

# Microsoft 365 Unattended License Overview

This brief applies to all Microsoft Licensing programs.

## Contents

Summary .....	1
Details .....	2
What is the difference between Robotic Process Automation and a bot? .....	2
What is the Microsoft 365 Unattended License? .....	2
Microsoft Licensing Scenarios .....	5
Example 1 - Call Center Automation .....	6
Example 2 - Finance Data Capture & Entry .....	6
Example 3 - HR Reporting .....	7
FAQ .....	7

## Summary

Across the software industry, numerous technology solutions help people do their job. But the widespread adoption of technology also means that businesses can end up with disconnected solutions that require them to patch together processes across siloed applications. In the past, joining disparate systems together was difficult or too costly because it required professional developers — especially when some of the data can still be on paper or locked in decades-old Windows or web applications.

This brief explains how Robotic Process Automation impacts the licensing needs for Microsoft customers. Robotic Process Automation is a significant technological advancement over historical automation solutions, such as screen scraping, and it is important to understand the use and implications of licensing this service.

## Details

### What is the difference between Robotic Process Automation and a bot?

---

It is important to note that a bot is a computer program that executes the steps in a Robotic Process Automation process. The Robotic Process Automation is the action and process performed by the bot, whereas the bot is the interface and “user” executing said actions. Bots are often utilized to assist a person to execute automation and repetitive tasks and cannot be utilized in order to reduce the number licenses that would typically be required for device or software use.

“Robotic Process Automation”, otherwise known as “RPA”, refers to when an application, or any set of applications, are used to capture data and/or manipulate applications to perform tasks.

Robotic Process Automation (RPA) is a form of business process automation technology based on metaphorical software robots (bots) or artificial intelligence (AI) workers. In traditional workflow automation tools, a software developer produces a list of actions to automate a task and interface to the back-end system using internal application programming interfaces (APIs) or dedicated scripting language. In contrast, RPA systems develop the action list by watching the user perform that task in the application's graphical user interface (GUI), and then perform the automation by repeating those tasks directly in the GUI.

Bots can interface with any application through the UI the same way a user does. Such bots are “trained” by their users by being “shown” how to complete a task and typically follow logical rules such as “if/then” rules while reading & writing to databases. Bots also work with and drive existing applications by opening emails and attachments or inputting data to forms.

You will find slight variations across the industry on bot definitions. Microsoft has its own definitions in order to provide clarity to customers for their specific needs and the potential software licensing implications when implementing RPA scenarios.

### What is the Microsoft 365 Unattended License?

---

When we look at Microsoft’s view into licensing Robotic Process Automation solutions, we follow the same general outlines as the broader industry definitions. “Robotic Process Automation”, “RPA”, or “bots” means an application, or any set of applications used to capture data and manipulate applications to perform repetitive tasks. Specifically, when Windows client and/or Microsoft Office or Office 365 is involved, bots operate upon any UI element of Windows 10 within an OSE and/or operates upon any Office application in any OSE.

The Office and Windows components here are key since Microsoft is providing license, bots use rights, and access to its software. Due to the ability for these RPA solutions and bots to perform tasks and access systems the same as a human user would, it is critical to understand this distinction.

We also classify bots into two distinct categories – *Attended* and *Unattended*. Below are examples of Attended and Unattended bots. Examples that would require a Microsoft 365 - Unattended License are noted.

**“Attended bot”** – An Attended bot assists a person to execute automation on the person’s local and/or remote workstations. It operates concurrently with the person on the same workstation/s to accomplish repetitive tasks and is triggered by explicit actions of that person.

- i.e. cut & paste information from one screen to another
- i.e. user triggering an action to auto-update customer contact information
- i.e. user clicking a keyboard key in order to send a meeting invite for the next available time to a specified colleague

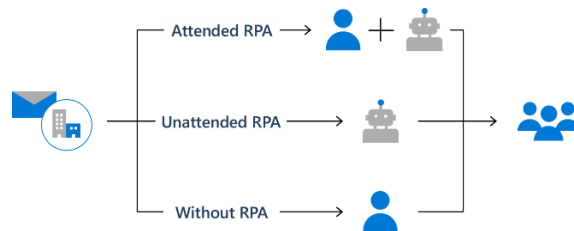
**“Unattended bot”** – Any bot that doesn’t conform to the definition of “Attended bot” should be considered an “Unattended bot.”

