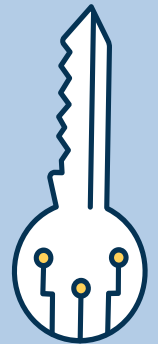
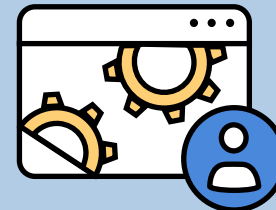


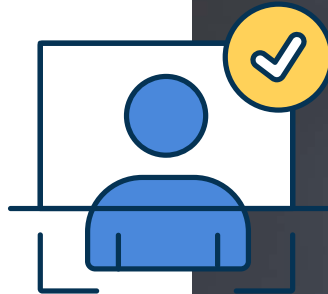
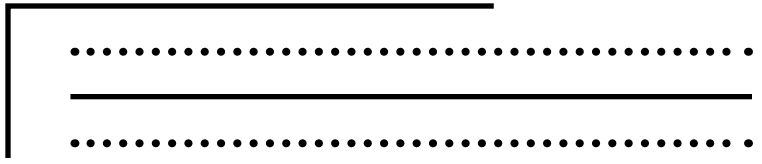


Apple TV

for
beginners

Management





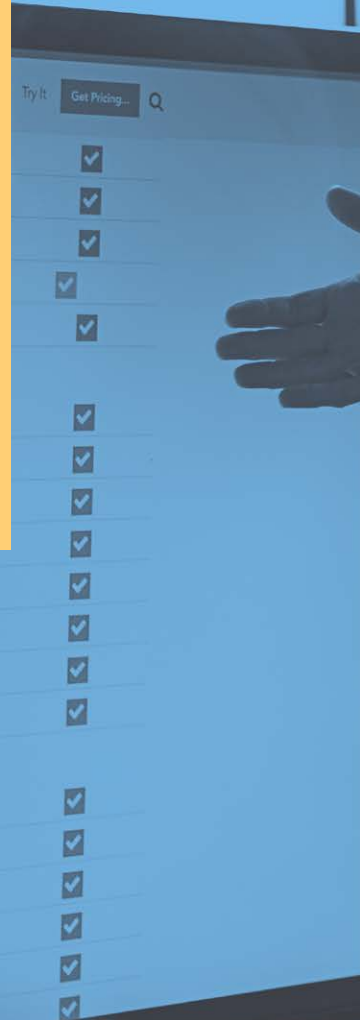
Apple TV has distinguished itself as a living room fixture, with families relying on it to stream digital content across multiple apps or from their personal devices using AirPlay. But its potential as a dedicated and scalable wireless media player featuring true zero-touch enrollment also makes it a powerful tool for enterprise, small and medium-business (SMB) and educational settings. Effectively utilizing existing hardware and network infrastructure, Apple TV is emerging as a preferred vehicle for messaging and reporting for many organizations.

95% of organizations responded to a **survey** in our Jamf Nation community that they use Apple TV in their workplace environment. At one-third of the cost and one-sixth of the time to deploy of a classic media player, Apple TV is changing how businesses, schools and more communicate both internally and externally.

In this e-book, you'll find explanations of what makes Apple TV unique and how you can make it work for you. This guide introduces beginners to tvOS, the operating system developed specifically for the Apple TV, and covers the basics of enrollment, deployment and management. It also identifies some security considerations and evolving real-world uses of the Apple TV, including digital signage, dashboards and instructional content.

