

Enterprise deployment guide

Quick start guide

1. Connect AIRTAME to your TV or Projector.
2. Download the AIRTAME application from airtame.com/start
3. Connect to the AIRTAME WiFi network using the password on screen
4. Open a browser and navigate to 192.168.22.1 and do the [network configuration](#)
5. Join the same network as AIRTAME is connected to or connect directly to the second WiFi card on AIRTAME.
6. Start streaming using either automatic discovery if allowed on the network or connect using "Connect to IP" by entering the IP Address displayed on the TV Splash screen.

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Network integration

Before integrating AIRTAME in your existing network infrastructure you need to decide who can connect and how they connect to AIRTAME:

- Single network/VLAN infrastructure
- Multiple network/VLAN infrastructure (Internal/Guest)

Single network

If your network only consist of one network/VLAN you have three ways of integrating AIRTAME:

1. Build in 2.4GHz WiFi
2. Build in 5GHz WiFi
3. USB [ethernet adapter](#) (Not included)

We strongly recommend either a **wired connection** or a **5GHz connection** to an AP

located nearby without any major interferences in between. Since the AIRTAME solution relies on the existing network infrastructure, we can't guarantee good performance and stability if a bad network connection is applied to AIRTAME. [Network recommendations](#)

Multiple network/VLAN network

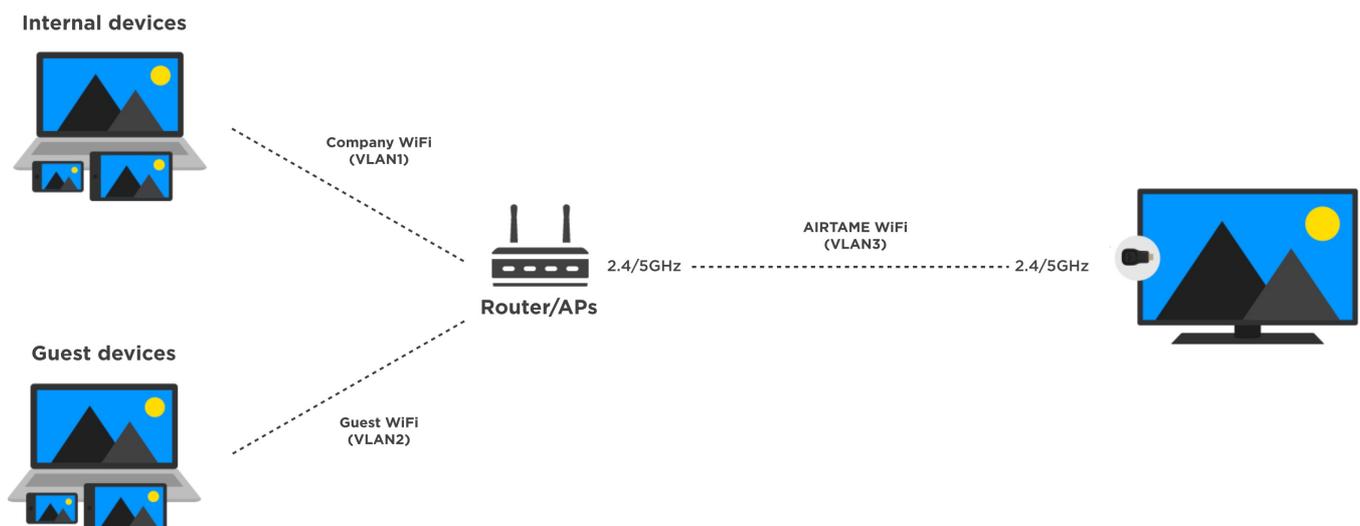
If your network consist of more networks/VLANs for e.g. guests or students; you can choose between different ways of integrating AIRTAME:

1. Connect AIRTAME to a separate VLAN with access from other VLANs
2. Connect as client to a WiFi VLAN + connect to the other VLAN with a wired connection

[Network recommendations](#)

