your users’ inboxes, and then moves them to the Junk mail folder as long as the messages are unread.

ZAP is available with the default Exchange Online Protection.

**How does ZAP work?**

Office 365 updates anti-spam engine and malware signatures in real time on a daily basis. However, your users might still get malicious messages in their inboxes, because the daily scan might not have detected a new spam or malware campaign. ZAP gets around this by continually monitoring updates to the Office 365 spam and malware signatures, and can therefore identify previously undetected malicious messages already in inboxes.

If the recipients have not read the messages, then ZAP moves the messages to their Junk mail folder. The reverse is true for messages that were incorrectly classified as malicious.

The ZAP action is seamless for the mailbox user, he or she is not notified the mail has been moved. Allow lists, Exchange transport rules, and end user rules or additional filters take precedence over the ZAP.

**Resources**

- Exchange Online Protection
- Exchange Online Protection Service Description
- Exchange Online Protection Limits
- Office 365 email anti-spam protection
- Overview of the Junk Email Filter
- How Office 365 uses Sender Policy Framework (SPF) to prevent spoofing
- Use DKIM to validate outbound email sent from your domain in Office 365
- Use DMARC to validate email in Office 365
- Zero-hour auto purge – protection against spam and malware
- Anti-spam and anti-malware protection in Office 365
- Prevent email from being marked as spam in EOP and Office 365
- Enable or disable safety tips in Office 365

**MDM for Office 365 (MDM)**

Mobile Device Management (MDM) for Office 365 can help you secure and manage mobile devices like iPhones, iPads, Androids, and Windows Phones used by licensed Office 365 users in your organization. You can create mobile device management policies with settings that can help control access to your organization’s Office 365 email and documents for supported mobile devices and apps. If a device is lost or stolen, you can remotely wipe the device to remove sensitive organizational information.

The following diagram shows what happens when a user with a new device signs in to an app that supports access control with MDM for Office 365. The user is blocked from accessing Office 365 resources in the app until they enroll their device.
Policy settings for mobile devices

If you create a policy to block access with certain settings turned on, users will be blocked from accessing Office 365 resources when using a supported app. The settings that can block users from accessing Office 365 resources are in these sections:

- Security
- Encryption
- Jail broken
- Managed email profile

If the user signs in to an app that supports access control with MDM for Office 365, they are blocked from accessing Office 365 resources in the app until their device complies with the security setting.

Supported Devices

You can use MDM for Office 365 to secure and manage the following types of devices.

- Windows Phone 8.1+
- iOS 7.1 or later versions
- Android 4 or later versions
- Windows 8.1*
- Windows 8.1 RT*
- Windows 10**
- Windows 10 Mobile**

* Access control for Windows 8.1 and Windows 8.1 RT devices is limited to Exchange ActiveSync.

** Requires the device to be joined to Azure Active Directory and be enrolled in the mobile device management service of your organization.

If people in your organization use mobile devices that aren’t supported by Mobile Device Management for Office 365, you might want to block Exchange ActiveSync app access to Office 365 email for those devices, to help make your organization’s data more secure. Read: Manage device access settings.

Choose between Exchange Active Sync and MDM for Office 365

<table>
<thead>
<tr>
<th>Feature</th>
<th>EAS</th>
<th>MDM for O365</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device Configuration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventory mobile devices that access corporate apps</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Full device wipe</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Mobile device configuration settings</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Self-service password reset (Cloud only users)</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Office 365</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provides reporting on devices that do not meet IT policy</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>Group-based policies and reporting</td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>Root and jailbreak detection</td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>Selective wipe</td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>Prevent access to corporate email and docs based upon device enrollment and policies</td>
<td></td>
<td>✔️</td>
</tr>
</tbody>
</table>

Choose between Intune and MDM for Office 365

Microsoft Intune and built-in Mobile Device Management for Office 365 both give you the ability to manage mobile devices in your organization. But there are key differences, described in the following table.

<table>
<thead>
<tr>
<th>MDM for Office 365</th>
<th>Microsoft Intune</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td></td>
</tr>
<tr>
<td>Included with many Office 365 commercial subscriptions.</td>
<td>Requires a paid subscription for Microsoft Intune or can be purchased with Enterprise Mobility + Security (EM+S).</td>
</tr>
<tr>
<td>How you manage devices</td>
<td></td>
</tr>
<tr>
<td>Manage devices using the Security and Compliance Center in Office 365.</td>
<td>If you use Intune by itself, you manage devices using the Intune admin console. If you integrate Intune with SCCM 2012, you use the Configuration Manager console to manage devices on-premises and in cloud.</td>
</tr>
<tr>
<td>Devices you can manage</td>
<td></td>
</tr>
<tr>
<td>iOS, Android, and Windows Phone.</td>
<td>iOS, Mac OS X, Android, Windows Phone, and Windows PCs.</td>
</tr>
<tr>
<td>Key capabilities</td>
<td></td>
</tr>
</tbody>
</table>
MDM for Office 365

- Ensure that Office 365 can be accessed only on phones and tablets that are managed and compliant.
- Manage security policies, like device level pin lock and jailbreak detection, to help prevent unauthorized users from accessing corporate email and data on a device when it is lost or stolen.
- Remove Office 365 company data from an employee’s device while leaving their personal data in place.

MDM for Office 365 capabilities, plus following:
- Securely access corporate resource with certificates, Wi-Fi, VPN, and email profiles.
- Enroll and manage collections of corporate-owned devices, simplifying policy and app deployment.
- Deploy your internal line-of-business apps and apps in stores to users.
- Restrict actions like copy, cut, paste, and save as, to only apps managed by Intune.
- Enable more secure web browsing using the Intune Managed Browser app.
- Manage PCs from the cloud using Intune, or connect Intune to SCCM to manage all of your devices from a single management console.
- Set up MAM (mobile app management) policies by using the Azure portal, even if people’s devices aren’t enrolled in Intune.

Features

Office 365 offers the following subset of Azure multi-factor authentication capabilities as a part of the subscription:

- The ability to enable and enforce multi-factor authentication for end users
- The use of a mobile app (online and one-time password) as a second authentication factor
- The use of a phone call as a second authentication factor
- The use of a Short Message Service (SMS) message as a second authentication factor
- Application passwords for non-browser clients
- Default Microsoft greetings during authentication phone calls

Feature comparison of versions

The following table below provides a list of the features that are available in the various versions of Azure Multi-Factor Authentication.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Office 365 MFA</th>
<th>MFA for Azure Admins</th>
<th>Azure MFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect admin accounts with MFA</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Mobile app as a second factor</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Phone call as a second factor</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>SMS as a second factor</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>App passwords for clients that don’t support MFA</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Admin control over verification methods</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>PIN mode</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraud alert</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MFA Reports</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One-Time Bypass</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custom greetings for phone calls</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custom caller ID for phone calls</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trusted IPs</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remember MFA for trusted devices</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>MFA SDK</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>MFA for on-premises applications</td>
<td>●</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Multi-Factor Authentication (MFA) for Azure Administrators: Global administrators of Azure tenants can enable two-step verification for their global admin accounts at no additional cost.

Resources

- Overview of Mobile Device Management (MDM) for Office 365
- Capabilities of Mobile Device Management for Office 365
- Create and deploy device security policies
- Set up Mobile Device Management (MDM) in Office 365
- Choose between MDM for Office 365 and Microsoft Intune
- Frequently asked questions about Mobile Device Management for Office 365

MFA for Office 365 (MFA)

The security of multi-factor authentication lies in its layered approach. Compromising multiple authentication factors presents a significant challenge for attackers. Even if an attacker manages to learn the user’s password, it is useless without also having possession of the trusted device. Should the user lose the device, the person who finds it won’t be able to use it unless he or she also knows the user’s password.

Office 365 uses multi-factor authentication to help provide the extra security and is managed from the Office 365 admin center.
**Resources**

- What is Azure Multi-Factor Authentication?
- How Azure Multi-Factor Authentication works
- Plan for multi-factor authentication for Office 365 Deployments
- Set up multi-factor authentication for Office 365
- Using Office 365 modern authentication with Office clients
- Enable Modern Authentication for Office 2013 on Windows devices.

**RMS for Office 365 (RMS)**

Rights Management Services enables you to restrict access to documents and email to specific people and to prevent anyone else from viewing or editing them, even if they are sent outside the organization.

- **Exchange Online IRM Integration.** Enables users of Exchange Online to IRM protect and consume e-mail messages (and attachments).
- **SharePoint Online IRM Integration.** Enables SharePoint Online administrators to create IRM-protected document libraries so that when a user checks-out a document from the IRM-protected document library, protection is applied to the document no matter where it goes and the user has the usage rights to that document as they were specified for the document library.
- **Office IRM Integration.** Enables Microsoft Office users to be able to IRM protect content using predefined policies provided by the service within an organization. Office applications that include these capabilities are Word, Excel, PowerPoint and, Outlook. In addition to this, Visio support is also available.

**Features**

- **Help protect emails against unauthorized access** by applying different IRM options to your email messages.
- **Enhance security of your SharePoint libraries** by using IRM to set up appropriate permissions.
- **Help keep your information safe, online or offline,** because your files are protected whether they’re viewed using Office Online or downloaded to a local machine.
- **Seamless integration with all Office documents** helps guard your organization’s intellectual property.
- **Apply custom templates** based on your business needs in addition to using default Rights Management Services templates.

Examples of policies you can apply to email and documents with Rights Management for Office 365 are:

- **Do not forward (email)/ Restricted Access (Office apps):** Only the recipients of the email or document will be able to view and reply. They cannot forward or share with other people or print.

- **CompanyName Confidential:** Only people inside your organization (that is, people with an Office 365 account @companyname.com) can access the content, make edits, and share with others inside your company.
- **CompanyName Confidential View Only:** People inside your organization can view this content but cannot edit or change it in any way. They can print and share with other people inside your company.

**Levels of Protection**

**Native**

- For text, image, Microsoft Office (Word, Excel, PowerPoint) files, Visio files, .pdf files, and other application file types that support RMS, native protection provides a strong level of protection that includes both encryption and enforcement of rights (permissions).

**Generic**

- For all other applications and file types, generic protection provides a level of protection that includes both file encapsulation using the .pfile file type and authentication to verify if a user is authorized to open the file.

**Azure Rights Management Connector**

The Microsoft Rights Management (RMS) connector lets you quickly enable existing on-premises servers to use their Information Rights Management (IRM) functionality with the cloud-based Microsoft Rights Management service (Azure RMS).

With this functionality,

- All users can easily protect documents and pictures both inside your organization and outside, without having to install additional infrastructure or establish trust relationships with other organizations.
- You can use this connector even if some of your users are connecting to online services, in a hybrid scenario. For
example, some users’ mailboxes use Exchange Online and some users’ mailboxes use Exchange Server.

The RMS connector supports the following on-premises servers: Exchange 2010/2013 Server, SharePoint 2010/2013 Server, and file servers that run Windows Server and use File Classification Infrastructure (FCI) to classify and apply policies to Office documents in a folder.

Microsoft Rights Management sharing application

The Microsoft Rights Management sharing application is an optional downloadable application for Microsoft Windows and other platforms that provides the following:

- Protection of a single file or bulk protection of multiple files as well as all files within a selected folder.
- Full support for protection of any type of file and a built-in viewer for commonly used text and image file types.
- Generic protection for files that do not support RMS protection.
- Full interoperability with files protected using Office Information Rights Management (IRM).
- Full interoperability with PDF files protected using SharePoint, FCI, and supported PDF authoring tools.

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- Generic protection for files that do not support RMS protection.
- Full interoperability with files protected using Office Information Rights Management (IRM).
- Full interoperability with PDF files protected using SharePoint, FCI, and supported PDF authoring tools.

O365 Message Encryption (OME)

Office 365 Message Encryption is an easy-to-use service that lets email users send encrypted messages to people inside or outside their organization.

Designated recipients can easily view their encrypted messages and return encrypted replies. Regardless of the destination email service—whether it’s Outlook.com, Yahoo, Gmail, or another service—email users can send confidential business communications with an added level of protection against unauthorized access.

Exchange Online and Exchange Online Protection (EOP) administrators set up Office 365 Message Encryption by defining encryption rules.

Features

Office 365 Message Encryption provides advanced security and reliability to help protect your information.
• Send encrypted email messages to anyone, regardless of the recipient’s email address.
• Provide strong, automated encryption with a cost-effective infrastructure.
• Eliminate the need for certificates and use a recipient’s email address as the public key.
• Communication through a TLS-enabled network further enhances message security.
• Enhance the security of subsequent email responses by encrypting each message in the thread.

Office 365 Message Encryption helps keep your data safe, while allowing you to maintain control over your environment.

• Easily set up encryption using the single action Exchange transport rules.
• Protect sensitive information and data from leaving your gateway, consistently and automatically.
• Policy-based encryption encrypts messages at the gateway based on policy rules.
• Help manage compliance by leveraging the strong integration with data loss prevention.
• Integrate with existing email infrastructure for minimal up-front capital investment.
• Grow your organization’s brand by using custom branding text or disclaimers and a custom logo.

Language support

Office 365 Message encryption supports Office 365 languages, as follows:

• Incoming email messages and attached HTML files are localized based on the sender’s language settings.
• The viewing portal is localized based on the recipient’s browser settings.
• The body (content) of the encrypted message isn’t localized.

Scenarios

There are many scenarios in which email message encryption might be required, including the following:

• A bank employee sending credit card statements to customers
• An insurance company representative providing policy details to customers
• A mortgage broker requesting financial information from a customer for a loan application
• A health care provider sending health care information to patients
• An attorney sending confidential information to a customer or another attorney
• A consultant sending a contract to a customer

Resources

• Office 365 Message Encryption
• Encryption in Office 365

Data Loss Prevention (DLP)

To comply with business standards and industry regulations, organizations need to protect sensitive information and prevent its inadvertent disclosure. Examples of sensitive information that you might want to prevent from leaking outside your organization include financial data or personally identifiable information (PII) such as credit card numbers, social security numbers, or health records. With a data loss prevention (DLP) policy, you can identify, monitor, and automatically protect sensitive information across Office 365.

With a DLP policy, you can:

• Identify sensitive information across many locations, such as Exchange Online, SharePoint Online, and OneDrive for Business. For example, you can identify any document containing a credit card number that’s stored in any OneDrive for Business site, or you can monitor just the OneDrive sites of specific people.
• Prevent the accidental sharing of sensitive information. For example, you can identify any document or email containing a health record that’s shared with people outside your organization, and then automatically block access to that document or block the email from being sent.
• Monitor and protect sensitive information in the desktop versions of Excel 2016, PowerPoint 2016, and Word 2016. Office 2016 desktop programs include the same capabilities to identify sensitive information and apply DLP policies. DLP provides continuous monitoring when people share content in these Office 2016 programs.
• Help users learn how to stay compliant without interrupting their workflow. You can educate your users about DLP policies and help them remain compliant without blocking their work. For example, if a user tries to share a document containing sensitive information, a DLP policy can both send them an email notification and show them a policy tip in the context of the document library that allows them to override the policy if they have a business justification. The same policy tips also appear in Outlook on the web, Outlook 2013 and later, Excel 2016, PowerPoint 2016, and Word 2016.
• View DLP reports showing content that matches your organization’s DLP policies. To assess how your organization is complying with a DLP policy, you can see how many matches each policy and rule has over time. If a DLP policy allows users to override a policy tip and report a false positive, you can also view what users have reported.

You create and manage DLP policies on the Data loss prevention page in the Office 365 Security & Compliance Center.
What a DLP policy contains

A DLP policy contains a few basic things:

- Where to protect the content – *locations* such as Exchange Online, SharePoint Online, and OneDrive for Business sites.

- When and how to protect the content by enforcing *rules* comprised of:
  - **Conditions** the content must match before the rule is enforced -- for example, look only for content containing Social Security numbers that have been shared with people outside your organization.
  - **Actions** that you want the rule to take automatically when content matching the conditions is found -- for example, block access to the document and send both the user and compliance officer an email notification.
  - You can use **notifications** and **overrides** to educate your users about DLP policies and help them remain compliant without blocking their work.
  - When a rule is matched, you can send an **incident report** to your compliance officer (or any people you choose) with details of the event.

When a DLP policy looks for a sensitive information type such as a credit card number, it doesn’t simply look for a 16-digit number. Each sensitive information type is defined and detected by using a combination of:

- Keywords
- Internal functions to validate checksums or composition
- Evaluation of regular expressions to find pattern matches
- Other content examination

This helps DLP detection achieve a high degree of accuracy while reducing the number of false positives that can interrupt peoples’ work.

Types of sensitive information

A DLP policy can help protect sensitive information, which is defined as a *sensitive information type*. Office 365 includes definitions for many common sensitive information types across many different regions that are ready for you to use, such as a credit card number, bank account numbers, national ID numbers, and passport numbers.

When a DLP policy looks for a sensitive information type such as a credit card number, it doesn’t simply look for a 16-digit number. Each sensitive information type is defined and detected by using a combination of:

- Keywords
- Internal functions to validate checksums or composition
- Evaluation of regular expressions to find pattern matches
- Other content examination

This helps DLP detection achieve a high degree of accuracy while reducing the number of false positives that can interrupt peoples’ work.