- i.e. running SQL queries and inputting data into forms
- i.e. sending Excel reports at midnight through an automated process (requires RPA for M365 license)
- i.e. having an application use Microsoft Word to automatically open submitted files and extract data to a CRM application. (requires RPA for M365 license)

The following examples highlight the various methods to accomplish the same task with and without a Robotic Process Automation solution:

**Example 1:** User receives a message from corporate and needs to send to multiple people in the organization.

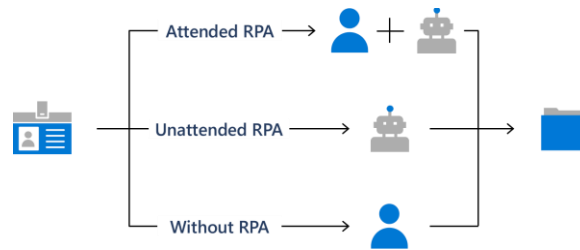
- **With Attended RPA:** If there is a macro that allows the user to click a button and send the message to all parties.
- **With Unattended RPA\*:** If there is a macro that runs autonomously by recognizing the mail and sends the message to all parties without the user performing any action.
- **Without RPA:** If the user manually sends the message to all parties.



**Example 2:** Web Site or Screen Scraping - When a site or screen contains information (stock, news, media, content, etc.) the page can be scraped by a bot for specific information pieces which can be consolidated and presented to the end user in order to make a decision at a later time.

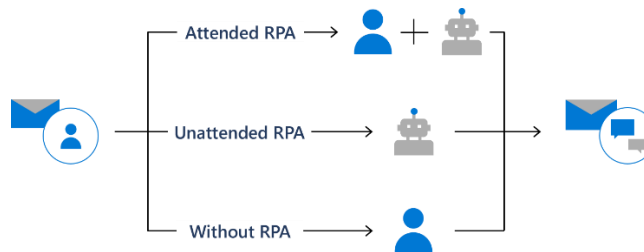
- **With Attended RPA:** If there is a macro that allows the user to click a button and specified content on the site or screen is captured and consolidated.
- **With Unattended RPA\*:** If there is a macro that runs autonomously by scanning for specified content on the site or screen and captures and consolidates.

- **Without RPA:** If the user manually scans the site or screen to physically capture and consolidate the content.



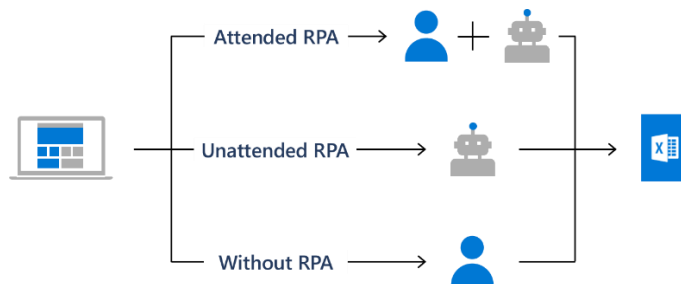
**Example 3:** Incoming Customer Email responses - Where an organization traditionally has a team that handles the first line of defense to respond to customer inquiries, an RPA solution can be implemented and tied to key words or phrases with canned answers or links to relevant information.

- **With Attended RPA:** If there is a macro that allows the user to trigger a task to provide a pre-determined answer to the customer.
- **With Unattended RPA\*:** If there is a macro that automatically responds to customer emails with canned answers based on key words in the submission.
- **Without RPA:** If the user manually reads and chooses the appropriate pre-determined answer to respond to the customer.



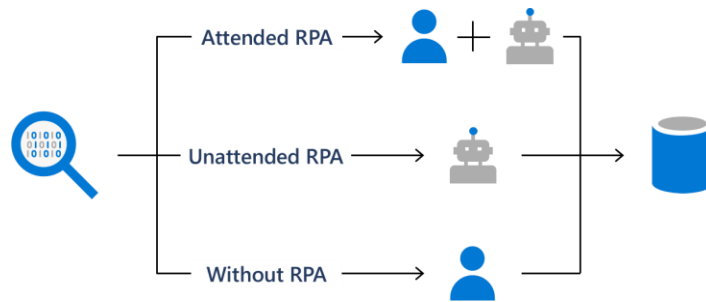
**Example 4:** Onboarding new employees - An RPA solution can assist new employees to an organization that need pertinent information to get set up in their organizational system for a smooth onboarding process.

- **With Attended RPA:** If there is a macro that managers can trigger in order to provide pertinent information to a new employee.
- **With Unattended RPA\*:** If there is a macro that recognizes when a new employee has started and automatically sends them pertinent information.
- **Without RPA:** If the manager manually sends pertinent information to their new employee after they start.