Examples of recommended network integrations

#1 Separate WiFi network for AIRTAME devices



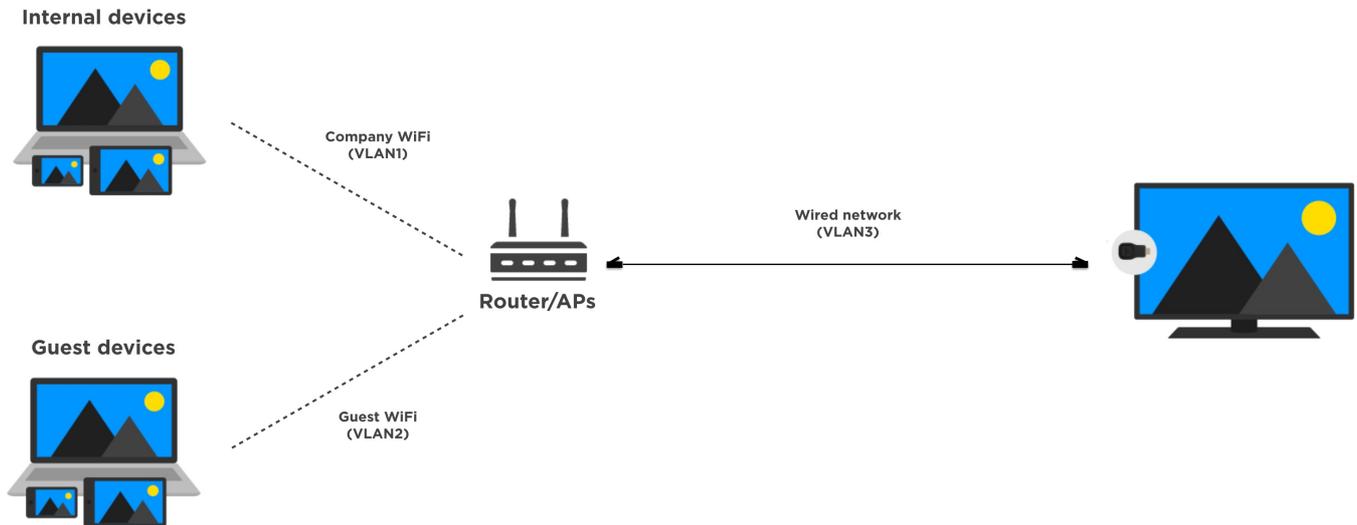
Set up process

- Create a new SSID with a separate VLAN (potentially hidden) for the AIRTAME devices.
- Create network rules that allows user on the internal and guest network to access AIRTAME by opening up the ports described below in this article.
- Disable AP or hide password on AIRTAMEs own AP to avoid unintended user connection

Pros

- With this setup security is taken care of by the network controller instead of AIRTAME

