

Aranda VIRTUAL SUPPORT (AVS) is a system intended to be able to take remote control of workstations with different types of Operating Systems. In a Client-Server model, where there are Clients of type: Consoles, desktop applications where remote control is managed by specialists and Agents, applications that run on the side of the machine to which remote control is taken;

In the AVS Agent Manual you should take into account the following considerations:



1. Requirements

Learn about the requirements for installing the agent on workstations, supported operating system versions, and configuring a Windows user account.

2. Agent Workstation

The Aranda Virtual Support agent is installed on the workstations required by the customer to carry out remote support tasks such as file transfer and remote takeover by the specialist.

Who is this Handbook for?

This manual is designed for the workstations and the specialist, so that they can install and configure the agent on the different devices.

What is our documentation?

- [AVS Getting Started Guide](#)
- [AVS Management User Manual](#)
- [AVS Agent Manual](#)
- [On-premises installation manual](#)

AVS Agents

AVS Agent Usage Requirement

 Important: You cannot have the AVS Agent and the Aranda Remote Control (ARC) Agent installed simultaneously on the same workstation. Conflicts can be generated between both agents, preventing proper use.

The following are the minimum conditions for the installation of the agent that the workstation must meet:

Workstation Requirements	
Virtual processor	2-core CPU
RAM	Minimum 4 GB
Disk Space	Minimum 400 MB

Supported versions

The supported operating system versions are as follows:

Operating system	Version
Mac OS 12	Monterey
Mac OS 13	Fortune
Mac OS 14	Sonoma
Windows 10 LTS 2019	1809
Windows 10 Enterprise LTSC 2021	20H1
Windows 10	20H2
Windows 10	21H1
Windows 10	21H2
Windows 10	22H2
Windows 11	21H2
Windows 11	22H2
Windows Server 2016	
Windows Server 2019	1809
Windows Server 2022	

Required Ports

Ports used by the Workstation Agent.

Port	Protocol	Description
443	TCP	Required for the Workstation Agent’s connection to the Notifications server.
8081	TCP	Required only for output, intended for connecting the Workstation Agent to the Turn Server on the remote control socket.
	WebSockets	They establish a persistent two-way connection between the agent and the server.
64883	TCP	Required for output only, intended for connecting the Workstation Agent to external Turn Servers in file transfer.
15000 – 65000	UDP	Range required for output only, intended for connecting the Workstation Agent to external Turn Servers in file transfer.

Windows User Account Settings

It defines the collection of information that allows the operating system to know the resources, such as files, folders, programs, configurations, personal preferences, among others, to which a user has access. Accessed by Windows Login

AVS Agent

In order for a specialist to provide the remote control or file transfer service, users must have an agent installed on their workstations according to their Operating System that facilitates the operation.

How agent deployment works

In the support management processes performed by the support administrator and the AVS web console specialist, an agent configuration code is automatically generated.

The AVS specialist will share the agent configuration code with the workstation to perform the agent installation on devices that require starting remote support tasks.



The process of installing and configuring the AVS agent on workstations must be adjusted to the operating system (Windows or MacOS) to facilitate its operation, following

the following concepts:

Installing the Agent

Installing the agent on the workstation device allows for remote support and can be run with the installer, in installed or run-only mode (without installing the agent), or by command line.

Manual Agent Configuration

After the agent has been installed, if the respective configuration code has not been generated during support group management in the AVS web console, you can perform the manual configuration of the agent.

AVS Notifications

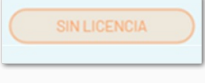
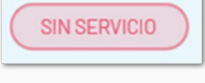
In the agent configuration processes and during remote support, the system generates different notifications.

Agent Update

The latest version of the agent can be updated on devices, via a notification that arrives at the workstation.

Agent Notifications

When installing and configuring the agents, through the user interface, you will be able to validate the station’s availability for remote support, with the status message located at the top right of the interface. The device status can be “Online”, “Disconnected”, “Licensed”, “No Support Group”, “No License”, or “No Service”. The agent variants based on the reported status are described below.

State	Message color	Notification	Image
Online	Green	The device can receive a remote connection	
Disconnected	Grey	The device is not connected to the notification server (It can be due to an incorrect URL or internet network failures)	
Graduate	Blue	Licensed Device	
No support group	Orange	Support group code is invalid	
No license	Orange	The device is not licensed	
No service	Red	Agent failure on device when service is stopped	

Windows Agent

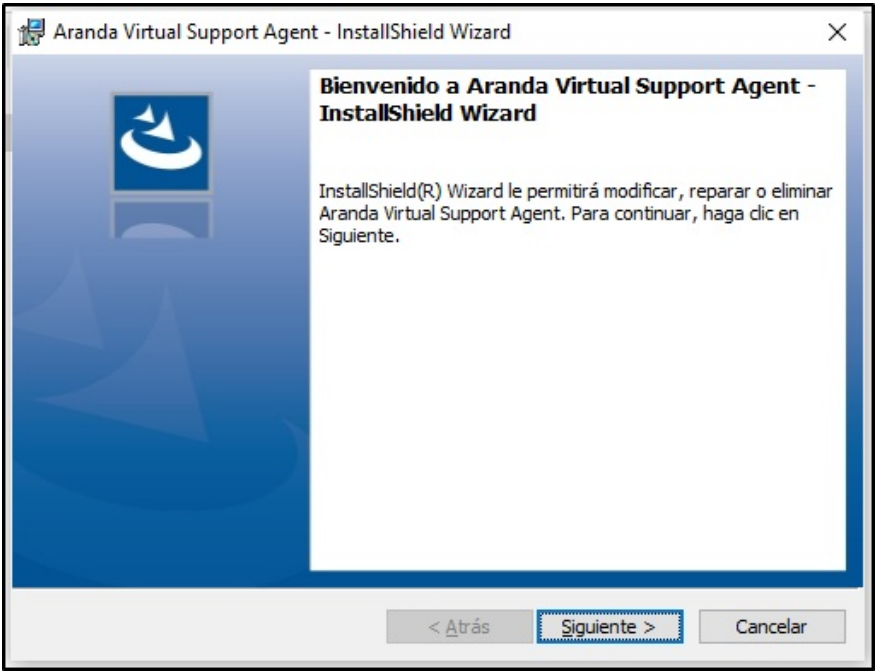
Windows Agent Installation

⚠ Important: The operating system is required to be licensed, for the agent UI and chat to install correctly.

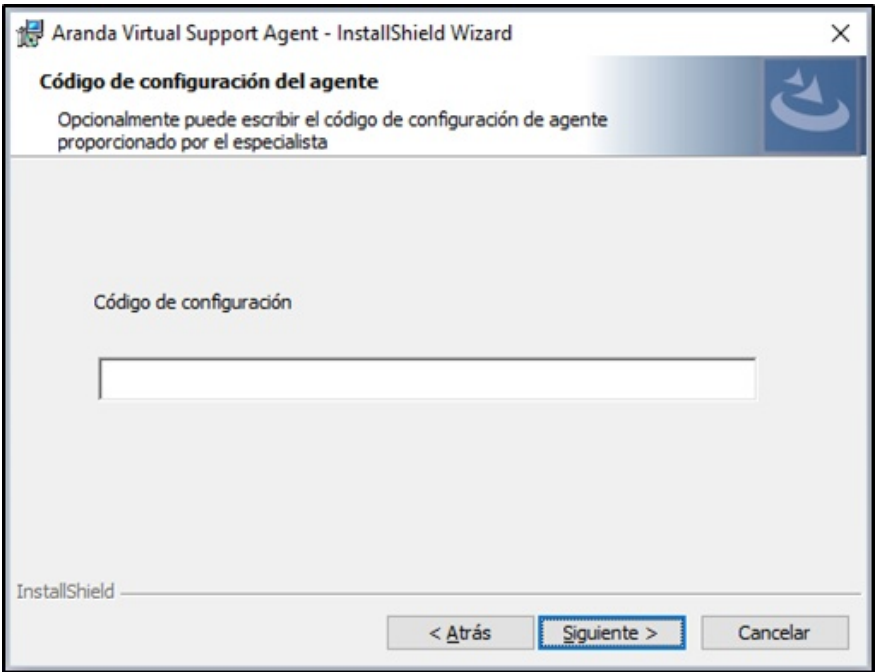
Run Agent with Installation

1. To perform the manual installation of the agent, the specialist supplies the executable file of the Aranda Virtual Support agent. Entering the installer will launch the

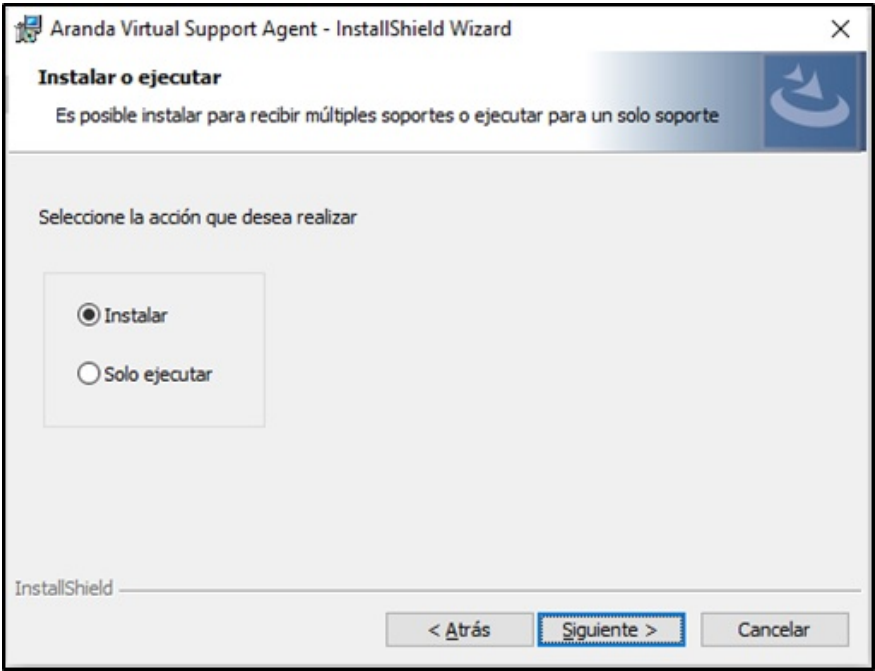
installation wizard, click Following.



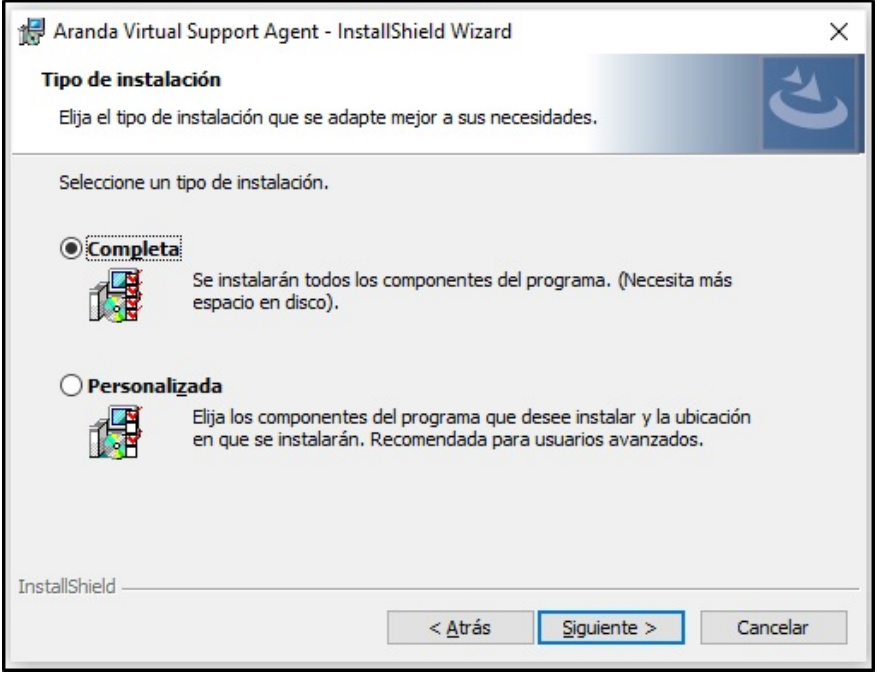
2. Enter the [Agent Configuration Code](#) and click Following. If you don't have this code, leave the space empty and click Following.



3. If you need to have multiple supports, select the install and click following.

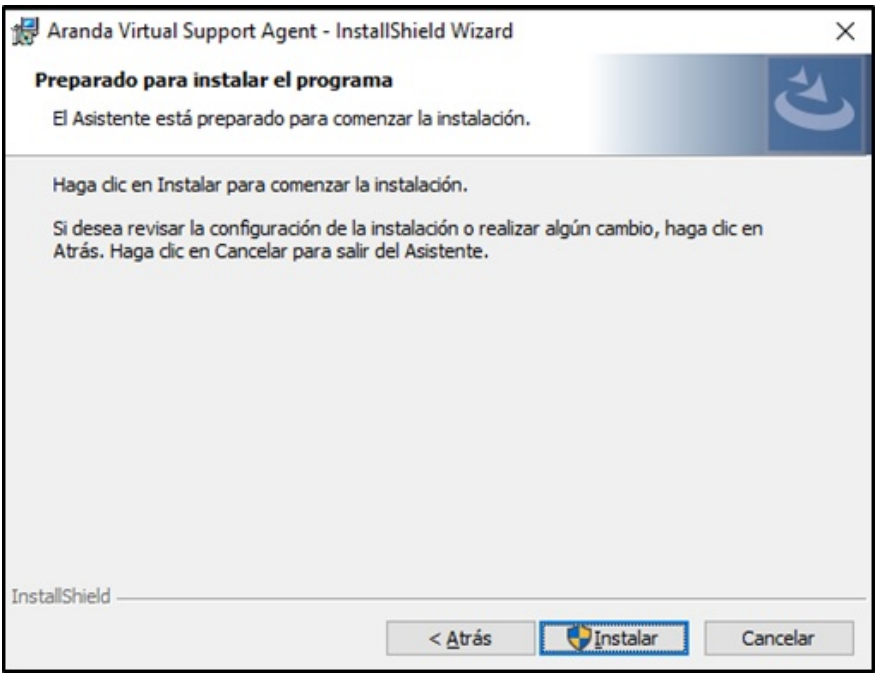


4. In the drop-down window, fill in the organization data, click Following, select the type of installation you want to perform (complete or custom) according to your competencies and skills and click Following.

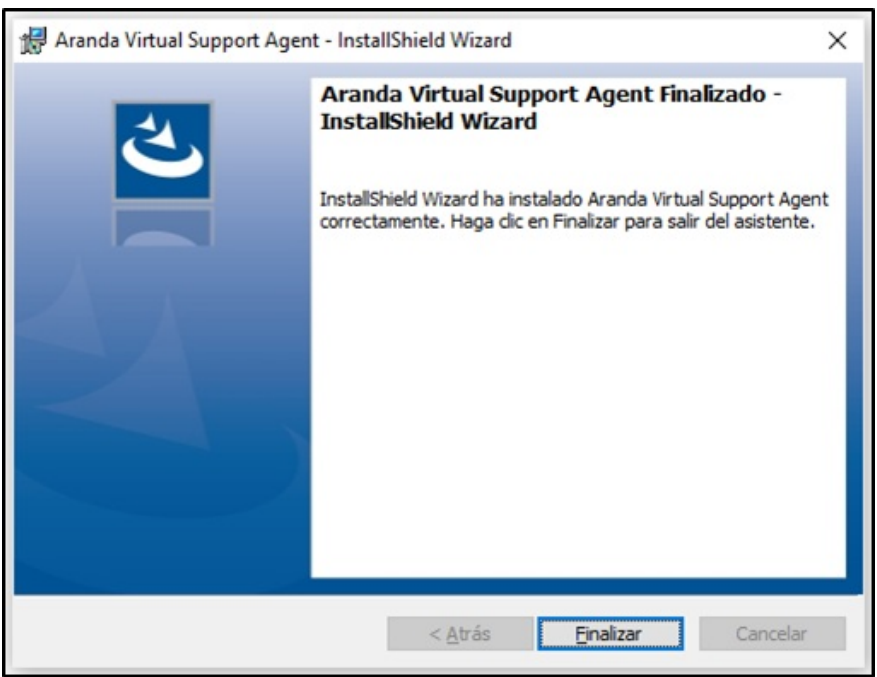


➤ Note: Installing the agent generates different [Aranda Virtual Support processes and services](#).

5. To start the agent installation, click Install.



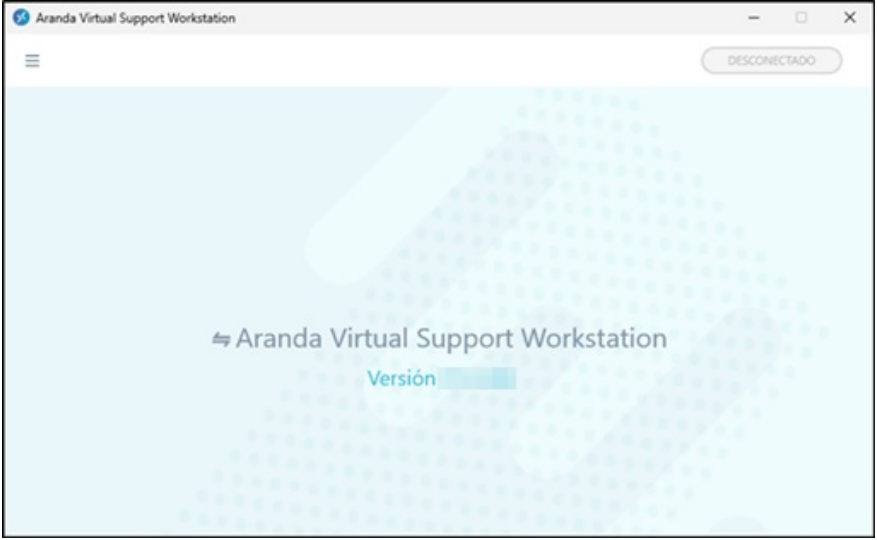
6. Once the installation is complete, click End.



