

Rocketbot Addon: Remote Desktop Helper

Cree un archivo .rdp para conectarse a un Escritorio remoto automáticamente

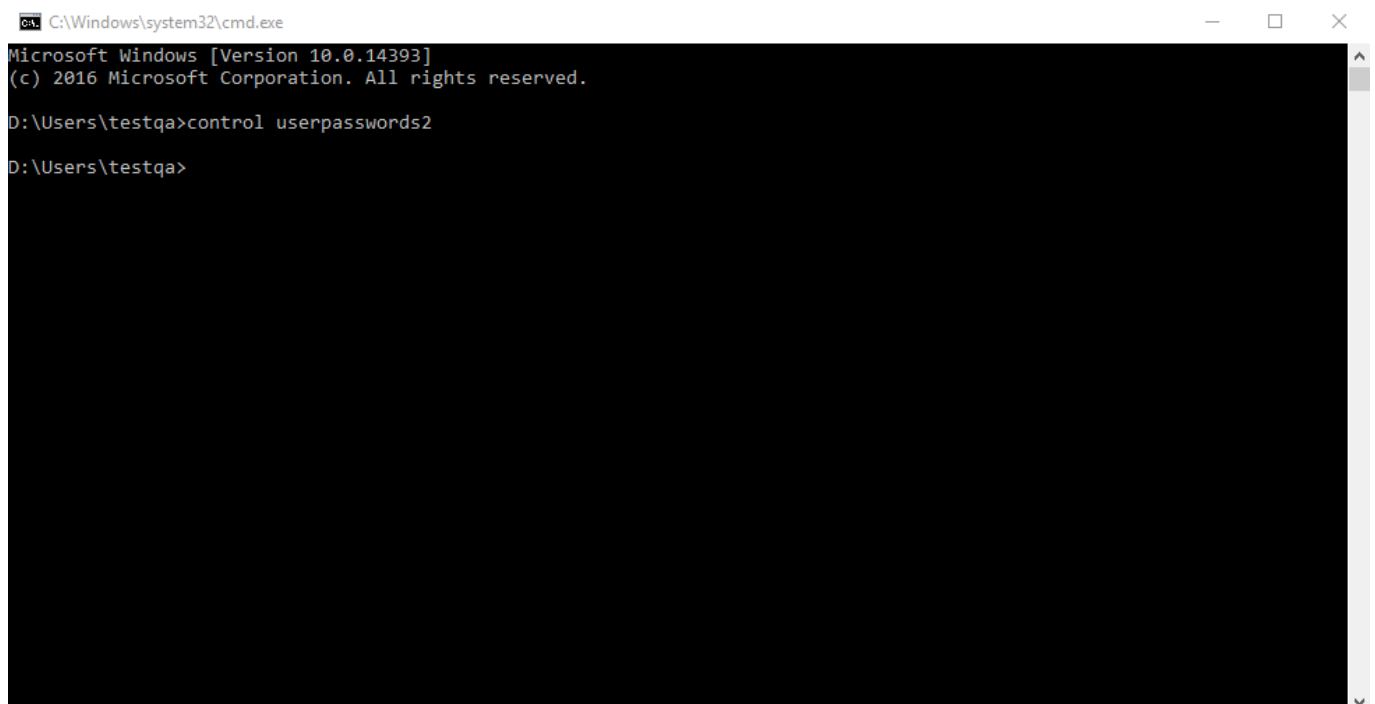
Un problema común, que suele presentarse al enviar a producción un bot en el servidor de tu cliente, es que el mismo por políticas de IT de la empresa no permite mantener la sesión al desconectarse. Aun cuando se utilice realice la desconexión vía TSCON (Documentación: [RPA en Servidores Virtuales – Rocketbot Docs](#)).

Como solución a este inconveniente y para que no sea necesario intervenir manualmente en la apertura del ambiente para que el/los bot/os programados puedan ejecutarse correctamente, se puede crear un nuevo usuario en el mismo ambiente (que no este sujeto a las políticas del ambiente productivo) que solo cumpla la función de ejecutar un archivo .rdp que se conecte al ambiente donde Rocketbot debe ejecutarse de manera programada. Al abrir una sesión mediante RDP se posibilita la ejecución de los bots con normalidad.