#2 same as #1 with a wired network connection



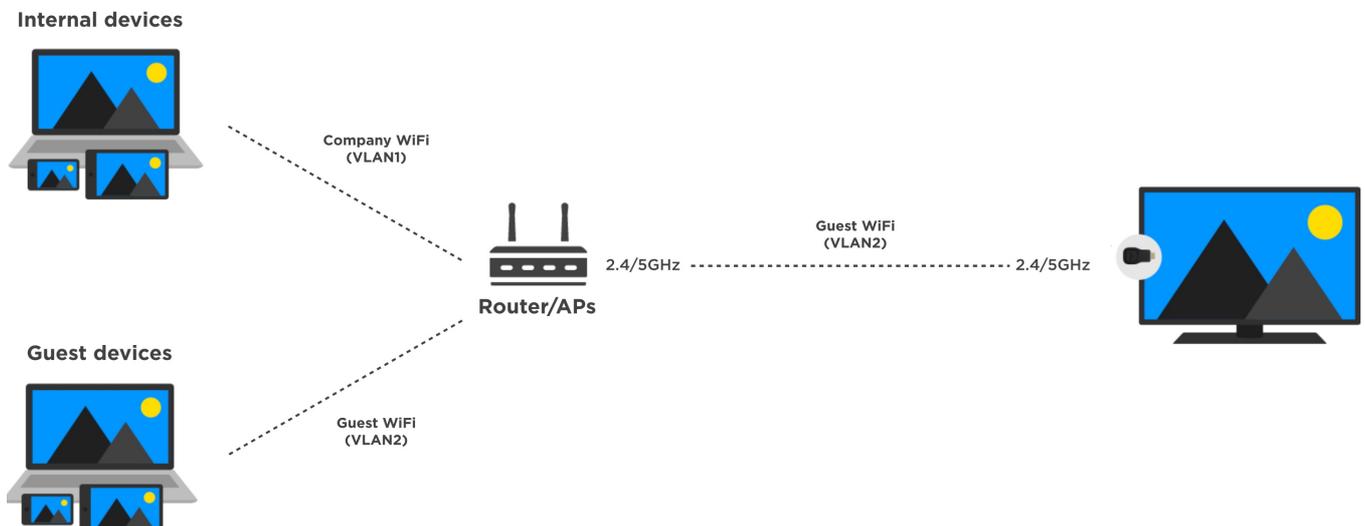
Set up process

- Create a separate VLAN and assign to the network cable connected to AIRTAME.
- Create network rules that allows user on the internal and guest network to access AIRTAME by opening up the ports described below in this article.
- Disable AP or hide password on AIRTAMEs own AP to avoid unintended user connection

Pros

- With this setup security is taken care of by the network controller instead of AIRTAME.
- Always possible to access and remote configure AIRTAME because of the wired connection

#3 AIRTAME connected to Guest network with streaming access from internal network



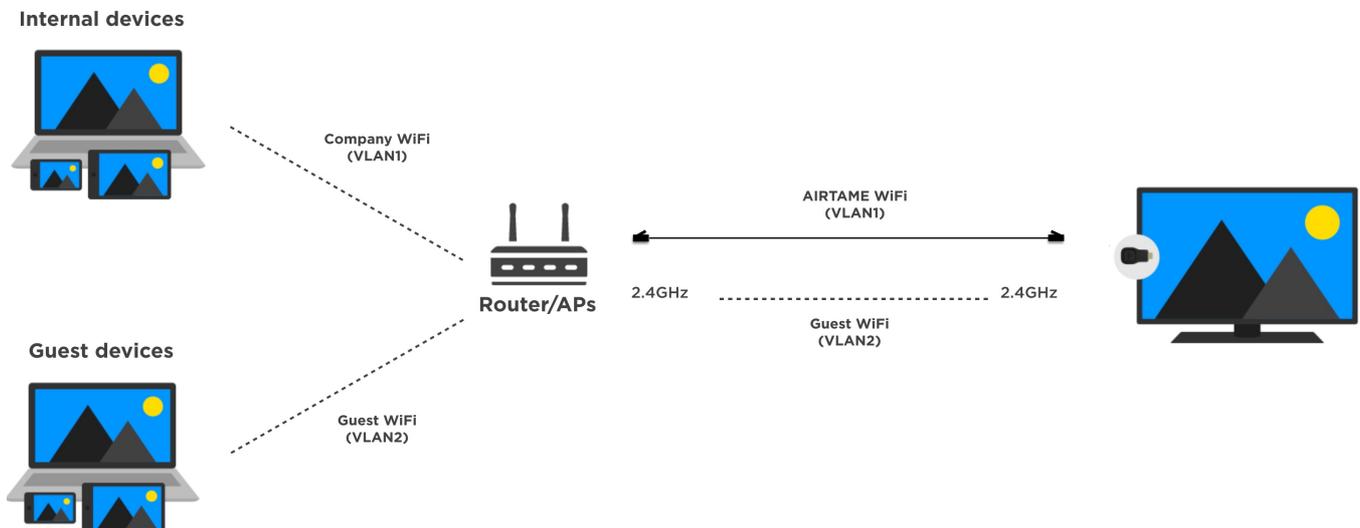
Set up process

- Connect AIRTAME to the Guest network
- Create network rules that allows user on the internal network to access AIRTAME by opening up only the ports described below in this article.
- Disable AP or hide password on AIRTAMEs own AP to avoid unintended user connection