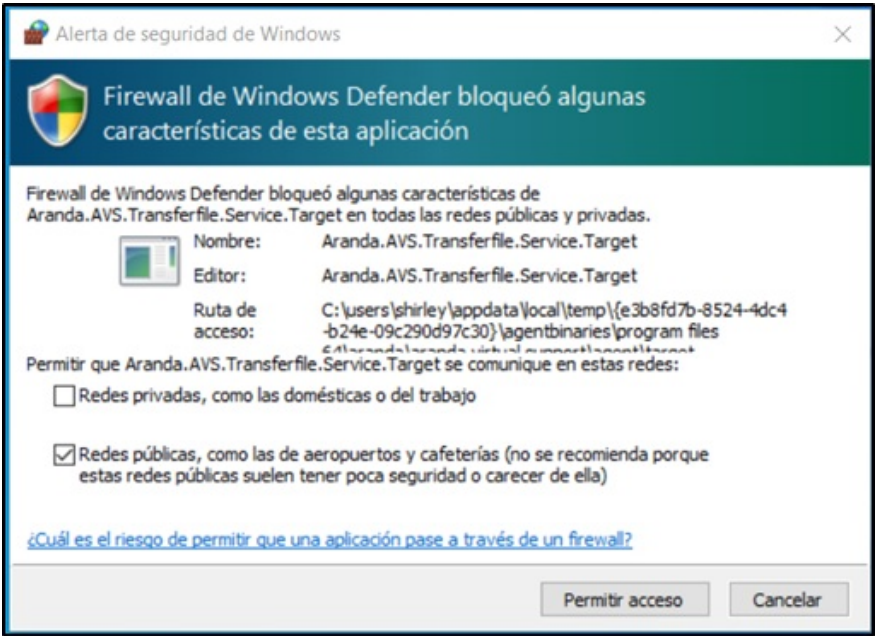
7. Verify that, in the Windows Start menu, in the All Applications, Aranda Software path, the ‘Aranda Virtual Support Workstation’ option is present. Select this item to open the Agent UI.



8. Si no se ingresó ningún código de configuración en el paso 2, en la interfaz de usuario del agente, podrá visualizar el mensaje de notificación en color gris y con el estado ‘Desconectado’. Dirijase a la sección [Configuración manual de agente](#) para completar el proceso. Ver también [Notificaciones](#)



▮ Note: If the specialist performs a file transfer on the workstation device for the first time, the Firewall will send a security alert. Select all checkboxes and click Allow access.

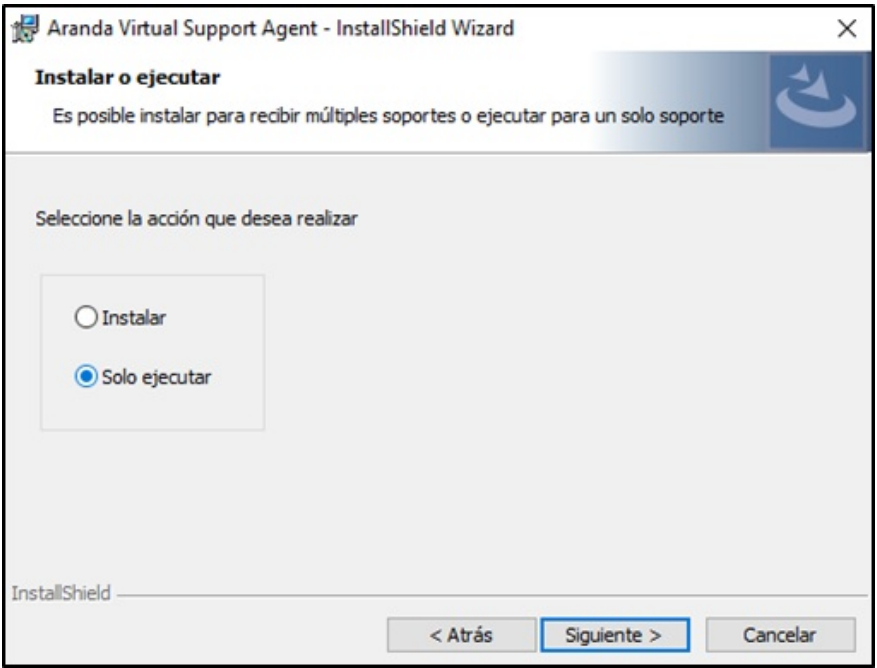


- ▮ Notes:
1. During the installation of the agent, it is necessary to grant the [User Account Control \(UAC\) Permissions](#).
 2. Once the agent installation process is completed, if required, you will be able to enter again [The agent configuration code](#).

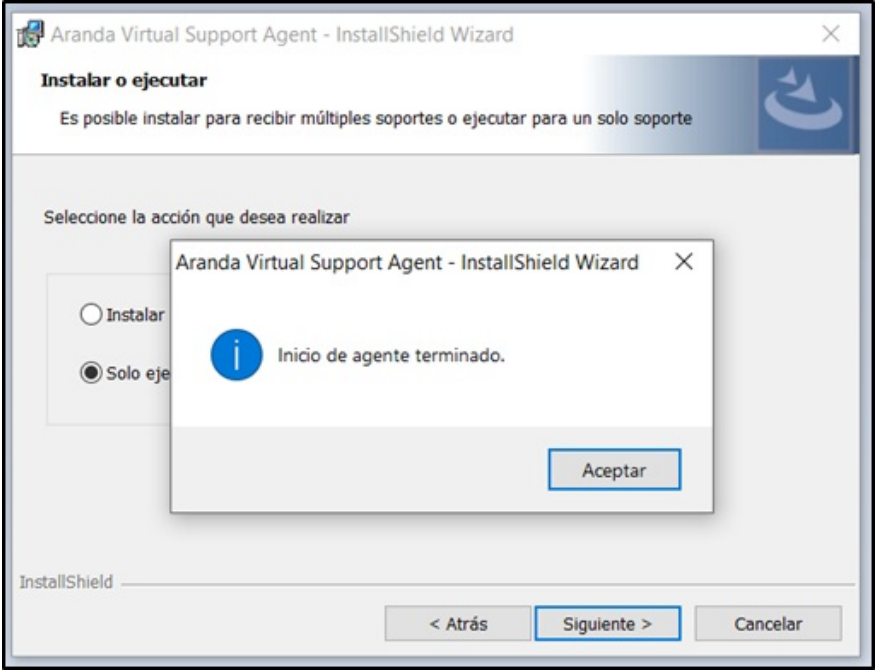
Run Agent without installing

To run the agent without installing it, follow these steps:

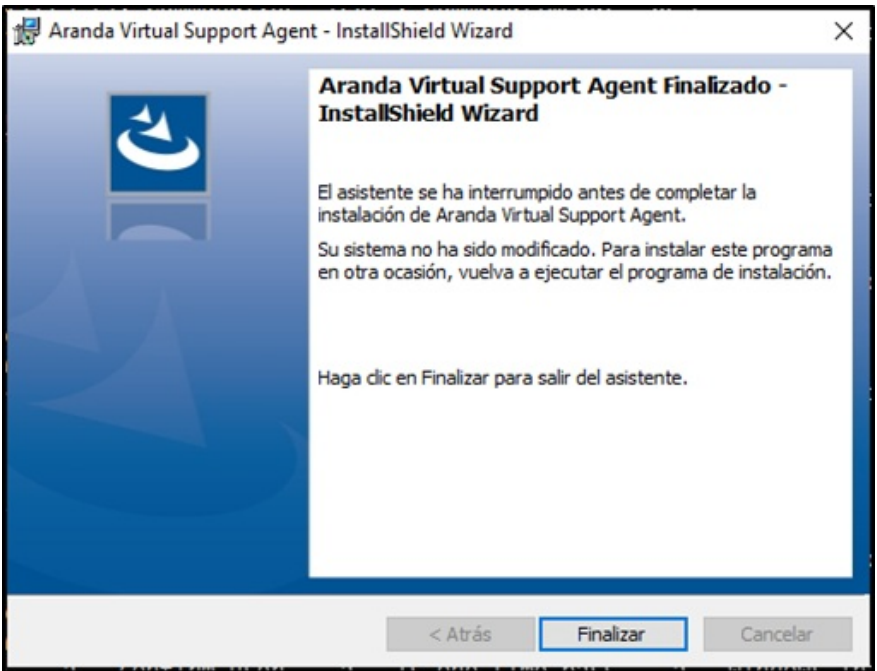
1. Follow steps 1 and 2 of [Run with installation](#).
2. Select the Run Only option and click Following.



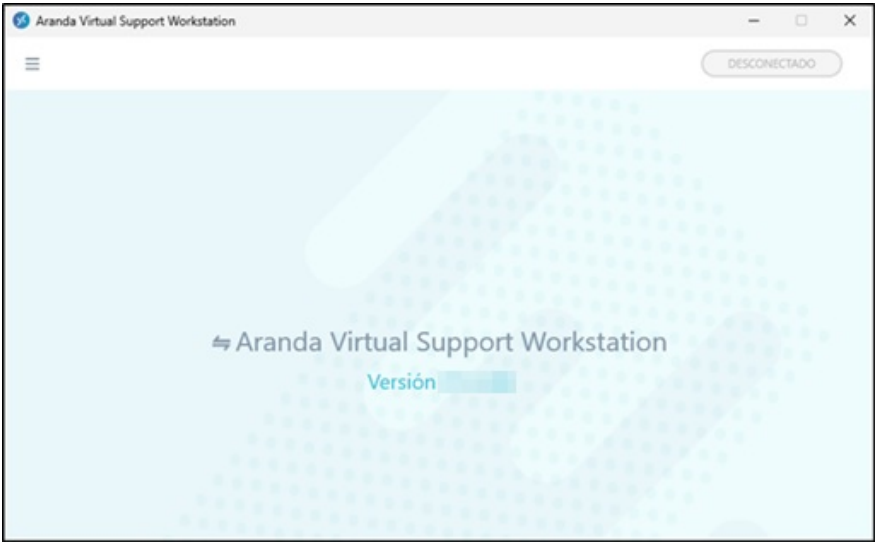
3. A window opens with the following message and the User Account Control question is launched. [View installation permissions](#)



4. Click Accept and then in End.

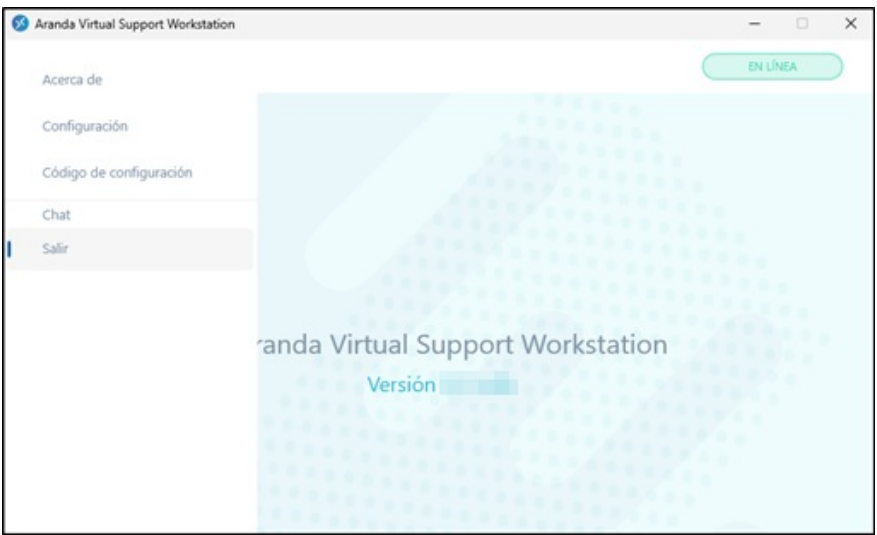


5. The agent UI will launch automatically. If no configuration code was entered in step 2, the notification message will be greyed out in the agent UI and with the status 'Disconnected'. Go to the [Manual Agent Configuration](#) to complete the process.

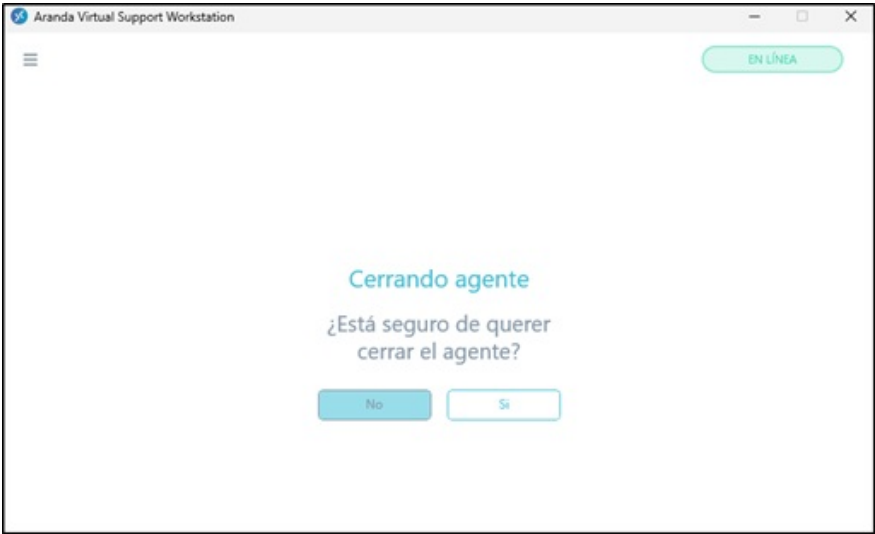


Notes:

1. If the specialist performs a file transfer on the workstation device in the "Run Only" mode, the Firewall will send a security alert. Select all checkboxes and click Allow access.
2. The executable file of the agent installer cannot be scanned by antiviruses, which identify it as a false positive and can be blocked or removed from the machine where it is examined.
6. To end the agent in run-only mode, from the agent UI drop-down menu, select the option Get out.



7. Confirm by clicking Yes.



⚠ Note: If option No On the commit, the agent is not finalized and redirects to the view About.

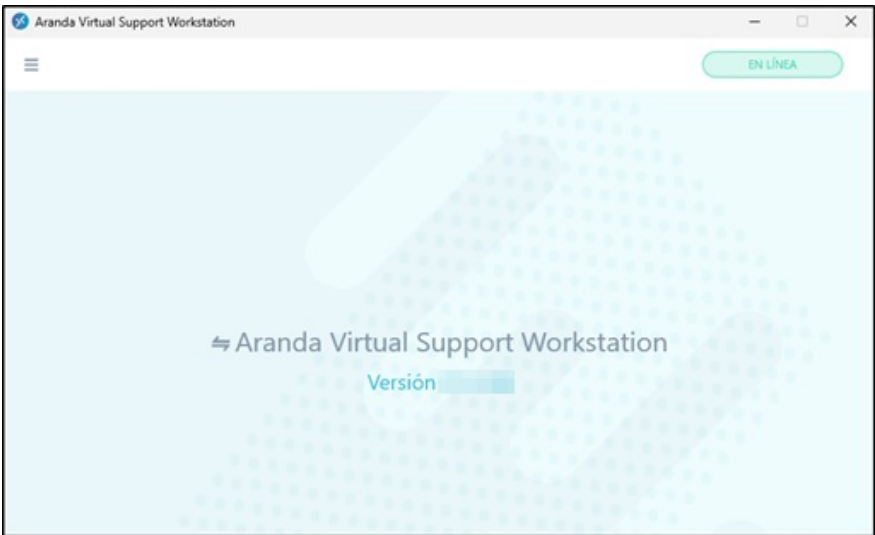
Installing and configuring the agent by command line

Agent installation and configuration can also be done by command line. This action can be performed remotely by the workstation itself or by the specialist. In this case, follow the steps below:

1. Log in to the cmd as an administrator
2. Select the folder where the installer is downloaded
3. Run the command `<.\AVS.Agent.Installer.X.X.X.X.exe /S /V "/norestart /qn ACC=Código_de_configuración">`, (The X.X.X.X correspond to the installer version).

For the AVS installer. Agent.Installer.msi, the `<msiexec.exe /i "Ruta\al\archivo\AVS.Agent.Installer.msi" /norestart /qn ACC=Código_de_configuración>`.