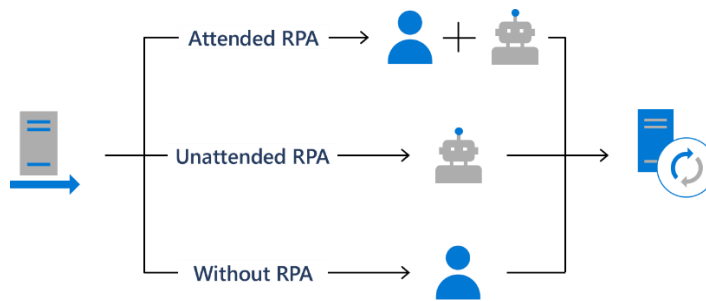
**Example 5:** Forms or data processing - An RPA triggers a macro to read information and write to systems instead of manual data entry.

- **With Attended RPA:** If there is a macro that is triggered by the user to assist them in writing data into a system.
- **With Unattended RPA\*:** If there is a macro that runs overnight autonomously by reading a data source and writing to a new backup system.
- **Without RPA:** If the user manually reads information and physically writes it another system.



**Example 6:** Data transfer - Managing data transfer or backups with an RPA solution with source, destination, and credential information.

- **With Attended RPA:** If there is a macro that is triggered by the user that reads data and transfers to another source destination.
- **With Unattended RPA\*:** If there is a macro that runs autonomously, logs in with credentials, and processes a data backup without user guidance.
- **Without RPA:** If the user manually processes the data transfer and backups to another destination.



*\*Each of the above Unattended RPA examples will require the Microsoft 365 – Unattended License if they are accessing an Office application or Windows client.*

## Microsoft Licensing Scenarios

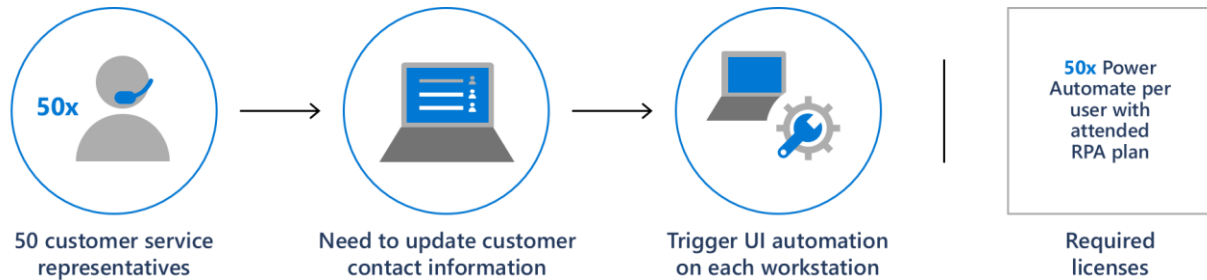
The below examples include additional licenses not discussed in this brief. For an overview and further information, please go to [Microsoft.com](https://www.microsoft.com) for additional details.

### Example 1 - Call Center Automation

A call center has 50 customer service representatives. Each representative requires the ability to trigger UI automation as part of process for updating customer contact information. The automation will occur on each representative’s workstation.

**Licensing Solution:** 50x Power Automate per user with attended RPA plan.

**Rationale:** This scenario is setting up an RPA solution that is triggered by the customer service representative for an automated process, thus this is an Attended scenario. Since there are 50 users, 50 licenses are required.

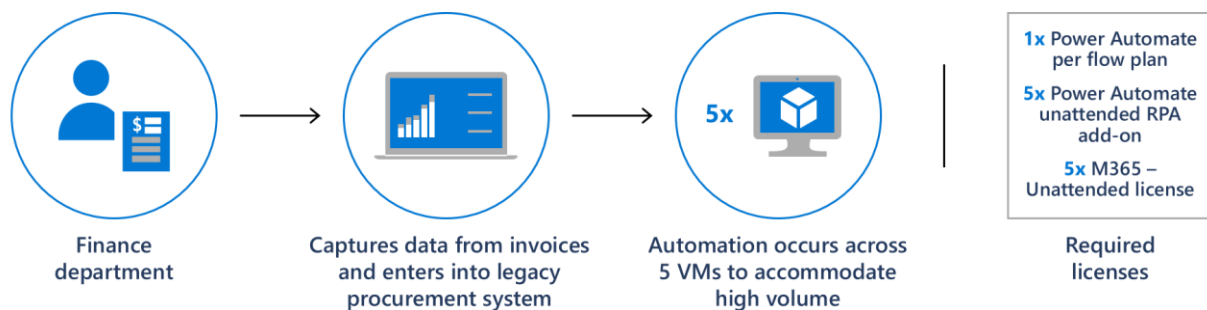


### Example 2 - Finance Data Capture & Entry

A finance department receives invoices attached to Outlook email messages. The department would like to automate the process of capturing data from the invoices and entering the information in a legacy procurement system. The automation will occur without an employee’s involvement across 5 VMs in order to accommodate the volume (anticipated 10,000 invoices/month).

