

This article provides an overview of out-of-the-box Office 365/SharePoint Online functionality and what organizations can and should do with it.

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loud-adoption rates are soaring. Organizations are welcoming cloud-based services because they cut costs and improve communications and collaboration. It's not surprising that a recent Gartner O365 survey revealed that "Email and Office still come out at the top" as reasons why organizations embrace the Office 365/SharePoint Online (O365/ SPO) platform.

Other reasons for its adoption include the elimination of maintenance costs associated with on-premises servers, the implementation of feature upgrades as soon as they are available, and the reality of inexpensive, seemingly unlimited storage.

But are organizations getting value from the cloud? Have they found ways to utilize O365/SPO to its fullest potential? Will concerns about security, privacy, and vendor support continue to impede adoption for some organizations? This article provides an overview of out-of-thebox O365/SPO functionality - that is, what organizations can and should do with it.

Recent Office Updates

Microsoft continues to roll out security and feature updates, sometimes weekly. For security updates, it's critical that IT applies them as soon as possible. Computer World suggests spending two days checking for reports about issues, and if all seems well, then applying the updates. Though it's beyond the scope of this article to

discuss each security and feature update, currently users with the right subscription can:

- Encrypt e-mail messages
- Issue a blind copy warning if users choose "Reply All" to a message
- Edit SPO document library column metadata from within a document

For past, current, and in-development upgrades, see Microsoft's Office 365 Road Map.

OneDrive for Business

From its inception as Groove in Office 2007, which offered offline synchronization functionality, OneDrive for Business is primarily a synchronization tool that now includes many SPO features while also acting like a network drive in the cloud. Users control how they share content. They can view version history and they can launch workflows. All business subscriptions include OneDrive for Business and 5 terabytes of storage to start.

Machine-Learning and AI

In 2014, Microsoft rolled out Delve for O365. Formerly code-named Oslo and powered by Office Graph, Delve monitors with whom and with what a user interacts. It incorporates content from e-mail, OneDrive for Business, SPO, Yammer, Lync, and other O365 applications, presenting what matters the most to users, who only see what they are permissioned to see.

What Is Office 365?

Office 365 is a cloud-based subscription with many plans including a variety of Microsoft Office Suite applications and services.

At the high end of the scale, the new 0365 Enterprise E5 plan includes, among many other things:

- · Office 2016 desktop and mobile applications: Outlook, Word, Excel, PowerPoint, Publisher, Access, and One Note
- Office 365 services: Exchange Online, Microsoft Teams, Skype for Business, OneDrive for Business, SharePoint Online, Yammer, Delve, Power BI, Office 365 Video
- 1 TB file storage and sharing
- · Advanced eDiscovery (In-place Search, Hold and
- Exchange Online Advanced Threat Protection
- · Advanced Security Management
- · Advanced Power BI and MyAnalytics
- · Public switched telephone network (PSTN) confer-
- Cloud-based call management with option to add PSTN calling
- 24/7 phone & web suppor

At the lower end of the scale, 0365 Enterprise E1 plan does not include any applications, but it does include, among other things:

- Office 365 services: Exchange Online, Microsoft Teams, Skype for Business, One Drive for Business, Yammer, and Delve
- 1 TB file storage and sharing
- eDiscovery Search
- · Online and video conferencing
- Skype Meetings Broadcast
- FastTrack Free development support with purchase of 50+ seats
- 24/7 phone & web support



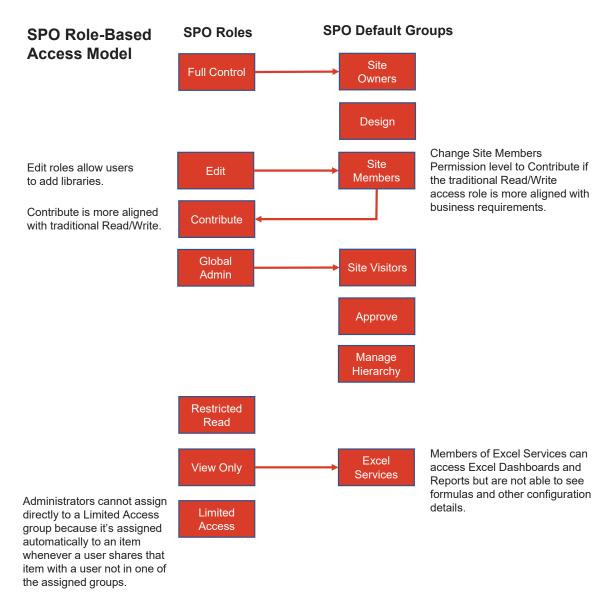


Figure 1: Role-Based Access Model

In December 2017, Microsoft announced how it would extend human ingenuity with everyday artificial intelligence (AI). Among Microsoft's more recent machine-learning and AI assets is a feature called Acronym, which can scan e-mails and documents to better understand how users employ acronyms across their organization.