Pros

- With this setup security is taken care of by the network controller and not AIRTAME
- No need for a separate SSID/VLAN for the AIRTAME devices

#4 Wired connection to internal network + WiFi connection to Guest network



Set up process

- Connect AIRTAME with an [Ethernet adapter](#) to the internal network
- Connect the 2.4 or 5GHz WiFi interface to the Guest network
- AIRTAMEs own AP can be used for Guests as well since it forwards the internet access from the client connection

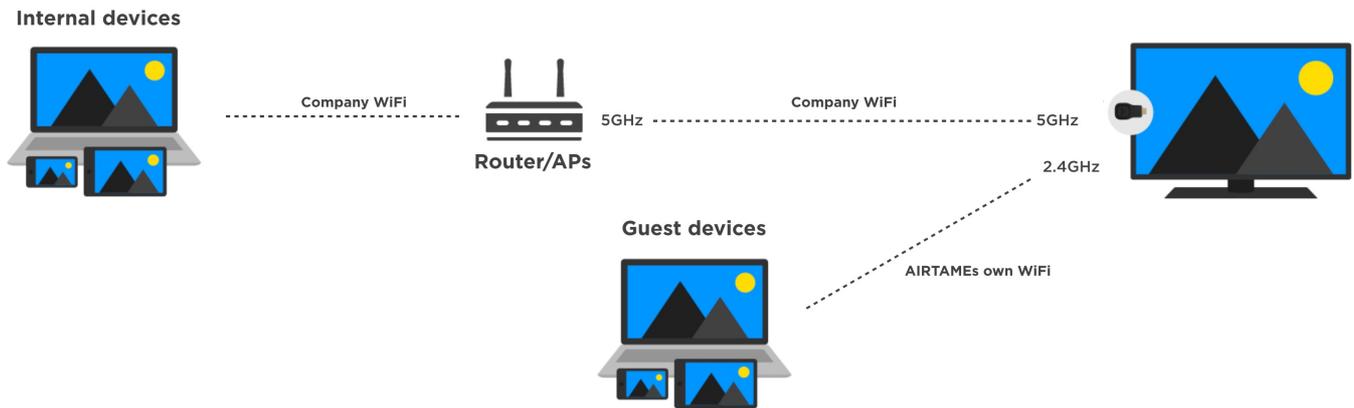
Pros

- With this setup it's not needed to do any configuration on the existing network setup.

Cons

- With this setup AIRTAME is connected to both the internal and external network potentially making it a security breach if it's being hacked.

#5 WiFi connection to internal WiFi and guests connecting to directly to AIRTAME



Set up process

- Connect AIRTAME to the internal network
- AIRTAMEs own AP can be used for Guests and have online access forwarded from the internal network.

Pros

- With this setup it's not needed to do any configuration of the existing network infrastructure.

Cons

- With this setup AIRTAME is forwarding the network connection from the internal network enabling guests to access services available on the internal network.

HTTP based authentication

AIRTAME doesn't support http based authentication. Therefore we recommend two alternative solutions to that scenario:

1. Create a separate WiFi network/VLAN used only by AIRTAME with a normal WiFi authentication and then allow access from the other VLANs.
2. Add AIRTAME to a group of authenticated devices using MAC addresses.