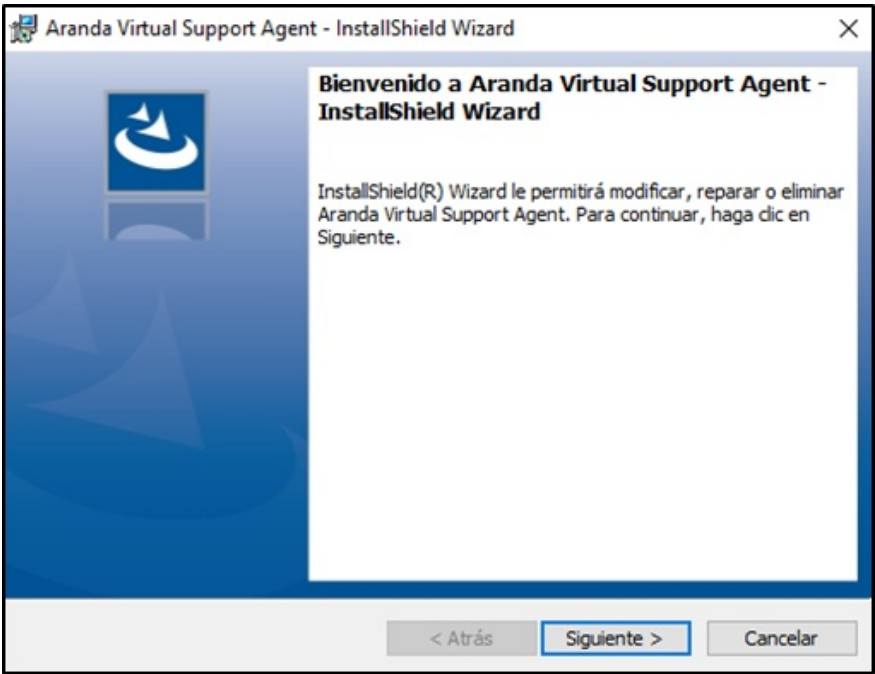
4. If the installation and configuration were successful, in the Windows Start menu, in the All Applications path, Aranda Software will be able to display the option 'Aranda Virtual Support Workstation'. Select this item to open the Agent user interface, display the notification message in green and with the status 'Online'; This can take about 10 minutes. If the configuration code is incorrect or no licenses are available, the agent will be installed, but it will not be configured and the agent's notification message will remain grayed out in the 'Disconnected' state after 10 minutes.



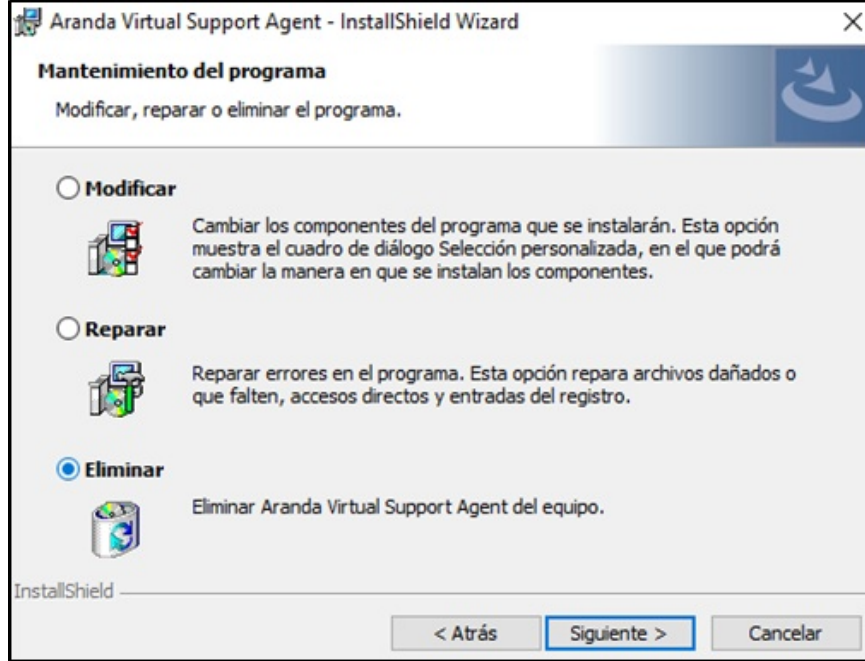
⚠ Note: To uninstall the agent, run the command `<wmic product where "name like 'Aranda Virtual Support Agent'" call uninstall /nointeractive>`.

Uninstall agent

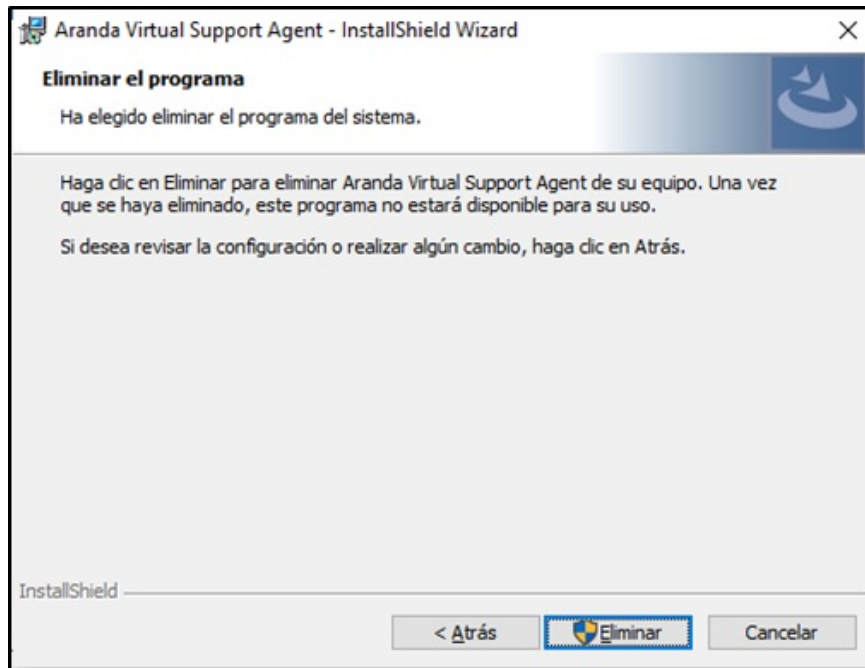
1. Go to the agent's installer.
2. The installation wizard will start, click Following.



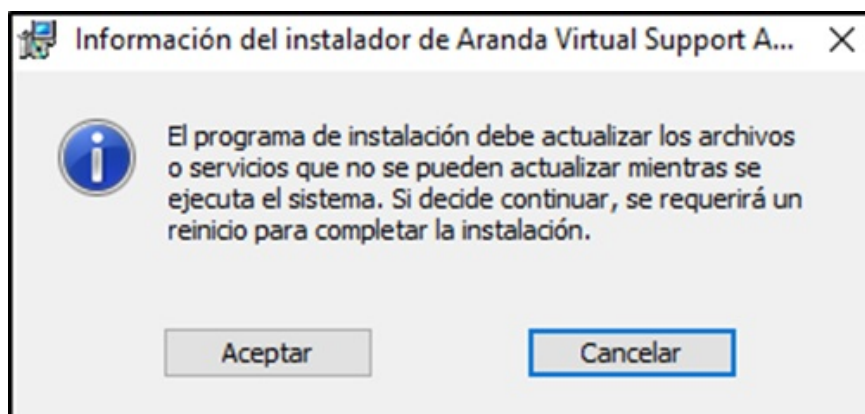
3. Choose the option Eliminate and click Following.



4. Click Eliminate and then in Accept in the confirmation message.



5. The following message is received:



6. Click Accept and in End. The agent will be successfully uninstalled.

➤ Note: The agent can also be uninstalled from the Programs and Features option of the control panel.

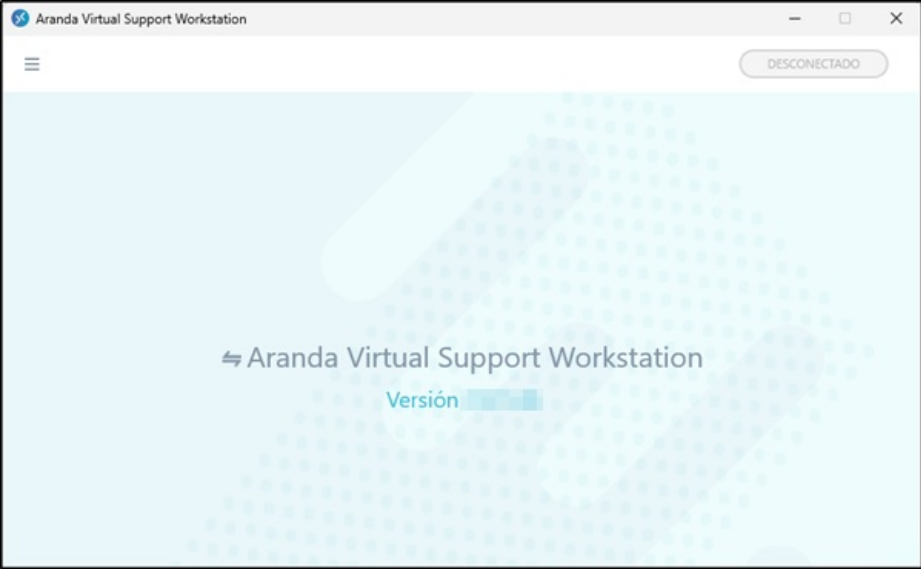
Manual Windows Agent Configuration

Once the agent is installed, follow these steps to access the user interface:

1. Click the Windows “Start” button.
2. Navigate to “All Apps.”
3. In the “Aranda Software” folder, find and select the “Aranda Virtual Support Workstation” option.



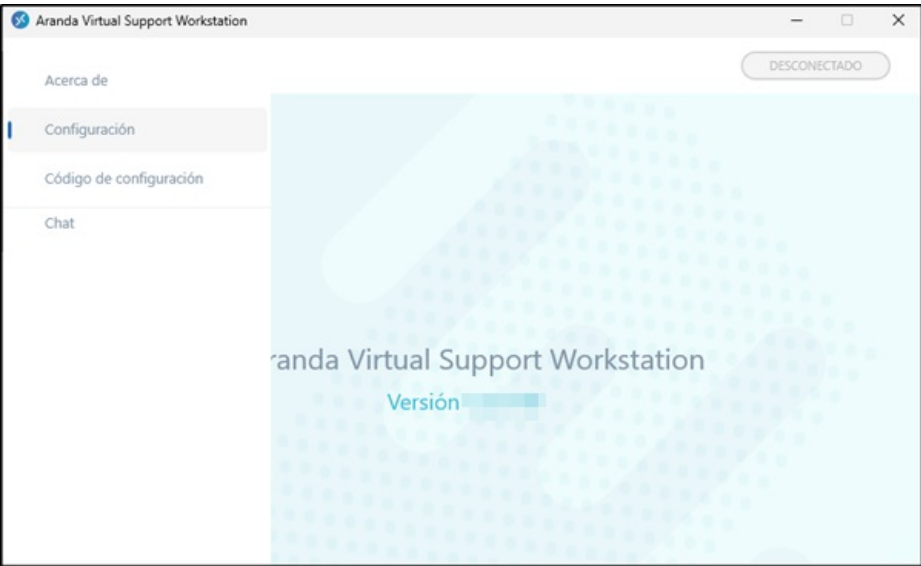
The agent UI is enabled where you can make adjustments to the configuration.



Option	Description
Drop-down menu	Displays a menu of options: - About: Allows you to display the current version of the agent (default option). - Configuration: Allows you to adjust the Host configuration, group code, and apply the configuration code. - Configuration Code: Allows you to update the agent's configuration by inserting a new configuration code. View Configuration Code. - Get out: Enables the option to close the agent interface, available only in "Run Only" mode
Status message	It allows you to visualize the current status of the agent. View Notifications

Configuration

1. From the agent UI drop-down menu, select the Configuration:



2. In the Settings window, complete the following Fields.

Field	Obligatory	Description
Host(Api or Url)	Yes	Aranda Virtual Support (AVS) server URL, which must be provided by the specialist performing the support.
Support Group Code	Yes	Support group code that must be provided by the specialist who will provide the support.
Requires user confirmation	No	This field is for enabling or disabling confirmation by the user when authorizing a support session.
Fixed password	Yes	The authorization password for the support session. The password must meet the following characteristics: 1. It must have at least one capital letter. 2. It must have at least one lowercase letter. 3. It must have at least one number. 4. It must have at least one special character. 5. It must have a minimum length of 12 and a maximum of 50 characters.
One-time password	No	This password is made to be used only once when authenticating the support session, once the support session has been authorized the password will no longer be valid and a new one will be generated. A new password can be invalidated and generated by clicking the refresh icon in that field or by clicking the Accept.

3. To save the settings, click Accept. If the fields have been entered correctly, the message will be displayed: “ Correct, Updated settings.”

📌 Notes:

- 1. Click the Cancel to undo the modifications made, as long as the changes have not been previously saved.
- 2. If a change to the agent configuration is required, after the agent installation you will be able to log in again [The Configuration Code](#).

User confirmation

User confirmation means that the specialist cannot enter the workstation until the user approves the authorization. The following steps must be followed:

- 1. In the agent UI, in the Settings window, turn on the Requires user confirmation.

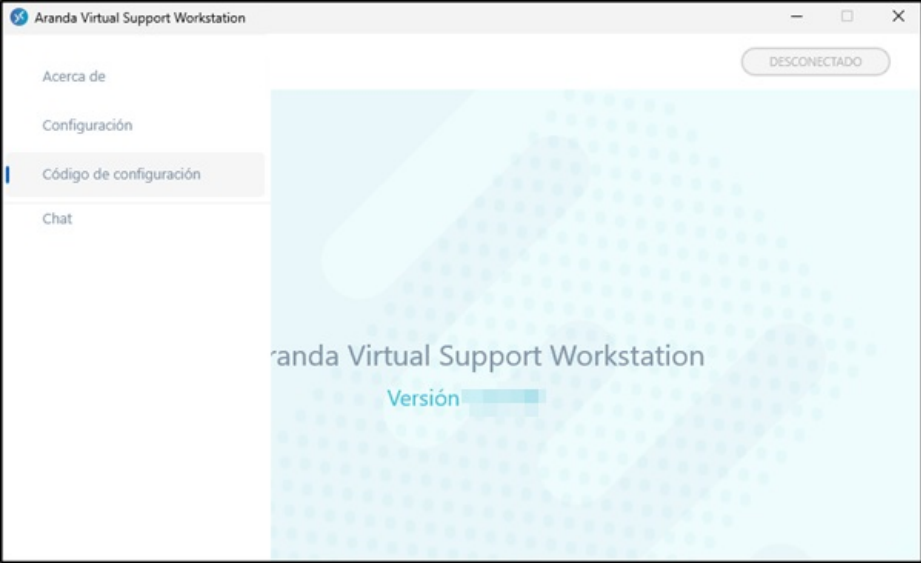
- 2. When the specialist requests authorization for a support session, the workstation will receive a validation message:

- 3. The specialist will be on hold, while the application is accepted. If accepted, support is authorized.

Enter Setup Code

It is possible that at some point the agent configuration needs to be updated either due to changes in the support specialist, organizational, headquarters, departmental changes, etc. In these cases, it is possible to re-enter the configuration code without the need for a new installation of the agent. To do this, perform the following steps:

- 1. From the agent UI drop-down menu, select the Configuration Code:



2. In the Configuration, enter the configuration code provided by the specialist in the field Configuration Code and click Send:



3. If the code is correct, the message is displayed: " Correct, Updated settings." The fields of [Configuration](#) They will be updated according to the parameters set in the agent's profile. [Notes]- When clicked Send Without filling in the field, the message will be displayed: "Error: The configuration code cannot be empty".
- When clicked Send By filling out a plain code, the message will be displayed: "Error: The configuration code is not in a valid format."

Chat Service

⚠ Important: The Chat does not handle conversation history, when the chat window is closed, the conversations will be deleted.

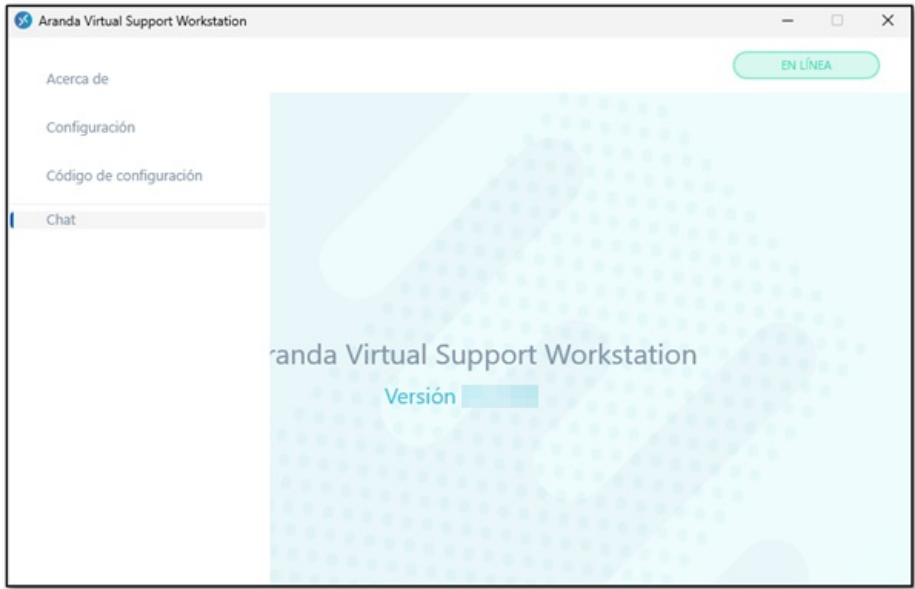
The chat service allows the workstation user to communicate with Aranda Virtual Support (AVS) online specialists. To access the chat service from the AVS Agent user interface (UI) and communicate with a specialist, follow these steps:

Requirements

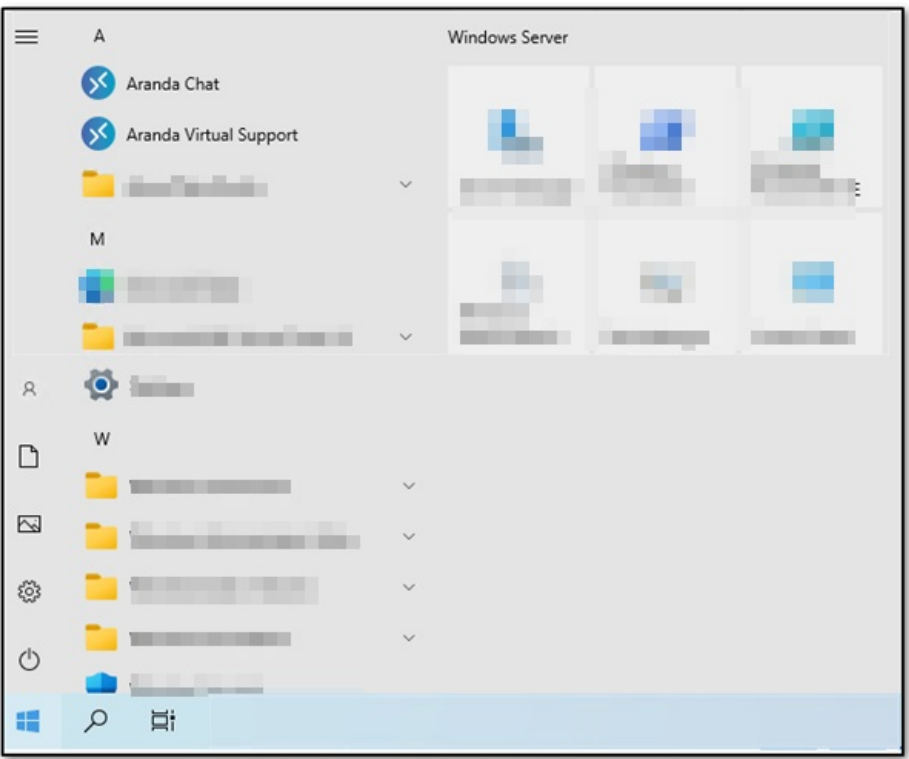
- The Agent must be [installed](#) or initiated in [Execution Mode](#) and be in the "Online" status.
- The workstation must be associated with the support groups of specialists that are online on the AVS website.