Resources

- [Overview of data loss prevention policies](#)
- [What the DLP policy templates include](#)
- [What the sensitive information types look for](#)
- [Create a custom sensitive information type](#)
**eDiscovery**

Electronic discovery, or eDiscovery, is the process of identifying and delivering electronic information that can be used as evidence in legal cases. You can use eDiscovery in Office 365 to search for content in Exchange Online mailboxes, Office 365 Groups, Microsoft Teams, SharePoint Online and sites, and Skype for Business conversations. If you only need to search mailboxes, you can use In-Place eDiscovery in the Exchange admin center (EAC). If you need to search mailboxes and sites in the same eDiscovery search, you can use Content Search in the Office 365 Security & Compliance Center. In both cases, you can identify, hold, and export content found in mailboxes and sites.

Office 365 provides the following eDiscovery tools:

- Content Search in the Office 365 Security & Compliance Center
- eDiscovery Cases in the Office 365 Security & Compliance Center
- In-Place eDiscovery in Exchange Online
- The eDiscovery Center in SharePoint Online
- Office 365 Advanced eDiscovery

### Run a Content Search

You can use **Content Search** in the Office 365 Security & Compliance Center to search for items such as email, documents, and instant messaging conversations in your Office 365 organization. Use this tool to search for items in these Office 365 services:

- Exchange Online mailboxes and public folders
- SharePoint Online and OneDrive for Business sites
- Skype for Business conversations
- Microsoft Teams
- Office 365 Groups

Content Search is a new eDiscovery search tool with new and improved scaling and performance capabilities. Use Content Search to run very large eDiscovery searches.

You can search all mailboxes, all Exchange public folders, and all SharePoint Online sites and OneDrive for Business accounts in a single Content Search. There are no limits on the number of content locations that you can search. There are also no limits on the number of searches that can run at the same time.

After you run a Content Search, the number of content locations and an estimated number of search results are displayed in the details pane on the **Content search** page. After you run a search you can preview the results, get keyword statistics for one or more searches, bulk-edit content searches, and export the results to a local computer.

### Place content locations on hold

You can use an eDiscovery case to create holds to preserve content that might be relevant to the case. You can place a hold on the mailboxes and OneDrive for Business sites of people who are custodians in the case. You can also place a hold on the group mailbox, SharePoint site, and OneDrive for Business site for an Office 365 Group. Similarly, you can place a hold on the mailbox and site that are associated with Microsoft Teams. When you place content locations on hold, content is held until you remove the hold from the content location or until you delete the hold.

When you create a hold, you have the following options to scope the content that is held in the specified content locations:

- You create an infinite hold where all content is placed on hold. Alternatively, you can create a query-based hold where only content that matches a search query is placed on hold.
- You can specify a date range to hold only the content that was sent, received, or created within that date range. Alternatively, you can hold all content regardless of when it was sent, received, or created.

### Export Content Search results

After a Content Search is successfully run, you can export the search results to a local computer. When you export email results, they’re downloaded to your computer as PST files. When you export content from SharePoint and OneDrive for Business sites, copies of native Office documents are exported. There are additional documents and reports that are included with the exported search results.

Additionally, any RMS-encrypted email messages that are included in the results of a Content Search will be decrypted when you export them (as individual messages). This decryption capability is enabled by default for members of the eDiscovery Manager role group. This is because the **RMS Decrypt management** role is assigned to this role group.

### Export limits

Exporting search results from the Security & Compliance Center has the following limits:

- You can export a maximum of 2 TB of data from a single Content Search. If the search results are larger than 2 TB, consider using date ranges or other types of filters to decrease the total size of the search results.
- Your organization can export a maximum of 2 TB of data during a single day.
- You can have a maximum of 10 exports running at the same time within your organization.
- A single user can run a maximum of three exports at the same time.

The maximum size of a PST file that can be exported is 10 GB by default. That means if the search results from a user’s mailbox are larger than 10 GB, the search results for the mailbox will be exported in two (or more) PST files.

### Manage eDiscovery cases

You can use **eDiscovery cases** in the Office 365 Security & Compliance Center to control who can create, access, and manage eDiscovery cases in your organization. If your...
An organization has an Office 365 E5 subscription, you can also use eDiscovery cases to analyze search results by using Office 365 Advanced eDiscovery.

An eDiscovery case allows you to add members to a case, control what types of actions that specific case members can perform, place a hold on content locations relevant to a legal case, and associate multiple Content Searches with a single case. You can also export the results of any Content Search that is associated with a case or prepare search results for analysis in Advanced eDiscovery. eDiscovery cases are a good way to limit who has access to Content Searches and search results for a specific legal case in your organization.

Assign eDiscovery permissions

The primary eDiscovery-related role group in Security & Compliance Center is called eDiscovery Manager. There are two subgroups within this role group.

- eDiscovery Managers: An eDiscovery Manager can use the Content Search tool in the Security & Compliance Center to search content locations in the organization, and perform various search-related actions such as preview and export search results. Members can also create and manage eDiscovery cases, add and remove members to a case, create case holds, and run Content Searches associated with a case. An eDiscovery Managers can only access and manage the cases they create. They can’t access or manage cases create by other eDiscovery Managers.

- eDiscovery Administrators: An eDiscovery Administrator is a member of the eDiscovery Manager role group, and can perform the same Content Search and case management-related tasks that an eDiscovery Manager can perform. Additionally, an eDiscovery Administrator can:
  - Access all cases that are listed on the eDiscovery cases page in the Security & Compliance Center.
  - Manage any eDiscovery case after they add themselves as a member of the case.
  - Perform administrative tasks in Advanced eDiscovery, such as setting up users, creating cases, and importing data. This is because a person who is an eDiscovery Administrator in the Security & Compliance Center is automatically added as an administrator in Advanced eDiscovery.

Scenarios

- **Reduce risk** of non-compliance due to time delays
- **Control increasing cost** of compliance processes: time, expenses, resources.
- **Effective management** of compliance processes.

Resources

- eDiscovery in Office 365
- Assign eDiscovery permissions in the Office 365 Security & Compliance Center

- Limits for Search in the Office 365 Security & Compliance Center
- Run a Content Search in the Office 365 Security & Compliance Center
- Export search results from the Office 365 Security & Compliance Center
- Manage eDiscovery cases in the Office 365 Security & Compliance Center
- MSIT Showcase: Office 365 meets evolving eDiscovery challenges in a cloud-first world

Customer Lockbox

Customer Lockbox ensures that no one at Microsoft can access customer content without the customer’s explicit approval.

**Customer Lockbox brings the customer into the approval workflow for access to customer content.**

For the purpose of maximizing data security and privacy for Office 365 customers, we have engineered the service to require nearly zero interaction with customer content by Microsoft employees.

**Nearly all service operations performed by Microsoft are either fully automated so there is no human interaction, or the human involvement is abstracted away from Office 365 customer content.**

In the very rare instances someone may need access to customer content to resolve a customer issue. Today within Microsoft, **Lockbox** enforces access control through multiple levels of approval, providing just-in-time access with limited and time-bound authorization. In addition, all access control activities in the service are logged and audited.

Customer Lockbox for Office 365, provides unprecedented customer control over content residing in Office 365, so customers can be assured that their content will not be accessed by Microsoft employees without their explicit approval. It brings customers into the access approval loop, requiring the customer to provide explicit approval of access to their content by a Microsoft employee for service operations.
How it Works

- Administrators in the customer’s Office 365 environment are notified via email that there is a request for access.
- Office 365 Admin Center portal will also display requests that have been submitted to the customer for approval.
- Administrators in the customer’s Office 365 environment can approve or reject Customer Lockbox requests.
- Microsoft can only proceed following approval of a Customer Lockbox request.
- If a customer rejects a Customer Lockbox request, no access to customer content will occur.
- If a user was experiencing a service issue that required Microsoft to access customer content in order to resolve (though such circumstances are expected to be extremely rare), then the service issue might simply persist. Microsoft would inform the customer of this outcome.
- Customer Lockbox requests have a default lifetime of 12 hours; after which they expire. Expired requests do not result in access to customer content.

Resources

- Video: An Overview of Customer Lockbox in Office 365
- Announcing Customer Lockbox for Office 365
- Microsoft Mechanics: An Overview of Customer Lockbox in Office 365

Advanced Threat Protection (ATP)

Advanced threat protection (ATP) in Exchange Online Protection (EOP) helps you prevent zero-day malware attacks in your email environment. ATP provides a way for your users access only links in emails or attachments to emails that are identified as not malicious.

If you already use EOP to help combat malware in your email messaging environment, adding ATP will provide more-effective protection than ever before against attacks propagated by unsafe links and unsafe attachments.

ATP complements existing EOP anti-malware scanning. Only those attachments that successfully pass anti-malware scanning are affected by your safe attachments or safe links policies.

Features & Benefits

ATP for Exchange Online delivers the following benefits:

- **Protection against unknown malware and viruses**—Today EOP employs a robust and layered anti-virus protection powered with three different engines against known malware and viruses. ATP extends this protection through a feature called Safe Attachments, which protects against unknown malware and viruses, and provides better zero-day protection to safeguard your messaging system. All messages and attachments that don’t have a known virus/malware signature are routed to a special hypervisor environment, where a behavior analysis is performed using a variety of machine learning and analysis techniques to detect malicious intent. If no suspicious activity is detected, the message is released for delivery to the mailbox.

- **Real time, time-of-click protection against malicious URLs**—EOP scans each message in transit in Office 365 and provides time of delivery protection, blocking any malicious hyperlinks in a message. But attackers sometimes try to hide malicious URLs with seemingly safe links that are redirected to unsafe sites by a forwarding service after the message has been received. ATP’s Safe Links feature proactively protects your users if they click such a link. That protection remains every time they click the link, as malicious links are dynamically blocked while good links can be accessed.

- **Rich reporting and URL trace capabilities**—ATP also offers rich reporting and tracking capabilities, so you can gain critical insights into who is getting targeted in your organization and the category of attacks you are facing. Reporting and message tracing allows you to investigate messages that have been blocked due to an unknown virus or malware, while the URL trace capability allows you to track individual malicious links in the messages that have been clicked.
Recent Improvements

- **New reports**—Get better insights to malware activity. Security admins will have a new reporting dashboard to see details of malware that Office 365 Advanced Threat Protection is analyzing.
- **Dynamic delivery**—Better performance and lower latency for emails with attachments. Users will see a placeholder while attachments are scanned in a sandbox environment. If deemed safe, attachments are re-inserted into the email. Dynamic Delivery is rolling out to customers now.

Upcoming Improvements

- **URL detonation**—Deeper protection against malicious URLs. Not only do we check a list of malicious URLs when a user clicks on a link, but Office 365 will also perform real-time behavioral malware analysis in a sandbox environment to identify malicious links. URL reputation checks are part of Advanced Threat Protection today.
- **Intelligence sharing with Windows Defender Advanced Threat Protection**—Security admins will be able to see malware activity and relationships across Windows 10 and Office 365.
- **Broader protection**—Advanced Threat Protection will extend to include protection for SharePoint Online, Word, Excel, PowerPoint and OneDrive for Business.

Scenarios

Advanced protection against unknown & sophisticated threats in end-user email, attachments & URLs.

- protect against unknown malware and viruses
- real time, time-of-click protection against malicious URLs
- rich reporting and URL trace capabilities

Resources

- ATP safe attachments in Office 365
- Set up an ATP safe attachments policy in Office 365
- ATP safe links in Office 365
- Set up ATP safe links policies in Office 365
- View the reports for Advanced Threat Protection

Advanced Security Management

Advanced Security Management in Office 365 gives you insights into suspicious activity in Office 365 so you can investigate situations that are potentially problematic and, if needed, take action to address security issues.

After you enable the feature, there are three ways in which you can use the service to help keep your organization safe:

- **alerts** that are triggered by anomalies or specific activities,
- **app discovery**, which provides information to help you understand and manage cloud app usage in your organization and
- **app permissions**, which give you control over third-party apps that connect to Office 365

Threat detection

Advanced Security Management enables you to set up anomaly detection policies, so you can be alerted to potential breaches of your network. Anomaly detection works by scanning user activities and evaluating their risk against over 70 different indicators, including sign-in failures, administrator activity and inactive accounts. For example, you can be alerted to impossible travel scenarios, such as if a user signs in to the service to check their mail from New York and then two minutes later is downloading a document from SharePoint Online in Tokyo.

Advanced Security Management also leverages behavioral analytics as part of its anomaly detection to assess potentially risky user behavior. It does this by understanding how users typically interact with Office 365, spotting anomalies and giving the anomalous activity a risk score to help IT decide whether to take further action.

Enhanced control

Advanced Security Management lets you set up activity policies that can track specific activities.

Default activity policy templates that are included

- **Administrative activity from a non-administrative IP address** Alert when an admin user performs an administrative activity from an IP address that is not included in a specific IP range category.
- **User logon from a non-categorized IP address** Alert when a user logs on from an IP address that is not included in a specific IP range category.
- **Mass download by a single user** Alert when a single user performs more than 30 downloads within 5 minutes.
- **Multiple failed user log on attempts to an app** Alert when a single user attempts to log on to a single app, and fails more than 10 times within 5 minutes.
- **Logon from a risky IP address** Alert when a user logs on from a risky IP address to your sanctioned services. The Risky IP category contains, by default, anonymous proxies and TOR exits point.

After reviewing an alert and investigating a user’s activities, IT may deem that the behavior is risky and want to stop the user from doing anything else. This can be done directly from the alert. Some activities may be deemed so risky that IT may want to immediately suspend the account. To help with this, IT can configure the activity policy so that an account is automatically suspended if that risky activity takes place.
Discovery and insights

Advanced Security Management also provides an **app discovery dashboard** that allows IT Pros to visualize your organization’s usage of Office 365 and other productivity cloud services, so you can maximize investments in IT-approved solutions. With the ability to discover about 1,000 applications in categories like collaboration, cloud storage, webmail and others, IT can better determine the extent to which shadow IT is occurring in your organization. Advanced Security Management will also give you details about the top apps in each category. For example, you can see how much data is being sent to OneDrive for Business, Box, Dropbox and other cloud storage providers.

To load the data into the dashboard, all you have to do is take the logs from your network devices and upload them via an easy-to-use interface.

**App Permissions** provides information to IT about which applications in their network have access to Office 365 data, what permissions they have and which users granted these apps access to their Office 365 accounts.

Based on this information, IT admins can choose to approve the app or revoke its access to Office 365. If they choose to revoke permissions to the app, it will no longer be able to access the information for any of the users in the Office 365 tenant. App Permissions also makes it easy for IT admins to notify users who have installed the application that is going to be banned.

Resources

- Blog post: [Gain enhanced visibility and control with Office 365 Advanced Security Management](#)
- Video: [Introducing Advanced Security Management for Office 365](#)
- Overview of Advanced Security Management in Office 365
- Get started with Advanced Security Management
- Create app discovery reports in Advanced Security Management
- Blog post: [Enhanced control over third-party apps now available in Office 365](#)

Advanced eDiscovery

With Advanced eDiscovery, you can better understand your Office 365 data and reduce your eDiscovery costs. Advanced eDiscovery helps you analyze unstructured data within Office 365, perform more efficient document review, and make decisions to reduce data for eDiscovery. You can work with data stored in Exchange Online, SharePoint Online, OneDrive for Business, and Skype for Business. You can select groups, individual mailboxes and sites, and then analyze it with Advanced eDiscovery.

Advanced eDiscovery streamlines and speeds up the document review process by identifying redundant information with features like Near-duplicates detection and Email Thread analysis. The Relevance feature applies predictive coding technology to identify relevant documents. Advanced eDiscovery learns from your tagging decisions on sample documents and applies statistical and self-learning techniques to calculate the relevance of each document in the data set. This enables you to focus on key documents, make quick yet informed decisions on case strategy, cull data, and prioritize review.

**Features**

**More efficient document review**

- identifies redundant information with features like Near-Duplicate Detection, which provides information about how similar documents are to each other; and Thread Analysis, which identifies emails that contain other emails in a thread, allowing you to review just the unique emails rather than every single one.
- reduces document review costs significantly.
- when you export data, the near-duplicate and email thread metadata are available to be loaded into other eDiscovery tools.

**Reduce data for eDiscovery**

- offers a Relevance feature, which applies predictive coding technology to teach the system to identify relevant documents
- learns from your tagging decisions on sample documents, and the system applies statistical and self-learning techniques to calculate the relevance of each document in the data set.
- enables you to focus on key documents and make quick yet informed decisions on case strategy.
- by ranking documents by relevance, you can also precisely cull the data and prioritize review.

**Understand unstructured data**

- Themes and Search are powerful features for early case assessment and internal investigations that help you quickly map the collection and find key data points.
- Themes groups related documents, allowing you to identify topics of interest, drill down to discover more material, find similar documents, and intuitively explore your data set by following up on related themes.
- Search gives search capabilities such as wildcards, Boolean logic, conceptual search and term expansion.

**Setup and Use**

Please refer to following articles to learn how to setup and use various modules and features:

- [Quick setup for Advanced eDiscovery](#): Helps you to get started with Advanced eDiscovery.
- [Running the Advanced eDiscovery Process module](#): Enables the preparation of files from specified data sources.
- **Analyzing case data with Advanced eDiscovery**: Allows identification and grouping of Near-duplicate files and hierarchically structured groups of Email Threads.
- **Managing Advanced eDiscovery Relevance setup**: Allows the definition of parameters for Relevance processing.
- **Using the Advanced eDiscovery Relevance module**: Identifies and ranks files by Relevance scores, which assists with early case assessment, document culling, and review.
- **Exporting case data with Advanced eDiscovery**: Enables the export of Advanced eDiscovery data and results for review.
- **Running reports in Advanced eDiscovery**: Enables the generation of .csv file output for the selected reports.
- **Defining case and tenant settings in Advanced eDiscovery**: Allows the definition of parameters at the case and tenant level.
- **Using Advanced eDiscovery utilities**: Enables the execution of defined Advanced eDiscovery utilities on case data.
- **User roles and access in Advanced eDiscovery**: Describes the access to features for each user role.

