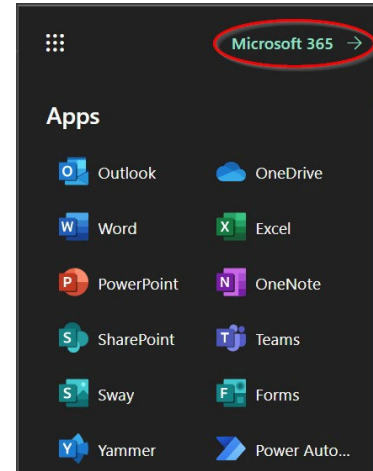


## **Part 1 of 3: Microsoft (Office) 365**

Microsoft 365 has cloud-based **Software-as-aService** for Office apps at [mySeneca.ca](https://mySeneca.ca).

The same Office applications can be [installed on your local machine](#) as client-side software which can run without a network connection. Even OneDrive will work locally as store-and-forward **Platform-as-aService** until synchronization with the cloud resumes.

For cloud folders *not* synchronized, e.g. for backup, OneDrive is **Infrastructure-as-a-Service**.



### [How to Send a File \(click me\)](#)

*Note that the minimum word counts suggested in the following questions gets more or less average marks depending on the quality of content. To go above average, see the marking rubric in course Announcements.*

*Note that [OneDrive for Business](#) (SharePoint) is different from [OneDrive for home](#)/personal use; assuming that OneDrive is the same everywhere is first-level, end-user thinking. You are an IT pro now: be suspicious of branding and marketing, assess features and function instead.*

#### **1. Microsoft 365 (15 points for this 3-part question, 150+ words total)**

1a. What Microsoft (Office) 365 *for business* tools, apps, and features support general collaboration (generating ideas, discussions, planning) when working on a group project?

Microsoft 365 offers a myriad of tools that foster collaboration among team members when working on a group project. The first and foremost is Microsoft Teams, which serves as a centralized platform for real-time chat, video meetings, and document sharing. Teams allows group members to brainstorm ideas and discuss plans via virtual channels, video conferences, and screen sharing.

SharePoint, another Microsoft 365 service, facilitates collaborative content management. It's useful for hosting shared resources like documents, calendars, and newsfeeds. It's more like a digital workplace where documents and discussions live in a shared space.

OneNote is an excellent tool for jotting down ideas, notes, or meeting minutes that are accessible to everyone in real-time.

Planner is useful for task assignment, tracking, and managing project timelines.

1b. A group of people must work together sharing a single file.

What would you use in Microsoft 365 to set that up, and what would you tell the group members to do?

If a group needs to work together on a single file, OneDrive for Business is the go-to solution within the Microsoft 365 ecosystem. To set this up, one person would upload the file to a shared folder on OneDrive and then share the folder's access link with group members.

Here's what I would tell group members to do:

- Click on the OneDrive access link received via email or Teams.
- Sign in using Microsoft 365 credentials if not already signed in.
- Access the shared folder and locate the file.
- Open the file with Microsoft's Online Apps (like Word or Excel Online) for simultaneous editing.

1c. What can be used in Microsoft 365 to manage a set of many files when people are working as a group?

When it comes to managing a set of many files for a group, SharePoint is probably the most robust option. It not only allows for the storage of multiple files but also offers version control, advanced search features, and customized permissions.

In SharePoint, you can create dedicated 'libraries' or 'sites' for each project, thereby keeping multiple files organized. Each library can hold multiple file types, and team members can check out files to make changes, ensuring version control. You can also set up approval workflows to streamline the review process of the shared files.

## **2. Cloud versus Local file serving (15 points in 150+ words)**

Compare and contrast storing files in the cloud versus your company's on premises server from the POV of the company's local end-users.

### **Cloud Storage**

#### **Advantages:**

**Accessibility:** Cloud storage allows end-users to access files from anywhere with an internet connection.

This is especially helpful for remote work or off-site collaboration.

**Collaboration:** Cloud platforms usually include built-in collaboration tools. Multiple people can edit a single document simultaneously, making workflow more efficient.

**Updates and Maintenance:** Cloud storage services are automatically updated and maintained by the provider, relieving end-users from the task of regular maintenance.

#### **Disadvantages:**

**Dependence on Internet:** An internet connection is a must. If the internet is down, so is access to important files.

**Data Security Concerns:** While cloud providers typically offer robust security measures, there's always a risk when storing sensitive information off-site.