You'll encounter the following topics:

- **Apple TV gets its own OS**
- **Introduction to Apple TV management**
- **AMB, ASM and tvOS enrollment options**
- **Deploying Apple TV**
- **Device management post-enrollment**
- **Security and access considerations**
- **Real-world uses for the Apple TV**



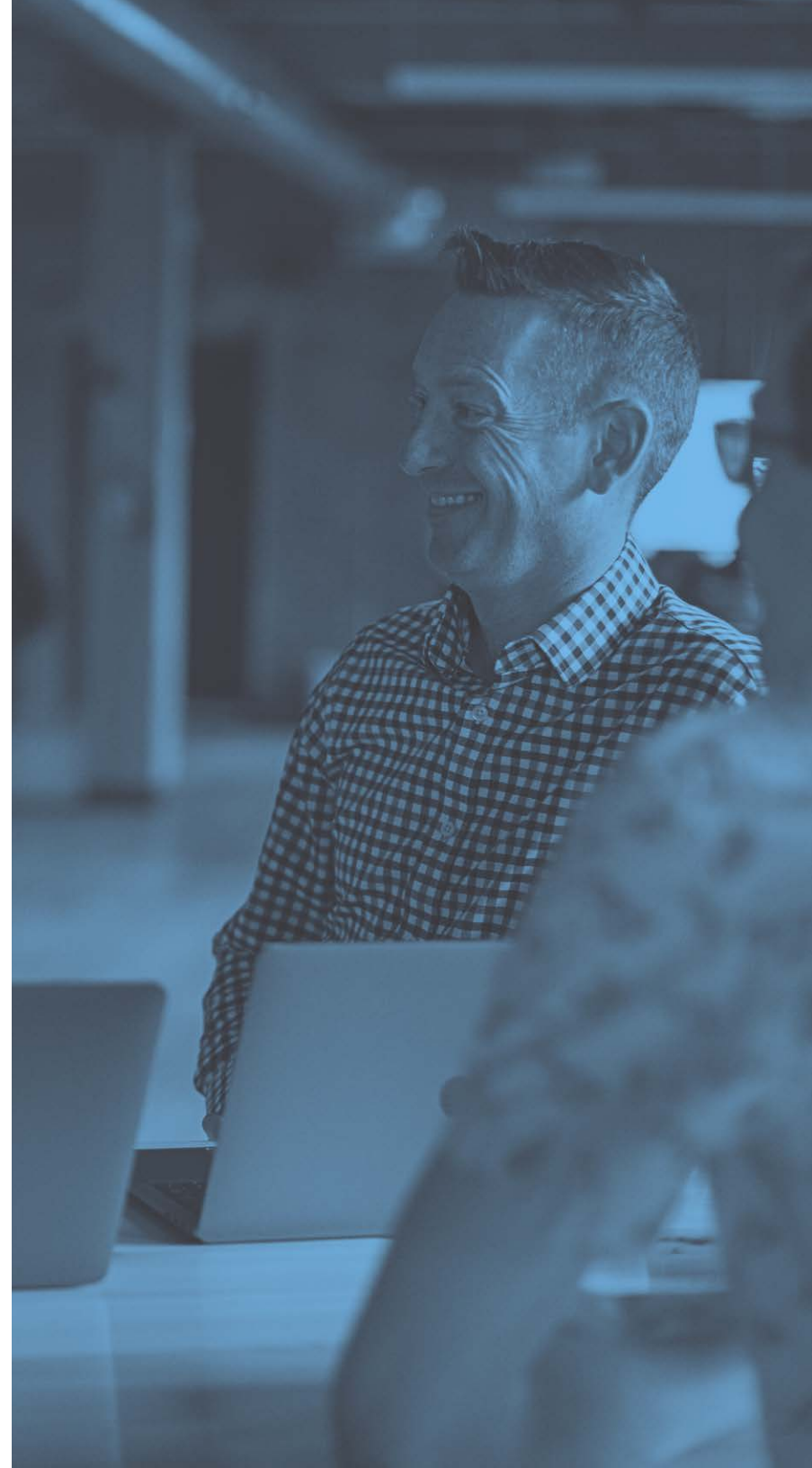
APPLE TV GETS ITS OWN OS

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When it debuted, the Apple TV ran off of the same iOS operating system in use for iPhone and, at that time, iPad. But when Apple released the fourth generation of the device in 2015, the company unveiled tvOS as a separate operating system. While its user interface remains very similar in appearance to that of iOS, tvOS has differentiated itself further through subsequent versions.

tvOS is designed to enable the unique functionality of the Apple TV, supporting a variety of large-screen formats, several input types (including the standard remote) and dynamic displays of cinematic screensavers or user-designated signage. Its evolution as a distinct operating system has helped Apple TV to break away from the personal mobile device paradigm and to work effectively as a network-connected media player.