### Scenarios

**Simplifies the eDiscovery process across your email and document repositories**

This **new machine learning & analytics** functionality improves existing eDiscovery by:

- Significantly **reducing** document review costs.
- **Speeding up** the document review process.
- Using core technology (Equivio) that has already achieved **broad acceptance** in the legal community.

### Resources

- **Video**: Office 365 Advanced eDiscovery
- **Office 365 Advanced eDiscovery**
- **Analyze Office 365 data with Equivio Zoom**
- **MSIT Showcase**: Office 365 meets evolving eDiscovery challenges in a cloud-first world

### Advanced Data Governance

**Advanced Data Governance** in Office 365 will help you manage the exploding volume and increasing complexity of corporate data. We’re applying intelligence to help you achieve organizational compliance and automate data retention.

Use the **Data Governance features in the Office 365 Security & Compliance Center** to import data into your Office 365 organization, archive and retain content in email and documents, and create supervision policies to review internal and 3rd-party communications.

The following table describes the features that are available:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Import</strong></td>
<td>Import PST files to Exchange mailboxes. Then you can use the Intelligent Import feature to filter the items in PST files that actually get imported to the target mailboxes. This lets you trim the data that’s imported by setting filters that control what data gets imported to Office 365.</td>
</tr>
<tr>
<td><strong>Archive</strong></td>
<td>Enable or disable a user’s archive mailbox, which provides users with an alternate storage location for historical messaging data. The default archive policy that is assigned to mailboxes moves messages to the archive mailbox two years after the date a message is delivered to the mailbox.</td>
</tr>
<tr>
<td><strong>Retention</strong></td>
<td>Manage the lifecycle of email and documents by keeping the content you need and removing content after it’s no longer required. While your organization may be required to retain content for a period of time.</td>
</tr>
<tr>
<td><strong>Supervision</strong></td>
<td>Define supervision policies that capture email and 3rd-party communications in your organization so they can be examined by internal or external reviewers.</td>
</tr>
</tbody>
</table>

### Why import email data to Office 365?

- Importing PST files to user mailboxes is one way to migrate your organization’s email to Office 365.
- You can use the Intelligent Import feature to filter the items in PST files that actually get imported to the target mailboxes. This lets you trim the data that’s imported by setting filters that control what data gets imported.
- Importing email data to Office 365 helps address compliance needs of your organization by letting you:
  - Enable archive mailboxes and unlimited archiving to give users additional mailbox storage space.
  - Place mailboxes on Litigation Hold to retain content.
  - Use Microsoft eDiscovery tools to search for mailbox content.
  - Use Office 365 retention policies in the Security & Compliance Center to control how long mailbox content is retained, and then delete content after the retention period expires.
- Importing data to Office 365 helps protect against data loss. Email data that’s imported to Office 365 inherits the high availability features of Exchange Online.
- Email data in Office 365 is available to users from all devices because it’s stored in the cloud.

### Intelligent Import

Use the new Intelligent Import feature in the Office 365 Import service to filter the items in PST files that actually get imported to the target mailboxes. Here’s how it works:

- After you create and submit a PST import job, PST files are uploaded to an Azure storage area in the Microsoft cloud.
Office 365 analyzes the data in the PST files, in a safe and secure manner, by identifying the age of the mailbox items and the different message types included in the PST files.

When the analysis is complete and the data is ready to import, you have the option to import all data in the PST files as is or trim the data that’s imported by setting filters that control what data gets imported. For example, you can choose to:
- Import only items of a certain age.
- Import selected message types.
- Exclude messages sent or received by specific people.

After you configure the filter settings, Office 365 imports only the data that meets the filtering criteria to the target mailboxes specified in the import job.

The following graphic shows the Intelligent Import process, and highlights the tasks you perform and the tasks performed by Office 365.

### Retention Policies

For most organizations, the volume and complexity of their data is increasing daily – email, documents, instant messages, and more. Effectively managing or governing this information is important because you need to:

- **Comply proactively with industry regulations and internal policies** that require you to retain content for a minimum period of time – for example, the Sarbanes-Oxley Act might require you to retain certain types of content for seven years.
- **Reduce your risk in the event of litigation or a security breach** by permanently deleting old content that you’re no longer required to keep.
- **Help your organization to share knowledge effectively and be more agile** by ensuring that your users work only with content that’s current and relevant to them.

A retention policy in Office 365 can help you achieve all of these goals. Managing content commonly requires two actions:

- **Retaining** content so that it can’t be permanently deleted before the end of the retention period.
- **Deleting** content permanently at the end of the retention period.

With a retention policy, you can:

- Decide proactively whether to retain content, delete content, or both – retain and then delete the content.
- Apply a single policy to the entire organization or just specific locations or users.
- Apply a policy to all content or just content meeting certain conditions, such as content containing specific keywords or specific types of sensitive information.

When content is subject to a retention policy, people can continue to edit and work with the content as if nothing’s changed because the content is retained in place, in its original location. But if someone edits or deletes content that’s subject to the policy, a copy is saved to a secure location where it’s retained while the policy is in effect.

### Supervision Policies

Use supervision policies to capture employee communications for examination by internal or external reviewers.

Follow these steps to set up and use supervision in your Office 365 organization:

- **Set up groups for Supervision.** Determine who will have their communications reviewed and who will perform those reviews.
- **Make Supervision available in your organization.** Add yourself to the Supervisory Review role group so you can set up policies. Anyone who has this role assigned can access the Supervision page under Data Governance in the Security & Compliance Center.
- **Set up a supervision policy.** These policies define which communications are subject to review in your organization, and specifies who should perform reviews. Communications include email as well as 3rd-party platform communications (such as Facebook, Twitter, etc.)
- **Use Outlook web app to review communications identified by a supervision policy.** The Supervision add-in gives reviewers access to the supervision functionality right within Outlook web app so they can assess and categorize each item. Support for the desktop version of Outlook is coming soon.
- **Run the supervision report.** Use the supervision reports to see the review activity at the policy and reviewer level. For each policy, you can also view live statistics on the current state of review activity.

### Resources

- [Data governance in the Office 365 Security & Compliance Center](#)
- [Overview of importing PST files to Office 365](#)
- [Filter data when importing PST files to Office 365](#)
- [Enable archive mailboxes in the Office 365 Security & Compliance Center](#)
- [Overview of retention policies](#)
- [Configure supervision policies for your organization](#)
Threat Intelligence

Office 365 hosts one of the largest enterprise email services and productivity suites in the world, and manages content created on millions of devices. In the course of protecting this information, Microsoft has built a vast repository of threat intelligence data, and the systems needed to spot patterns that correspond to attack behaviors and suspicious activity. In Office 365, Threat Intelligence is a collection of these insights used in analyzing your tenant to help you find and eliminate threats, proactively. Threat Intelligence appears as a set of tools and dashboards in the Office 365 Security and Compliance Center to understand and respond to threats.

Office 365 Threat Intelligence monitors signals from sources, such as user activity, authentication, email, compromised PCs, and security incidents. This data can be analyzed and displayed so that business decision makers and Office 365 Global, or Security, administrators can understand and respond to threats against their users and intellectual property.

- You can use the Threat dashboard to see threats that have already been handled, and as a handy tool for reporting out to business decision makers on what Threat Intelligence has already done to secure your business.
- If you are investigating or experiencing an attack against your Office 365 tenant, use the Threat explorer to analyze threats. Threat explorer shows you the volume of attacks over time, and you can analyze this data by threat families, attacker infrastructure, and more. You can also mark any suspicious email for the Incidents list.
- You can also mark suspicious emails you see in Threat explorer for further investigation, and manage response outcomes in the list of Incidents, a handy way to keep on-track during an attack.

Threat Intelligence Dashboard

This dashboard is an excellent resource when you need a summary of threats against your Office 365 tenant. It features a color-coded chart of weekly threat detections, and graphs of malware trends and malware families detected, as well as security trends in the industry, and a helpful heat-map of attack origins for your specific tenant. This dashboard also shows Global and Security administrators a quick listing of top targeted users and recent alerts that you can click into for more information, among other helpful panels of information.

The dashboard is an excellent way for technical experts in security to report out to business decisions makers like Chief Executive Officers (CEOs), or Chief Technical Officers (CTOs).

The dashboard is also an entry to Threat explorer, and many of the links connect these two views of your threat intelligence. For example, the Threat investigation panel on Dashboard has links that drill down into Threat explorer:

- Show messages removed after delivery
- Find malicious messages sent to someone in your organization

This summary panel should be checked daily.

Threat Explorer

When you open Threat explorer you’ll find a color-coded graph that represents attacks that are targeted at your organization. The default view will show malware by threat family. This pane has a tabbed view of top malware families, an email list, and a map of email origins. It also shows you top targeted users.

Note: Optionally show either All email, or Malware, by sender domain, sender IP, protections status, or caught by technology. And, you can export the chart data and email list.

When you click on a specific top malware family (such as JS/Nemucod), you can see details about how that malware is impacting your organization and what the malware can do. Once its threat pane opens, you can look at the definition of the malware family. The view of each top threat shows the affected users (recipients, sender addresses, IP addresses, and
status), along with tabs for Technical details, Global details, and Advanced analysis.

Incidents

Use Incidents to track phishing or malware campaigns aimed at your users and trigger remediation actions like deleting attachments, or moving email messages into a junk folder.

To create a new incident, search for messages you’ve identified as suspicious in the All Email view of Threat explorer. Once you’ve filtered the email down to those you want to track or remediate, use the Add email to incident button to create a new incident, or add those messages to an existing incident.

Once you’ve added messages to an incident, you can take a remediation action on those messages. From the Incidents page, select the incident that you created, and then, select your mail submission. In the submission dialog box, choose Move to junk, or Delete attachments. If you mistakenly move email messages to a junk folder, you can recover them by selecting Move to inbox.

You can track the progress of the remediation you started on the Action Logs tab.

Threat Intelligence Feeds

The same data that powers the Threat intelligence dashboard and Threat explorer is available through the Security and Compliance Center, and Office 365 Management Activity API, too. The feeds contain:

- One record for every email that contains a threat targeted at your organization
- One record for every message removed by zero-hour auto-purge

You can find the documentation for Threat Intelligence Feeds here: Office 365 Management Activity API.
Azure Active Directory (AD)

Azure Active Directory (Azure AD) is Microsoft’s multi-tenant cloud based directory and identity management service.

- **For IT Admins**, Azure AD provides an affordable, easy to use solution to give employees and business partners single sign-on (SSO) access to thousands of cloud SaaS Applications like Office365, Salesforce.com, Dropbox, and Concur.
- **For application developers**, Azure AD lets you focus on building your application by making it fast and simple to integrate with a world class identity management solution used by millions of organizations around the world.

Azure AD also includes a full suite of identity management capabilities including multi-factor authentication, device registration, self-service password management, self-service group management, privileged account management, role based access control, application usage monitoring, rich auditing and security monitoring and alerting. These capabilities can help secure cloud based applications, streamline IT processes, cut costs and help ensure that corporate compliance goals are met.

All Microsoft Online business services rely on Azure Active Directory (Azure AD) for sign-in and other identity needs. If you subscribe to any of Microsoft Online business services (for example, Office 365 or Microsoft Azure), you get Azure AD with access to all of the Free features, described below.

To enhance your Azure Active Directory, you can add paid capabilities using the Azure Active Directory Basic, Premium P1, and Premium P2 editions. Azure Active Directory paid editions are built on top of your existing free directory, providing enterprise class capabilities spanning self-service, enhanced monitoring, security reporting, Multi-Factor Authentication (MFA), and secure access for your mobile workforce.

Comparing generally available features

**Common Features**
- Directory Objects
- User/Group Management (add/update/delete)/ User-based provisioning, Device registration
- Single Sign-On (SSO)
- Self-Service Password Change for cloud users
- Connect (Sync engine that extends on-premises directories to Azure Active Directory)
- Security / Usage Reports

**Basic Features**
- Group-based access management / provisioning
- Self-Service Password Reset for cloud users
- Company Branding (Logon Pages/Access Panel customization)
- Application Proxy
- SLA 99.9%

**Premium P1 Features**
- Self-Service Group and app Management/Self-Service application additions/Dynamic Groups
- Self-Service Password Reset/Change/Unlock with on-premises write-back
- Multi-Factor Authentication (Cloud and On-premises (MFA Server))
- MIM CAL + MIM Server
- Cloud App Discovery
- Connect Health
- Automatic password rollover for group accounts

**Premium P2 Features**
- Identity Protection
- Privileged Identity Management

Azure Active Directory Join – Windows 10 only related features
- Join a device to Azure AD, Desktop SSO, Microsoft Passport for Azure AD, Administrator Bitlocker recovery
- MDM auto-enrollment, Self-Service Bitlocker recovery, Additional local administrators to Windows 10 devices via Azure AD Join

**Resources**
- What is Azure Active Directory?
- Fundamentals of Azure identity management
- Integrate your on-premises directories with Azure Active Directory
- Azure AD service limits and restrictions
- Frequently asked questions for Azure Active Directory
- Connect
- List of Tutorials on How to Integrate SaaS Apps with Azure Active Directory

**Office 365 identity and Azure AD**

Office 365 uses the cloud-based user authentication service Azure Active Directory to manage users. You can choose from
three main identity models in Office 365 when you set up and manage user accounts:

- **Cloud identity.** Manage your user accounts in Office 365 only. No on-premises servers are required to manage users; it's all done in the cloud.

  In this model, you create and manage users in the Office 365 admin center and store the accounts in Azure AD. Azure AD verifies the passwords. Azure AD is the cloud directory that is used by Office 365. No on-premises servers are required — Microsoft manages all that for you.

- **Synchronized identity.** Synchronize on-premises directory objects with Office 365 and manage your users on-premises. You can also synchronize passwords so that the users have the same password on-premises and in the cloud, but they will have to sign in again to use Office 365.

  In this model, you manage the user identity in an on-premises server and synchronize the accounts and, optionally, passwords to the cloud. The user enters the same password on-premises as he or she does in the cloud, and at sign-in, the password is verified by Azure AD. This model uses a directory synchronization tool to synchronize the on-premises identity to Office 365.

- **Federated identity.** Synchronize on-premises directory objects with Office 365 and manage your users on-premises. The users have the same password on-premises and in the cloud, and they do not have to sign in again to use Office 365. This is often referred to as single sign-on.

  This model requires a synchronized identity but with one change to that model: the user password is verified by the on-premises identity provider. This means that the password hash does not need to be synchronized to Azure AD. This model uses Active Directory Federation Services (AD FS) or a third-party identity provider.

  It's important to carefully consider which identity model to use to get up and running. Think about time, existing complexity, and cost. These factors are different for every organization; [Understanding Office 365 identity and Azure Active Directory](#) topic reviews these key concepts for every identity model to help you choose the identity you want to use for your deployment.

  **Related resources:**
  - [Azure AD Connect FAQ](#)
  - [Prepare to provision users through directory synchronization to Office 365](#)
  - [Fixing problems with directory synchronization for Office 365](#)

**Office 365 Groups**

Office 365 Groups is a service developed with collaboration in mind. It works with the Office 365 tools you use already so you can collaborate with your teammates when writing documents, creating spreadsheets, working on project plans, scheduling meetings, or sending email.

The Ignite session - Discover Office 365 Groups—overview, administration and roadmap, presents a comprehensive overview and update on Office 365 Groups. We first discussed how group collaboration in the enterprise has evolved to be multi-faceted and how Office 365 addresses the unique needs and workstyle of different groups.

Groups in Office 365 let you choose a set of people that you wish to collaborate with and easily set up a collection of resources for those people to share. You don’t have to worry about manually assigning permissions to all those resources because adding members to the group automatically gives
them the permissions they need to the tools your group provides.

Different teams may prefer to work different ways and Office 365 has the tools to enable collaboration in whatever form your teams prefer.

Groups in Outlook

If you prefer the shared inbox mode of collaboration, then the groups experience in Outlook is for you. By creating a group in Outlook you’ll get:

- Shared Inbox – For email conversations between your members. This inbox has an email address and can be set to accept messages from people outside the group and even outside your organization, much like a traditional distribution list
- Shared Calendar – For scheduling events related to the group
- SharePoint Document Library – A central place for the group to store and share files
- Shared OneNote Notebook – For gathering ideas, research, and information
- SharePoint Team Site – A central repository for information, links and content relating to your group
- Planner – For assigning and managing project tasks among your group members

You don’t have to manually create any of those resources; creating the group automatically creates them for you and assigns the necessary permissions for your group members so they can start using them right away.

You can access these resources through the familiar Microsoft Outlook 2016 desktop client, via Outlook on the Web, via Outlook 2016 for Mac (shared inbox only), via Outlook mobile, or using our dedicated Outlook Groups mobile apps on iOS, Android or Windows Phone.

Accessing Office 365 Connectors

Office 365 Connectors for Outlook Groups are available to any Office 365 Mail user. They are available by default when you navigate to any Group from Outlook on the web. Once you are in the Office 365 Mail app, navigate to any Group or create a new Group first and then select Connectors as shown in the screenshot.

Groups and Microsoft Teams

The newest part of our collaboration story is Microsoft Teams. Microsoft Teams is the inner loop for your team – a persistent chat board where you can have informal, real-time, conversations around very focused topics or specific sub-groups within the group. Creating a Microsoft Team adds this persistent chat capability to the groups experience in Outlook.