Access to Chat

1. Log in to the AVS Agent user interface (UI) on the workstation and select the option Chat from the floating menu.



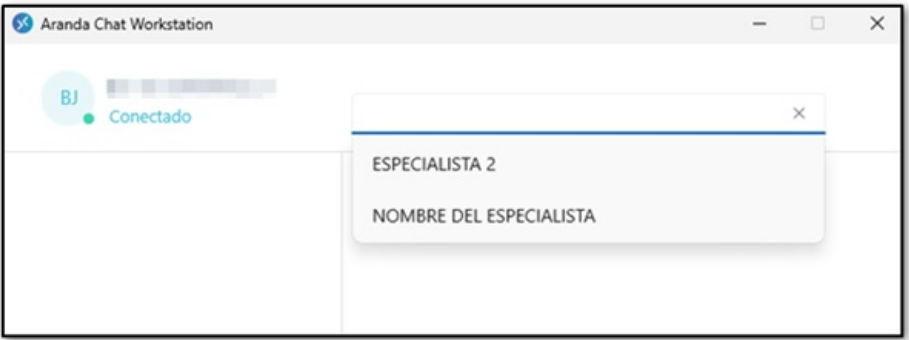
It can also be accessed from the start menu by selecting the option Aranda chat.



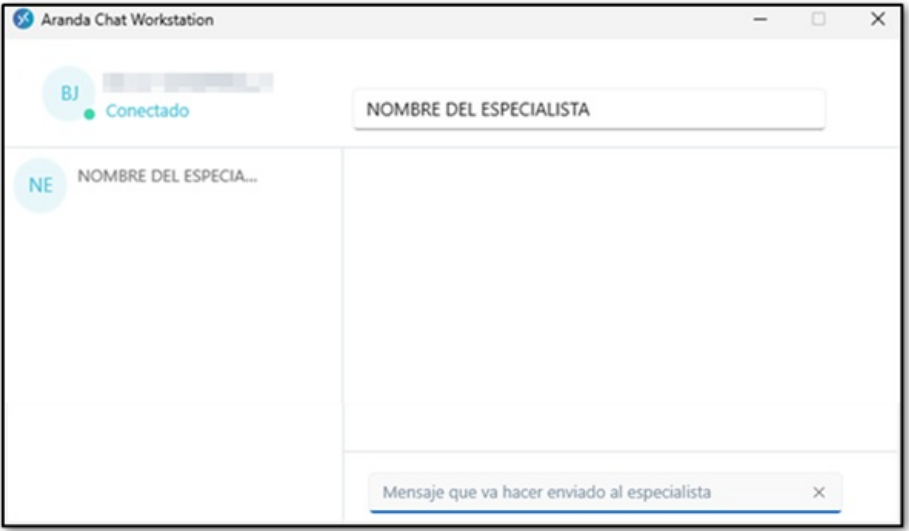
2. The chat window is enabled where the following options will be enabled:



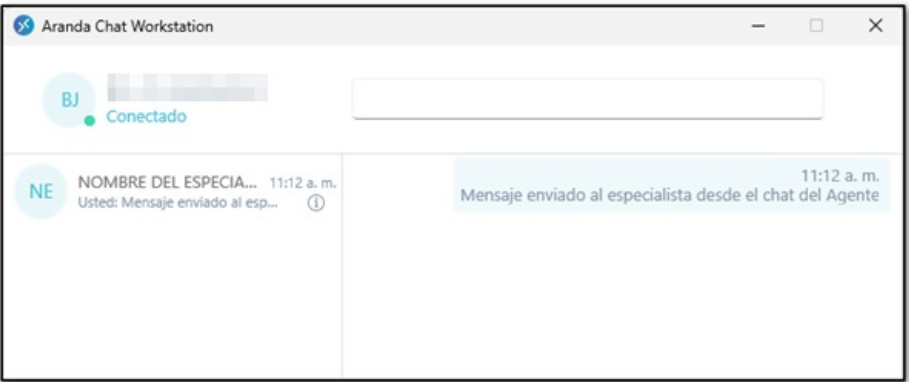
3. To send a message to a specialist, click on the query field and select the name from the list of generated chats. In this field, you can also filter by typing the name of the specialist.



4. By selecting the specialist, you will be able to view the list of recent chats and the Conversation Section is enabled where you can start the conversation. Type the message in the text field provided and press Enter to send it or click the Send (paper airplane icon).

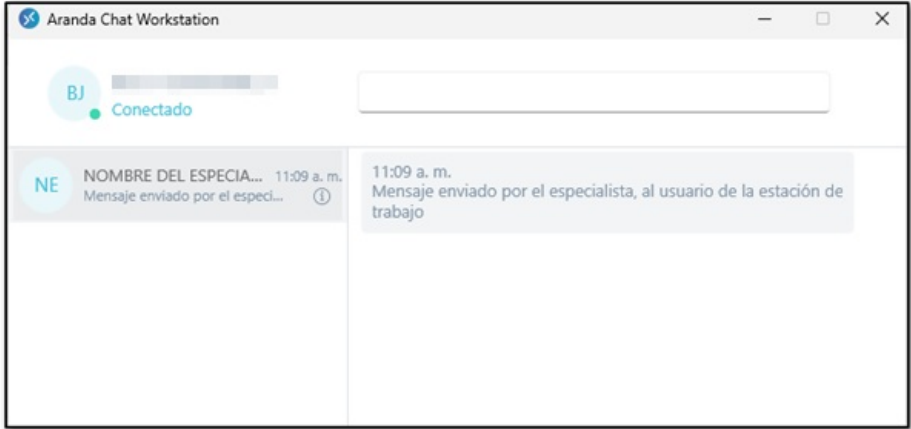


5. When the message is sent, it is recorded in the conversation section of the chat window, showing the timestamp of the sending.



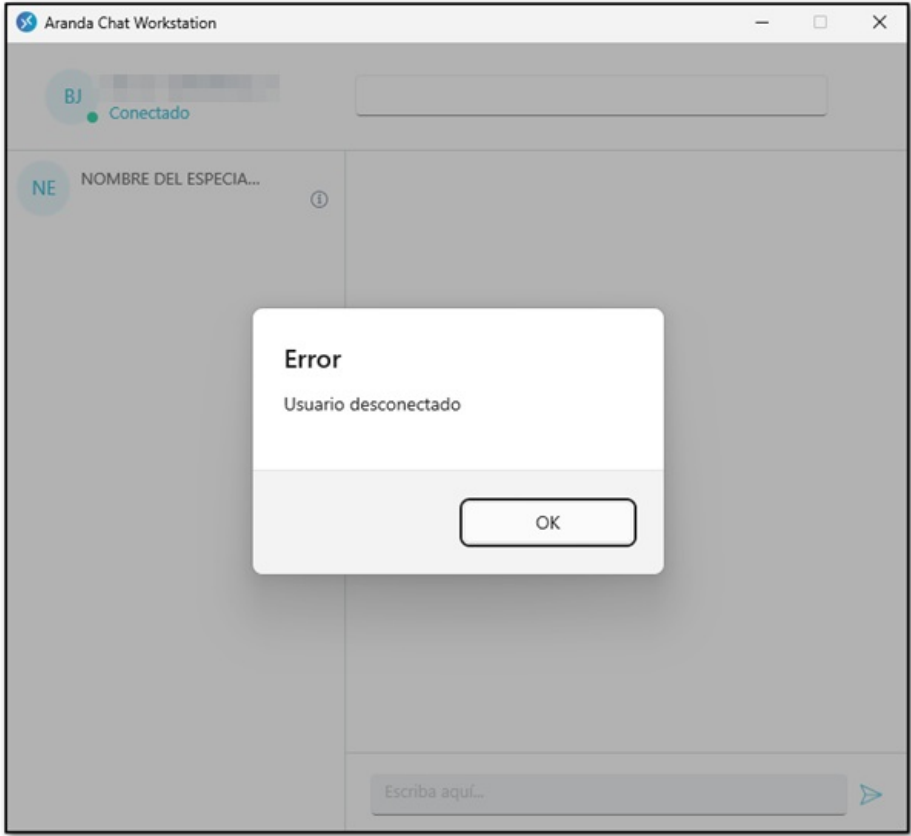
Receiving Messages and Notifications

When the workstation receives a new message, the chat window will launch, allowing the user to initiate the conversation with the specialist in a timely manner. Notifications help maintain an effective flow of communication between users and specialists.



Handling Lost Connection During Specialist Interaction

If during a conversation with a specialist they get disconnected, or if you select a specialist who is not logged in on the AVS website, and you try to send a message, the app will display the following message:



ⓘ Note: During the loss of connection in an interaction with the specialist, the user's message will not be sent. By re-establishing the connection, the user will be able to continue the conversation.

Windows Agent Update

1. Each time a new version of the AVS agent is released, the customer will receive a notification informing them that there is a new version and asking if they want to update it.

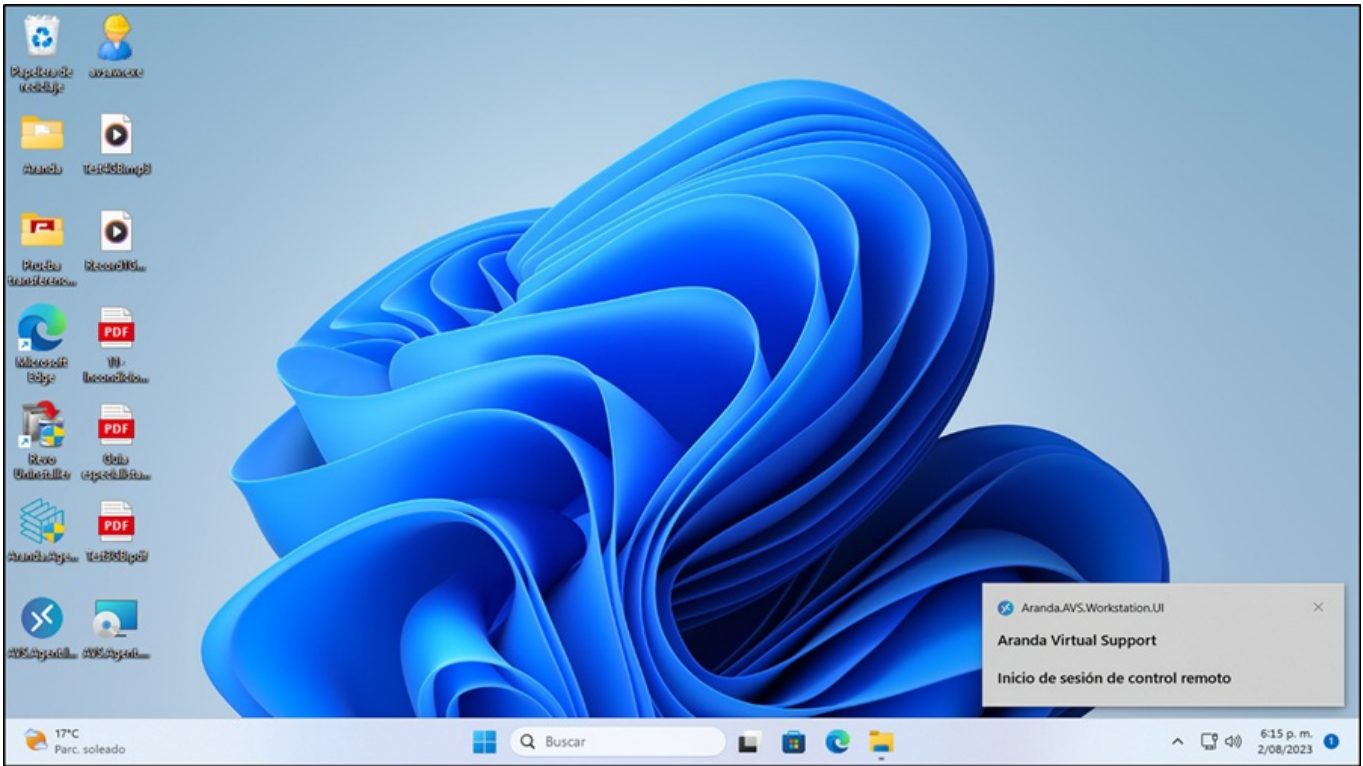


2. Once the customer decides to accept such an update, the new version of the agent installed on the device will automatically be obtained.

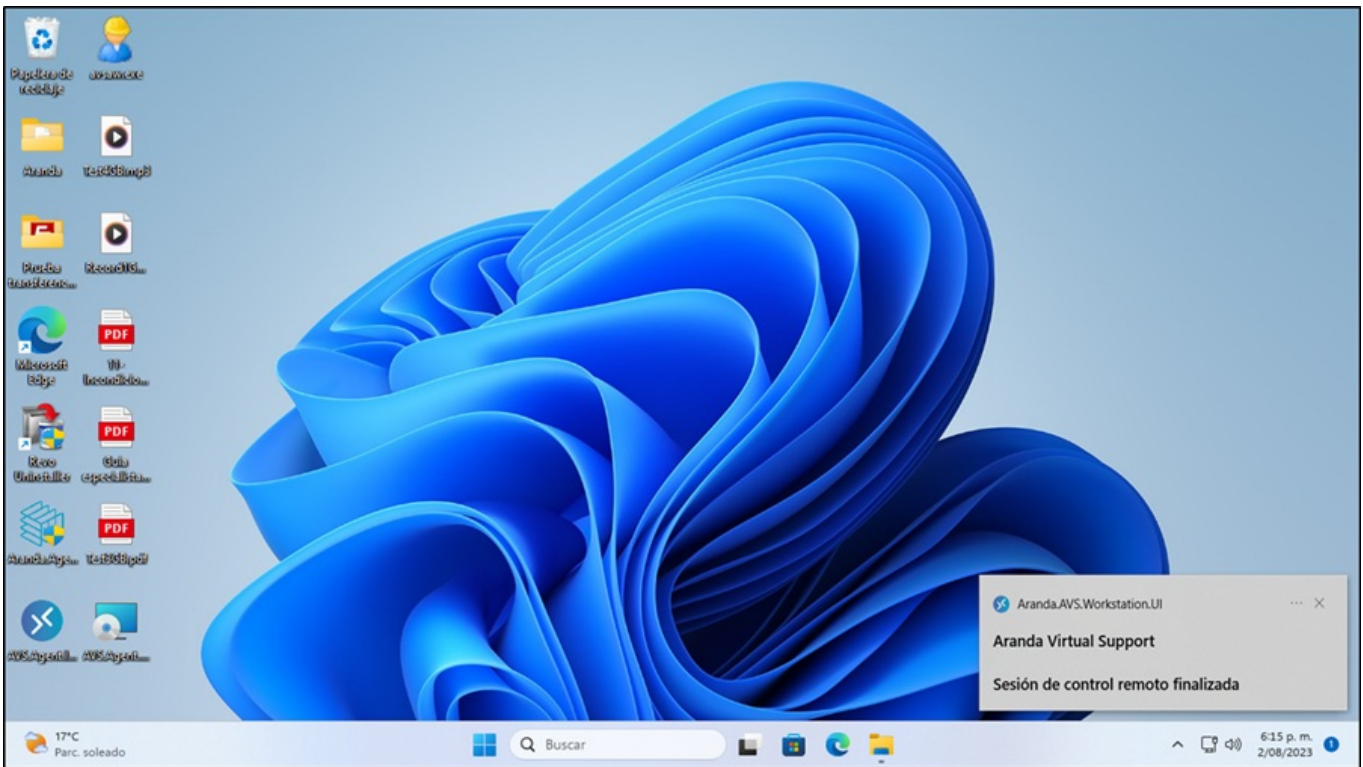
- ⓘ Notes:
- When clicked Later, after 2 hours the system will relaunch the update notification.
 - If you have an antivirus that restricts downloads, you must add the agent to the exclusions in order to perform the update.

Windows Remote Control Notifications

1. Each time a specialist takes remote control of a device, the Windows workstation receives a message informing it that its device is in a remote support session.



2. Once a specialist has finished a remote control session on a Windows device, the workstation will receive a message indicating the completion of the remote support session.