Since tvOS devices in corporate or school environments are usually intended for public display of content, it is critical that IT admins be able to control user access and permissions. tvOS is built to accommodate these needs while enabling a true zero-touch deployment: just plug in the device, connect to ethernet and the device is ready to go. The Apple TV is ideally suited to function as an enterprise-level, institutionally owned device. In the following sections, you'll learn about how and why you can use Apple programs and Jamf solutions to easily manage a fleet of tvOS devices for your organization.





INTRODUCTION TO APPLE TV MANAGEMENT

For **managing your Apple TV fleet**, you can use mobile device management (MDM), which is Apple's framework for managing tvOS, along with iOS and iPadOS. When you set up tvOS devices for your organization, you won't have the option of laying them all out on a table together. Each device will live at a separate location along with its display, and you'll need to be able to deploy and manage them from one central hub.

How MDM works

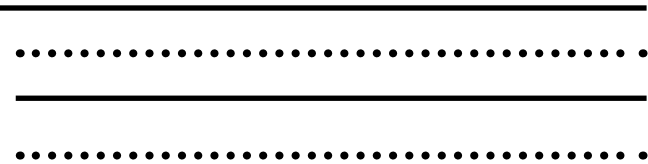
To effectively manage Apple devices and take advantage of their full range of capabilities, organizations require a reliable MDM solution. Three core components of the MDM framework to be familiar with are configuration profiles, commands and apps.

Configuration profiles

Configuration profiles define various settings for your Apple devices and tell that device how to behave. They can be used to automate configuration of passcode settings, Wi-Fi passwords and AirPlay permissions. They can also be used to restrict items, such as device features like the App Store, the ability to rename a device or the apps that are running in Single App Mode. These profiles can all be specified and deployed leveraging an MDM solution such as Jamf Pro.



INTRODUCTION TO APPLE TV MANAGEMENT

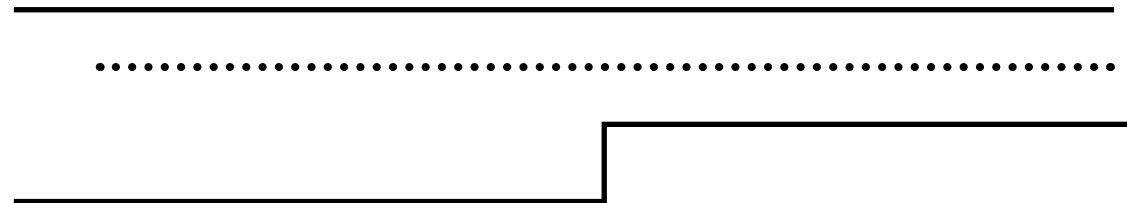


MDM commands

MDM commands are singular commands that you can send to your managed devices to take specific actions. Did you assign the use of an Apple TV to a certain customer or patient who has now left? Simply issue a remote wipe command to get rid of the user's account information and settings, restoring the device to its default state. Looking to power down a device or perform some preliminary troubleshooting? Remote shutdown and restart commands eliminate the need for physical access. Time to upgrade to the latest version of tvOS? Send the command to download and install updates. You can issue all of the necessary commands from your office; once you've plugged in an Apple TV, you should never need to touch it again.

Apps

There are a wide variety of apps designed to run in tvOS that transform the Apple TV into a real workhorse within your organizational infrastructure. From digital signage and dashboards to instructional videos and entertainment, these apps are redefining the role of the media player in public spaces. Read on for examples of some key apps and learn how they are already powering innovation in businesses, schools and more.