Accessing Office 365 Connectors

From Microsoft Teams, you can easily add and configure connectors for any channel, either from the channel context menu or in the channel header.

Groups in Yammer

Yammer brings the enterprise social experience to your collaboration. It helps you make new connections and discoveries across your organization. It can help you communicate and discuss ideas company-wide or around common interest areas. By creating an Office 365 connected group in Yammer you’ll get:

- Yammer Group – A common place to have conversations and share information
- SharePoint Document Library – A central place for the group to store and share files
- Shared OneNote Notebook – For gathering ideas, research, and information
- SharePoint Team Site – A central repository for information, links and content relating to your group
- Planner – For assigning and managing project tasks among your group members

You can access these tools through Yammer in your browser or using the Yammer app on your iOS, Android or Windows Phone device.

Accessing Office 365 connectors

Connectors can post updates to groups from a wide variety of tools, such as news and social media sources such as Twitter and Bing News, HR systems like XYZ, and project management tools like Trello and Asana. Connectors will be available only in Office 365 connected Yammer groups.

To add and configure connectors for any Office 365 connected Yammer group, click Add or Remove Apps
Restore a deleted Office 365 Group

If you've deleted an Office 365 group it's retained, by default, for a period of 30 days. The group, which we refer to as "soft-deleted" during that period, can be restored by using PowerShell.

You can also permanently delete a soft-deleted group if you can't wait the 30 days for the retention period to expire for the content to be permanently deleted.

IMPORTANT: If you use Remove-MsolGroup in PowerShell to delete a group, this will purge the group permanently. When deleting groups in PowerShell it's best practice to use Remove-AzureADMSGroup to soft-delete the O365 group.

Group content that can be restored includes:
- Azure Active Directory (AD) Office 365 Groups object, properties and members
- Group SMTP address
- Exchange Online shared inbox and calendar
- SharePoint Online team site and files
- OneNote notebook
- Planner

Additionally, if you have a connected Microsoft Team or Office 365 Connected Yammer group those can be restored as well.

Resources

Watch Videos ...
- Introducing Office 365 Groups
- Office 365 Groups: Quick tour of new user and admin experiences

Read ...
- Learn about Office 365 groups
- Office 365 Reports in the admin center - Office 365 groups
- Actionable messages in Outlook, Office 365 Groups, and Microsoft Teams
- Use PowerShell to manage Office 365 Groups
- Connect your business-critical applications to Outlook and Groups
- Manage your SharePoint team site settings
- Delete a group
- Restore a deleted Office 365 Group

Office 365 CDN

Office 365 Content Delivery Network (CDN) capability will enable you to host static assets, like images and JavaScript files in CDN for providing better performance with SharePoint pages. CDN will work effectively as a geo-distributed caching proxy, by caching the static assets closer to the browsers requesting them.

This CDN capability is included as a standard service as part of your Office 365 subscription. There are no additional costs involved on taking it into use. You'll need to explicitly enable CDN capabilities in your tenant using SharePoint Online Management PowerShell cmdlets.

Office 365 Public CDN

Office 365 Public Content Delivery Network (CDN) capability in the Office 365 will enable you to automatically host static assets, like images and JavaScript files in CDN for providing better performance with SharePoint pages. CDN will work effectively as a geo-distributed caching proxy, by caching the static assets closer to the browsers requesting them.

Following picture defines the logical flow:

1. Administrator enables Office 365 Public CDN for the tenant using SharePoint Online Management Shell.
2. Static assets to be shared from CDN are uploaded to the SharePoint libraries, which are enabled as CDN origins.
3. Assets are being exposed from the configured libraries and folders and they can be accessed using CDN URLs.
4. URLs pointing to CDN location are available to be used in the SharePoint sites and in the customizations hosted from SharePoint.

Public CDN URLs for the assets are static and are not changed after the asset has been located to the CDN origin. You can either hard-code Public CDN URLs or leverage the Publishing Feature integration to get Auto-Rewriting to CDN URL.

Office 365 Private CDN (Preview)

Following picture defines the logical flow with Office 365 Private CDN, which is now in preview status and available from tenants with first release status.
1. Administrator enables Office 365 Public CDN for the tenant using SharePoint Online Management Shell
2. Static assets to be shared from CDN are uploaded to the SharePoint libraries, which are enabled as CDN origins
3. Assets are available for being exposed through the CDN service when they are in the CDN origin for the Private CDN
4. When pages, with assets in the CDN origins, are being requested, SharePoint automatically rewrites the URLs pointing to the CDN URLs, so that client side browser is requesting these assets using CDN location
5. Assets being shared from the CDN origin must have a major version published and user access to these assets is being considered when the URL rewriting happens

The Private CDN URLs are dynamically generated by SharePoint Online. The Private CDN URL can only be generated if user has read permissions to the CDN origin (specifically the folder containing the asset).

Resources

- Video: [Getting started with Office 365 CDN](#)
- [General availability of Office 365 CDN](#)
- [SharePoint Online PowerShell cmdlet documentation](#)
There are multiple strategies and possible paths to achieve a wide and impactful adoption of Office 365. Every Organization is unique in its own way so plan, try out, learn and innovate as you go along.

1) **Structured adoption process.** Go to Four steps towards successful adoption section
2) **Get quick wins.** Go to Getting Started Scenarios section
3) **Discover possibilities and get inspired.** Go to Productivity library section
4) **Think end-to-end transformation.**

### Four Steps Towards Successful Adoption

A successful Office 365 rollout focuses on driving adoption and helping everyone understand the benefits of working in a new way.

Driving adoption is about understanding the business challenges that you will address with solutions based out of Office 365. It is about ensuring that people across your organization understand the benefits and embrace the solutions you provide.

That’s why we’ve created a four-step approach to help you successfully drive Office 365 adoption.

1) **Define a vision and identify business scenarios**

One of the most important factors in driving Office 365 adoption is to define a clear, concise, and comprehensive vision and outline your desired business scenarios. A well-defined business vision and list of targeted business objectives will serve as your guiding light throughout your launch and rollout planning, and also help secure buy-in across your organization.

2) **Prioritize solutions and create an adoption plan**

Once you’ve established your vision and have assessed your business challenges and opportunities, the next step is all about mapping the Office 365 capabilities to your targeted business goals and prioritizing the workloads that will help you get there.

3) **Commit resources and execute an adoption plan**

Raising awareness is an essential step to driving Office 365 adoption as it informs, involves, and inspires your users about the business value that Office 365 can bring to their day-to-day. As you go about launching your messaging and events, remember to highlight the vision and business scenarios that you identified in the previous adoption stages so you can easily convey the “What’s in it for me?”

4) **Measure, share success, and iterate**

As you move through your adoption journey, it’s important to continuously consolidate feedback, assess levels of success, and iterate on your approach through identifying new business scenarios, use cases, and audiences. After your organization-wide launch, measure how well Office 365 has been received and how usage relates back to the success criteria you established early on.

### Complete visioning exercise

**Host** a meeting with executives, key department stakeholders, project managers, and champions who understand overarching company goals.

**Discuss** the challenges and barriers that may be affecting workflows, and start to identify how new ways of working could make an impact.

**Consider these questions to drive the conversation:**

- What are the current collaboration and communications challenges within the organization?
- Why is the organization changing the way we work at this time?
- How does working in a new way support the organization’s overarching mission, vision, and strategy?
- How will a more social and open way of working benefit the overall organization and employees personally?
- What does success look like following the adoption of this new way of working?

### Define your scenarios

**Host** a meeting to delve deeper into current challenges, strategies, and goals.
Identify the important business objectives and challenges, and start to recognize areas of opportunity to improve work processes.

Consider these questions to drive the conversation:

- What are some of the organization’s challenges or pain points related to communication and collaboration?
- What are the main areas in which your organization would like to see improvement?
- What methods of communication and collaboration are typically better received by your organization than others?
- What is the process for drafting, distributing and sharing information?
- What are some of the factors that would help drive the business scenario forward?

Prioritize solutions

It’s important to start small and demonstrate quick value, so that you don’t overwhelm your teams. We encourage you to take the following four parameters into consideration as you work to prioritize the solutions and define your step-by-step approach.

- **Complexity**: How complex or difficult is it to put the solution into place? Complexity could be due to technical, organizational, or cultural challenges.
- **Added Value**: How much value will this usage scenario deliver to employees?
- **Impact**: Will the usage scenario impact employees across the whole company or is it specific to a team or department?
- **Leadership Involvement**: For each usage scenario, estimate the amount of leadership support you are likely to receive.

Drive awareness & excitement

“If people understand how it's going to help them they will be more motivated to learn it.”

To maximize results, use a variety of tactics:

- **Communications**: including internal announcements or newsletters, is critical to driving adoption, as it informs and inspires users about the new technology and helps create a natural “buzz” or excitement.
- **Engagement events**: such as parties, town hall meetings, contests, and giveaways, can help further momentum and encourage employees to start interacting with the new tools. Events should require users to interact with Office 365, so that they can experience the value first hand.
- **Training**: which can vary from classroom-style sessions to self-help getting started guides, is essential to ensure that employees understand how to actually use the new technologies to get their work done.

Keep in mind that the more communications, events and training sessions that you organize, the more likely your colleagues will engage with Office 365.

Resources

**FastTrack** includes resources, tools, and experts to make your rollout of Office 365 a success. A successful Office 365 rollout focuses on driving adoption and helping everyone understand the benefits of working in a new way.

For an **end-to-end view of building and implementing a successful Office 365 rollout**, review the Office 365 Adoption Guide.

Getting Started Scenarios

Once you’ve established your vision and have assessed your business challenges and opportunities, the next step is all about mapping the Office 365 capabilities to your targeted business goals and prioritizing the workloads that will help you get there. Refer to: Identify Scenarios, Office 365 Catalog, Identify scenario templates and Office 365 productivity training.

Select from the following key scenarios or build your own using the **Productivity Library**.

**Get it done from anywhere**

People need consistent, fast experiences, regardless of their device. Find out how Office 365 enables you to get the job done from anywhere.

- **Me and my documents**. With familiar Office experiences on the devices you use most, you can create with confidence, stay productive, and act on inspiration anywhere, anytime. Video tutorial
- **Work together seamlessly**. Do your best work together with Office 365—whatever you like to work. Video tutorial

**Email and calendar on the go**

Office 365 makes it easier than ever to manage your inbox. Coordinate meetings. Access synchronized contacts. Check your task list. And tackle your busy calendar. All so you can quickly deal with important matters on the go.

- **Unite your group**. With Outlook Groups, groups can work together using the rich capabilities of email without the fear of overloading their inboxes. Each Outlook Group is a dedicated workspace that contains the full history of conversations, files, and meetings accessible to all members. Video tutorial

**Collaborate on Content**

Access the documents and information you need when you need them. SharePoint Online and OneDrive for Business empower teams to collaborate on documents, share reports with partners, and connect with colleagues and customers—from virtually any device.

- **Anywhere access and sharing for your files**. OneDrive for Business makes it easy to access your files—and share them
with colleagues—online and offline, at your desk or on the go. Video tutorial

- **Collaborate and publish team and project information.** Create SharePoint team sites to help people work together, keep them connected to the information they need, and provide rich destinations that promote their work across the organization. Video tutorial

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**Make meetings matter**

Getting the right people working together can be a challenge in our on-the-go world. Skype for Business makes it easier for people to meet and connect online, across locations and devices.

- **Communicate your way.** Get input without leaving your Office app. With Skype for Business integration, you can IM, screen-share, talk, or video-chat right from your document. Easily bring others into a conversation and share your desktop so you can make decisions in real time. Video tutorial

- **Complete meeting solution.** Skype for Business helps your team work together from any location, on virtually any device—as if you were all in one room. Share your desktop, annotate your presentations with feedback, record a meeting for future reference, and capture it all with OneNote for reference after the meeting. Video tutorial

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**Provide a chat-centered workspace**

Workplace dynamics are changing and team collaboration has become a key part of getting work done. Today, employees work on two times more teams than they did just five years ago. Microsoft Teams is integrated with Office 365, so it gives the team a hub that brings together all of their chats, content, people, and tools.

- **Achieve more together.** Teams can be more effective when all the conversations, content, people, and tools live in just one hub. Plus, team chats, files, and notes are available to the entire team and can be referenced at any time, so everyone's up to speed. Video tutorial [en-US]

- **Connect your team.** Teams can communicate in whatever way works best in the moment: private chat with one or a group of people, chat with the entire team to tap into the group knowledge, or a call or video call for real-time collaboration. Video tutorial [en-US]

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**Drive Value.** Make sure everyone gets the most out of your investment in Office 365. FastTrack resources can help you

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**Productivity Library**

You can build your own scenarios using the Productivity Library available in FastTrack site. You can filter the scenarios by Roles, Industry and/or Products. To view a scenario, click on it.

**Sample scenario …**

Educate distributed sales representatives from anywhere.

Provide a way for distributed sales staff to attend training workshops and access product documentation from anywhere and on any device.

**Get started**

1. Easily schedule meetings accommodating multiple calendars
2. Make large group training virtual
3. Share training resources from a central location
4. Build a digital employee handbook
5. Engage in conversation with colleagues

**Case studies**

Telefonica calls on Office 365 and Yammer to power global workforce collaboration.

**Resources**

**Watch Videos ...**

- Office 365 delivers social networking
- Office 365 delivers web conferencing

For Manufacturing

- Office 365 helps manufacturing organizations streamline supply chain
- Office 365 helps manufacturing organizations sell effectively as a team
- Office 365 helps manufacturing organizations speed M&A and onboarding
- Office 365 helps manufacturing organizations improve field service
- Office 365 helps manufacturing organizations ensure operational excellence
- Office 365 helps manufacturing organizations accelerate product innovation

For Hospitality

- Office 365 helps hospitality organizations open a new location
- Office 365 helps hospitality organizations deliver effective training

For Retail
• Office 365 helps retail organizations deliver training effectively
• Office 365 helps retail organizations improve supplier relations
• Modern Workplace: The Evolution of Store Communications

For Financial Services
• Office 365 helps financial services organizations meet regulatory demands
• Office 365 helps financial services organizations improve sales

For Professional Services
• Office 365 helps professional services organizations streamline firm administration
• Office 365 helps professional services companies deliver excellent service
• Office 365 helps professional services organizations elevate employee talent

Office 365 Adoption content pack

Use the Office 365 Adoption content pack within Power BI to gain insights on how your organization is adopting the various services within Office 365 to communicate and collaborate. You can visualize and analyze Office 365 usage data, create custom reports and share the insights within your organization and gain insights into how specific regions or departments are utilizing Office 365.

The content pack gives you access to a pre-built dashboard that provides a cross-product view of the last 12 months and contains a number of sections. Each section provides you with specific usage insights. By clicking on the top level metrics, you can access more detailed reports. User specific information is available for the last month.

Resources
• Office 365 Adoption content pack
• Enable the Power BI adoption content pack for Office 365
• Working with the reports in the Office 365 adoption content pack
• Active user in Office 365 usage reports
• Troubleshoot Office 365 Adoption Content Pack
• Adoption content pack data model
• Customize the Office 365 Adoption Content Pack
Microsoft Graph

You can use the Microsoft Graph API to interact with the data of millions of users in the Microsoft cloud. Use Microsoft Graph to build apps for organizations and consumers that connect to a wealth of resources, relationships, and intelligence, all through a single endpoint: https://graph.microsoft.com.

What’s in the graph?

Microsoft Graph is made up of resources connected by relationships. For example, a user can be connected to a group through a memberOf relationship, and to another user through a manager relationship. Your app can traverse these relationships to access these connected resources and perform actions on them through the API.

You can also get valuable insights and intelligence about the data from Microsoft Graph. For example, you can get the popular files trending around a particular user, or get the most relevant people around a user.

What can you do with Microsoft Graph?

You can use Microsoft Graph to build experiences around the user’s unique context to help them be more productive. Imagine an app that...

• Looks at your next meeting and helps you prepare for it by providing profile information for attendees, including their job titles and who they work with, as well as information on the latest documents and projects they’re working on.
• Scans your calendar, and suggests the best times for the next team meeting.
• Fetches the latest sales projection chart from an Excel file in your OneDrive and lets you update the forecast in real time, all from your phone.
• Subscribes to changes in your calendar, sends you an alert when you’re spending too much time in meetings, and provides recommendations for the ones you could miss or delegate based on how relevant the attendees are to you.
• Helps you sort out personal and work information on your phone; for example, by categorizing pictures that should go to your personal OneDrive and business receipts that should go to your OneDrive for Business.

Featured scenarios for Microsoft Graph

Check out some common and featured scenarios for working with the Microsoft Graph API.

<table>
<thead>
<tr>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET my profile</td>
</tr>
<tr>
<td>GET my files</td>
</tr>
<tr>
<td>GET my photo</td>
</tr>
<tr>
<td>GET my mail</td>
</tr>
<tr>
<td>GET my high importance email</td>
</tr>
<tr>
<td>GET my calendar events</td>
</tr>
<tr>
<td>GET my manager</td>
</tr>
<tr>
<td>GET last user to modify file foo.txt</td>
</tr>
<tr>
<td>GET Office365 groups I’m member of</td>
</tr>
<tr>
<td>GET users in my organization</td>
</tr>
<tr>
<td>GET groups in my organization</td>
</tr>
<tr>
<td>GET people related to me</td>
</tr>
<tr>
<td>GET items trending around me</td>
</tr>
<tr>
<td>GET my notes</td>
</tr>
</tbody>
</table>

Try out some more calls in the Graph Explorer, and use our quick start to get up and running fast. Learn more about how to use the API to build your first app.