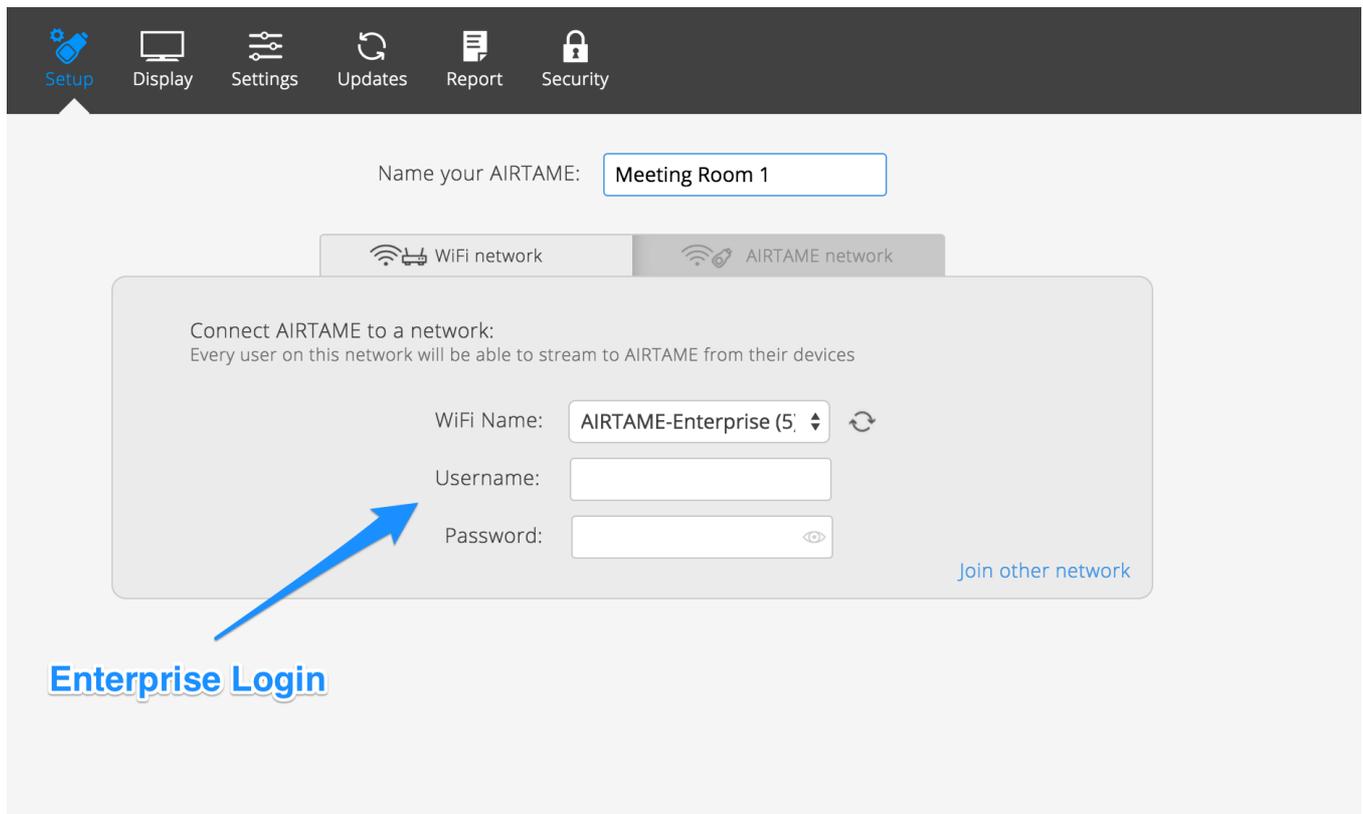
Application deployment

Installation

The AIRTAME PC software can be downloaded from airtame.com/start. At the moment we provide a single installer but will add a msi version for mass deployment. The size of the installer is around 50Mb. If you are interested in a .msi version reach out to support@airtame.com and we will send you a version.

Device Configurations

AIRTAME is running a web server for the device configuration. It can either be accessed from the Tray application under each automatically discovered device or by typing in it's IP address in a



The screenshot shows the AIRTAME configuration interface. At the top, there is a navigation bar with icons for Setup, Display, Settings, Updates, Report, and Security. Below this, a text input field labeled "Name your AIRTAME:" contains the text "Meeting Room 1". There are two tabs: "WiFi network" (selected) and "AIRTAME network". The main content area is titled "Connect AIRTAME to a network:" and includes the instruction "Every user on this network will be able to stream to AIRTAME from their devices". Below this, there are three input fields: "WiFi Name:" with a dropdown menu showing "AIRTAME-Enterprise (5)" and a refresh icon; "Username:" with an empty text box; and "Password:" with an empty text box and a visibility toggle icon. A blue arrow points to the "WiFi Name:" dropdown. At the bottom right of the form is a link "Join other network". Below the form, the text "Enterprise Login" is displayed in blue.