### **On-Premises Server Storage**

#### **Advantages:**

Control: The company has complete control over the on-premises servers, offering potentially better security and customization options.

Speed: Local servers usually offer faster data retrieval times because the data does not have to travel over the internet.

Internet Independence: Unlike cloud storage, local end-users can access files without an internet connection.

Disadvantages:

Maintenance: Local end-users might be affected by the downtime during server maintenance, upgrades, or hardware failures.

Limited Accessibility: Files stored on a local server are generally not accessible from outside the corporate network, limiting remote work options.

Cost: Initial setup and ongoing maintenance can be costly and may require in-house IT expertise.

In summary, cloud storage offers greater flexibility and ease of collaboration but comes with a dependency on internet access and potential security concerns. On-premises storage offers more control and can be faster but limits accessibility and requires more maintenance effort from local end-users.

### 3. Computing Services (30 points)

Fill in the table below. Traditionally, Microsoft 365 office applications were installed locally on client PCs and/or the company's on premises server. Consider this and what is now Infrastructure | Platform | Software \_as\_a\_Service "in the cloud." All MS 365 features are not end-user applications; those requiring technical set up (as opposed to simple installation) and/or IT expertise would be IaaS or PaaS depending on how the feature is used.

[This IBM page](#) on \_?\_aaS is worth reviewing.

N.B. The Internet is the delivery mechanism that makes \_?\_aaS possible. Every \_?\_aaS has a web-based user interface (e.g. for configuration), but the interface does not represent the service itself. ([The medium is not the message.](#))

N.B. Microsoft's Azure cloud computing platform is NOT Microsoft's 365 end-user utilities.

Computing Services	General Definition & Characteristics	What Microsoft end-user features and apps (e.g. in Office or MS 365) fit the Definitions & Characteristics <i>and why?</i>
On Premises Servers	Physical servers on company property. Handle company's computational needs.	Microsoft Office Suite (before cloud adaptation) - Installed and ran on company servers.
<u>IaaS</u> Infrastructure as a Service	Virtualized computing resources. Infrastructure managed by service provider.	Azure Virtual Machines - Acts like a virtual server. User doesn't manage underlying hardware.
<u>PaaS</u> Platform as a Service	Platform for app development without infrastructure management.	Azure App Service - Allows for app hosting without managing underlying OS and server infrastructure.
<u>SaaS</u> Software as a Service	Software delivered over the internet. No installations on individual PCs.	Microsoft 365 Apps like Word, Excel online - Users access them through the browser without installing them locally.

4. (40 points for 250+ words)

**If Everything is a Service, then what do we have apart from a lot of subscriptions to services?** For the applications you use and the entertainment you enjoy, does it matter when you don't have the hardware, the software, or the files? Is the [medium now the only message](#)?

Businesses purchase services instead of software and servers: Software | Platforms | Infrastructure as-a-Service. What was once physical has become virtual, all delivered by online services via subscription.

What happens when *having* something becomes having only *access* to something...when *things* have become *subscriptions* on a server in the cloud? Are we in the "[The End of Ownership](#)" era?

"The future has arrived — it's just not evenly distributed yet." — [William Gibson](#)  
With Everything as a [subscription] Service, is it now evenly distributed? Long-term

#### Financial Commitment

While subscriptions might seem cost-effective in the short run, they could lead to an elevated level of expenditure over time. For example, a software that was once a one-time purchase could, over several years of a subscription model, end up costing much more than its owned counterpart. Businesses must also be careful in managing multiple subscriptions to avoid 'subscription fatigue,' where the sheer number of active subscriptions becomes cumbersome to manage and optimize.

#### Data Privacy and Security

Another point worth mentioning is the issue of data privacy and security in a cloud-centric, subscription-based model. Since data is stored off-site, usually in a shared environment, there is an inherent risk of data breaches. While cloud providers invest heavily in security, the risk is never zero. Moreover, this raises concerns about data sovereignty. Where are your data stored, and what laws governing that territory? Businesses and individuals need to consider this when adopting a service-based model.

#### Vendor Lock-in

One of the significant risks with "Everything as a Service" is vendor lock-in. Once you commit to a specific service, switching can be cumbersome, expensive, and sometimes, impossible due to data migration challenges, compatibility issues, and contractual obligations.