Para facilitar la creación de este archivo .rdp Rocketbot creo la herramienta RDP Helper.

Antes de utilizar la herramienta:

Inicie sesión en el escritorio remoto con un usuario con privilegios administrativos. Abra una línea de comando y escriba *control userpasswords2*

A screenshot of a Windows Command Prompt window. The title bar shows 'C:\Windows\system32\cmd.exe'. The window content displays the following text: 'Microsoft Windows [Version 10.0.14393]', '(c) 2016 Microsoft Corporation. All rights reserved.', 'D:\Users\testqa>control userpasswords2', and 'D:\Users\testqa>'. The command prompt is currently at the second line, ready for input.

Ventana de *Símbolo del sistema* con comando para abrir *Cuentas de usuario*

Abra la pestaña **Avanzado** y en **Administración avanzada de usuarios** haga clic en el botón **Avanzado**.

User Accounts



Users

Advanced



Use the list below to grant or deny users access to your computer, and to change passwords and other settings.

Users for this computer:

User Name	Domain	Group
 Administrator	CLOUD	Remote Desktop Users
 Administrator	WSAM...	Administrators
 test001	CLOUD	Administrators; Remote Des...

Add...

Remove

Properties

Password for Administrator



To change the password for Administrator, click Reset Password.

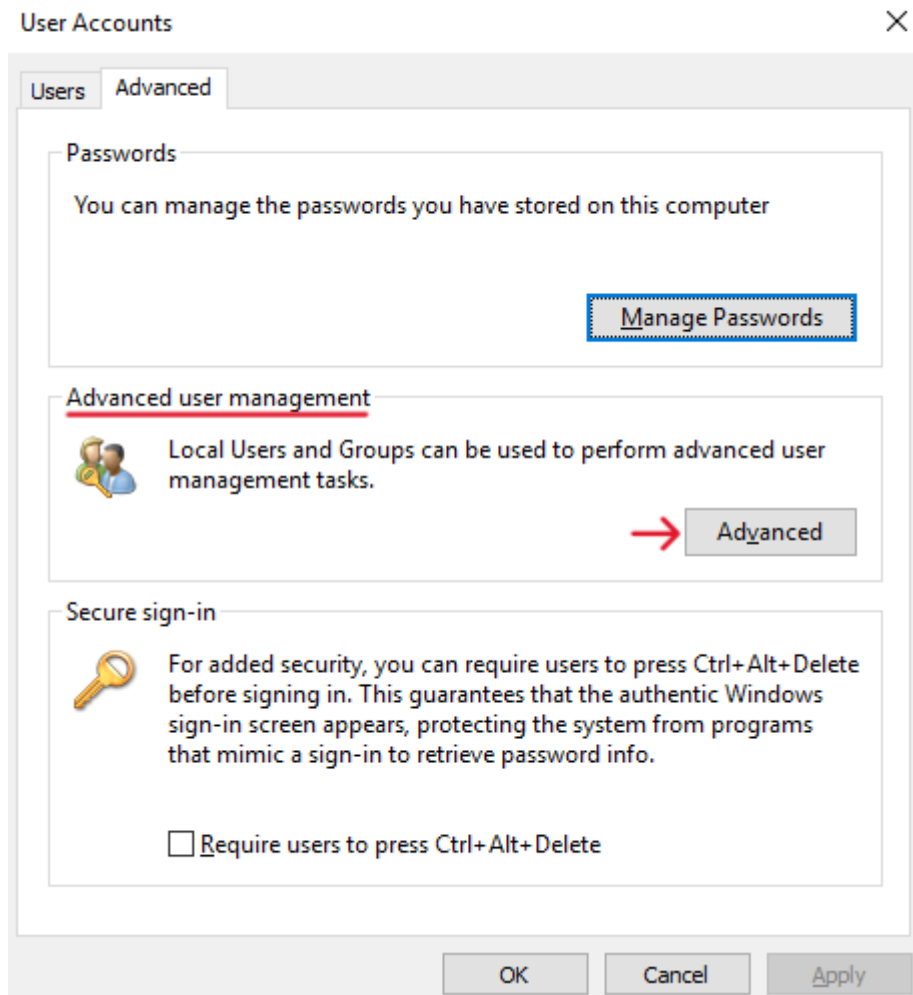
Reset Password...