**Licensing Solution:** 1x Power Automate per flow plan, 5x Power Automate unattended RPA add-on, and 5x Microsoft 365 – Unattended License.

**Rationale:** This scenario is setting up an RPA solution that is automated (unattended) and accessing an Office application (Outlook) and running on 5 machines. Due to the Office requirement, the Microsoft 365 – Unattended License (x5) is required for each machine. In addition to this, each machine also requires the Power Automate unattended RPA add-on (x5). Finally, the Power Automate unattended RPA add-on also has a pre-req of the Power Automate per flow plan (x1).

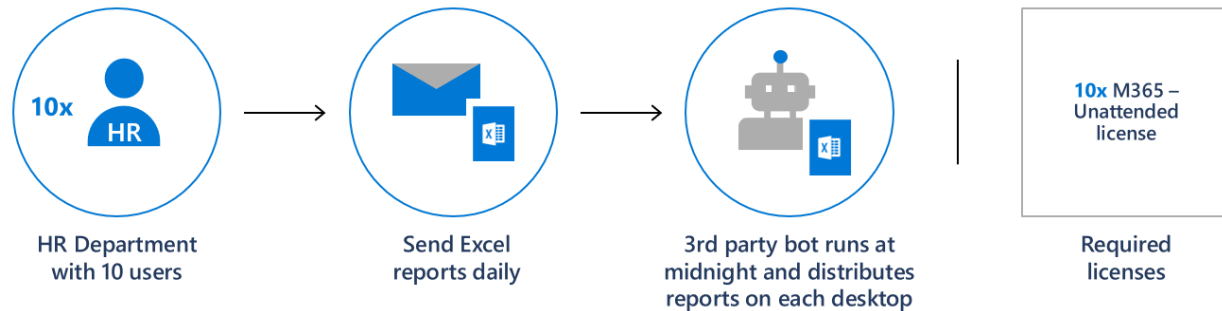


### Example 3 - HR Reporting

An HR department has 10 users that send Excel reports daily. Each user will create a 3<sup>rd</sup> party bot that runs autonomously at midnight and distribute these reports. The automation will occur without employee involvement on each user's desktop.

**Licensing Solution:** 10x Microsoft 365 – Unattended License

**Rationale:** This scenario is setting up an RPA solution that is running autonomously (unattended) and accessing an Office application (Excel). Since this solution is not utilizing Microsoft's Power Platform, the bot does not require any additional licenses.



## FAQ

**Q1:** When do I need a Microsoft 365 – Unattended License for my RPA solution?

**A:** The following scenarios require an RPA for Microsoft 365 license:

- Utilizing an Unattended bot that interacts with and/or operates on Windows 10.
- Utilizing an Unattended bot that interacts with and/or operates upon any Office application in any OSE.

**Q2:** How does Robotic Process Automation impact multiplexing? Can I use bots to avoid licensing users, devices, and services?

**A:** Multiplexing is when any type of automated process acts as an intermediary between different software or hardware to reduce direct connections with the software. Multiplexing does not reduce the number of required licenses. Multiplexing rules still apply for RPA scenarios. Bots must be licensed in addition to the services and/or devices that they access must also have the proper licenses just as a normal user and/or device would.

**Q3:** The Microsoft definition of bots varies from other industry definitions. Which one applies to me?

**A:** Microsoft definitions and terms always apply if you are using relevant Microsoft products.

**Q4:** I have created a bot that runs in unattended mode on more than one server at a time and interacts with Microsoft applications directly on the server. Is this allowed without licensing the bot?

**A:** No, this is not allowed. Since the bot is unattended and accessing Microsoft applications on more than one OSE, it would require the Microsoft 365 – Unattended License. This license limits the bot's interaction to only a single server at a time. If you need to access multiple servers at once, you will need to have multiple bots and multiple licenses.

**Q5:** *Is there licensing associated with development and testing of bots in production/nonproduction environments?*

**A:** A bot represents execution of a GUI-based process on a machine, so what matters is the dev/test/prod of the RPA which exists in current licensing today.