Get access tokens

To call Microsoft Graph, your app must acquire an access token from Azure Active Directory (Azure AD), Microsoft’s cloud identity service. The access token contains information (or claims) about your app and the permissions it has for the resources and APIs available through Microsoft Graph.

What is an access token and how do I use it?

Access tokens issued by Azure AD are base 64 encoded JSON Web Tokens (JWT). They contain information (claims) that web APIs secured by Azure AD, like Microsoft Graph, use to validate the caller and to ensure that the caller has the proper permissions to perform the operation they’re requesting. When calling Microsoft Graph, you can treat access tokens as opaque. You should always transmit access tokens over a secure channel, such as transport layer security (HTTPS).

To call Microsoft Graph, you attach the access token as a Bearer token to the Authorization header in an HTML request.

What are Microsoft Graph permissions?

Microsoft Graph exposes a rich set of granular permissions over the resources it controls. These permissions are expressed as strings and grant apps access to Microsoft Graph resources like users, groups, user mail, etc. For example:
- **User.Read** allows an app to read the profile of the signed-in user.
- **Mail.Send** allows an app to send mail on behalf of the signed-in user.

There are two types of permissions:

- **Delegated permissions** are used by apps that run with a user present. The user’s privileges are delegated to the app which makes calls on behalf of the user to Microsoft Graph. Many of these permissions can be consented to by a user, but others require administrator consent.
- **Application permissions** are used by apps that run without a user. These often grant an app broad privileges within an organization and always require the consent of an administrator.

For a complete list of Microsoft Graph permissions, as well as the differences between Delegated and Application permissions, see the [Permissions reference](#).

**What kind of apps can I call Microsoft Graph from?**

You can call Microsoft Graph from the following kinds of apps:

- **Native apps**: Apps that run on a device such as a desktop, tablet, or mobile phone. These apps use the operating system (OS) native to the device like iOS, Android, or Windows for user presentation and to make calls to Microsoft Graph on behalf of a user.
- **Web apps**: Apps that run on a server and interact with the signed-in user through a user-agent, usually a web browser. Most of the presentation layer is handled on the server, and calls to Microsoft Graph are made from the server-side on behalf of a user.
- **Single Page Apps (SPA)**: Web apps with rich user experiences that handle much of the presentation layer through client-side scripting in the browser. Calls to Microsoft Graph are made from client-side script using technologies like AJAX and frameworks like Angular.js. Calls are made on behalf of a user.
- **Background Services/Daemons**: Background services and daemons that run on a server without the presence of a user and make calls to Microsoft Graph under their own identity.
- **Web APIs**: A client app calls a web API (secured by Azure AD), which then calls Microsoft Graph, all on behalf of a user. Supported by the Azure AD endpoint. For the Azure AD v2.0 endpoint, only supported if the client and the web API have the same Application Id; for example, a native app that calls a web API back end.

**How do I get my app talking to Azure AD and Microsoft Graph?**

Before your app can get a token from Azure AD, it must be registered. For the Azure AD v2.0 endpoint, you use the [Microsoft App Registration Portal](#) to register your app. For the Azure AD endpoint, you use the [Azure portal](#). Registration integrates your app with Azure AD and establishes the coordinates and identifiers that it uses to get tokens. These are:

- **Application Id**: A unique identifier assigned by Azure AD.
- **Redirect URI/URL**: One or more endpoints at which your app will receive responses from Azure AD. (For native and mobile apps this is a URI assigned by Azure AD.)
- **Application Secret**: A password or a public/private key pair that your app uses to authenticate with Azure AD. (Not needed for native or mobile apps.)

**Microsoft Graph Connect samples**

Microsoft publishes Connect samples for Microsoft Graph for a wide variety of platforms, including: Android, AngularJS, ASP.NET, iOS (Obj-C and Swift), Node.JS, PHP, Python, Ruby, UWP, and Xamarin. You can use these samples to examine code that uses various authentication libraries to get tokens from Azure AD. Currently, most samples use third-party authentication libraries; however, the ASP.NET and UWP samples use Microsoft libraries.

- The [Build your first app](#) section contains detailed articles that show you how to create Connect apps using the Azure AD v2.0 endpoint, and covers the authentication libraries used on each platform. Available samples are listed by platform and authentication endpoint.
- To quickly get a running sample on your platform of choice, see [Microsoft Graph Quick Start](#).
- Visit the [Microsoft Graph repo](#) on GitHub to see all the samples available for Microsoft Graph.

**Azure Active Directory samples and documentation**

The Azure AD documentation contains articles and samples that specifically focus on authentication and authorization with Azure AD.

For the Azure AD v2.0 endpoint:

- The easiest place to start is in the [Azure AD v2.0 endpoint documentation](#). This article contains links to overviews, protocol documentation and getting started articles for different platforms all organized by the type of app you’re developing.
- For samples listed by client or server authentication library, see [Azure Active Directory v2.0 Authentication Libraries](#).
- Or you can explore Azure AD samples by platform in the [Azure Code gallery](#). Note: you cannot qualify your search by endpoint version.

For the Azure AD endpoint:

- The easiest place to start is in the [Azure AD Developer’s guide overview](#). This article contains links to overviews, protocol documentation, and getting started articles for different platforms organized by the type of app you’re developing.
- For samples listed by client or server authentication library, see [Azure Active Directory Authentication Libraries](#).
- For samples listed by app type and platform, see [Azure Active Directory Code Samples](#).
- Or you can explore Azure AD samples by platform in the [Azure Code gallery](#). Note: you cannot qualify your search by endpoint version.
Use the Microsoft Graph API

To read from or write to a resource such as a user or an email message, you construct a request that looks like the following.

https://graph.microsoft.com/{version}/{resource}?query-parameters

The components of a request include:

- **HTTP method** - The HTTP method used on the request to Microsoft Graph.
- **{version}** - The version of the Microsoft Graph API your application is using.
- **{resource}** - The resource in Microsoft Graph that you're referencing.
- **query-parameters** - An optional set of parameters to modify the request or response.

**HTTP methods**

Microsoft Graph uses the HTTP method on your request to determine what your request is doing. The API supports the following methods.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Read data from a resource.</td>
</tr>
<tr>
<td>POST</td>
<td>Create a new resource, or perform an action.</td>
</tr>
<tr>
<td>PATCH</td>
<td>Update a resource with new values.</td>
</tr>
<tr>
<td>PUT</td>
<td>Replace a resource with a new one.</td>
</tr>
<tr>
<td>DELETE</td>
<td>Remove a resource.</td>
</tr>
</tbody>
</table>

**Version**

Microsoft Graph currently supports two versions: v1.0 and beta.

- **v1.0** includes generally available APIs. Use the v1.0 version for all production apps.
- **beta** includes APIs that are currently in preview. Because we might introduce breaking changes to our beta APIs, we recommend that you use the beta version only to test apps that are in development; do not use beta APIs in your production apps.

For more information about API versions, see [Versioning and support](#).

**Resource**

Your URL will include the resource or resources you are interacting with in the request, such as me, users, groups, drives, and sites. Each of the top-level resources also include relationships, which you can use to access additional resources, like me/messages or me/drive. You can also interact with resources using methods, for example, to send an email, use me/sendMail.

**Query parameters (optional)**

You can use optional query parameters to customize the response in your Microsoft Graph app. Use query parameters to include more or fewer properties than the default response, filter the response for items that match a custom query, or provide additional parameters for a method.

For example, adding the following filter parameter restricts the messages returned to only those with the emailAddress property of jon@contoso.com.

https://graph.microsoft.com/v1.0/me/messages?filter=emailAddress eq 'jon@contoso.com'

For more information about query parameters, see [Customize responses](#).

**Working with Webhooks**

The Microsoft Graph REST API uses a webhook mechanism to deliver notifications to clients. A client is a web service that configures its own URL to receive notifications. Client apps use notifications to update their state upon changes.

Using the Microsoft Graph REST API, an app can subscribe to changes on the following resources:

- Messages
- Events
- Contacts
- Group conversations
- Drive root items

After Microsoft Graph accepts the subscription request, it pushes notifications to the URL specified in the subscription. The app then takes action according to its business logic. For example, it fetches more data, updates cache and views, etc.

Apps should renew their subscriptions before they expire. They can also unsubscribe at any time to stop getting notifications.

See the following code samples on GitHub.

- [Microsoft Graph Webhooks Sample for Node.js](#)
- [Microsoft Graph Webhooks Sample for ASP.NET](#)

**Characteristics of subscriptions**

You can create subscriptions for resources such as messages, events, contacts, and drive root items.

You can create a subscription to a specific folder:

https://graph.microsoft.com/v1.0/me/mailfolders('inbox')/messages

Or to a top-level resource:

https://graph.microsoft.com/v1.0/me/messages

Or on a drive root item:

https://graph.microsoft.com/v1.0/me/drive/root

Creating a subscription in most cases requires read scope to the resource. For example, to get notifications messages, your app needs the mail.read permission. Please note that currently the Files.ReadWrite permission is required for OneDrive Drive root items and drives associated with SharePoint sites require Files.ReadWrite.All.

**Beta Endpoints**

The beta endpoint includes APIs that are currently in preview and are not yet generally available. Some of these are given below.
Working with SharePoint sites

The SharePoint API in Microsoft Graph supports the following core scenarios:

- Access to SharePoint sites, lists, and drives (document libraries)
- Read-only support for site resources (no ability to create new sites)
- Read-write support for lists, listItems, and driveItems
- Address resources by SharePoint ID, URL, or relative path

The SharePoint API exposes three major resource types:

- Site (top-level object)
- List
- ListItem

Working with Intune

The Intune Graph API enables access to Intune information programmatically for your tenant, and the API performs the same Intune operations as those available through the Azure Portal.

The following sections provide the reference documentation for the Intune Graph API and resources:

- Managed apps
- Company terms and conditions
- Enroll corporate-owned devices
- Device configuration
- Device management
- App protection
- Enroll devices for management
- Role-based access control
- Telecom expense management

Work with Microsoft Teams

Microsoft Teams is built on Office 365 groups. You can use the group APIs with teams, with the following exception: currently, you can't use Create group to create a team.

The following beta APIs are specific to Microsoft Teams:

- List my teams
- Channels
- Chat threads
- Chat message

Work with Planner

The Office 365 Planner API enables you to create tasks and assign them to users in a group in Office 365.

Office 365 groups are the owners of the plans in the Planner API. When creating a new plan, make a group its owner by simply setting the owner property on a plan object. Plans must be owned by groups.

Plans are the containers of tasks. Tasks currently cannot be created without plans. Each task can be assigned to a user by adding an assignment in the assignments property on the task object.

Aside from task and plan data, the Planner API also provides resources to provide common visualization of data across clients.

Get Office 365 Usage Reports

Represents an Office 365 usage report object. It is a stream, which will return a CSV file.

<table>
<thead>
<tr>
<th>Method</th>
<th>Report Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get EmailAppUsage</td>
<td>EmailAppUsage report</td>
</tr>
<tr>
<td>Get EmailActivity</td>
<td>EmailActivity report</td>
</tr>
<tr>
<td>Get MailboxUsage</td>
<td>MailboxUsage report</td>
</tr>
<tr>
<td>Get Office365ActiveUsers</td>
<td>Office365ActiveUsers report</td>
</tr>
<tr>
<td>Get Office365GroupsActivity</td>
<td>Office365GroupsActivity report</td>
</tr>
<tr>
<td>Get Office365Activations</td>
<td>Office365Activations report</td>
</tr>
<tr>
<td>Get OneDriveUsage</td>
<td>OneDriveUsage report</td>
</tr>
<tr>
<td>Get OneDriveActivity</td>
<td>OneDriveActivity report</td>
</tr>
<tr>
<td>Get SfbDeviceUsage</td>
<td>SfbDeviceUsage report</td>
</tr>
<tr>
<td>Get SfbOrganizerActivity</td>
<td>SfbOrganizerActivity report</td>
</tr>
<tr>
<td>Get Sfb2PActivity</td>
<td>Sfb2PActivity report</td>
</tr>
<tr>
<td>Get SfbParticipantActivity</td>
<td>SfbParticipantActivity report</td>
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<tr>
<td>Get SfbActivity</td>
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<tr>
<td>Get SharePointSiteUsage</td>
<td>SharePointSiteUsage report</td>
</tr>
<tr>
<td>Get SharePointActivity</td>
<td>SharePointActivity report</td>
</tr>
<tr>
<td>Get YammerDeviceUsage</td>
<td>YammerDeviceUsage report</td>
</tr>
<tr>
<td>Get YammerActivity report</td>
<td>YammerActivity report</td>
</tr>
</tbody>
</table>

Resources

- Overview of Microsoft Graph
- Graph Explorer
- Code samples and SDKs
- Microsoft Graph beta endpoint reference

SharePoint Online

SharePoint Technologies

SharePoint features several key new technologies that support modern development tools and techniques. These include the SharePoint Framework for implementing client-side user experiences, webhooks and Flow for implementing processes, and Microsoft Graph APIs for accessing data.

Building out the SharePoint user experience with the SharePoint Framework

The SharePoint Framework lets developers create fast, modern user experiences using client-side development techniques. Developers can create client-side web parts that complement the modern user experience of SharePoint. The SharePoint Framework is designed to make it easy for developers to bring
the frameworks and tools they prefer when building script-based applications.

- Video: Microsoft SharePoint Framework
- Learn more about the SharePoint Framework
- Build a SharePoint Framework web part

Extend processes in SharePoint with Webhooks

SharePoint Webhooks bring common web developer extension patterns to SharePoint. Developers can use simple REST-based protocols to register for notifications on SharePoint lists and libraries, and use this to initiate document processes and approvals within their organization.

- Video: Microsoft SharePoint Webhooks
- Learn more about Webhooks
- Build a basic SharePoint Webhook

Accessing SharePoint from anywhere with Microsoft Graph

Microsoft Graph is an expanding set of powerful APIs that developers can use to connect apps and services with many Microsoft products. Microsoft Graph features a wide array of SDKs that make it accessible from a variety of services and platforms, including iOS and Android.

SharePoint support in Microsoft Graph includes site and list APIs as well as deep file access via OneDrive APIs.

- Video: Access Microsoft SharePoint with the Microsoft Graph
- Learn more about Microsoft Graph
- Build a simple cross-platform Application

Microsoft PowerApps and Microsoft Flow

Build simple, solid applications and processes quickly on SharePoint with PowerApps and Flow. Microsoft PowerApps lets end users and developers create applications with forms and custom user experiences using many different sources of data, including SharePoint. PowerApps are mobile-ready, and provide an easy way to collect data from your team, wherever they are and with whatever device they have. Microsoft Flow lets users create automated workflows between your favorite apps and services, with robust support for SharePoint.

- Learn more about Microsoft PowerApps
- Learn more about Microsoft Flow

SharePoint Add-ins

Deploy manageable applications and extensions on SharePoint. SharePoint Add-ins provide a flexible infrastructure for deploying and managing customizations within a customers’ SharePoint site. Site owners—usually a team leader or administrator—can discover and install add-ins published through the Office Store, or work with their administrator to deploy custom solutions on their own, all while retaining control over application permissions and access. Developers can frequently re-use existing content and applications and integrate them with SharePoint, or, if they choose, build new applications hosted on SharePoint.

- Learn more about SharePoint Add-ins
- Build a provider-hosted SharePoint add-in

Customizations

Broadly, SharePoint customizations and developments fall into four broad categories.

Site customizations

Update the branding and add functionality to team spaces, departmental sites, and corporate portals. Add tools and dashboards to make sites more relevant for the teams that use them.

To learn how to build site customizations, see our sections on site branding and add-ins, and how to build web parts using the SharePoint Framework.

Tools and integrations

Extend the user interface of SharePoint to add more functionality and links to other applications. Build tools to work with content you have in SharePoint.

To learn how to build integrations, explore our client APIs and the SharePoint Add-in model.

Processes

For many organizations, SharePoint is home to the core documents that are key to how an organization runs. Tailor processes around these documents to fit how teams work and function.

To learn more about building processes in SharePoint, see topics on workflow and learn about Microsoft Flow.

Applications

Build business applications that solve team and departmental needs, such as resource tracking, customer lists, work management, and more, using the storage, presentation, and process capabilities of SharePoint.

To learn more about building applications on SharePoint, check out our section on Add-in Development.

SharePoint Framework

The SharePoint Framework is the next evolution in SharePoint development

The SharePoint Framework (SPFx) is a page and web part model that provides full support for client-side SharePoint development, easy integration with SharePoint data, and support for open source tooling. With the SharePoint Framework, you can use modern web technologies and tools in your preferred development environment to build productive experiences and apps that are responsive and mobile-ready from day one.

Key features of the SharePoint Framework include:
• Runs in the context of the current user and connection in the browser. There are no iFrames.
• The controls are rendered in the normal page DOM.
• The controls are responsive and accessible by nature.
• Enables the developer to access the lifecycle - including, in addition to render - load, serialize and deserialize, configuration changes, and more.
• It’s framework agnostic. You can use any browser framework that you like: React, Handlebars, Knockout, Angular, and more.
• The toolchain is based on common open source client development tools like npm, TypeScript, Yeoman, webpack, and gulp.
• Performance is reliable.
• End users can use SPFx client-side solutions that are approved by the tenant administrators (or their delegates) on all sites, including self-service team, group, or personal sites.
• Solutions can be deployed in both classic web part and publishing pages and modern pages.

The runtime model improves on the script editor web part. It includes a robust client API, an HttpClient object that handles authentication to SharePoint and Office 365, contextual information, easy property definition and configuration, and more.