OK

Cancel

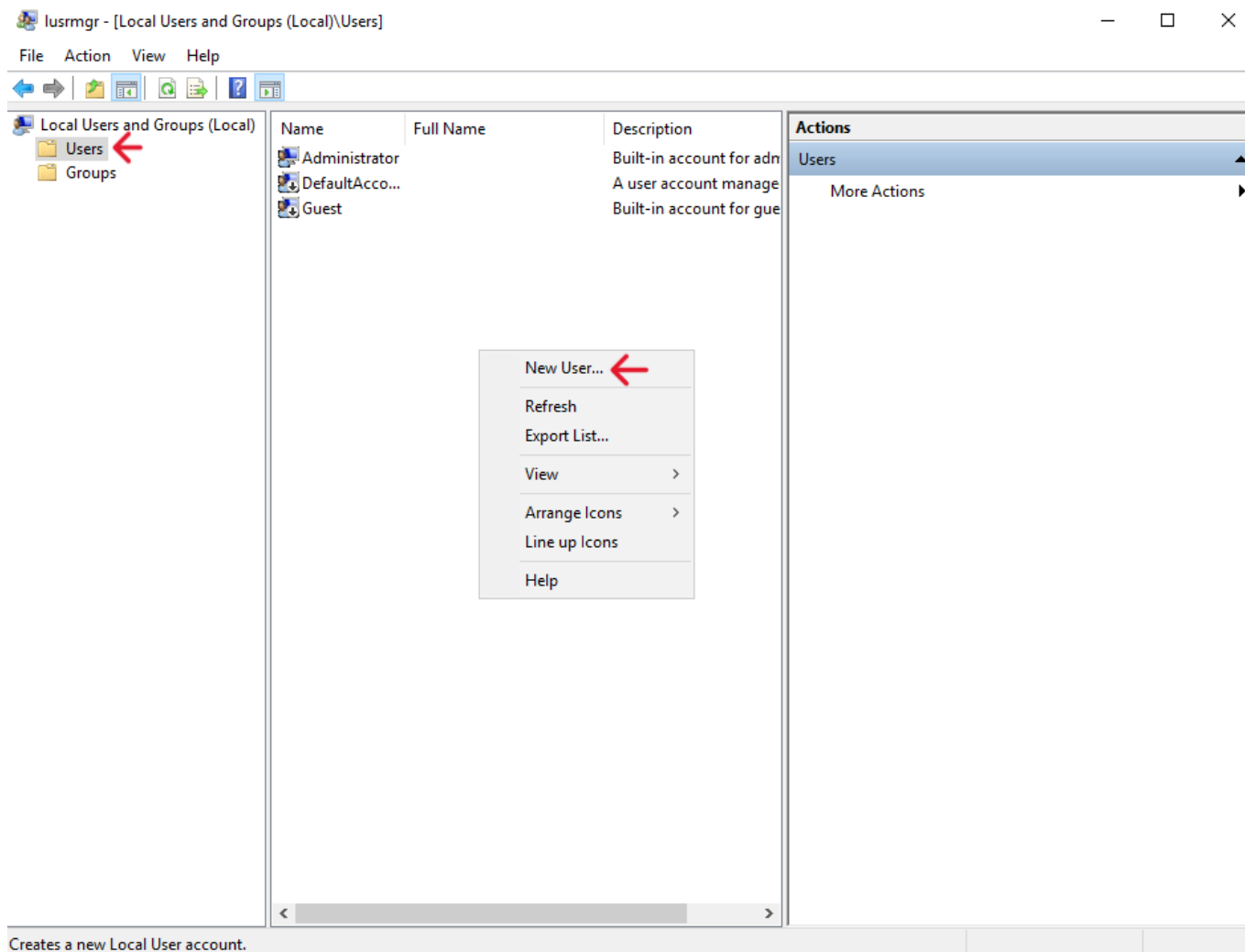
Apply

Ventana *Cuentas de usuario*



Ventana *Cuentas de usuario* – Pestaña *Avanzado*

Seleccione **Usuarios**, haga clic derecho en el panel central y seleccione **Nuevo usuario**.