Permissions and Processes

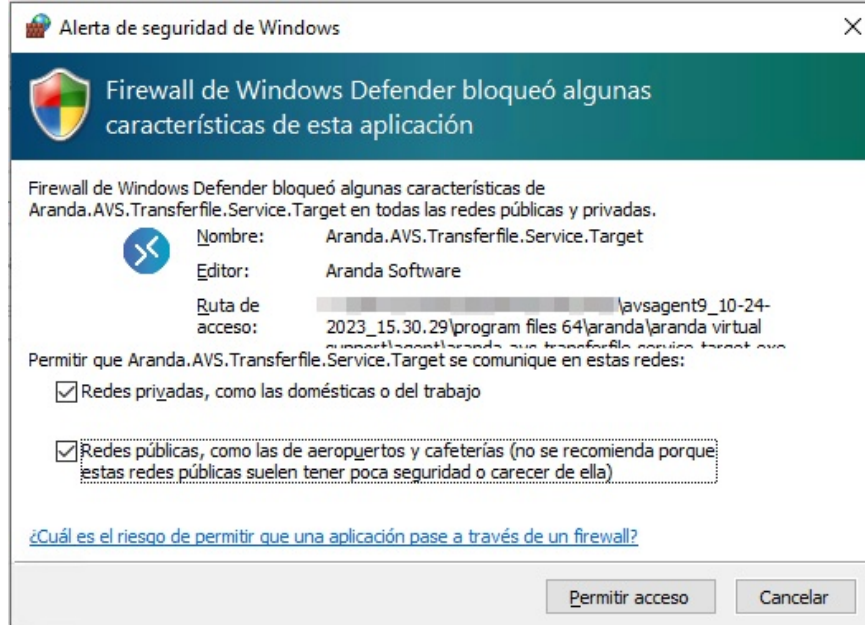
Windows Agent Permissions

Permissions on boot

Firewall

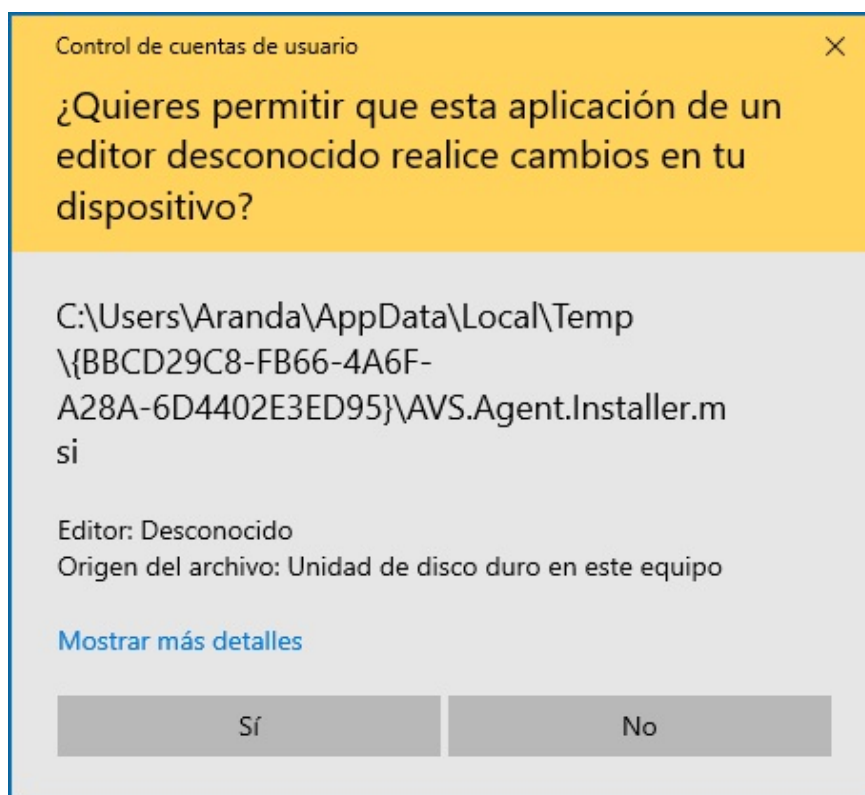
Although the agent does not require listening on any port externally, or any exceptions in firewall rules, when you first start Windows may request permissions to listen on ports locally.

In this case, the following window will be seen and such a request must be allowed:



As a Service

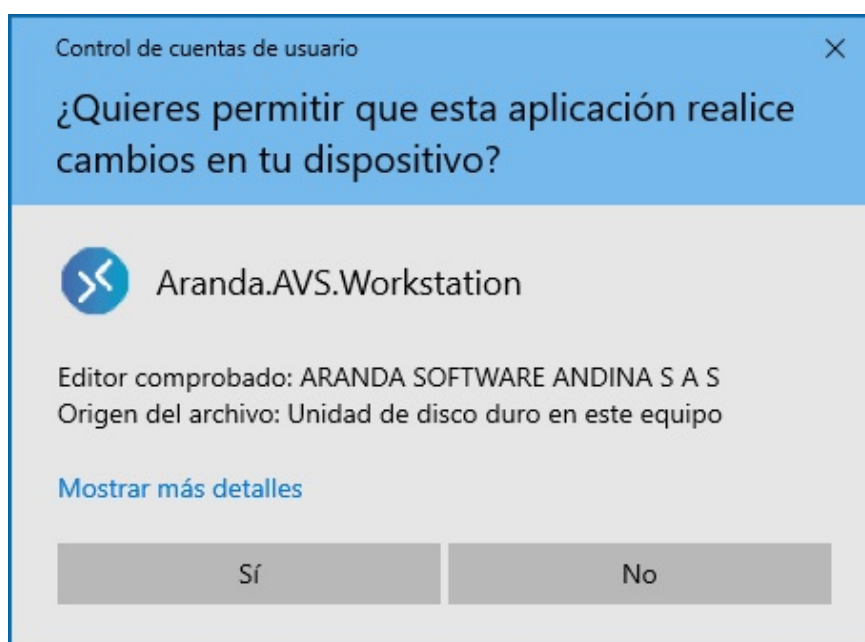
When running the agent from service, the UAC (User Account Control) question will appear so that the user process runs with administrator permissions. The question is similar to the one in the following image:



If you answer yes to the question, you will see that the user process (Aranda.AVS.Workstation.UI.exe), as well as all AVS service processes (remote control and file transfer) will run with administrator permissions. This is because they are user-launched processes. If you answer no, the installation of the agent-as-a-service is interrupted.

As an executable

If the agent is launched as an executable (when double-clicking on the application), a similar behavior will be seen, however, the question is visualized as follows:



In both cases, both as a service and as an executable, the same behavior will be had in terms of permissions.

User Account Control(UAC) question frequency

Under normal operating conditions, the agent will only ask the UAC question when started. It is only necessary to ask the question once, since with the permissions that the user acquires, it will be enough to launch the other processes with those permissions.

The agent has a security validation, which prevents the question from being asked repeatedly in less than five minutes.

If the question was answered in the negative, and you want to give administrator permissions later, you can either restart the agent completely or wait five minutes after it boots and stop the process called "Aranda.AVS.Workstation.UI.exe".

Permissions for the Remote Control Service in a Windows Session

The following sections describe the Remote Control Service permissions for a previously logged in Windows session directly.

Giving an affirmative answer to the UAC question

For this scenario, the remote will be able to handle programs that require administrator permissions. Examples of these programs include:

- Windows Command Prompt run as administrator.
- Task manager.
- Registry editor.
- File Explorer on paths with administrator permissions.
- Software released as administrator.

It is clear that it will also be able to handle all software that does not require administrator permissions.

All of these programs and any that require administrator permissions can be managed from the AVS viewer.

Some of the scenarios that will not have this management are:

- UAC questions to give administrator permissions to another program.
- UAC questions to install or uninstall software.

Giving a negative answer to the UAC question

In this scenario, you will not be able to manage any software or program that requires administrator permissions or that has been released with administrator permissions.

If you foreground a program with such a restriction, mouse and keyboard events will have no effect on the remote control.

Windows Agent Processes and Services

Main Process

The main process of the agent is the one corresponding to the executable “Aranda.AVS.Workstation.exe”. When launched from the agent service it will look like this:

Nombre	PID	Estado	Nombre de usuario
 Aranda.AVS.Workstation.exe	1480	En ejecución	SYSTEM

When launched as a user or executable, you will see in the User Name column, the user of the current Windows session:

Nombre	PID	Estado	Nombre de usuario
 Aranda.AVS.Workstation.exe	5944	En ejecución	ju...

This service is responsible for communicating with the main server, as well as managing the agent’s internal database and orchestrating the other processes. No matter how the agent is launched, whether as a service or executable, there will only be a “Aranda.AVS.Workstation.exe” process

User Process

Regardless of whether the agent was launched as a service or executable, you will see a “Aranda.AVS.Workstation.UI.exe” process within each Windows session launched. The process will belong to each user, like this:

Nombre	PID	Estado	Nombre de usuario
 Aranda.AVS.Workstation.UI.exe	22588	En ejecución	ju...

There will only be one process per Windows user session. This process is responsible for launching windows, icons, questions with a graphical user interface, as well as launching the processes of the AVS services that require running in the Windows user session.

AVS Service Processes

Remote control

The process in charge of allowing remote control is the one corresponding to the executable “Aranda.AVS.VNC.Application.exe”.

Depending on whether the agent is launched as an executable, you will see only one process for each Windows session started, as follows:

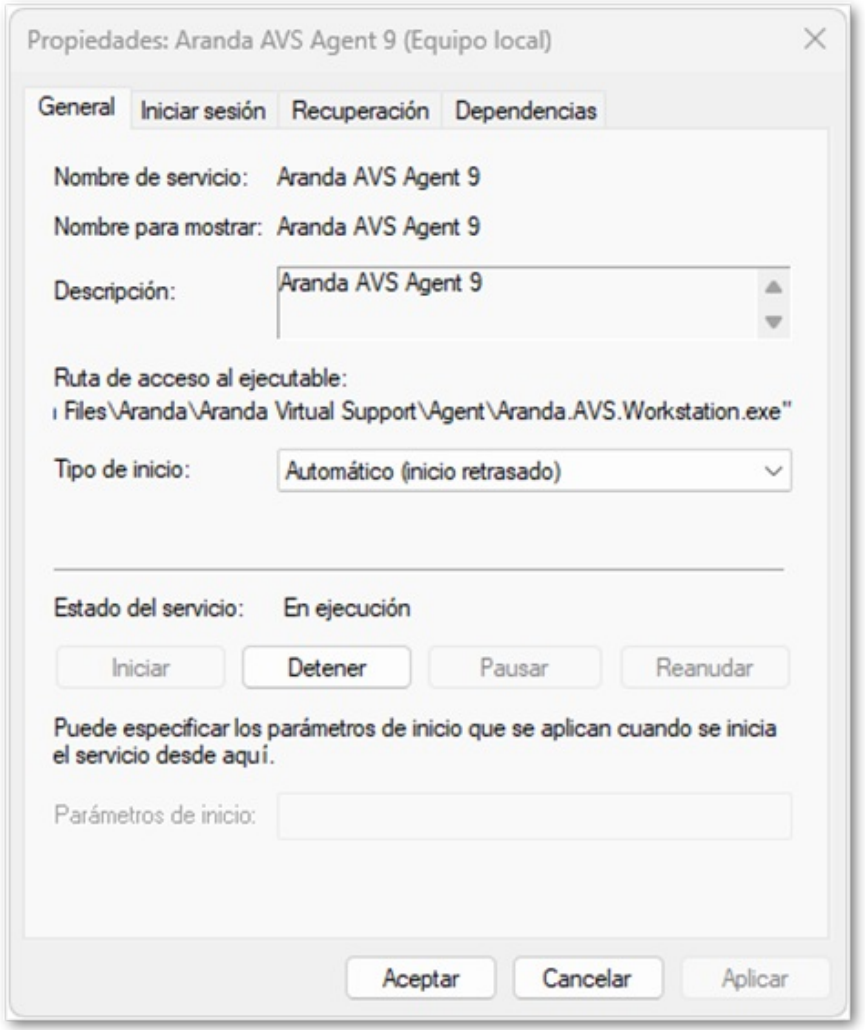
Nombre	PID	Estado	Nombre de usuario
 Aranda.AVS.VNC.Application.exe	16712	En ejecución	SYSTEM

On the other hand, if the agent is launched as a service, you will see two processes of the same executable, one for the user of each Windows session and one for the service.

Nombre	PID	Estado	Nombre de usuario
 Aranda.AVS.VNC.Application.exe	15612	En ejecución	SYSTEM
 Aranda.AVS.VNC.Application.exe	23996	En ejecución	ju...

Main Service

If the agent has been installed with the service, you will see the following Windows service for the agent:

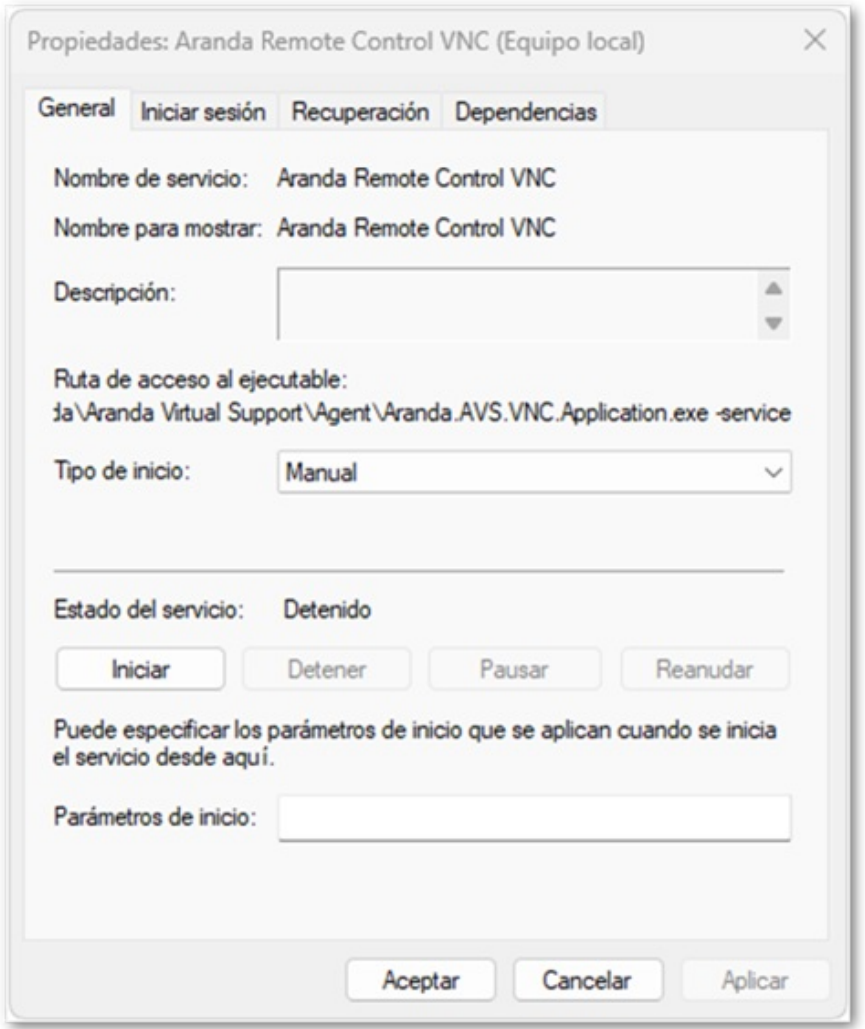


This service points to the executable “Aranda.AVS.Workstation.exe” As can be seen, this service must be started automatically to allow functionalities without depending on a Windows session.

Additional Services for AVS Services

Remote control

If installed as a service, the following service must be available for remote control:



This service points to the executable “Aranda.AVS.VNC.Application.exe” This service is launched by the service of the executable “Aranda.AVS.Workstation.exe”, so its startup must be manual.

Halting Processes

Regardless of the way the agent has been launched, if the agent is stopped correctly, it will in turn be responsible for stopping all the processes and services launched during its operation.

Internal communication between processes and services

For the aforementioned processes it is important to be able to send and receive messages. To do this, a GRPC communication is used in which each process listens on an internal port, without configuring firewall rules and without remote or external access to the computer; it is a local communication between processes.

The ports mentioned below are static. The agent will attempt to use those ports locally; however, in case they are busy, the agent will not work properly until the ports are available again.

Main Process

The main process of the executable “Aranda.AVS.Workstation.exe” tries to listen on TCP port 5050. On that port, it receives responses from interaction with the graphical interfaces of the user’s processes, “Aranda.AVS.Workstation.UI.exe”, as well as notifications from remote control services, user confirmation requests (if enabled), and notifications of agent updates.

This is the same regardless of whether it is released as a service or executable

File Transfer Process

The main process of the executable “Aranda.AVS.Transferfile.Service.Target.exe” tries to listen on TCP port 5029. Responses are received on that port from the interaction with file transfer between the workstation and the specialist agent.

Remote Control Process

The “Aranda.AVS.VNC.Application.exe” remote control process attempts to listen on TCP port 9087 when running within a user’s session on Windows locally. There it receives requests to start a remote control session. In this case, the agent attempts to use port 8081 for communication with the Turn Server; is the only port that must be allowed to go out to the Internet in order to communicate with the Local Turn Server.