For information professionals, advanced data governance and intelligent search will be of interest. With the latter, users can extract text from image files stored in OneDrive and SPO libraries and index those files, enabling them to "locate images relevant to search queries."

Metadata Architecture

The functionality to build complex taxonomies that utilize managed metadata services has been available for more than a decade. Qualified site owners with the right assignment of Site Collection Admin rights can also integrate term sets into Content Types, create global navigation drop-down menus, and incorporate those term sets into search refiners.

What's new, though, is that with some SPO Site Modern Theme Templates, users can drag-and-drop documents into their respective information categories when using a Group By style. The documents will automatically inherit tags; no manual tagging is required. Also released in 2018 is the ability to perform bulk metadata editing using the Details pane. And later in 2018, site administrators will be able to add custom metadata to modern SPO pages and news articles.

SPO Restrictions and Limitations

Like all software, on-premises or in the cloud, there are limitations of what users can do, but many of these

limitations are irrelevant. For instance, while it's possible to have 2,000 subsites or 5,000 security groups in a site collection, it's probably not necessary, even for large organizations following lifecycle management principles.

Organizations should be aware of the 400-character limitation (up from 261), which is the complete file and folder path from the "https" to the last character in the file extension. A poorly architected site plan and accompanying folder structure with over-long character strings can result in file synch errors.

For more information on services limitations, see the "Read More About It" section.

Migrating Content

Early in 2018 Microsoft introduced its own migration tool available for download from Microsoft's website. Unless site administrators have the required skills, organizations should engage an IT resource and/ or third-party consultant to help with the migration and planning.

Technically savvy users may want to learn about Windows PowerShell, a command-line shell and a scripting language that facilitates task automation and configuration management. It's especially useful if migrations involve several thousand libraries and lists, containing various configurations. Proper planning is key, and organizations must not miss this step. When in doubt, hire an expert.

Users can conduct smaller migrations (100 files at a time) to SPO from a Windows environment or from one SPO site collection to another site collection, assuming in-scope content falls within allowable limits. SPO also preserves the last modified and modified-by dates in the new location. Though users should not expect to preserve version history in the new location; SPO takes the most recent version from its source location and resets it at Version 1.

Earlier this year, Microsoft released hub sites as it moved away from its traditional site and sub site hierarchy, toward a flat hierarchical architecture. In a flat hierarchy, every site becomes its own entity. Sites can be grouped under hub sites and reassigned anytime. In addition, a hub site member site can move from group to group.

With this latest release, site administrators must now rely on the new Microsoft Graph API, which facilitates search across integrated applications and uses machine learning, to query information from different sites.

Those who are new to SharePoint may find the new design easy to adopt because the concept of permissioning has been simplified. On the down side, popular features such as Term Store/Managed Metadata Services (used to create and manage taxonomies) are not supported. Organizations migrating from on-premises to SPO should consider how a hub site hierarchy might impact existing users.

For a more thorough overview of migrations, see "Conducting a Business and Systems Analysis to Protect your ECM Investment" in the March/April 2016 issue of Information Management.

SPO Security

SPO follows a role-based access control (RBAC) model to manage and limit accessibility. Figure 1 demonstrates the flow of such a model.

Additionally, to further ensure security, include the information-sharing concepts listed below in all O365 and SPO training and awareness programs. If such deployment is conducted without proper training, organizations could face unnecessary risks if users share confidential information with the wrong people.

- The Anyone Group: It gives access to anyone who receives this link, whether they receive it directly from one user or it is forwarded from someone else. If O365 Global Admin activates external sharing, the link could go to people outside of your organization.
- People in < Your Organization> Group: It gives everyone in the organization access to the link, whether they receive it directly from end users or it is forwarded from someone else.
- Specific People: It gives access to specific people.
- Allow Editing: By default, O365 turns on this feature. Uncheck the checkbox to grant "View only" access.

Users control with whom they share content, the type of access they provide, and whether access expires after a set period. Again, do not overlook the above-noted concepts when providing user training.