Firewall rules

Port	Type	Direction	Function
8001+8002	UDP	PC to Dongle	Video + audio streaming
1900 +1901	UDP	Both	Network discovery
80 + 443	TCP	Both	Web based management
1986	TCP	Both	Mobile streaming

Guest Application

We are currently working on a Stand alone version of the PC software that doesn't need to be installed or ask for administrator rights. The user will potentially be prompted a Firewall notification since the automatic discovery uses network access. It is still possible to stream without this rule by connecting using the AIRTAME IP address.

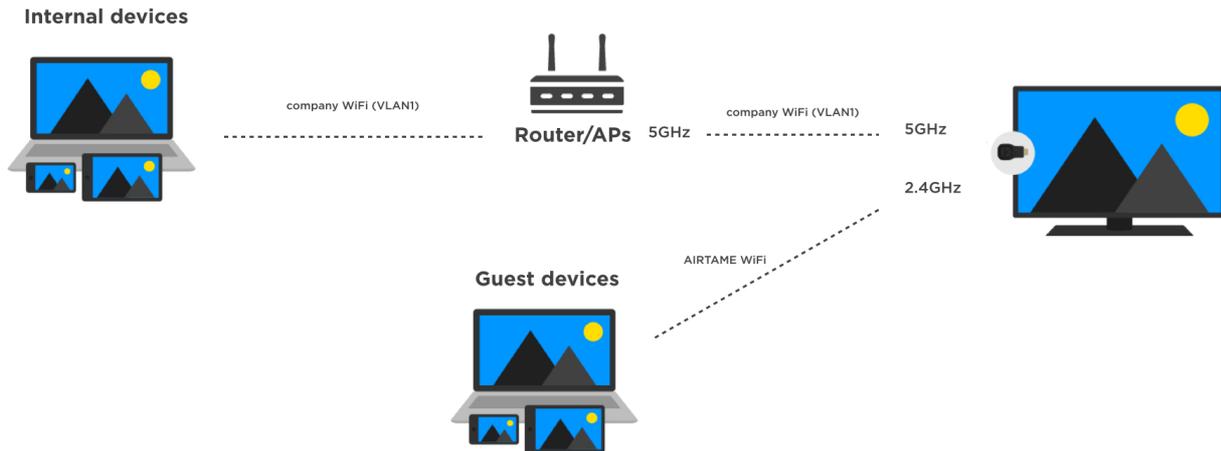
Streaming to AIRTAME

The information needed to start streaming to AIRTAME can be found on the splash screen. In general there are two ways to start a stream:

1. Connecting directly to the WiFi AP AIRTAME automatically creates on the network card that is not being used as a client connection.
2. Connecting over the existing network infrastructure that AIRTAME has a wireless or wired connection to.

Illustration showing how it's possible to connect to AIRTAME both directly and using an existing network infrastructure.