Unlike other SharePoint development models available to date, the SharePoint Framework focuses on client-side development and is built on top of popular open source tools. One big benefit of this change is that developers on any platform can build SharePoint customizations.

If you work with C# and Visual Studio, or JavaScript, you might have to learn about client-side JavaScript development. Most of your knowledge is completely transferable. You’ll use the same REST services or JavaScript Object Model (JSOM) depending on your requirements. The data model has not changed in any way.

SharePoint Framework developer training

SharePoint Framework developer training consists of 7 modules that are individually broken down into smaller labs, including an overview of getting your environment set up, building your first web part, and working with different JavaScript frameworks. This is the module breakdown:

- Module 1: Getting Started with the SharePoint Framework
- Module 2: Deep Dive of the SharePoint Framework
- Module 3: Working with SharePoint Content
- Module 4: Deploying SharePoint Framework to Production
- Module 5: Working with the Property Pane
- Module 6: Using React and Office UI Fabric
- Module 7: Working with different JavaScript Frameworks and Libraries

Beyond working with SharePoint Framework, the Office Developer training repository also features improved developer training for SharePoint webhooks, as well as a number of deep-dives into SharePoint add-ins and SharePoint capabilities. You can explore the Office Developer training repository to get started.

Resources

- SharePoint Framework developer training
- SharePoint Framework Toolchain
- SharePoint Framework (SPFx) enterprise guidance
- Team-based development on the SharePoint Framework
- Code samples
- SharePoint PnP Webcast
  - Introduction to Visual Studio Extension for SharePoint Framework
  - Common (mis)conceptions about SharePoint Framework

SharePoint Add-ins

SharePoint Add-ins are self-contained extensions of SharePoint websites that you create, and that run without custom code on the SharePoint server. There are two basic kinds of SharePoint Add-ins — SharePoint-hosted and Provider-hosted.

Build SharePoint-hosted or provider-hosted add-ins to use remote web applications, surface remote data, offload business logic, access SharePoint list data, integrate with Office applications and services, make SharePoint a portal for other applications, and more.

<table>
<thead>
<tr>
<th>SharePoint-hosted</th>
<th>Provider-hosted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centered around SharePoint components including lists, pages, Web Parts, workflows, libraries, and more.</td>
<td>Centered around a remote web application or data source.</td>
</tr>
<tr>
<td>Business logic is JavaScript on custom SharePoint pages.</td>
<td>Business logic is mainly rendered server-side code.</td>
</tr>
<tr>
<td>No server-side code.</td>
<td>Can include SharePoint components.</td>
</tr>
</tbody>
</table>

- All SharePoint Add-ins are to solve a well-defined business problem.
- Add-ins don’t have custom code that runs on the SharePoint servers. Instead, all custom logic moves “up” to the cloud, or “down” to client computers, or “over” to an on-premises server that is outside the SharePoint Online subscription.
- Almost all major types of SharePoint components can be part of a SharePoint Add-in, including pages, lists, workflows, custom content types, list templates, Web Parts, and more.
- SharePoint Add-ins can fit into a SharePoint website in several ways: as an immersive full-page experience that can have the look and feel of a SharePoint page, as part of a webpage, using a special kind of control, called an add-in, part, to surface an iframe element that contains the add-in OR, as UI commands that extend ribbons and menus by adding the add-in to list items, documents, and more.
- All SharePoint Add-ins that users install get a tile on the Site Contents page of the SharePoint website. Clicking the tile runs the add-in.
- A SharePoint Add-in is configured using an add-in manifest—an XML file that declares the add-in’s basic properties, where it runs, and what SharePoint should do when the add-in starts.
Using data in SharePoint Add-ins

In your add-in, you will frequently have to retrieve and manipulate SharePoint data, such as items in document libraries and lists, metadata, or user profiles. Similarly, you might have scenarios where you need to access external data in add-in. The model for SharePoint Add-ins provides multiple connectivity options and a rich set of APIs for accessing the data and services that reside on SharePoint and on external systems.

As you design add-in and plan for data access, you have to make two key decisions:

- Which connectivity option should I use?
- What APIs should I use for accessing the data I need?

The following figures summarize the different options that are provided by the model for SharePoint Add-ins.

Options for using SharePoint data in your add-in

You have to decide whether you want to authenticate and communicate to SharePoint by using (1) OAuth, or (2) the cross-domain library. Then, for the data access API, you must decide between (3) the client object model (JavaScript/.NET client object models), or (4) Representational State Transfer (REST).

Keep in mind that you can also access certain data using (5) Representational State Transfer (REST). The following API choices are available when you want to access SharePoint data from add-in:

- Representational State Transfer (REST): For scenarios in which you need to access SharePoint entities from client technologies that do not use JavaScript and are not built on the .NET Framework platform, SharePoint provides an implementation of a REST web service that uses the Open Data (OData) protocol to perform CRUDQ (Create, Read, Update, Delete, and Query) operations on SharePoint data.
- .NET Framework client object model (.NET client OM): Almost every class in the core site and list server-side object model has a corresponding class in the .NET Framework client object model. In addition, the .NET Framework client object model also exposes a full set of APIs for extending other features, including some SharePoint-level features such as ECM, taxonomy, user profiles, advanced search, analytics, BCS, and others.
- JavaScript client object model (JSOM): SharePoint provides a JavaScript object model for use in either inline script or separate .js files. It includes all the same functionality as the .NET Framework client object model. The JSOM is a useful way of including custom SharePoint code in an add-in, especially in a SharePoint-hosted add-in, where custom server-side code is not allowed.

Keep track of the Office Dev Blog for updates in this area.

Resources

Microsoft Virtual Academy Courses ...
- Getting Started with SharePoint Add-Ins
- Advanced SharePoint Add-in Development

Read ...
- SharePoint Add-ins
- Get started creating SharePoint-hosted SharePoint Add-ins
- Get started creating provider-hosted SharePoint Add-ins
- Secure data access and client object models for SharePoint Add-ins
- Choose patterns for developing and hosting your SharePoint Add-in
- How to install add-in/app to SharePoint sites using CSOM
- New SharePoint CSOM version released for SharePoint Online - May 2017

The Modern experiences

SharePoint Online has started the gradual introduction of “modern” experiences across the SharePoint service, which has a direct impact on the end user experience but also on the customization options that can be used.

The SharePoint “modern” experiences are currently not available for SharePoint on-premises. They are planned to, step by step, become available for SharePoint 2016 as part of upcoming feature packs.

The modern experiences in SharePoint Online are:
- Modern team sites
- Modern list and library experiences
- Modern site pages

"Modern” experiences are gradually released in SharePoint Online and you can control how they are taken into use on tenant or site level. If you have a lot of existing important
customizations, you can defer taking new experiences into use until needed customizations scenarios can be enabled with them as well.

We recommend using the following process for adopting to the "modern" experiences, if you have existing customizations which are business critical for your deployment:

1. **Readiness**: Understand the "modern" experiences, know what features they offer but equally important understand what's features are not (yet) available
2. **Assess**: Assess to what extend your current customizations can work in the "modern" experience. Also assess which of your sites do have customizations or features that will not work in the "modern" experiences, these sites and their customizations should be updated or need to stay in "classic". However all other sites should work fine using the "modern" experiences.
3. **Solution planning**: Plan the needed work on both custom solutions as sites to prepare them to be used with the "modern" experiences
4. **Develop and test**: Apply the needed changes to your customizations and test them
5. **Deploy**: Roll out the updated changes to your SharePoint Online environment

Here are the key scenarios currently supported by the "modern" experiences.

<table>
<thead>
<tr>
<th>Customization</th>
<th>Introduction to options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provisioning &quot;modern&quot; team sites</td>
<td>&quot;Modern&quot; team sites can be provisioned by an end user but you can also create these sites programmatically which is explained in detail in <a href="#">Provisioning modern team sites</a> article.</td>
</tr>
<tr>
<td>Customizing &quot;modern&quot; team sites</td>
<td>&quot;Modern&quot; team sites are sites which bring a fresh new responsive user experience to SharePoint Online, showing relevant information on the home page. Typically these sites also have a corresponding Office 365 Group associated. Learn more about the customization options in <a href="#">Customizing modern team sites</a> article.</td>
</tr>
<tr>
<td>Customizing &quot;modern&quot; lists and libraries</td>
<td>&quot;Modern&quot; lists and document libraries bring a better user experience which is faster, more intuitive and responsive. The <a href="#">Customizing modern lists and libraries</a> article focuses on the extensibility options, such as user custom actions and branding, which are supported for the &quot;modern&quot; library and list experiences.</td>
</tr>
<tr>
<td>Customizing &quot;modern&quot; site pages</td>
<td>&quot;Modern&quot; team site pages are fast, easy to author and support rich multimedia content. And pages look great on any device, in a browser or from within the SharePoint mobile app. The <a href="#">Customizing modern site pages</a> article focuses on the extensibility options there are in the &quot;modern&quot; page experience.</td>
</tr>
</tbody>
</table>

Online resources to refer to are:
- [Customizing the "modern" experiences in SharePoint Online](#)
- [Provisioning "modern" team sites programmatically](#)
- [Customizing "modern" team sites](#)
- [Customizing "modern" lists and libraries](#)
- [Customizing "modern" site pages](#)

### SharePoint Webhooks

SharePoint webhooks enable developers to build applications that subscribe to receive notifications on specific events that occur in SharePoint. When an event is triggered, SharePoint sends an HTTP POST payload to the subscriber. Webhooks are easier to develop and consume than Windows Communication Foundation (WCF) services used by SharePoint add-in remote event receivers. This is because webhooks are regular HTTP services (web API).

Currently webhooks are only enabled for SharePoint list items. SharePoint list item webhooks cover the events corresponding to list item changes for a given SharePoint list or a document library. SharePoint webhooks provide a simple notification pipeline so your application can be aware of changes to a SharePoint list without polling the service.

For more information see [SharePoint list webhooks](#) and [SharePoint webhooks sample reference implementation](#).

### Using Azure Functions

Azure functions offer an easy way to host your SharePoint webhooks: you can simply add your webhook C# or Javascript code via the browser and Azure will take care of the hosting and scaling of your function! The online guide - [Using Azure Functions with SharePoint webhooks](#) shows how to setup and use Azure Functions for your webhooks.

### Azure WebJobs

#### Azure WebJobs

Azure WebJobs provide an easy way to run scripts or programs as background processes on App Service Web Apps. You can upload and run an executable file such as as cmd, bat, exe (.NET), ps1, sh, php, py, js and jar. These programs run as WebJobs on a schedule (cron) or continuously.

### Performing repetitive, scheduled, background processes

In SharePoint Online, you cannot deploy farm solutions, which is how timer jobs were deployed on SharePoint on-premises. To implement similar timer job functionality in SharePoint Online, you need to run a console application as an Azure WebJob. The console application accesses SharePoint Online using the client-side object model (CSOM). Some examples:

- Site metadata collection – for example reports on current administrators, storage usage, etc.
- Replicate taxonomy structure changes from on-premises master metadata management system to Office 365

### Performing asynchronous operations

- [Performing asynchronous operations](#)
Azure WebJob can be triggered immediately whenever there is a new message added to queue, not as a scheduled task. You can hook in your WebJob to either Azure queue storage or Azure service bus queues. Here's the key elements for providing us the asynchronous processing pattern.

1. User operates in the SharePoint and starts provider hosted app UI one way or another (full page, pop up, app part etc.)
2. Actual operations are performed in the provider hosted app side which is collecting needed parameters and other settings for the processing
3. Operation request is stored to Azure storage queue or Service bus for processing
4. Task is picked up automatically by continuously running WebJob with needed details and requested operation is applied

How connectors work

When you connect a tool or service to a group, everyone in the group can see the messages delivered by that service. For example, let’s say your group wants to follow news reports about your company’s new product that’s hitting the market. You could add the Bing News connector to your group, configure it to send you links to topics of interest, and specify the frequency of delivery. When news headlines are sent to your group, everyone in the group will be able to read and respond to them.

Office 365 Connectors also provides a compelling extensibility solution for developers. Developers can build connectors through incoming webhooks to generate rich connector cards. Additionally, with the new "Connect to Office 365" button, developers can embed the button on their site and enable users to connect to Office 365 groups.

Actionable Messages

Whether you are filling out a survey, approving an expense report, or updating a CRM sales opportunity, Actionable Messages enable you to take quick actions right from within Outlook and Teams. Developers can now embed actions in their emails or notifications, elevating user engagement with their services and increasing organizational productivity.

Office 365 provides two solutions to enhance productivity with Outlook Actionable Messages: actionable messages via email, and actionable messages via Office 365 Connectors.

Sending actionable messages via email

To embed an actionable message card in an email message, we need to wrap the card in a `<script>` tag. The `<script>` tag is then inserted into the `<head>` of the email’s HTML body.

Office 365 Connectors

Office 365 Connectors are a great way to get useful information and content into your Office 365 Group. Any user can connect their group to services like Trello, Bing News, Twitter, etc., and get notified of the group’s activity in that service.

Connectors fall into a variety of categories to suit every type of user and team, from the information worker focused on interests (Bing News, RSS) or productivity (Trello, Asana) to developer automation tools (BuildKite), to email marketing services (MailChimp), and so on. You can hook multiple connectors to a group, and when you hook up one or more connectors, they’re available to everyone in the group. No additional steps required!

Resources

- Introduction to Azure WebJobs
- Azure WebJobs documentation resources
- Use Microsoft Azure WebJobs with Office 365
- Using Azure storage queues and WebJobs for async actions in Office 365
- Asynchronous operations with Azure storage queues and WebJobs
- How to Synchronize Terms across multiple term stores
- Getting Started with azure WebJobs ("timer jobs") for your Office 365 Sites
- PnP Web Cast - Asynchronous operations with Office 365 using Azure WebJobs
- PnP Add-In Transformation Training module 5: Using Remote Event Receivers and Remote Timer Jobs

For examples of sending messages, see the following.

- Send Actionable Message via the Microsoft Graph: A sample console app written in C# that sends an actionable message using the Microsoft Graph.
- Send Actionable Message via SMTP: A sample Python script that sends an actionable message using the Office 365 SMTP server.
Sending actionable messages via Office 365 Connectors

Connectors use webhooks to create Connector Card messages within an Office 365 group. Developers can create these cards by sending an HTTP request with a simple JSON payload to an Office 365 group webhook address.

Resources

- Video: Introducing Office 365 Connectors
- Get started with Office 365 Connector Cards
- Register your connector with the Office 365 Connectors developer dashboard
- Send an actionable message via email in Office 365
- Post an actionable message card to an Office 365 group
- Getting started with Connectors for Microsoft Teams

Microsoft PowerApps

Microsoft PowerApps enables power users in line of business roles to easily build and deploy business apps. At the same time, PowerApps empowers IT organizations to catalyze business innovation by allowing business units to create apps, while maintaining control over data access and security.

The Common Data Service, included in PowerApps, is an out-of-the-box secure business database to improve operational efficiency offering a unified view of business data. Common Data Service provides App creators the flexibility to use standard business entities or custom entities to power their business apps.

To generate an app automatically, you just need to specify a data source. For step-by-step instructions, see Create an app to manage data in SharePoint. Even though the topic is designed for SharePoint, the same principles apply to other types of data sources.

Customize an App

If the generated app doesn’t meet your needs by default, you can customize it. You might, for example, want to show data in a different kind of UI element (known as a control).

For ideas about how to improve your app further, you can open a sample app to get a sense of what you can invent with some creativity and a bit of experience.

Features and Pricing

PowerApps is licensed on a per-user basis. Each user who accesses the service to create and run apps needs a license. Office 365 and Dynamics 365 customers can immediately benefit from the PowerApps and Microsoft Flow capabilities that these offerings include. Customers who want to build apps and flows that access data sources outside Office 365 and Dynamics 365, or need additional functionality, can purchase standalone subscriptions to PowerApps and Microsoft Flow.

There are important differences in functionality between these groups of licenses.

For Office 365 and Dynamics
- Create and run custom business apps
- Extend the capabilities of Office 365 and Dynamics 365
- Automate your workflows with Microsoft Flow

For app makers and admins
- Everything included with PowerApps for Office 365 and Dynamics 365
- Use apps that connect to an even wider range of data sources, with premium connectors
- Use apps built on the Common Data Service

You can also [build an app from a template](#). Each template is based on fictitious data in a cloud account, such as Dropbox, OneDrive, or Google Drive. Explore specific screens and controls to understand how they’re configured, and experiment with customization to discover techniques that you can apply to your own apps.

Create an app from scratch

You can [create an app from scratch](#). By working from the ground up, you gain flexibility in app design, flow, and controls, and you can incorporate a larger variety of data sources.

For detailed explanations of some concepts you’ll need, see these topics:

- formulas
- galleries and forms
- tables and records
- controls and their properties

<table>
<thead>
<tr>
<th>For and 365</th>
<th>For users</th>
<th>For app makers and admins</th>
</tr>
</thead>
<tbody>
<tr>
<td>PowerApps for Office 365 and Dynamics 365</td>
<td>PowerApps Plan 1</td>
<td>PowerApps Plan 2</td>
</tr>
<tr>
<td>• Create and run custom business apps</td>
<td>• Everything included with PowerApps for Office 365 and Dynamics 365</td>
<td>• Everything included with Plan 1</td>
</tr>
<tr>
<td>• Extend the capabilities of Office 365 and Dynamics 365</td>
<td>• Use apps that connect to an even wider range of data sources, with premium connectors</td>
<td>• Model your data using the Common Data Service</td>
</tr>
<tr>
<td>• Automate your workflows with Microsoft Flow</td>
<td>• Use apps built on the Common Data Service</td>
<td>• Create and manage instances of the Common Data Service</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Enterprise-grade administration of environments and user policies</td>
</tr>
</tbody>
</table>
PowerApps for Office 365 and Dynamics 365

PowerApps capabilities for Office 365 and Dynamics 365 enable users to create and run apps within the context of these services. PowerApps licenses always include Microsoft Flow capabilities. In addition to being included in PowerApps licenses, Microsoft Flow is also available as a standalone service.