Vendor Support

Information governance (IG) professionals should get acquainted with Microsoft's service level agreement (SLA) to better understand what its 99.99% uptime guarantee implies and the support they will get if an outage occurs. Just because an organization loses access for several hours doesn't necessarily mean it can submit a claim.

The formula to calculate downtime is as follows:

$$\frac{\textit{User Minutes} - \textit{Downtime}}{\textit{User Minutes}} \times 100$$

Here, downtime is measured in user minutes; that is, for each month, downtime is the sum of the length (in minutes) of each Incident that occurs during that month, multiplied by the number of users impacted by that incident.

Office 365 Licensing

There are variations of licenses for O365 for education, for small business, and for large enterprises, with different pricing for government organizations. All are customizable, with some variations for standalone plans. Organizations seeking more advanced IG functionality as well as records management should invest in the Enterprise (E) licensing plans for enterprises, and Academic (A) for academic institutions.

Features will vary depending on the subscription. For example, data governance and threat management are available in all academic, business, and enterprise plans, as well as standalone plans. But advanced functionality for these features is today available only with an Enterprise 3 subscription and not with standalone options. Organizations wanting data loss prevention and/ or advanced encryption will need an E3, E5, A3, or A5 license.

Of interest to IG professionals are the machine-learning capabilities included in the Advanced Data Governance feature. Intelligent actions such as recommending policies, automatically classifying information based on retention schedules, and applying labels based on sensitivity values enable better management of information assets.

Global Licensing Requirements

Organizations with worldwide operations may be subject to accounting and crediting restrictions or other laws, depending on the country, and may need to work through a local vendor. In Brazil, for example, "Software Law determines that all acts and agreements for the licensing of commercialisation rights relating to software programs of foreign origin [are subject to] payable taxes and charges," according to the legal information resource GettingtheDealThrough.com. Work with your procurement or legal department to better understand where your organization must negotiate separate licensing agreements. Depending on the number of employees and countries an organization operates in, such negotiations could take months or even years. Further, consider any rules regarding location. For instance, some countries do not permit organizations to move personally identifiable information outside their borders.

SPO Online Administration Best Practices

While it would be easy to lock down all content, that won't necessarily make it secure. Users are likely to create workarounds, creating what will become dark content, hidden and therefore unused for business decisions, but potentially surfacing during discovery. To maintain SPO governance, site collection administrators should do the

- Ensure there are valid business reasons for locking down content. Only then should site administrators break the permissions on a subsite in a site collection or library.
- Deactivate external sharing to reduce the risk from internal threats. If the business insists, conduct a risk assessment and get a senior leader to approve and accept the risk.
- Ensure that there are processes to keep track of site administrators and their required training.
- Keep track of the creation of sites. Include the site name, where the site resides in the structure, the business owner, and any custom configuration details, as illustrated in Figure 2 "SPO Site List."

Classify the SPO site list as confidential, especially if some sites contain confidential information. It will become a valuable reporting tool during an audit or other legal matter. A technically savvy resource can utilize PowerShell (mentioned earlier) if the number of sites exceeds what is manageable by a small number of non-technical end-users, though the output will likely require some formatting tweaks to ensure a non-technical audience can review it.

Information Lifecyle Management Controls

The great news about O365 and SPO is that administrators can deploy retention policies to content in Exchange, OneDrive for Business, SPO, and O365

Site Name (Parent Site)	Site Level(s) (subsite)	Permission Level	PII (Yes/No	Site Owner/ Admin	Business Owner	Security Group Name	Custom Configuration Details	Comments
Site Name (Parent Site)	Site Level(s) (subsite)	Permission Level	PII (Yes/No	Site Owner/ Admin	Business Owner	Security Group Name	Custom Configuration Details	Comments
Recruitment	2	Confidential	No	John M	Вор Ј.	Recruitment Owners Recruitment Members Recruitment Visitors	Drop down lists; Managed metadata Services; two retention policies based on last modified date	Site contains Employee resumes and bios, including senior managers. Permissions broken at parent. One library contains inactive resumes and one library contains active resumes and bios. The latter transferred to employee file record centre after probationary period expires

Figure 2: SPO Site List





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for Information Management and Information Governance

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Read More About It

Consider these sources for additional reading about Office 365/SharePoint.