MacOS Agents

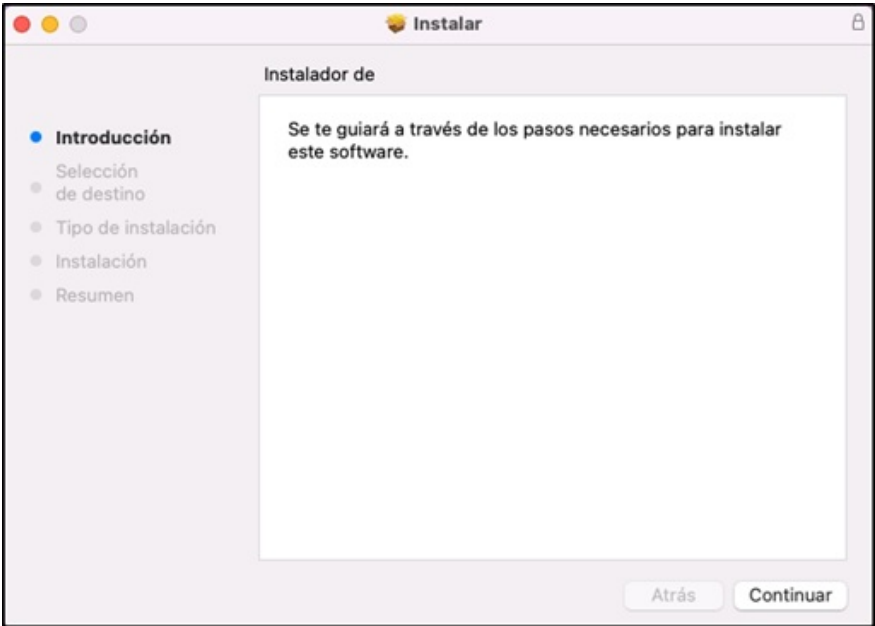
MacOS Agent Installation

Run Agent with Installation

For macOS systems, there are two installation agents, which should be used specifically depending on the type of processor of the device.

- Aranda Virtual Support Workstation.X.X.X.X_arm64.pkg: For devices with Apple Silicon (M1-M2) processors.
- Aranda Virtual Support Workstation.X.X.X.X_x64.pkg: For devices with Intel processors.

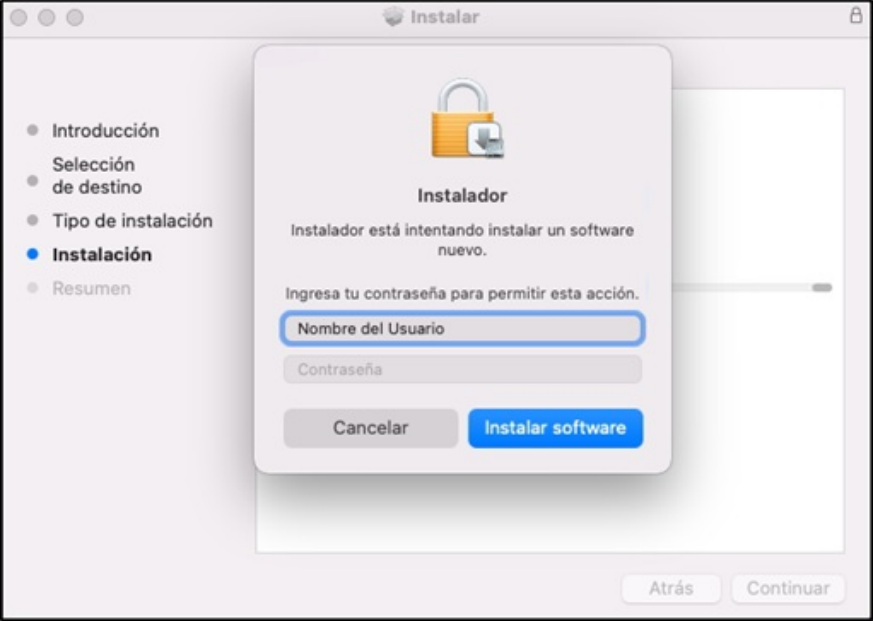
1. To perform the manual installation of the agent, the specialist provides the executable file of the Aranda Virtual Support agent according to the processor of the device. Entering the installer will launch the installation wizard, click Continue.



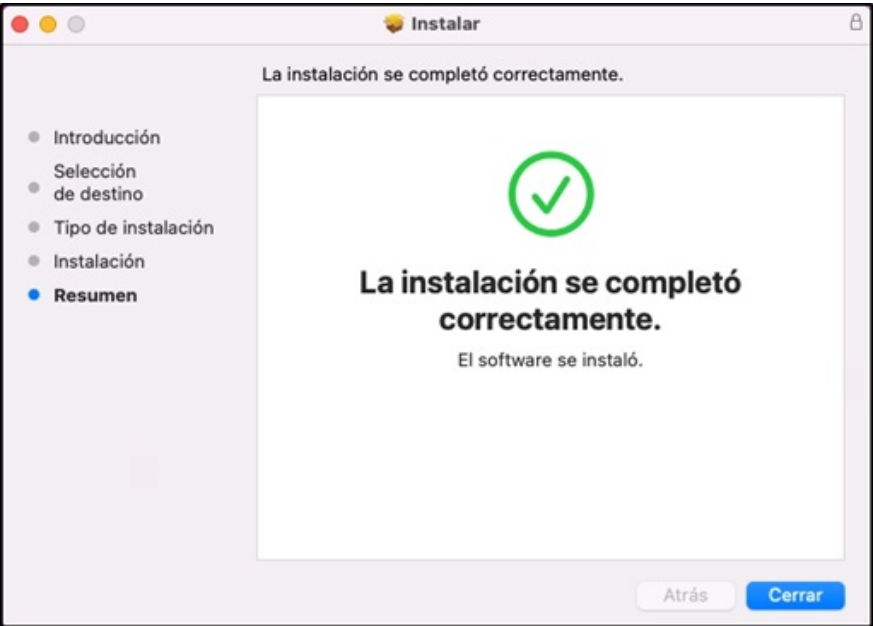
2. The auto wizard selects the destination route and provides a summary of the space required for the installation. Select the option to Install.



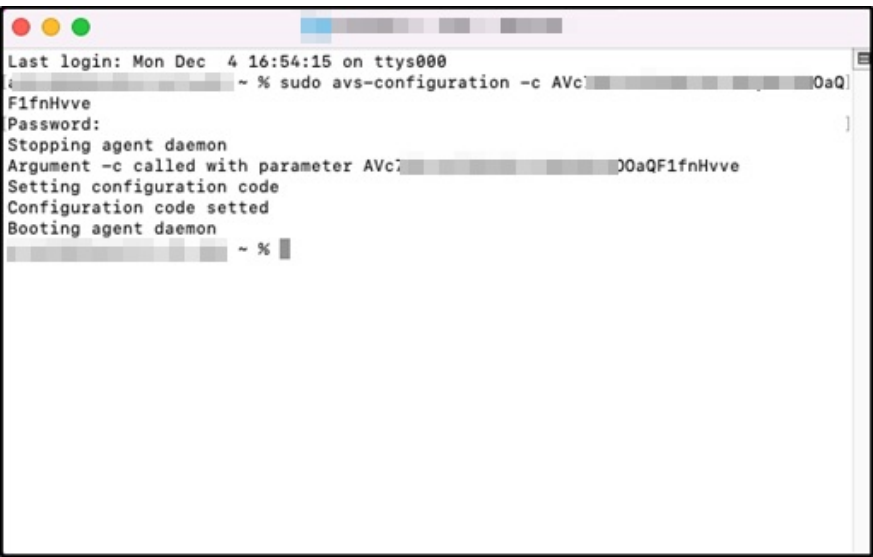
3. In the pop-up window, fill in the requested data and click Install software.



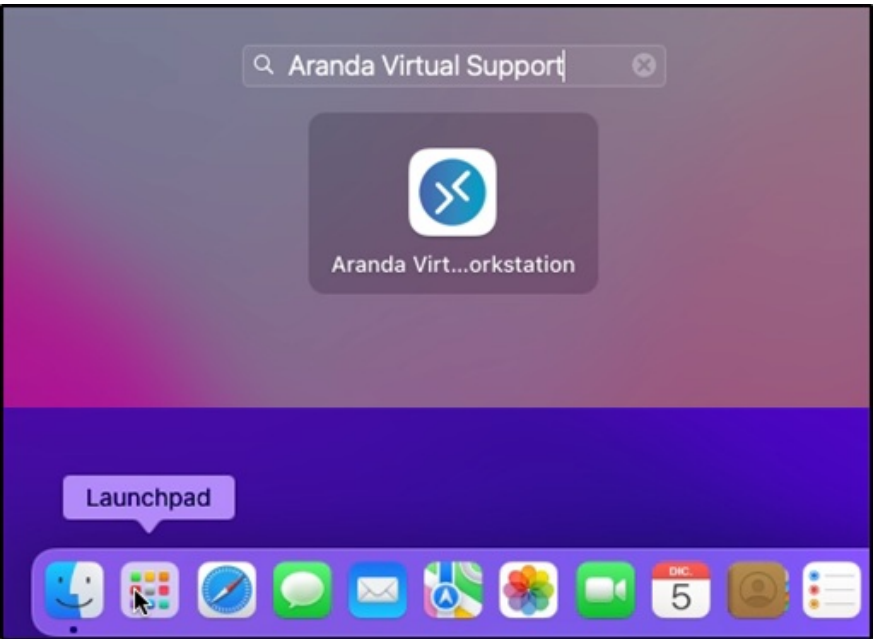
[Note]Installing the agent generates different [Aranda Virtual Support processes](#). 4. Once the installation is complete, click Close.



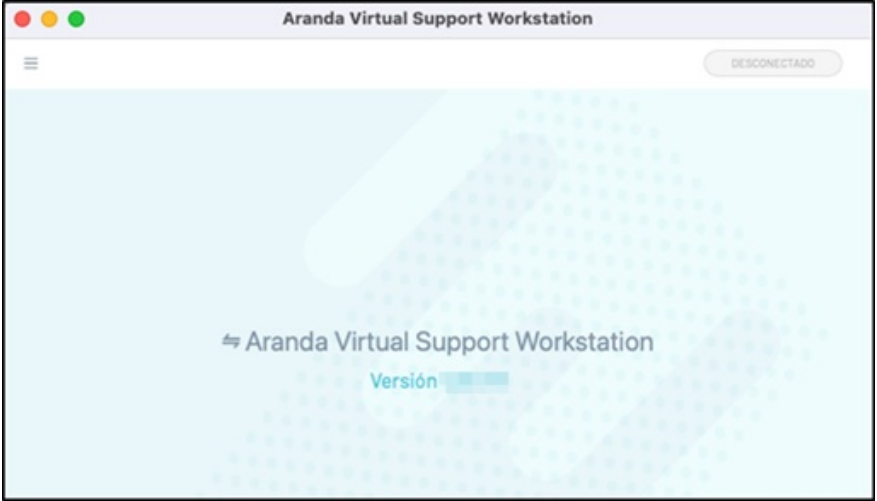
5. To apply the [Agent Configuration Code](#) From the terminal, use the following command: `sudo avs-configuration -c {código de configuración}`, not including the curly brackets {}.



6. From the Launchpad search for 'Aranda Virtual Support Workstation'. Select this item to open the Agent UI.



7. Si no se ingresó ningún código de configuración en el paso 5, en la interfaz de usuario del agente, podrá visualizar el mensaje de notificación en color gris y con el estado 'Desconectado'. Dirijase a la sección [Configuración manual de agente](#) para completar el proceso. Ver también [Notificaciones](#)



- [Notes]
1. During the installation of the agent, it is necessary to grant the [Permissions Accessibility and Access](#).
 2. Once the agent installation process is completed, if required, you will be able to enter again [The agent configuration code](#)

Installing and configuring the agent by command line

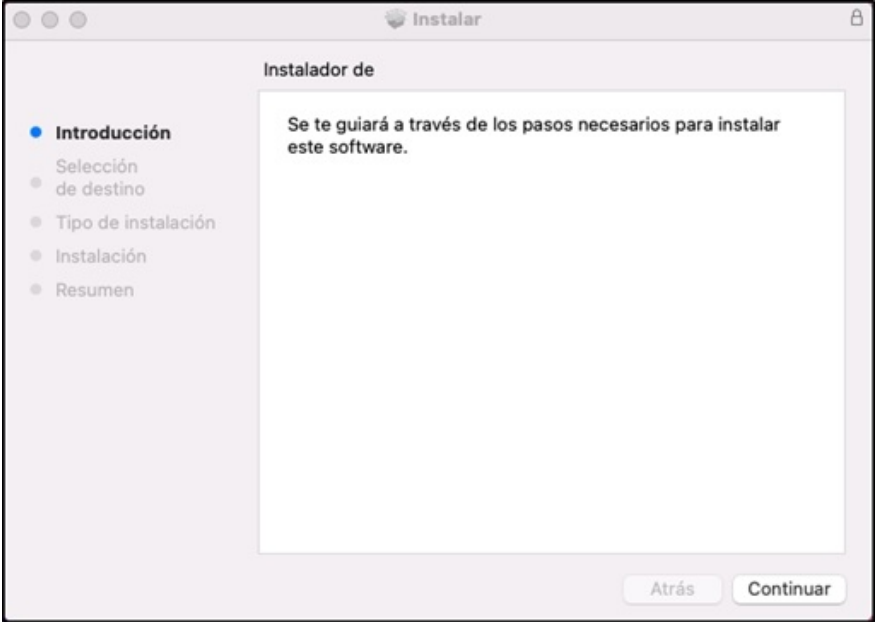
Agent installation and configuration can also be done by command line. This action can be performed remotely by the workstation itself or by the specialist. In this case, follow the steps below:

1. Enter the Terminal.app
2. Run the command: `sudo installer -pkg "Downloads/Aranda Virtual Support Workstation.X.X.X.X_arm64.pkg" -target /`. (What is in quotation marks corresponds to the path and name of the installer. The X.X.X.X correspond to the version.).
3. To apply the [Agent Configuration Code](#) From the terminal, use the following command: `sudo avs-configuration -c {código de configuración}`, not including the curly brackets {}.
4. If the installation and configuration were successful, from the Launchpad search for ‘Aranda Virtual Support Workstation’. Select this item to open the Agent user interface, display the notification message in green and with the status ‘Online’; This can take about 10 minutes. If the configuration code is incorrect or no licenses are available, the agent will be installed, but it will not be configured and the agent’s notification message will remain grayed out in the ‘Disconnected’ state after 10 minutes.

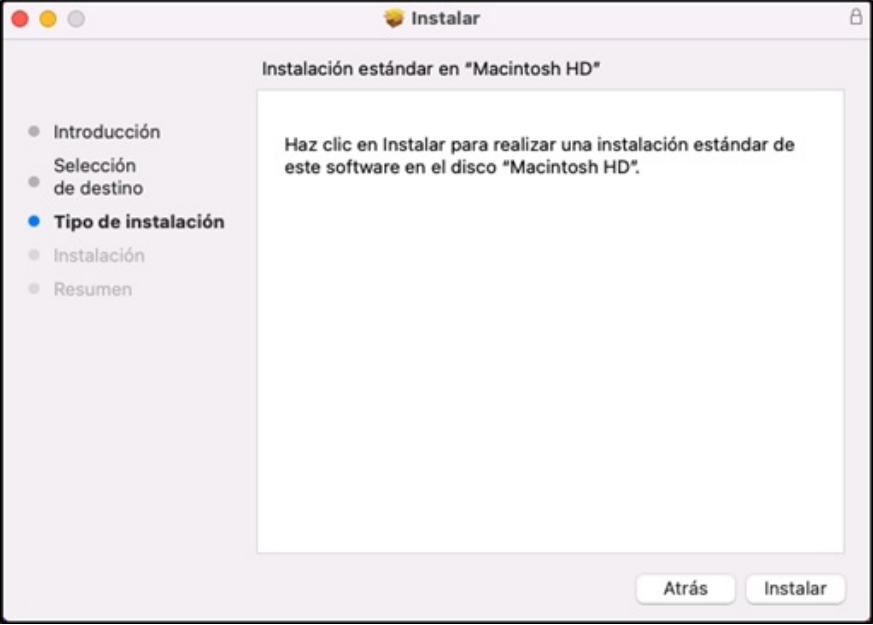


Uninstall agent

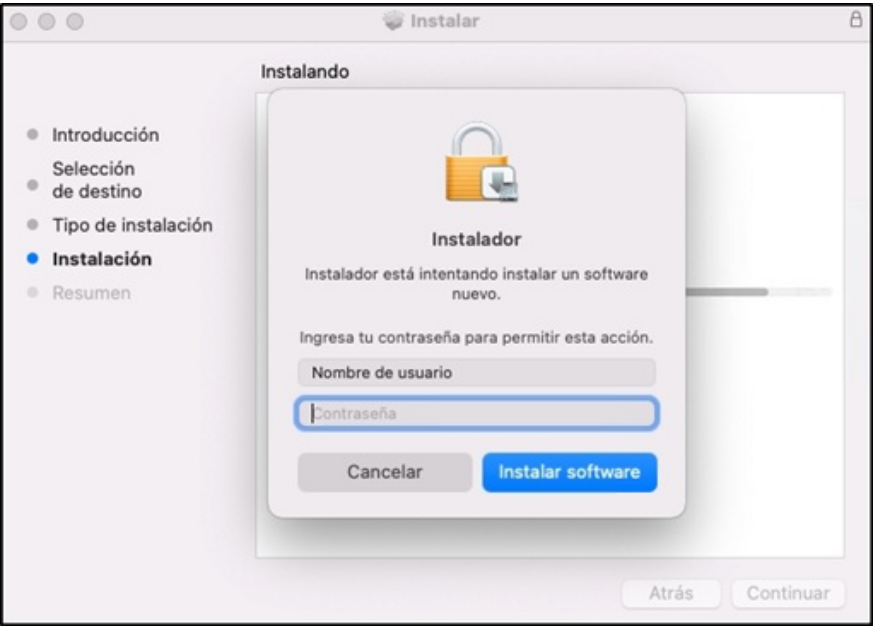
1. Access the agent uninstaller Aranda Virtual Support Workstation Uninstaller.X.X.X.X.pkg. Make sure that it matches the version of the agent installed on your system.
2. The installation wizard will start, click Continue.