Ventana *Usuarios y grupos locales*

Complete el formulario con el *nombre de usuario* y la *contraseña* y marque la opción **La contraseña nunca caduca**.

New User ? X

User name: user

Full name:

Description: RDP runner

Password:

Confirm password:

☐ User must change password at next logon

☐ User cannot change password

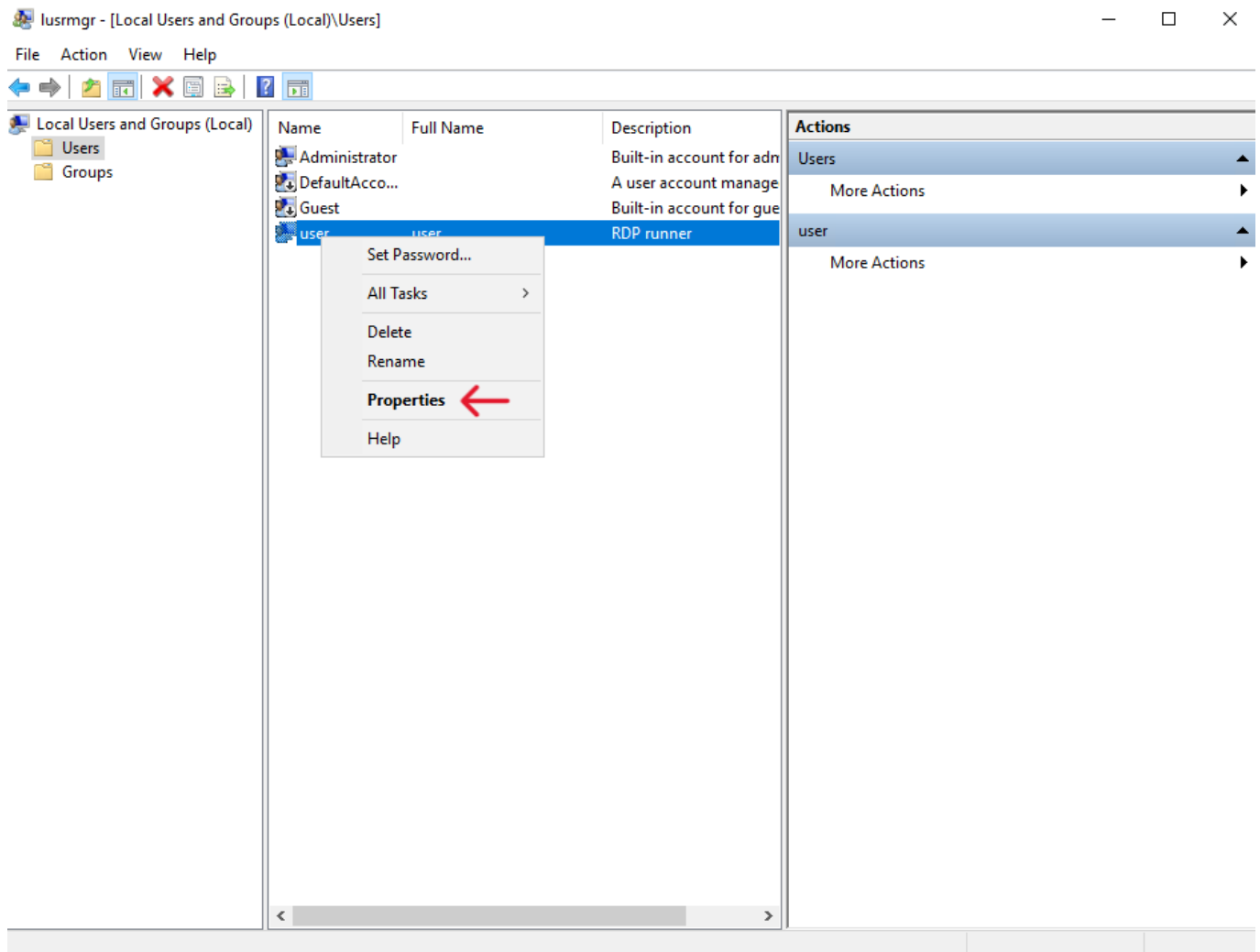
☒ Password never expires

☐ Account is disabled

Help Create Close

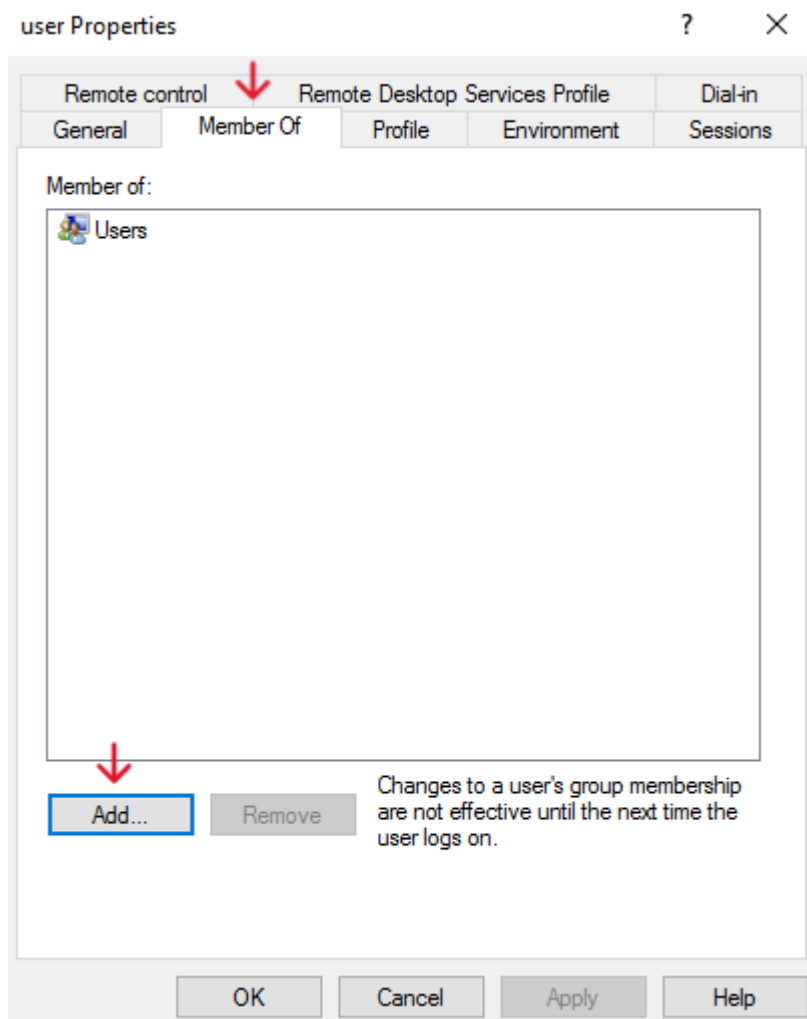
Ventana *Nuevo Usuario*

Cierre esa ventana y regrese a Cuentas de usuario, abra la pestaña **Usuarios**, seleccione el usuario creado y haga clic en el botón **Propiedades**.