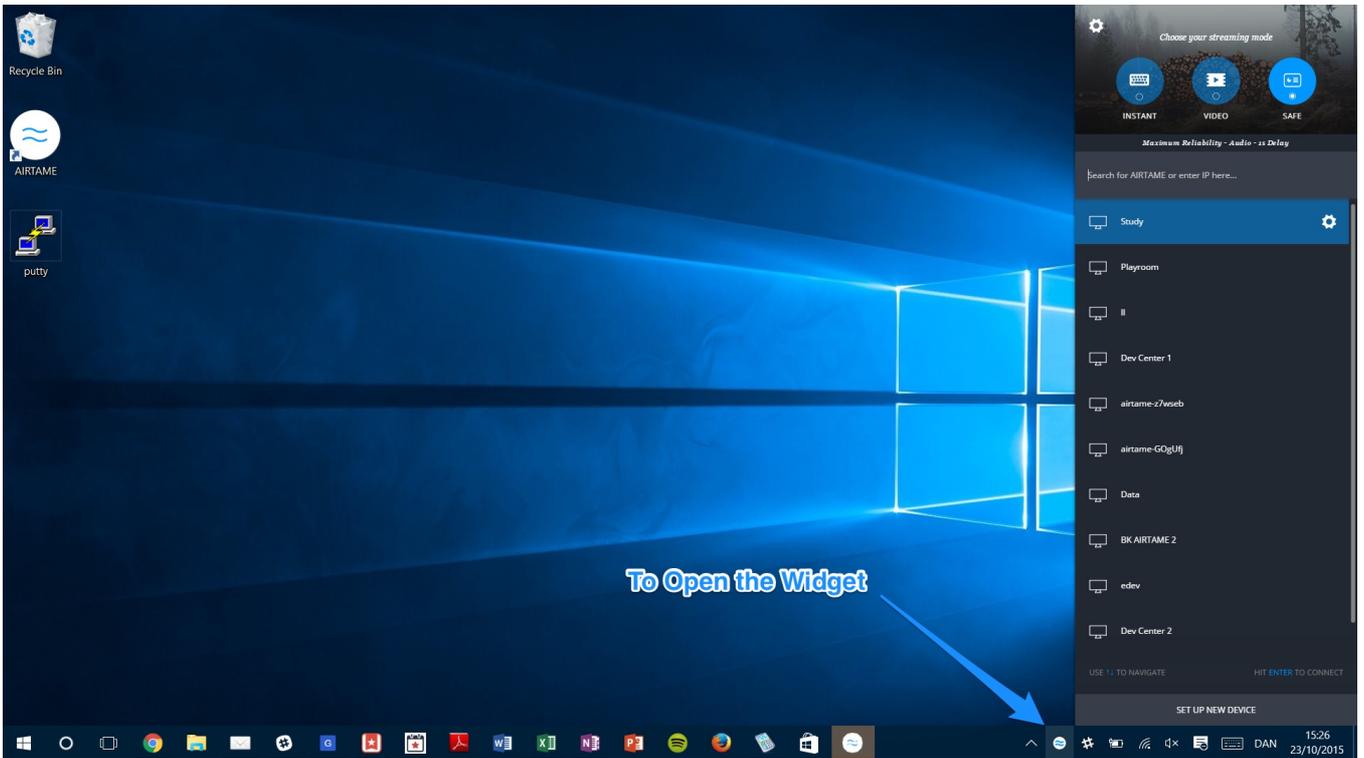
Internal (Wireless 5GHz) - Guest (AIRTAME AP 2.4GHz)