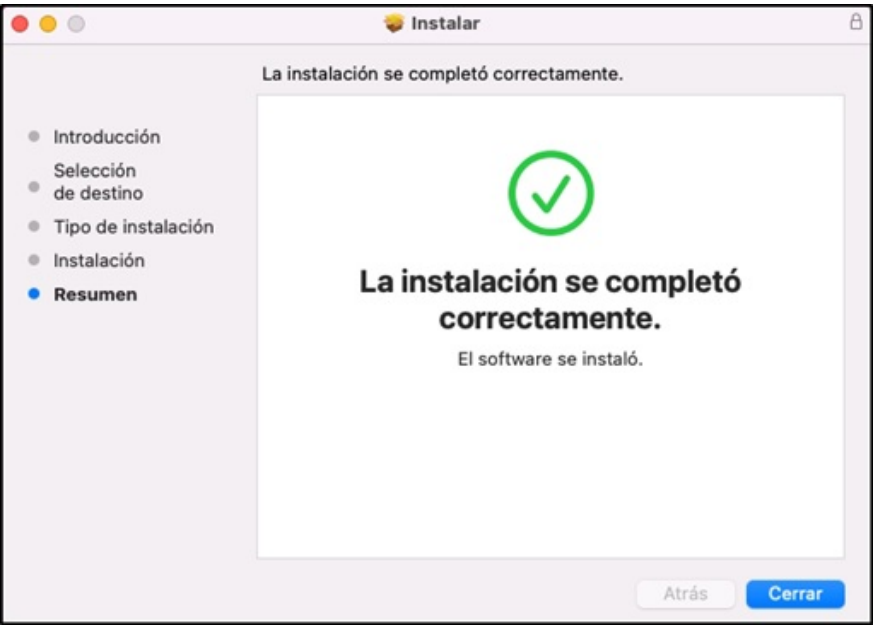
3. The Auto Assistant selects the destination route. Select the option to Install.



4. In the pop-up window, fill in the requested data and click Install software.



5. You receive the following message: “Installation completed successfully”, click the Close. The agent will be successfully uninstalled.

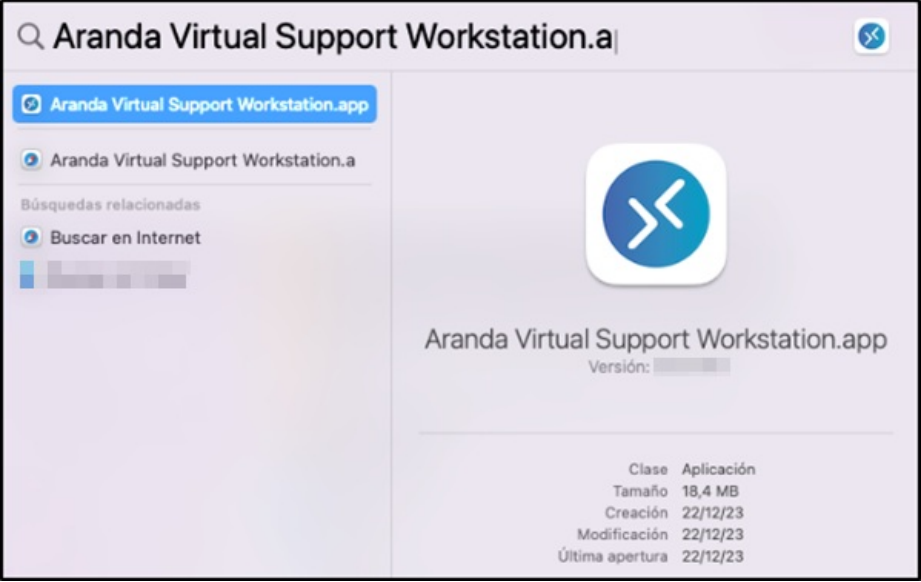


[Note]From the terminal you can also run the command: `sudo installer -pkg "Downloads/Aranda Virtual Support Workstation Uninstaller.X.X.X.pkg" -target /`. (What is in quotation marks corresponds to the path and name of the uninstaller. The X.X.X.X correspond to the version.) This allows the agent to be uninstalled. |

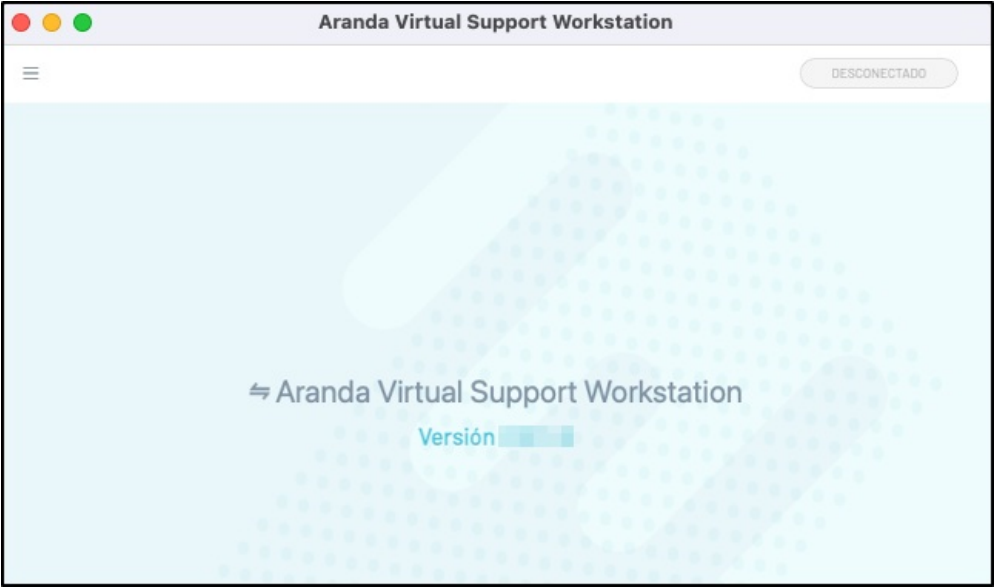
Manual MacOS Agent Configuration

Once the agent is installed, follow these steps to access the user interface:

1. Click the “Launchpad” icon or the magnifying glass icon in the Spotlight.
2. Find and select the “Aranda Virtual Support Workstation” option.



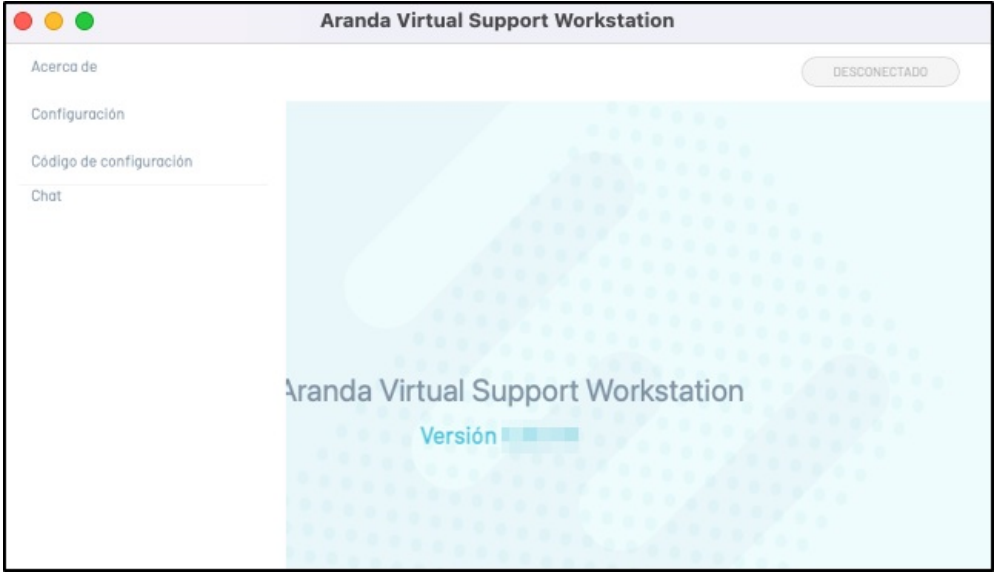
The agent UI is enabled where you can make adjustments to the configuration.



Option	Description
Drop-down menu	Displays a menu of options: - About: Allows you to display the current version of the agent (default option). - Configuration: Allows you to adjust the Host configuration, group code, and apply the configuration code. - Configuration Code: Allows you to update the agent's configuration by inserting a new configuration code. View Configuration Code.
Status message	It allows you to visualize the current status of the agent. View Notifications

Configuration

1. From the agent UI drop-down menu, select the Configuration:



2. In the Settings window, complete the following Fields.

Field	Obligatory	Description
Host(Api or Url)	Yes	Url of the notification server that must be delivered by the specialist who performs the support.
Support Group Code	Yes	Support group code that must be provided by the specialist who will provide the support.
Requires user confirmation	No	This field is for enabling or disabling confirmation by the user when authorizing a support session. The authorization password for the support session. The password must meet the following characteristics:
Fixed password	Yes	1. It must have at least one capital letter. 2. It must have at least one lowercase letter. 3. It must have at least one number. 4. It must have at least one special character. 5. It must have a minimum length of 12 and a maximum of 50 characters.
One-time password	No	This password is made to be used only once when authenticating the support session, once the support session has been authorized the password will no longer be valid and a new one will be generated. A new password can be invalidated and generated by clicking the refresh icon in that field or by clicking the Accept.

Aranda Virtual Support Workstation

DESCONECTADO

Configuración

HOST (API o URL)

Ingrese API o URL.

Código de grupo

Ingrese código de grupo.

Autorización

Requiere confirmación de usuario

Esta contraseña es fija y nos va a dejar acceder de manera permanente.

Contraseña

Ingrese la contraseña

Confirmar Contraseña

Ingrese la contraseña nuevamente

Habilitar contraseña de un sólo uso

CANCELAR

ACEPTAR

3. To save the settings, click Accept. If the fields have been entered correctly, the message will be displayed: “Correct, Updated settings.”

📌 Notes:

- 1. Click the Cancel to undo the modifications made, as long as the changes have not been previously saved.
- 2. If a change to the agent configuration is required, after the agent installation you will be able to log in again [The Configuration Code](#).

User confirmation

User confirmation means that the specialist cannot enter the workstation until the user approves the authorization. The following steps must be followed:

- 1. In the agent UI, in the Settings window, turn on the Requires user confirmation.

Aranda Virtual Support Workstation

EN LÍNEA

Configuración

HOST (API o URL)

http:

Código de grupo

4c155639

Autorización

Requiere confirmación de usuario

Esta contraseña es fija y nos va a dejar acceder de manera permanente.

Contraseña

Confirmar Contraseña

Habilitar contraseña de un sólo uso

CANCELAR

ACEPTAR

- 2. When the specialist requests authorization for a support session, the workstation will receive a validation message:

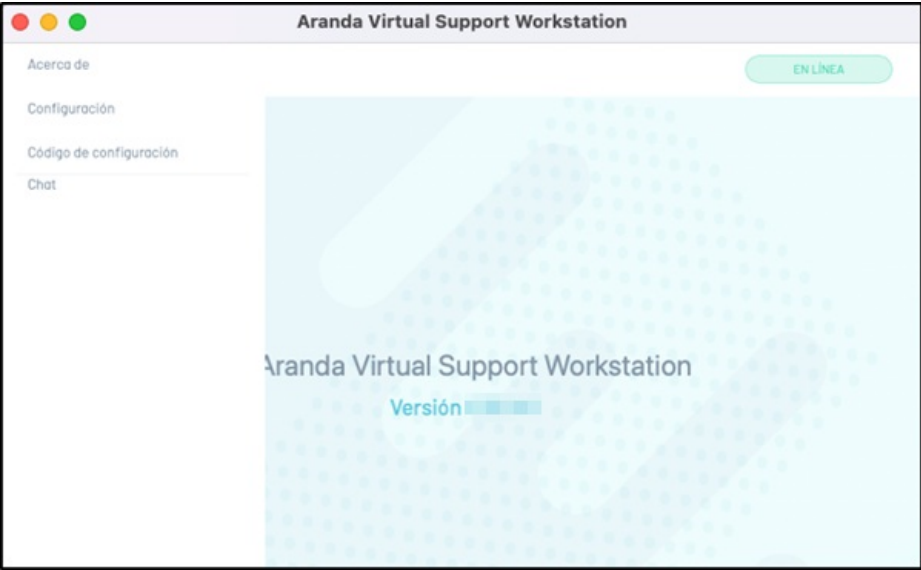


3. The specialist will be on hold, while the application is accepted. If accepted, support is authorized.

Enter Setup Code

It is possible that at some point the agent configuration needs to be updated either due to changes in the support specialist, organizational, headquarters, departmental changes, etc. In these cases, it is possible to re-enter the configuration code without the need for a new installation of the agent. To do this, perform the following steps:

1. From the agent UI drop-down menu, select the Configuration Code:



2. In the Configuration, enter the configuration code provided by the specialist in the field Configuration Code and click Send:



3. If the code is correct, the message is displayed: " Correct, Updated settings." The fields of [Configuration](#) They will be updated according to the parameters set in the agent's profile. [Notes]- When clicked Send Without filling in the field, the message will be displayed: "Error: The configuration code cannot be empty".
- When clicked Send By filling out a plain code, the message will be displayed: "Error: The configuration code is not in a valid format."]

Chat Service

⚠ Important: The Chat does not handle conversation history, when the chat window is closed, the conversations will be deleted.

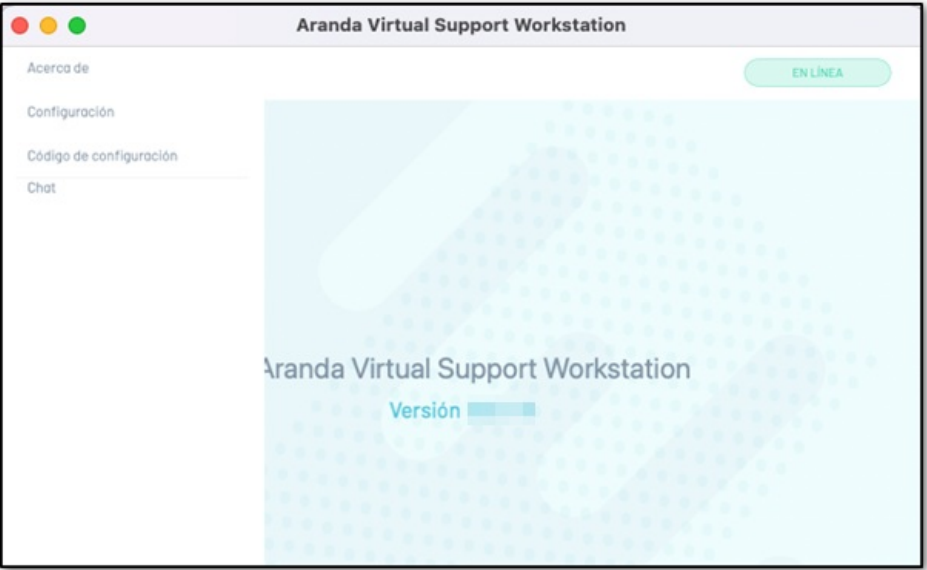
The chat service allows the workstation user to communicate with Aranda Virtual Support (AVS) online specialists. To access the chat service from the AVS Agent user interface (UI) and communicate with a specialist, follow these steps:

Requirements

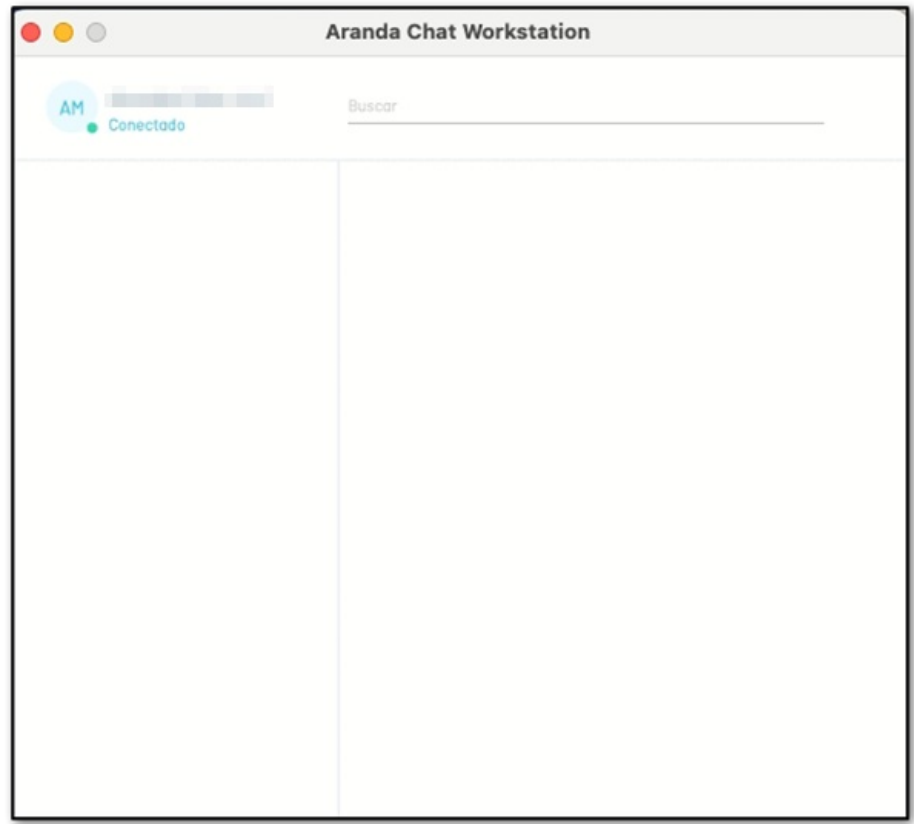
- The Agent must be [installed](#) and be in the "Online" status.
- The workstation must be associated with the support groups of specialists that are online on the AVS website.