- English, Bill. Microsoft SharePoint Online for Office 365: Administering and Configuring for the Cloud. Microsoft Press: Redmond, WA, 2015.
- http://icansharepoint.com/file-type-and-namingrestrictions/
- https://blogs.gartner.com/craig-roth/2018/01/09/ office-365-survey-results-are-in/
- https://blogs.msdn.microsoft.com/cloud trails/2013/03/05/what-is-the-permissions-modelused-by-sharepoint-online/
- https://docs.microsoft.com/
- https://gettingthedealthrough.com/area/19/jurisdiction/6/licensing-brazil/
- https://products.office.com/en-us/business/office-365-roadmap?filters=#abc
- https://rcpmag.com/blogs/scott-bekker/2018/01/5-security-features-office-365-roadmap.aspx
- https://redmondmag.com/articles/2017/05/10/ microsoft-expands-sharepoint-online-url-path-lengths.aspx
- https://sharepointmaven.com/set-retention-deletion-policies-files-folders-sharepoint/
- https://support.office.com
- https://www.computerworld.com/article/3205187/ enterprise-applications/office-365-a-guide-tothe-updates.html
- · https://www.digitalcitizen.life/simple-questionswhat-powershell-what-can-you-do-it
- https://www.gartner.com/smarterwithgartner/ widespread-adoption-of-cloud-office-is-nowwell-underway/
- https://www.petri.com/office-365-sla
- https://www.scnsoft.com/blog/office-365-collaboration-tools
- https://www.theinquirer.net/inquirer/ news/2364088/microsoft-puts-out-oslo-for-microsoft-office-calls-delve-a-milestone
- Smallwood, Robert F. Information Governance: Concepts, Strategies and Best Practices (Chapter 16, "SharePoint Information Governance," by Monica Crocker, CRM, PMP, CIP, edited by Robert Smallwood.) Wiley: Hoboken, NJ, 2014.

groups directly from the O365 administration center. Work with IT to ensure your policies align with the organization's retention schedule. With the right subscription and a qualified IT resource, it's also possible to automate the assignment of labels if the content matches specific conditions.

In-Place Records Management

In-place simply means that records live alongside documents users are working on. They can upload or drag-and-drop documents into a library configured to automatically declare items as records. At this time, declaration isn't complete until users check those documents into the library, but this could change.

While it's possible to give all users the ability to declare and undeclare records, best practices dictate that the highest level of restriction should apply. At no time should users have the right to undeclare records.

Retention Policies

There are four places in SPO where site owners can define event-driven information lifecycle retention policies. Site owners can create policies at the site collection level, within a content type, in a library, or even at the folder level. The more granular the context, the more resources and time are required to ensure information lifecycle management compliance.

Because site owners can configure multi-stage lifecycle events based on last modified or creation dates, it's possible to automatically declare items as records after a set period elapses, and then permanently destroy them six years later without user involvement (if DoD 5015.2 compliance isn't a requirement). With support from a qualified IT resource, site owners can also automate the routing of records to a records center that utilizes workflow functionality.

Lifecycle Management Audit Reports

After receiving training on information management, site owners should regularly review site activity for anomalies. Such reports would include disposition activity, file editing, copying files, editing content types, and editing users and permissions.

Training Resources

With just a few clicks, it's easy to find online support, either through Microsoft or other third parties, some of whom are listed in the "Read More About It" section.

ARMA's SharePoint® training, facilitated by Bruce Miller, is well-worth the investment. It will be offered next as a Flipped session: the first part will be virtual on September 25, and the last part will be an in-person session on October 22 at the ARMA International Annual Conference & Expo in Anaheim. Get more details or

register at https://www.arma.org/page/live_flipped.

AIIM also offers a deep-dive online course titled "Implementing Information Management on SharePoint and Office 365." Get more details or register at www. aiim.org.

In addition, those who have LinkedIn's premium membership can access O365/SPO modules for all skill levels.

SPO Governance Checklist

To help ensure proper SPO governance, an organization needs:

- An O365/SPO governance committee
- · Clearly identified roles, responsibilities, and information ownership
- An open dialog about protecting data without overprotecting it
- Users' understanding of SPO information-sharing concepts
- A process to keep track of site sprawl
- Availability of qualified resources

A Look Ahead

Collaboration and communication enhancements continue to top the list of Microsoft's O365 roadmap. Coming soon are many new information lifecycle management features. IG professionals may now - or very

soon - be able to issue and track legal hold notices and receive responses from information custodians; apply retention policies to content in Planner and Yammer; and automate event-based retention using the Advanced Data Governance API to connect to other lines of business applications. Stay tuned, because O365 and SPO tentacles are extending dramatically.



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