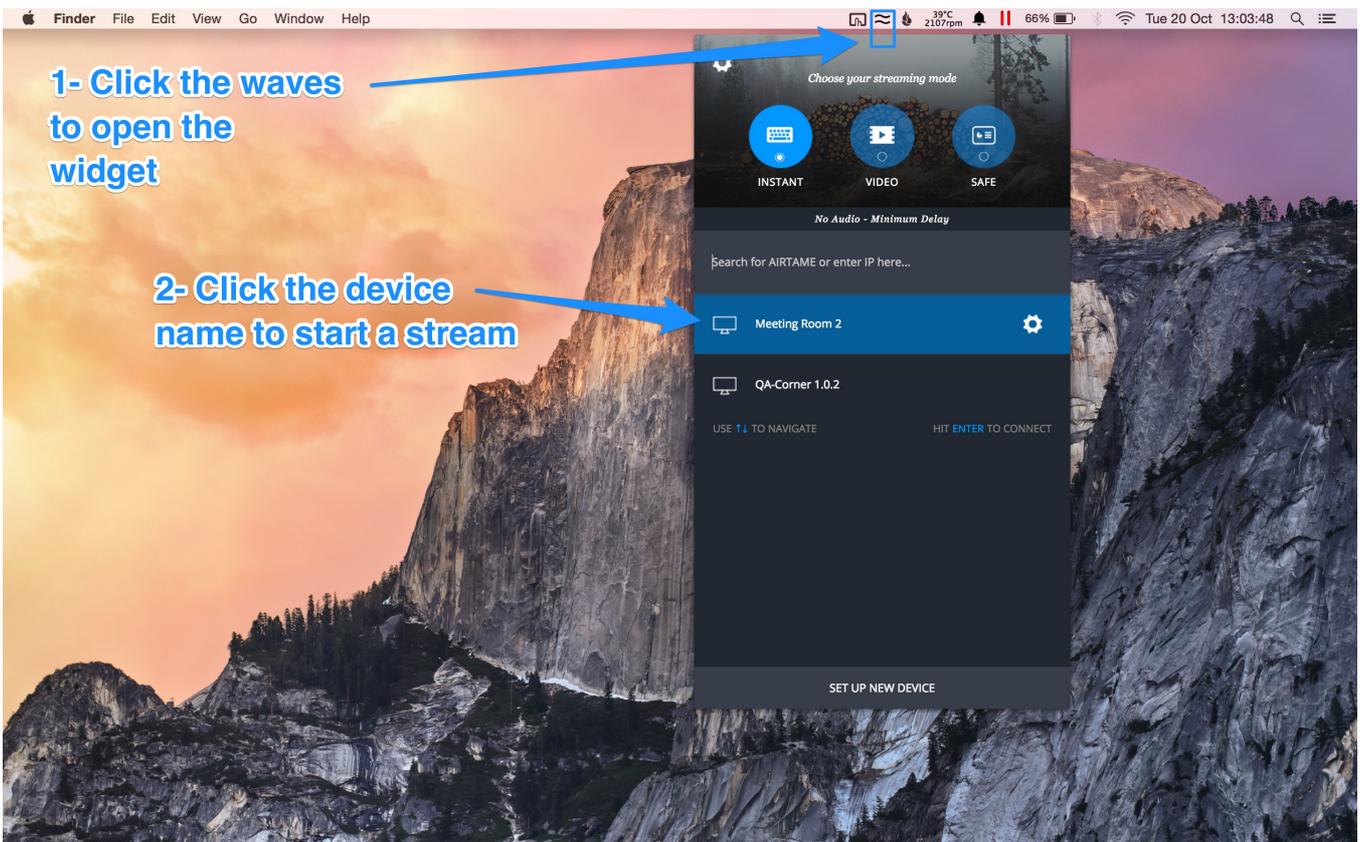
Explanation of the AIRTAME Splash Screen



From the Windows Application



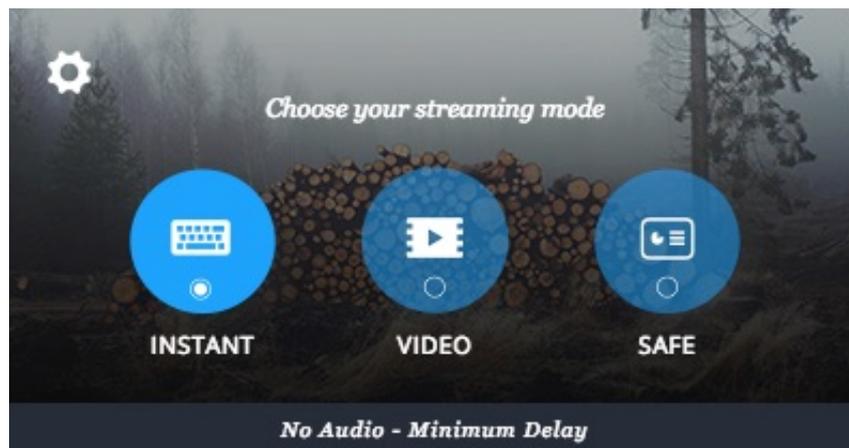
From the Mac Application



Streaming modes

Airtame provides three different streaming modes configured to provide the best streaming experience in different use cases.

1. Work = Low latency
2. Video = Preconfigured 2 seconds buffer for fluent video and AV sync
3. Present = Low FPS for reduced CPU usage



Mobile applications

The AIRTAME application is made for presentations and makes it simple and easy to share, for example, PDFs or Power Point presentations. The apps are available from:

- [App Store](#)
- [Google Play](#)