Access to Chat

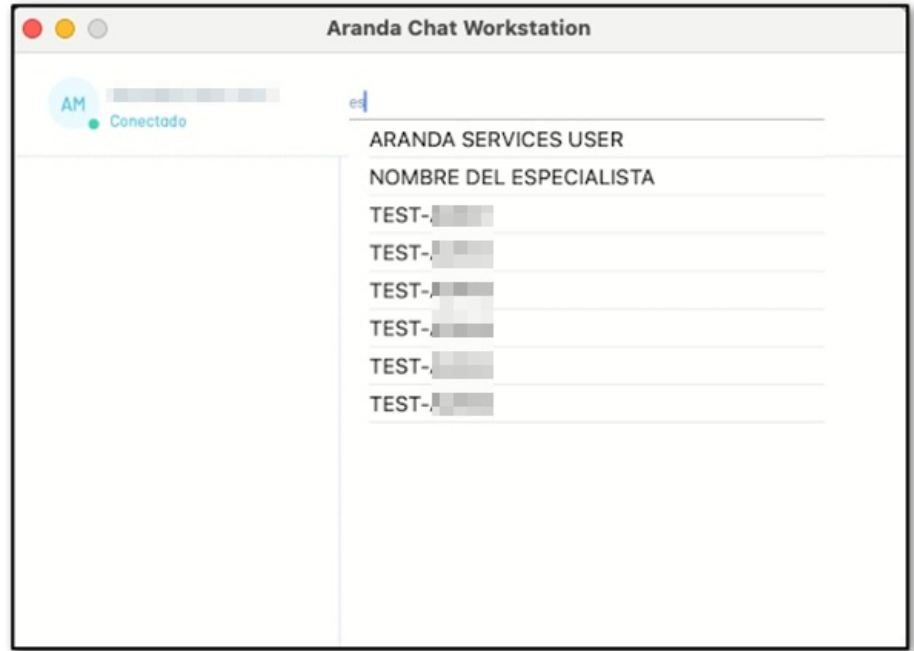
1. Log in to the AVS Agent user interface (UI) on the workstation and select the option Chat from the floating menu.



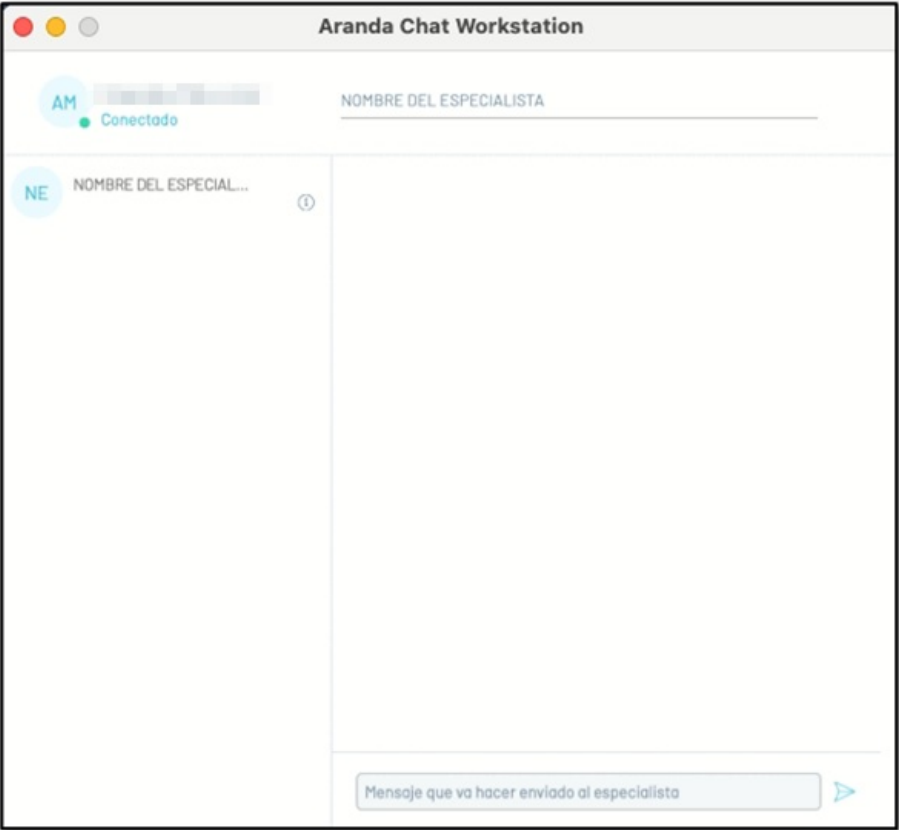
2. The chat window is enabled where the following options will be enabled:



3. To send a message to a specialist, click on the query field and select the name from the list of generated chats. In this field, you can also filter by typing the name of the specialist.



4. By selecting the specialist, you will be able to view the list of recent chats and the Conversation Section is enabled where you can start the conversation. Type the message in the text field provided and press Enter to send it or click the Send (paper airplane icon).

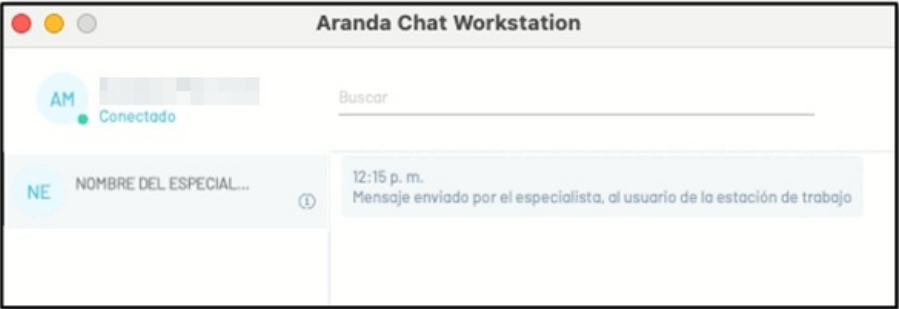


5. When the message is sent, it is recorded in the conversation section of the chat window, showing the timestamp of the sending.



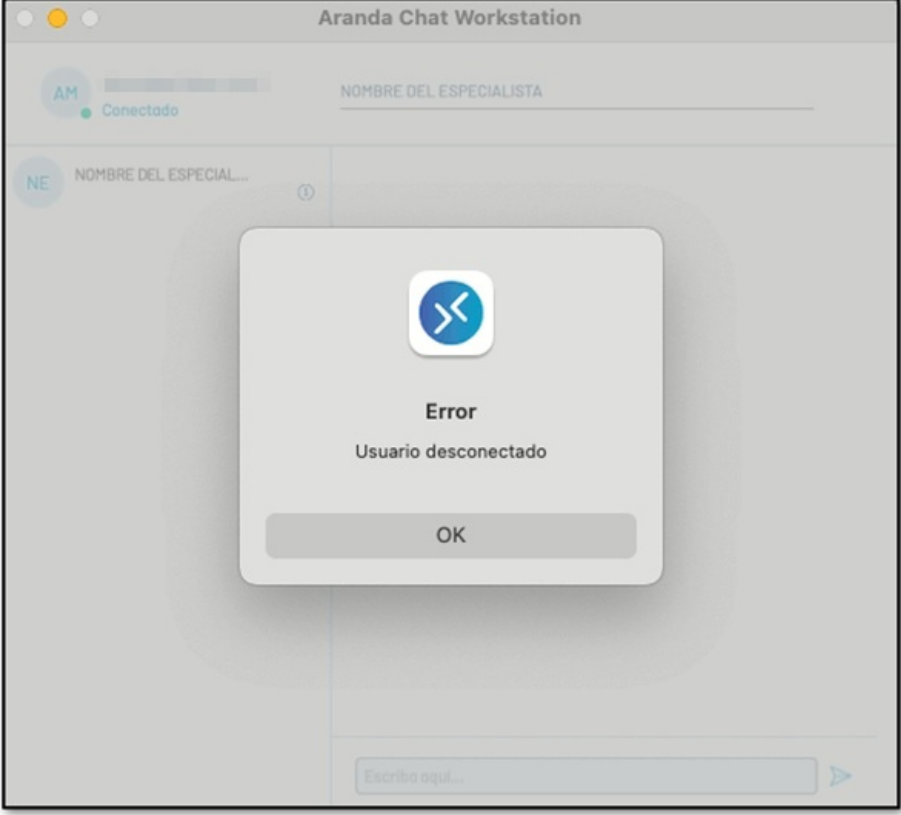
Receiving Messages and Notifications

When the workstation receives a new message, the chat window will launch, allowing the user to initiate the conversation with the specialist in a timely manner. Notifications help maintain an effective flow of communication between users and specialists.



Handling Lost Connection During Specialist Interaction

If during a conversation with a specialist they get disconnected, or if you select a specialist who is not logged in on the AVS website, and you try to send a message, the app will display the following message:



📌 Note: During the loss of connection in an interaction with the specialist, the user’s message will not be sent. By re-establishing the connection, the user will be able to continue the conversation.

MacOS Agent Update

1. Each time a new version of the AVS agent is released, the customer will receive a notification informing them that there is a new version and asking if they want to update it.



2. Once the customer decides to accept such an update, the new version of the agent installed on the device will automatically be obtained.

- 📌 Notes:
- When clicked Later, after 2 hours the system will relaunch the update notification.
 - If you have an antivirus that restricts downloads, you must add the agent to the exclusions in order to perform the update.

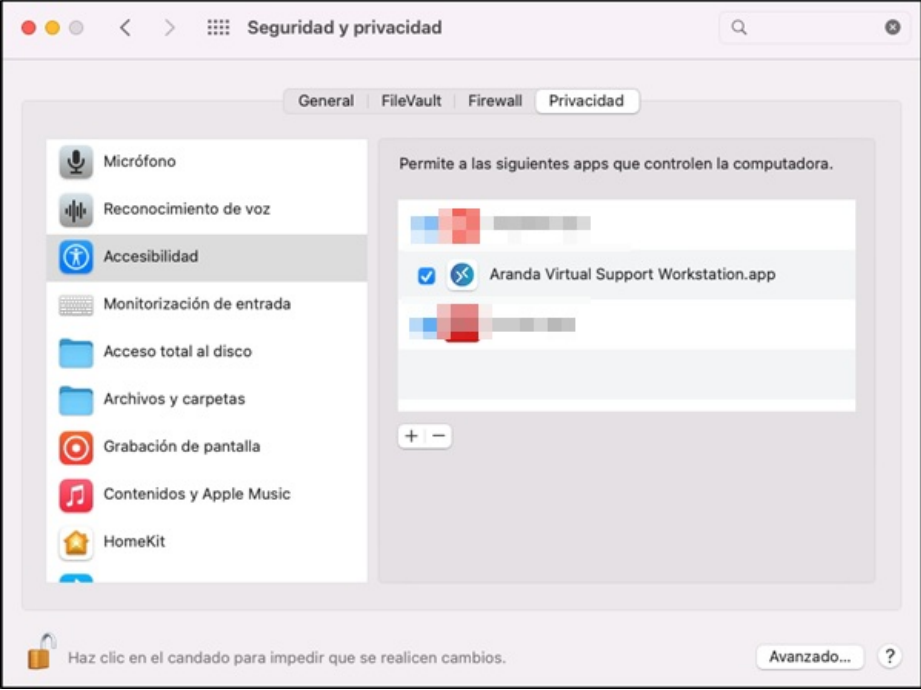
Permissions and Processes

MacOS Agent Permissions

The following sections describe the permissions that must be granted to the Aranda Virtual Support Workstation agent.

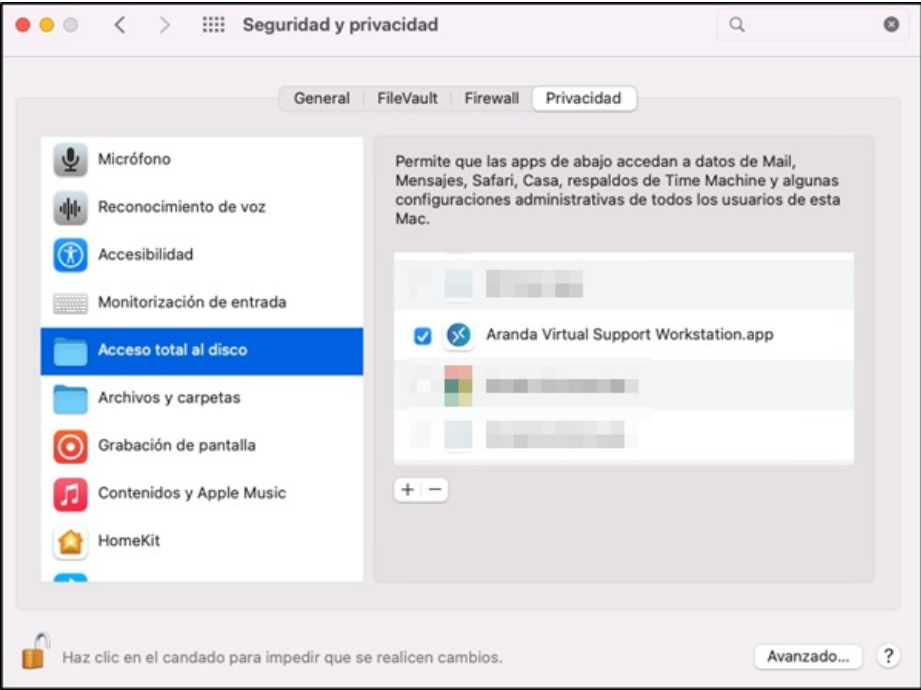
Accessibility Permit

This permission must be granted from the system preferences, selecting the option Security and privacy. If this permission is not activated, it will not be possible to take remote control.



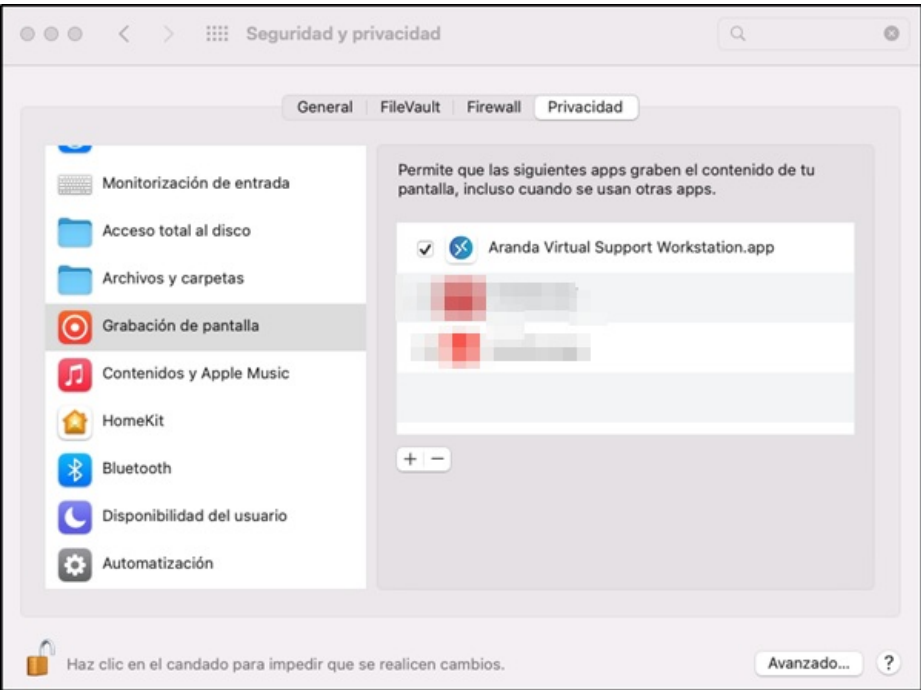
Full Disk Access Permission

This permission must be granted from the system preferences, selecting the option Security and privacy. This permit is required for the proper functioning of the Agent.



Screen Recording Permission

This permission must be granted from the system preferences, selecting the option Security and privacy. This permission is required to allow remote takeover and store the visual record in the audit.



MacOS Agent Processes

Main Process

The main process of the agent is the one corresponding to the executable "Aranda.AVS.Workstation". When launched from the agent it will look like this:

Monitor de Actividad				
Todos los procesos				
Nombre del proceso	Usuario	PID	% CPU	
Aranda.AVS.Workstation	root	1432	0,1	

This process is responsible for communicating with the main server, as well as managing the agent’s internal database and orchestrating the other processes.

AVS Processes

Remote control

The process in charge of allowing remote control is the corresponding “Aranda Virtual Support”. You will see only one process for each session started, as follows:



Halting Processes

Regardless of the way the agent has been launched, if the agent is stopped correctly, it will in turn be responsible for stopping all the processes and services launched during its operation

Internal communication between processes

For the aforementioned processes it is important to be able to send and receive messages. To do this, a GRPC communication is used in which each process listens on an internal port, without configuring firewall rules and without remote or external access to the computer; it is a local communication between processes.

The ports mentioned below are static. The agent will attempt to use those ports locally; however, in case they are busy, the agent will not work properly until the ports are available again.

Main Process

The main process of the executable “Aranda.AVS.Workstation” tries to listen on TCP port 5050. On this port, it receives responses from the interaction with the graphical interfaces of the user processes “Aranda Virtual Support”, as well as notifications from remote control services, user confirmation requests (if enabled) and notifications of agent updates.

Remote Control Process

The “arcvnc” remote control process attempts to listen on TCP port 9087 when running within a user’s session. There it receives requests to start a remote control session. In this case, the agent attempts to use port 8081 for communication with the Turn Server; is the only port that must be allowed to go out to the Internet in order to communicate with the Local Turn Server.