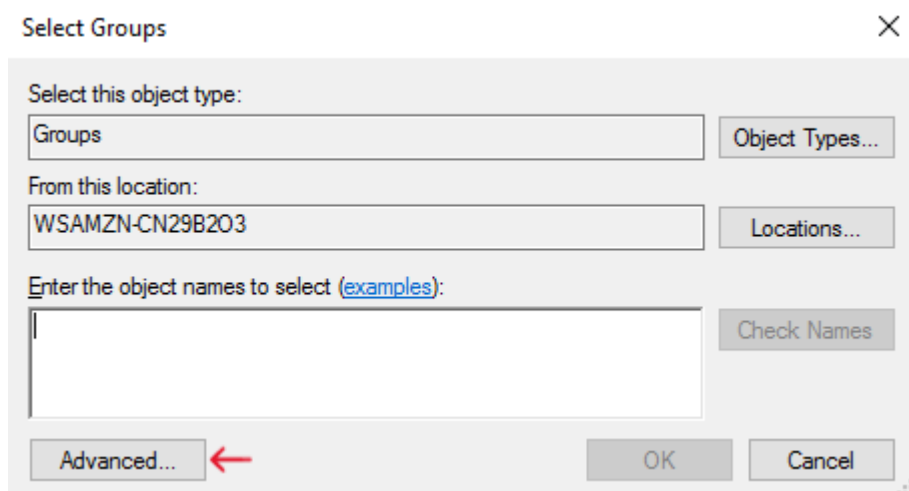


Ventana Usuarios y grupos locales – Menú desplegable de usuario

En la ventana Propiedades de usuario, abra la pestaña **Miembro de**, haga clic en **Agregar**, luego haga clic en **Avanzado**.



Ventana *Propiedades de <usuario>*



Ventana *Seleccionar Grupos*

Haga clic en **Buscar ahora** y seleccione **Usuario de escritorio remoto**.

Select Groups X

Select this object type:
 Object Types...

From this location:
 Locations...

Common Queries

Name: Starts with

Description: Starts with → Find Now

☐ Disabled accounts

☐ Non expiring password

Days since last logon:

Columns...

Stop



OK Cancel

Search results:

Name	In Folder
Print Operators	WSAMZN-CN29...
RDS Endpoint Servers	WSAMZN-CN29...
RDS Management Servers	WSAMZN-CN29...
RDS Remote Access Servers	WSAMZN-CN29...
Remote Desktop Users	WSAMZN-CN29...
Remote Management Users	WSAMZN-CN29...
Replicator	WSAMZN-CN29...
Storage Replica Administrators	WSAMZN-CN29...
System Managed Accounts Group	WSAMZN-CN29...
Users	WSAMZN-CN29...

Ventana *Seleccionar Grupos (Avanzado)*

Finalmente aplique los cambios.

⚠ **Importante:**



Como configurar la herramienta:

1. Conéctese a la cuenta y abra Rocketbot Studio (No es necesaria una licencia productiva, con una de desarrollador es suficiente).
2. Abra el complemento Asistente de Escritorio remoto y complete el formulario con los datos necesarios para realizar una Conexión a Escritorio remoto sobre la cuenta que posee el Rocketbot productivo. Una vez completado con lo solicitado:
 - IP del ambiente
 - Usuario y Contraseña
 - Carpeta donde guardar el archivo a crear
 - Nombre del archivos **.rdp** que se creara
 - Modo (Opcional, por defecto será Pantalla Completa, pero puede

seleccionarse modo Ventana)

- Resolución con la cual abrir el escritorio remoto (800×600; 1024×768; 1920×1080; etc.).

Nota: Debe ser la resolución con la cual se desarrollo el bot.

3. Dar guardar para crear el archivo **.rdp**.
4. Cree una tarea automatizada para ejecutar el archivo generado así se abrirá el escritorio remoto para ejecutar los bots en el horario programado sin intervención humana.
5. Desconéctese de la cuenta creada para ejecutar el archivo **.rdp** usando TSCON.bat ([Documentación](#))

□ [REDACTED] ■

RPA on Virtual Server

Depending on the process you wish to automate and how you intend to run the **robots**, your **server** will need to meet specific requirements for the robot to operate well.

Processes can be divided into two types: those that require a **graphical interface** (robots that take screenshots or use the keyboard and mouse) and those that do not (robots that emulate a terminal, automate xlsx files, use an API, etc.). It is critical to consider this when developing a robot because most servers **lose the graphical interface** when disconnected, causing robots to fail.

Screen locking and **minimizing the remote desktop** can also have an impact on your robot's performance. The operating system should never lock the screen on a machine running an automated process (**RPA**), as the robot will be **unable** to take **screenshots** or move the mouse to the indicated places. When you minimize the rdp, Windows may pause some processes or remove the interface, so you must configure your machine to prevent this from happening.