PowerApps will be added to existing and new Office 365 subscriptions starting later in November 2016. These Office 365 plans include PowerApps for Office 365:

- Office 365 Business Essentials
- Office 365 Business Premium
- Office 365 Enterprise E1
- Office 365 Enterprise E3
- Office 365 Enterprise E5

Resources

- Introduction to PowerApps
- PowerApps Blog
- Choose the right plans for your team
- Licensing Overview
- Manage your connections
- Add a data connection in an app
- Microsoft Common Data Model preview available for PowerApps

Useful Ignite sessions...

- Review business application platform roadmap, strategy and packaging
- Dive into PowerApps, building apps that mean business without writing code

Microsoft Flow

Microsoft Flow is a preview, cloud-based, business-automation service with which you can build simple processes that make your business move more quickly and efficiently with less effort. You can connect to a broad range of services through easy-to-use templates and create your own processes that are tailored to your goals.

Templates are pre-built flows for popular and common scenarios. Using a template only requires you to have access to the services in the template and to fill out any required settings.

Data sources: Built-in data connectors to more than 50 services, including Office 365, Twitter, OneDrive, Dropbox, Google Drive, Slack, MailChimp, Facebook, Dynamics CRM, SharePoint, Salesforce, and SQL.

Manage Connections

Connections in Microsoft Flow allow you to easily access your data while building flows. Flow includes commonly used connections, including SharePoint, SQL, Office 365, OneDrive for Business, Salesforce, Excel, Dropbox, Twitter, and more. Connections are shared with Microsoft PowerApps, so when you create a connection in PowerApps, it shows up in Microsoft Flow, and vice versa.

For example, you can use connections to:

- Update a list on a SharePoint site.
- Get Excel data from your OneDrive for Business or Dropbox account.
- Connect to Office 365 and send email.
- Create a Twitter connection to send a tweet.

You can create connections in Microsoft Flow in multiple scenarios, such as:

- Creating a flow from a template
- Creating a flow from blank or updating an existing flow
- Creating a connection in the Microsoft Flow portal

Flow and Logic Apps

Microsoft Flow is a stand-alone SaaS Service that is designed for broad usage, including business users that want to automate day-to-day tasks.

Logic Apps is an Azure service available through the Azure Portal. It is targeted at IT Professionals that need to tackle more complex integration problems, it includes the great features available in Microsoft Flow, plus additional capability like integration with Azure Resource Manager and the Azure Portal, PowerShell and the Azure Command-Line Interface (Azure CLI), Visual Studio, more advanced connectors. Learn more about Logic apps.

Flow creation now available from mobile phones

You can now easily create a flow from your phone (available both on our iOS and Android apps) by just a few simple clicks. Browse our rich template gallery, navigate through our services list, or select a various template category to drill into.

Also, if you’re looking for a specific service or template, you can simply search the gallery by keyword, and get in no time a list of results focused to your needs.

Finally, after creating your flow, you can come back and edit or rename it directly from within the app, from the flow properties page.

View our app video, and check out our documentation that covers app concepts, from getting started to more advanced capabilities.

Features and Pricing

Premium plans give you more runs, more checks, and access to services like MailChimp, Salesforce and many more.
- 750 runs per month
- Unlimited flow creation
- 15-minute checks

<table>
<thead>
<tr>
<th>Flow Plan 1</th>
<th>Flow Plan 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,500 runs per month</td>
<td>15,000 runs per month</td>
</tr>
<tr>
<td>Unlimited flow creation</td>
<td>Unlimited flow creation</td>
</tr>
<tr>
<td>3-minute checks</td>
<td>1-minute checks</td>
</tr>
<tr>
<td>Premium Services</td>
<td>Premium Services</td>
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<tr>
<td>99.9% SLA</td>
<td>99.9% SLA</td>
</tr>
</tbody>
</table>

For more detailed information, refer to the Pricing page.

Resources
- Microsoft Flow Blog
- Flow in your organization Q&A
- Create a flow from a template in Microsoft Flow
- Create a flow in Microsoft Flow
- Manage connections in Microsoft Flow
- Manage an on-premises data gateway
- YouTube Playlist: Microsoft Flow

Useful Ignite sessions ...
- Dive into the Microsoft Common Data Model
- Review business application platform roadmap, strategy and packaging
- Dive into Microsoft Flow, create automated workflows between your favorite apps and services

Microsoft Teams Developer Platform

Microsoft Teams is a chat-based workspace in Office 365 that integrates with the apps and services teams use to get work done together. The Microsoft Teams Developer platform makes it easy for you to integrate your own service, whether you develop custom apps for your enterprise or SaaS applications for teams around the world.

For the best and most extensible option for adding your service into Teams, create a Microsoft Teams app. A Microsoft Teams app is a package of services that you host, that can be distributed through the Teams product or sideloaded by teams.

For quick one-off integration of your existing webhook, you can take advantage of our Custom Bot feature. This ad-hoc extensibility option allows you to simply set up webhooks / notifications in a specific team, with no additional coding required.

Apps in Microsoft Teams

Apps in Microsoft Teams allow you to make your service available to users within Teams in contexts that make sense, all through one Teams app package that users can acquire through our in-product app gallery, via the Office Store, or sideloaded directly by your team. Via this single package, your app can assist users:
- via multiple app scopes: such as in team channels or personally via the user’s “app bar”.
- via multiple app capabilities: such as bots in conversation or tabs in rich web views

Read: Learn more about app scopes and where you can surface your app

Here are the capabilities your app can leverage today. You can offer all of them in the team scope, and most of them in the personal scope.

Tabs

Tabs allow team members to access your service on a dedicated canvas, within a channel or in user’s personal app space. You can leverage your existing web app to create a great tab experience within Teams. Examples of tabs include dashboards and data visualization, documents, notes, task managers and design canvases. Read: Get started with tabs.

Bots

Build and connect intelligent bots to interact with Microsoft Teams users naturally through chat. Bots can answer natural language questions and perform lightweight tasks such as querying bug information or kicking off a build. Any bot you’ve created using the Microsoft Bot Framework can easily be made to work in Microsoft Teams. Read: Get started with bots.

Compose Extensions

Leverage the power of your web service to provide a quick and easy way for your users to insert your content into the chat stream. Read: Get started with compose extensions.

Connectors

Office 365 Connectors are a great way to get useful information and content into Microsoft Teams. You can integrate your service by posting rich Connector cards into custom incoming webhooks. Read: Get started with connectors.
Custom Bots

If you’ve integrated with outgoing webhooks or slash commands in other chat platforms, you can now easily bring those integrations over to Microsoft Teams via Custom Bots.

Custom bots are an easy way of extending your team with Teams interactivity without having to go through the full process of creating a bot via the Microsoft Bot Framework. You can use them for custom workflows and commands, such as kicking off a build or checking the latest set of livestream issues. With custom bots, too, you have an effective way of ensuring your service is accessible only by authorized users, as the shared secret used by your custom bot will only be scoped to the team in which it has been added.

Read: Get started with custom bots. For sample code illustrating a custom bot, please see our sample located here.

Office Add-ins

Build an add-in that lives inside Outlook, Excel, Word, PowerPoint, or Project to extend what you can do from right in the documents, across devices and platforms — like pulling content from the web, calling mapping services, locating news, translating text, and more.

Office Add-ins platform overview

Office Add-in is a web application hosted in a web browser control or iframe running in the context of an Office host application that can interact with a user’s documents or mail items. You can use Office Add-ins to extend and interact with:

- Documents or data - Word documents, Excel spreadsheets, PowerPoint presentations, Access browser-based databases, and Project schedules and views.
- Outlook mailbox items - Email messages, meeting requests, or appointments.

Add-ins can run in multiple environments, including Office desktop applications, Office Online in both desktop and mobile browsers, and a growing number of Office tablet and phone add-ins.

Resources

Microsoft Virtual Academy Courses …

- Getting Started with Office Add-ins
- Advanced Office Add-in Development with Excel, Word, and PowerPoint

Read …

- Office Add-ins platform overview
- Plan to develop Office Add-ins
- Create Office Add-ins with Napa with an Office 365 Developer Site
- Create and debug Office Add-ins in Visual Studio

Office UI Fabric

Office UI Fabric is the official front-end framework for building experiences that fit seamlessly into Office and Office 365.

Icons

Typography

Brand Icons

Buttons

- New SharePoint experiences are built with Fabric and the SharePoint Framework comes with it baked in to make things simple. Learn more
- Fabric is the official UX design framework for Office Add-ins. With Fabric, add-ins blend seamlessly with Word, Excel, PowerPoint, and Outlook. Learn more

Styles

The Fabric Core project includes all of the base styling that’s used throughout Microsoft. You can get the core styling with Fabric React, Fabric JS, or just Fabric Core on its own. Fabric’s components use the core styling.

Components

Fabric’s robust, up-to-date components are built with the React framework. Look through the component list to see the building blocks that are available using Fabric React.

Fabric’s components help you get buttons, navigation, and more that look like Office quickly and easily. They also contain extra functionality that helps your app act like Office too.
Fabric comes in many flavors so you can choose the one that works for you. Check out Fabric JS, ngOfficeUIFabric, and Fabric iOS to learn more about each option.

Resources

- What is Office UI Fabric?
- GitHub: Office UI Fabric
- Office UI Fabric: Resources
- Fabric tutorial

Skype Developer Platform

The Skype Developer Platform enables native integration of real-time presence, secure messaging, calling, and conference capabilities within your web and mobile applications. Harness the power of our platform to embed interactive, multi-channel communications that enable greater productivity and collaboration.

Embedded Engagement

Embed live conversations in your website and apps by using our Web SDK and App SDK.

Industry Solutions

You can build more engaging industry solutions using the Skype User API, Web SDK and App SDK.

Check out our industry solutions in healthcare, financial services, retail, and customer service and get inspired.

Social Connection

Get people sharing and talking about your business with the friendly Skype Share and Contact Me buttons for instant calls and chats.

Skype Web SDK

The Skype Developer Platform for Web (“Skype Web SDK”) is a set of JavaScript Web APIs and HTML controls that enable you to build web experiences that seamlessly integrate a wide variety of real-time collaboration models leveraging Skype for Business services and the larger Skype network. It provides support for multiple core collaboration services like presence, chat, audio, and video, enabling web experiences across a broad spectrum of users, platforms, and devices.

Unified Communications Web API 2.0

Microsoft Unified Communications Web API 2.0 is a REST API that exposes Skype for Business Online instant messaging (IM) and presence capabilities. UCWA 2.0 enables developers to make their enterprise applications and intranets more lively and connected to business contacts.

Key use cases enabled by this API include:

- Lighting up presence in business apps and intranets.
- Embedding IM experience in enterprise-specific Line of Business apps across platforms/browsers/devices (contextual communications), especially Windows 8, Apple iPad, and others.
- Enabling Web Chat - pro-active chat feature for e-commerce site, helpdesk, support, and other scenarios.
Although UCWA 2.0 is language-independent, developers can use any programming language from C/C++ to Java, and the API is fine-tuned for web developers who are familiar with ordinary web technologies such as HTTP, OAuth, JSON, and JavaScript.

Resources

- Skype Developer Platform
- Skype Developer Platform – MSDN homepage
- Skype Web SDK
- Unified Communications Web API 2.0

Office 365 Developer Patterns and Practices

The Office 365 Developer Patterns and Practices program provides samples and documentation to help you transition your development solutions from full-trust code to the app model. Start by reading Transforming your SharePoint customizations to add-in model - Resources.

You can use the code samples and guidance in the Office 365 Developer Patterns and Practices project to help you develop business solutions for your organization or your customers. The project includes code samples that show you how to use provider-hosted add-ins to address key scenarios, as well as other resources that illustrate best practices for add-in model development.

Development Patterns and Solution Guidance

The Office 365 development patterns and practices solution guidance on MSDN provides samples and documentation to help you to implement typical customizations for Office 365 or for SharePoint Online based on your functional requirements.

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<th>Read this content</th>
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<td>Localization solutions</td>
<td>Localize your SharePoint site contents and UI text.</td>
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<td>Search solutions</td>
<td>Find out about the SharePoint search architecture, search APIs, and search add-ins.</td>
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<td>Improve security and performance of your SharePoint sites with OAuth, support for Germany, China and US Government environments, cross-domain images, elevated privileges, and external sharing.</td>
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<td>Find a list of SharePoint add-in recipes.</td>
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<td>Transform farm solutions to the SharePoint add-in model</td>
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<td>Sandbox solution transformation guidance</td>
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<td>PnP remote provisioning</td>
<td>Provision your SharePoint Online site collections using features of the add-in model.</td>
</tr>
<tr>
<td>PnP remote timer job framework</td>
<td>Describes timer jobs which are background tasks that operate on your SharePoint sites.</td>
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The GitHub repo - Office 365 Development Training Content houses all of the training content for Office 365 Development training courses.

PnP weekly web casts are quick videos recorded around key topics for the Office 365 and SharePoint add-in model development. These are around 30-45 min long recordings on different resources, guidance and other patterns and practices. View here: PnP YouTube channel.

Office 365 Dev PnP releases are done typically first Friday of each month. Details on monthly releases are covered in the monthly community calls. Download calendar invite (ics) to save the call details to your calendar.

Resources

- PnP training package
- PnP under dev.office.com. One location for all the latest resources and announcements
- PnP GitHub. Main repository
- PnP MSDN pages and PnP Guidance Repository
- PnP Videos at Channel 9
EXTEND MANAGEMENT AND SECURITY CAPABILITIES WITH EMS

Accelerate your digital transformation

Office 365 is a powerful platform and a critical step in your organization’s digital transformation. You can derive great business value from uncompromised productivity with cloud powered tools that give your users the freedom to work from anywhere, using any device. The fundamental management and security capabilities built into Office 365 are designed to give you control without disrupting the end user experience. As you deploy Office 365, you must extend these robust management and security capabilities to your broader digital ecosystem for a comprehensive and holistic security strategy.

With Microsoft Enterprise Mobility + Security (EMS), you can use your Office 365 deployment to accelerate your organization’s specific priorities at every stage of your digital transformation. EMS provides additional security for Office 365 and extends your capabilities to securely deliver your broader portfolio of cloud-based or cloud aware apps to any device and safeguard your critical corporate assets everywhere. Additionally, EMS protects your overall app portfolio and end-user computing infrastructure against threats both on-premises and in the cloud.

EMS provides strategic capabilities to help you realize digital transformation: secure access, mobile management, and advanced security.

Secure Access

Part of the promise of digital transformation is an infrastructure that enables uncompromised productivity for your entire workforce. To that end, Office 365 provides secure, seamless access to its apps from any device and any location. But, Office Mobile apps won’t be the only applications in your cloud app portfolio as you develop your cloud strategy and move more line-of-business apps to the cloud. As you continue to diversify your digital ecosystem, you’ll need a comprehensive solution to manage and secure access for everything. A single, unified identity for each user is critical. Use EMS to connect your current on-premises identity investments to your SaaS and on-premises workloads and establish one identity for each of your users. With one identity, you can anchor security and productivity for your entire application portfolio.

Start with single sign-on to Office 365 and all of your apps

Employees are more productive when they have just one username and password to remember. With Office 365, your users have the convenience of single sign-on to Office 365 experiences, facilitating a consistent and fluid user experience from any device. EMS extends this capability to thousands of cloud and on-premises web apps—all through a single, secure identity. To further support productivity, EMS provides self-service capabilities to end users, such as resetting forgotten passwords or requesting access to an application, which can significantly reduce demands on your IT helpdesk.

Ensure you protect and manage privileged identities

Once you have established one, unified identity per user, managing the different privileges for your users is an important way to safeguard against potential vulnerabilities. With EMS, you gain oversight and control over all levels of user privilege. You can discover permanent administrators within your organization and use as-is, or enforce on-demand, just-in-time administrative access so that increased privileges are only available to certain users when needed. The EMS Security Wizard simplifies converting permanent administrators to eligible administrators to make on-demand privileges easier to manage and enforce. Audit reports and access reviews make it possible to determine who still needs administrative rights and EMS will alert you to idle roles so that you can reduce or eliminate unused privileges.
Add risk-based conditional access informed by an expanded set of conditions

Office 365 includes conditional access based on device state, so that you can block users from accessing Office resources from vulnerable or compromised devices. **EMS expands your conditional access capabilities to provide more comprehensive control across multiple levels:** identity, device, application, and file. With EMS, you can define conditions for access that include:

**User**

Assign multiple conditions (based on location, application, device, and risk levels) to all users or to multiple security groups. You can also specifically exclude groups from being affected by conditional access policies.

**Location**

Define a set of trusted IP addresses to allow access only from them. If a user attempts to access corporate assets from an unknown network, set specific controls that either challenge the user with multi-factor authentication (MFA) or block access entirely. You can also apply policies to user groups.

**Application**

Set policy that defines the conditions of access to an app based on the sensitivity you specify. For example, you can block access to an app from unknown locations, or require MFA, which you can require every time an app is accessed or base requirement on the location from which it's being accessed. These policies can be applied to any cloud (SaaS) or on-premises app protected by Azure Active Directory, including their rich, mobile, or browser-based clients.