**Q6:** *What about the infrastructure needed to run an unattended bot in a virtual machine? Is that included in the unattended RPA add-on?*

**A:** No – running the unattended RPA bot in a VM requires the separate purchase of any necessary compute resources.

**Q7:** *What licenses do I need for an Unattended bot accessing a Windows environment but not using an Office application?*

**A:** A typical configuration would require 3 SKUs, the Microsoft 365 – Unattended License (*Windows access*), Power Automate unattended RPA add-on (*unattended RPA license*) which also has a pre-req of either the Power Automate per flow plan or Power Automate per user with attended RPA (*depending if you want to license per user or per flow*). Depending on how you have your OSE licensed, may impact the need for the Microsoft 365 – Unattended License.

**Q8:** *How can I reduce my current cost & license position for my employees by implementing an RPA solution?*

**A:** You cannot reduce licensing cost or position by implementing RPA. However, by implementing an RPA solution, you may see improved time savings, employee performance, or other efficiencies. These benefits may improve your corporation output and help you realize savings in other areas.

**Q9:** *Is there a scenario where I do not have to purchase a Microsoft license for my RPA solution?*

**A:** If the RPA solution interacts with Windows or Office, then you will need a license. There is no such thing as “unlicensed access” for RPA solutions. There are, however, various configurations possible depending on the RPA function and access requirements.

For example, if there is no Windows client or Office then there is no requirement for the Microsoft 365 – Unattended License required. This does not mean there isn't a bot running, but rather a bot license is not required as it is not accessing or utilizing relevant Microsoft software or services.

**Q10:** *My company has developed a process that leverages components of Word (or Excel or any other desktop Office app) to complete a process on a server that is then sent to end users. In the past this was not allowed based on multiplexing and other limitations. Is this now allowed? If so, what must be licensed? All the end users? The hardware?*

**A:** The RPA solutions Microsoft has introduced do not break any preexisting rules. Each end user, hardware, server, and process must be appropriately licensed. You must first determine if the process is a bot that is attended or unattended, and this will determine the proper licensing required for your scenario. The new licenses introduced now enable you to properly license bots for scenarios that weren't allowed before, but never reduce license requirements.

**Q11:** *How do I manage the application via Systems Center Products? Does it matter if the bot is attended or unattended?*

**A:** Bot implementation does not have any impact on application management. It may be possible to implement an RPA solution to streamline this process, but that depends on how the RPA solution is built.



**Q12:** *We have been using SQL under the Server and CAL model to support an application where there is a Word document created, converted to PDF and then re-distributed manually by email. We are doing this to decrease the cost of the SQL instance and to eliminate the need for Frontline users to license for Word. Does this new licensing offer a less cumbersome process?*

**A:** No. This scenario is an attempt to reduce license position for my employees. Each employee must be properly licensed, and bots cannot be utilized to reduce the need for CALs.

**Q13:** *I have a single bot that runs 3 different processes in which all have steps that require GUI automation in Office 365. To handle the high volume, I have 10 VMs set up to handle these processes. How many 365 – Unattended Licenses do I need to purchase?*

**A:** The Microsoft 365 – Unattended License allows access to a single virtual machine. Due to the bot running GUI automation in Office 365 on all 10 VMs, and each Microsoft 365 – Unattended License being allowed a single unique instance of Office 365, this translates to 10 Microsoft 365 – Unattended licenses. If the VMs are accessed at separate times, you are still limited by the activation limits for Windows Enterprise E3 and/or Office 365 E3.

**Q14:** *What is the difference between a Macro and a Bot?*

**A:** A Macro is a single instruction that expands automatically into a set of instructions to perform a specific task often triggered by an action. A bot can act automatically or be triggered by an action to use or orchestrate an application. Similarly, to the Attended and Unattended scenarios, a Macro would fall under the Attended definition and is largely covered by Microsoft product licensing. While a bot, if acting automatically, is an Unattended scenario and would require additional Microsoft licensing depending on the solution.

© 2020 Microsoft Corporation. All rights reserved. This document is for informational purposes only. MICROSOFT MAKES NO WARRANTIES, EXPRESS OR IMPLIED, IN THIS DOCUMENT. This information is provided to help guide your authorized use of products you license; it is not your agreement. Your use of products licensed under your volume license agreement is governed by the terms and conditions of that agreement. In the case of any conflict between this information and your agreement, the terms and conditions of your agreement control. Prices for licenses acquired through Microsoft resellers are determined by the reseller.