In **Rocketbot**, we have developed an application that allows you to easily configure your server, creating the necessary.bat files to run your robot and/or modifying the **registers** to prevent screen problems. You can download this application here: [RDP-Rocketbot](#). Remember to save it to the server and/or machine as needed.

Maintain interface when server disconnects.

To avoid these issues, Windows servers have a command called **tscon.exe** that allows you to take an open session on the server and move it to the console, giving your robot an interface to work with after disconnecting from the server.

The **tscon** command can be used to create a bat file in the RDP-Rocketbot application's *Disconnect and run a task* or *Disconnect and run ROC* tabs. This file must be run as administrator each time you want to disconnect from the server (or run your robot, depending on the option selected), and it will disconnect you from the server while maintaining the graphical interface.

Beware! If the remote desktop is not opened from a physical screen, the resolution may change and become lower. Refer to section three for alternatives.

You can edit the bat and examine its contents, but we have summarized the crucial information here. The bat contains a powershell script that retrieves the session id of the session you are using when logging into the rdp and uses it in the **tscon** command to open the console session.

```
@powershell -NoProfile -ExecutionPolicy unrestricted -Command  
"$sessionid=((quser $env:USERNAME | select -Skip 1) -split '\s+')[2]; tscon  
$sessionid /dest:console" 2> UnlockErrors.log
```

If you need the bat to run your robot after disconnecting, you will see something like this:

```
@powershell -NoProfile -ExecutionPolicy unrestricted -Command  
"$sessionid=((quser $env:USERNAME | select -Skip 1) -split '\s+')[2]; tscon  
$sessionid /dest:console" 2> UnlockErrors.log
```

```
timeout 10  
cd c:\rocketbot  
rocketbot.exe -start=nombre_robot
```

Maintain interface when minimizing remote desktop

To minimize the remote desktop without interfering with the robot's operation, modify the following registers in the machine that opens the rdp:

- For the current user:
 - HKEY_CURRENT_USER\Software\Microsoft\Terminal Server Client (32 bit)
 - HKEY_CURRENT_USER\Software\Wow6432Node\Microsoft\Terminal Server Client (64 bit)

- For all users:
 - HKEY_LOCAL_MACHINE\Software\Microsoft\Terminal Server Client (32 bit)
 - HKEY_LOCAL_MACHINE\Software\Wow6432Node\Microsoft\Terminal Server Client (64 bit)

You can change the logs with a single click in the RDP-Rocketbot application's Connect to Remote Desktop tab. Just keep in mind that you must run the application as an administrator.

Change in resolution after disconnecting from the server

If you have already resolved the previous issues, but your **robot** still fails and/or does not recognize the images, you most likely have a **resolution** issue. We already mentioned in the first section of this post that when you disconnect the server, the graphical interface is lost and you must use **tscon**. This enables the robot to take screenshots, but because the server no longer has access to your screen to set a resolution, it uses its own default resolution, which is 1024×768 in most cases.

If your robot uses **virtualization**, this resolution change may have an impact, so it is critical that you check the resolutions that your server allows when you disconnect before beginning to develop your robot.

The resolutions allowed by the server in the Screen resolutions table from the TSCON console can be seen in the *View screen resolutions* tab of the [RDP-Rocketbot](#) application.

Those are the resolutions you can use, but that does not mean you can begin building the robot. When you disconnect, you should check the resolution of the server and, if possible, change it to the resolution you require. You can use the [Windows](#) module to change the **screen resolution**, and you can also use the Take screenshot command in the Desktop section to see if the resolution is correct.

A sample robot can be downloaded here [test_resolucionDownload](#)

If when exiting the remote desktop it is not possible to change the resolution manually and/or using the Rocketbot module, you can try the following:

Change the resolution in regedit by searching for all registries named **DefaultSettings XResolution** and **DefaultSettings YResolution**.

Prevent screen lock

To prevent the server from blocking the screen, you should first consult with the IT team to see if it is possible to modify the necessary settings to

prevent this from happening, as this may not be possible depending on the company's security policies.

In the Settings section of the RDP-Rocketbot application, you can modify the registers needed to disable the screen lock. The registry to be modified is *HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows*

Changing Policies [Link](#)