**Risk**

**Assess risk in real time.** Machine learning in the Microsoft Intelligent Security Graph leverages billions of signals daily, can detect suspicious behavior, and applies risk-based conditional access that protects your applications and critical company data in real time. As conditions change, controls are triggered that allow, block, or challenge users with multi-factor authentication, device enrollment, or password change.

**Mobile Management**

Once you’ve enabled secure and managed access, the next step is to protect your data. Applications, such as your Office Mobile apps, are the most likely point of access to your corporate resources, acting as a sort of “front door” to your environment and its data. This makes application management a critical part of your security strategy—especially given the complexity of different user devices, apps, preferences, and behaviors. With EMS, you can manage data inside Office Mobile apps as well as your line-of-business and third-party apps. **Flexible solutions for mobile management** give you the control to decide exactly what happens to your data once it’s been accessed.

Protect apps with and without device enrollment

In addition to the complexity of your workforce, your circle of collaboration is extending beyond your own organization to include other business partners and contractors. The nuances of your mobile ecosystem may require flexibility when it comes to device and app management, and EMS gives you choices.

You can have full management of corporate-owned or user-owned devices through enrollment in **mobile device management (MDM) with EMS.** Once a device is enrolled, IT can define and enforce compliance with security policies, automatically deliver apps, set cut/copy/paste/save-as restrictions, jailbreak detection, PIN requirements, and remote-wipe protected data from any of your EMS-managed apps or devices.

In some situations, it’s necessary to provide users with access to corporate resources from devices that aren’t feasible or desirable to enroll in MDM. Managing application policies without MDM enrollment gives you—and your users— the flexibility to deploy Office Mobile apps on iOS, Android, and Windows devices **without requiring enrollment through EMS.** You may also be using a non-Microsoft MDM solution. In that case, you may choose to use your current MDM solution or forego MDM altogether and still protect access to Office 365 and your company data.

EMS application protection policies protect your data at the app level without requiring device enrollment. The security capabilities include app encryption at rest, app access control requiring a PIN or credentials, secure web browsing, and secure viewing of PDFs, images, and videos. Even without device enrollment, you can still define cut/copy/paste/save-as restrictions and apply app-level selective wipe when needed.

You’ll have visibility and control over your line-of-business apps and an ever-growing collection of third-party apps that your users access from a variety of devices. EMS adds granular application management so that IT can deliver a perfect balance between productivity and protection to pave the way for secure collaboration.

**Extend Office 365 rights management for collaboration**

Your users can apply persistent rights management protections to Office files through Office 365 so that data is protected when shared. **EMS extends persistent data protection** to any file type so that your users can collaborate safely within and outside of your organization.

To capture the greatest advantages of file-level protection, EMS includes automatic data classification based on sensitivity, preventing data vulnerabilities from inconsistencies in classification. You can define policies that automatically classify and label data at the time of creation or modification, based on source, context, and content itself.
Manage collaboration with file tracking and revocation

For even more visibility and control over internal and external collaboration, you can monitor shared files and respond to potential leaks through EMS. IT and users can track shared files to monitor activity by authorized collaborators, revoke access if necessary, and revise classification. Your IT team can use powerful logging and reporting on shared files to monitor, analyze, and reason over data. With persistent information protection through EMS, you can empower secure collaboration for any file, on any device, anywhere.

Advanced Security

Office 365 delivers anywhere, anytime, uncompromised productivity. Adding secure access and mobile management through EMS builds the framework to help you protect your organization both on-premises and in the cloud. EMS uses managed and protected identity as the core of advanced security that works to detect internal threats with cutting-edge behavioral analytics and anomaly detection technologies. Using EMS, you can uncover suspicious activity and pinpoint threats across your on-premises and cloud ecosystem.

Advanced Threat Analytics

Using machine learning and event logs, EMS identifies advanced persistent threats on-premises and detects known malicious attacks almost as instantly as they occur. With clear and relevant information provided through a concise attack timeline, you can quickly focus on critical response actions.

Extend Office 365 Advanced Security Management with Cloud App Security

Your Office 365 investment gives you a great foundation for securing your Office Mobile apps against cloud-based threats. To build comprehensive cloud application security that safeguards all your apps, EMS includes powerful visibility, threat detection, attack prevention, and deep discovery of shadow IT. You can monitor user behavior and data flow characteristics for detailed insight on how your users are working with cloud apps. EMS cloud application security capabilities also interface with your existing response mechanisms so that you can continue building on your current investments.

Monitor, assess, and make decisions based on real-time risk estimates

With Office 365 and EMS, you can take a more informed, agile, and comprehensive security posture with respect to the complex and everchanging identity security landscape. Even the most sophisticated attacks leave behind traces that form detectable patterns. Every month Microsoft processes a tremendous volume of these signals. In addition, we update more than 1 billion PCs, service more than 450 billion authentications, and analyze more than 200 billion emails for malware and malicious websites.

Microsoft threat intelligence systems observe nearly every kind of attack and push the collected data directly into our Microsoft Intelligent Security Graph.

The Intelligent Security Graph pulls together telemetry and signals from the hundreds of cloud services that Microsoft operates, extensive and ongoing research that identifies emerging attack vectors and malware, as well as data from partnerships with industry leaders and law enforcement organizations.

We apply machine learning and data analytics to identify anomalous and suspicious activities that characterize advanced and persistent attacks. The graph makes it possible for Microsoft to deliver recommendations and automated actions to help prevent attacks and to counter them. We calculate and assign a risk level (low, medium or high), based on the gathered data, to every sign-in activity and user account. We also assign a risk score to possible configuration vulnerabilities, such as administrators with weak authentication options, or the absence of an initial MFA configuration for end users.

Through Office 365 and EMS, the Microsoft Intelligent Security Graph is part of your advanced security strategy.

Resources

- eBook: Expand your Office 365 capabilities with Enterprise Mobility + Security
- Enterprise Mobility + Security
- Manage Identities
- Identity-driven Security
- Manage mobile productivity
- Information Protection

Plan Office 365 Security & Information Protection

Office 365 includes many security and information protection capabilities. Microsoft Enterprise Mobility + Security (EMS) includes additional capabilities for protecting data, identities, and devices with Office 365. EMS includes Microsoft Intune and Azure Active Directory Premium. It can be challenging for large organizations to determine which capabilities to implement and in what order. The Plan for Office 365 security and information protection capabilities article provides help.

Deciding which capabilities to use

Our cybersecurity consulting team recommends taking a methodical approach to planning and implementing security and information protection features. If you don’t already have an established approach, here is a recommended starting point.

Step 1: Set information protection standards

First, agree on a set of standards that can be applied across your organization. Here is an example of what this can look like.
Step 1: Establish information protection priorities
The first step of protecting information is identifying what to protect. Develop clear, simple, and well-communicated guidelines to identify, protect, and monitor the most important data assets anywhere they reside.

Step 2: Set organization minimum standards
Establish minimum standards for devices and accounts accessing any data assets belonging to the organization. This can include device configuration compliance, device wipe, enterprise data protection capabilities, user authentication strength, and user identity.

Step 3: Find and protect sensitive data
Identify and classify sensitive assets. Define the technologies and processes to automatically apply security controls.

Step 4: Protect high value assets (HVAs)
Establish the strongest protection for assets that have a disproportionate impact on the organization’s mission or profitability. Perform stringent analysis of HVA lifecycle and security dependencies, establish appropriate security controls and conditions.

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>This level of protection is provided by default for data stored in Office 365 services. Data is encrypted while it resides in the service and in transit between the service and client devices. For some organizations, this level of protection meets the minimum standard.</td>
</tr>
<tr>
<td>2</td>
<td>Capabilities such as multi-factor authentication (MFA), mobile device management, and Exchange Online Advanced Threat Protection increase protection and substantially raise the minimum standard for protecting devices, accounts, and data. Many organizations will require one or more of these</td>
</tr>
<tr>
<td>3</td>
<td>You can achieve the highest levels of protection with capabilities such as Customer Lockbox for Office 365, eDiscovery features in Office 365, and SQL Server Always Encrypted for partner solutions that interact with Office 365. Use auditing features to ensure compliance to policies and prescribed configurations. Not all organizations require the highest level of protection.</td>
</tr>
</tbody>
</table>

Protecting data on devices
Many organizations start by implementing controls to protect data on devices. Office 365 includes some built-in capabilities. Intune and Azure Active Directory Premium include additional configurable capabilities for implementing conditional access and other access controls. For more information, see Controlling Access to Office 365 and Protecting Content on Devices.

This table summarizes the capabilities.

<table>
<thead>
<tr>
<th>BYOD (not enrolled)</th>
<th>Office 365</th>
<th>Intune</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic multi-factor authentication capabilities for Office 365.</td>
<td>Enforce PIN and encryption requirements, as well as other policy settings, for applications accessing Office 365. Restrict actions like copy, cut, paste, and save as, to only apps managed by Intune. Enable secure web browsing using the Intune Managed Browser App.</td>
<td></td>
</tr>
<tr>
<td>Access control for Office 365 email and documents. Only mobile devices that are enrolled in MDM for Office 365 can access Exchange Online and SharePoint Online.</td>
<td>Configure conditional access policies for Office 365 apply to SharePoint Online, OneDrive for Business, and Skype for Business. Configure secure access with certificates,</td>
<td></td>
</tr>
</tbody>
</table>
Office 365 | Intune
---|---
Wi-Fi, VPN and email profiles. Keep managed computers secure by ensuring the latest patches and software updates are quickly installed.

**Additional Azure Active Directory Premium capabilities**

Create access policies that evaluate the context of a user’s login to make real-time decisions about which applications they should be allowed to access.

For example, you can require multi-factor authentication per application or only when users are not at work. Or you can block access to specific applications when users are not at work.
This section gives a high-level overview on what IT decision makers and architects need to know about Microsoft cloud solutions.

Microsoft Cloud Services and Platform Options

Microsoft SaaS Services

Taking advantage of productivity workloads provided in the cloud is a first step for many enterprise organizations.

- Get started quickly.
- Rich feature set is always up to date.
- Frees organizations to focus IT resources on strategic applications.
- Includes a Microsoft Azure Active Directory tenant for use with other Microsoft cloud services.

Core Capabilities

**Office 365**
Enterprise cloud productivity and collaboration services

**Microsoft Dynamics CRM**
Enterprise cloud customer relationship management

**Microsoft Enterprise Mobility + Security (EMS)**
Keep your employees productive on their favorite apps and devices while protecting your company data and applications.
- Azure Active Directory Premium
- Intune
- Azure Information Protection

**Microsoft AppSource**
One destination for business users to discover, trial, and acquire line-of-business apps. Find the right app for your business by category, industry, or Microsoft product.

**Microsoft PowerBI**
Bring your data to life. PowerBI transforms your company’s data into rich visuals for you to collect and organize.

**Microsoft Azure Internet of Things (IoT) Suite**
Connect your devices, analyze data, and integrate business systems. Transform your company when you uncover new business models and revenue streams.

**Microsoft Cortana Intelligence Suite**
A fully managed big data and advanced analytics suite to transform your data into intelligent action.

Best for...

Deliver end-to-end intelligent business cloud productivity

- Start with the right fit for your business & grow at your own pace in the cloud.
- Empower employees with productivity tools surfaced in context of processes.
- Guide employees to optimal outcomes with intelligence embedded in processes.
- Stay nimble & adapt in real-time with flexible, extensible applications & platform

Enterprise-wide, private social networking:

- Share information across teams & projects
- Connect to the right people

Manage mobile devices, PCs, and applications from the cloud
Manage customer relationships, including sales, service, and marketing

Microsoft Azure PaaS

Microsoft Azure PaaS is an open, flexible platform and a growing collection of integrated services that helps you move faster, do more, and save money. Use the Azure PaaS open and flexible platform to quickly build, deploy, and manage cloud-enabled applications across the global network of datacenters managed by Microsoft.

- Build modern applications and focus on functionality instead of infrastructure.
- Support for many programming languages including .Net, Java, PHP, Ruby, Node.js, Python, and more.
- Choice of frameworks including .Net, ExpressJS, Rails, Zend, and more.

Core Capabilities

**Digital Marketing**
Connect with customers worldwide with digital campaigns that are personalized and scalable.

**Mobile**
Reach your customers everywhere, on every device, with a single mobile app build.
Business Intelligence
Drive better, faster decision making by analyzing your data for deeper insights.

E-commerce
Give customers a personalized, scalable, and secure shopping experience.

Microservices Applications
Deliver scalable, reliable applications faster to meet the changing demands of your customers.

Big data and analytics
Make the most informed decision possible by analyzing all of the data you need in real time.

Data warehouse
Handle exponential data growth without leaving security, scalability, or analytics behind.

Remote monitoring with IoT
Enhance your business’ performance by monitoring devices, assets, and sensors in the cloud.

Digital media
Deliver high-quality videos to your customers anywhere, anytime, on any device.

Disaster recovery
Protect all your major IT systems while ensuring apps work when you need them most.

Best for …
- Mobile applications
- Hybrid cloud storage with StorSimple
- Media streaming
- Big data solutions using HD Insights
- Machine learning and other advanced analytics scenarios
- B2B e-commerce
- Scalable web portals and sites
- Multichannel marketing
- E-commerce website
- Gaming apps
- Video archiving
- Internet of Things (IoT) solutions

Microsoft Azure IaaS

Azure Infrastructure as a Service (IaaS)

Extend your IT infrastructure to the cloud by using Azure compute, storage, and networking features and resources. Choose your language, workload, and operating system.

- Combine Azure IaaS with Azure PaaS features as you move existing workloads to the cloud.
- Create, resize, and decommission virtual machines in minutes for dev and test scenarios.
- Reduce your on-premises servers and your overall datacenter costs.
- Plan, size, and scale your infrastructure to support your long-term cloud adoption plans.

Microsoft Azure IaaS includes network services and virtual machines. These services can be combined with any PaaS services. Manage your environment using the Azure portal, Azure PowerShell, or the Azure Command Line Interface (CLI).

Virtual Network
Provision and manage virtual networks in Azure and securely link to your on-premises IT infrastructure.

ExpressRoute
Connects on-premises infrastructure directly to the Microsoft network that contains Azure datacenters, without using the Internet.

Virtual Machines
Create new virtual machines or create and upload your own to create pre-configured virtual machines.

Traffic Manager
Load balance incoming global traffic across multiple services running in the same or different datacenters.

Best for …
- Development and test environments
- Disaster recovery of on-premises solutions
- Big data solutions using HDInsight
- SAP solutions
- Application modernization to optimize IT operations and increase customer/employees experience
- SQL Server test, backup, and disaster recovery
- Power BI solutions
- Windows Server 2003 end of support migration
- Datacenter expansion or replacement

Private cloud

Private cloud datacenters excel at hosting services that remain on-premises to support hybrid cloud solutions. Organizations that excel with private cloud IaaS capabilities can benefit from taking this approach with a broader portfolio.
• Deliver faster innovation with optimal control and security with new hybrid cloud capabilities that cut across infrastructure, applications, data, and users.
• Provides the benefits of IaaS but on your terms with dedicated resources, complete control, greater potential for customization, and greater datacenter efficiency.

Microsoft Windows Server
Brings our experience delivering global-scale cloud services into your infrastructure with features and enhancements in virtualization, management, storage, networking, virtual desktop infrastructure, access and information protection, and the web and application platform.

Microsoft SQL Server
Secure, scalable database platform that has everything built in, from advanced analytics to unparalleled in-memory performance. Gain real-time insights across your transactional and analytical data.

Microsoft System Center
A simplified datacenter management experience for complex, heterogeneous workloads. Comprehensive monitoring, hardware and virtual machine provisioning, rigorous automation, and configuration management that keeps you in control of your IT—whether on-premises, in the cloud, or across platforms.

Microsoft Azure Stack
A new hybrid cloud platform product that enables you to deliver Azure services from your own datacenter. Delivers true hybrid cloud agility. You decide where to keep your data and applications—in your own datacenter or with a hosting service provider.

Microsoft Operations Management Suite (OMS)
Gain visibility and control of your hybrid cloud with simplified operations management and security across. Support Windows and Linux running in Public, Private and Hybrid scenarios.

Best for …
• Running core network services to support hybrid cloud environments:
  • Windows Server Active Directory
  • Domain Name System (DNS)
  • Windows Server Update Services
  • Microsoft System Center 2012 R2 Configuration Manager
  • Compliance with data sovereignty, privacy, and regulatory requirements
  • Legacy applications
  • Implementing a chargeback process based on consumption for business units in your organization
  • Providing delegated authority and tools to implement a self-service model
  • Constructing and spanning cloud environments across multiple datacenters, infrastructure, and service providers
  • Write applications consistently and deploy anywhere

Balance of Responsibilities
The balance of control and responsibility for managing solutions depends on the category of the service. The following chart summarizes the balance of responsibility for both Microsoft and the customer.

Resources
• Microsoft Cloud Services and Platform Options

Microsoft cloud storage options
The Microsoft Cloud Storage for Enterprise Architects document covers what IT architects need to know about storage options in Microsoft cloud services and platforms along with the reasons for using cloud storage and the key scenarios.
• Move-in ready cloud storage options that are bundled with existing services, which you can use immediately and with minimal configuration.
• Some assembly required storage options that you can use as a starting point for your storage solution with additional configuration or coding for a custom fit.
• Build it from the ground up with storage building blocks to create your own storage solution or storage for your apps from scratch.