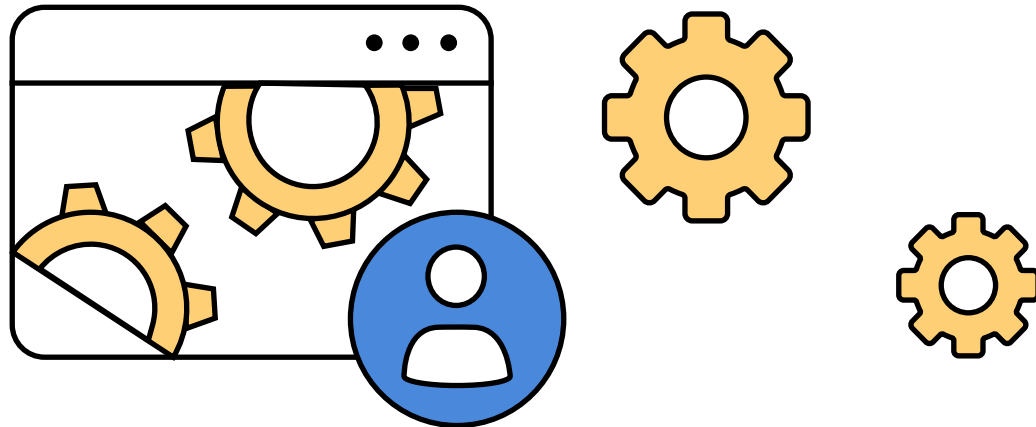
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APPLE BUSINESS MANAGER, APPLE SCHOOL MANAGER AND TVOS ENROLLMENT OPTIONS

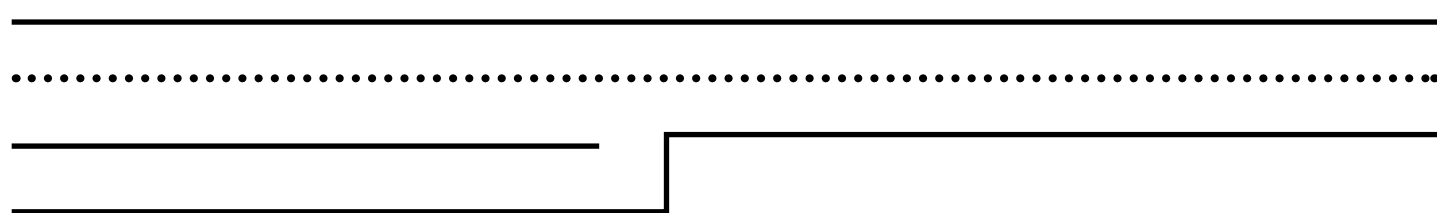
Apple Business Manager and Apple School Manager offer key features needed to enable a zero-touch deployment strategy. These programs tell your device the first time it's taken out of the box and powered on to automatically enroll in your MDM server. They also allow you to procure app licenses from Apple and remotely deploy and manage them with your MDM solution like Jamf.


Best of all, these programs specifically designed for businesses and schools are available at no cost; the only requirement is that you procure your Apple technology from a supported vendor.

**Apple Business Manager and Apple School Manager take the place of the Device Enrollment Program (DEP) and the Volume Purchase Program (VPP).*



ENROLLMENT OPTIONS tvOS



 For tvOS	Description	User Experience	Supervision	Best For
Automatic zero-touch enrollment with Apple Business Manager or Apple School Manager	Automatic enrollment over the air	User receives shrink-wrapped box, and the device is automatically configured when turned on and plugged into ethernet	Yes (wirelessly)	Providing users an out-of-box experience
Apple Configurator	Enrollment through a Mac app that connects to devices via USB	IT manages the setup process and hands devices to users	Yes	When Apple Business Manager or Apple School Manager are not an option <i>*Note, some newer Apple TV hardware does not have a USB port and will require an ethernet cable</i>

Performing zero-touch deployments via Apple School Manager or Apple Business Manager is the recommended way to enroll Apple TV devices to save your organization time, and preserve the user experience.



DEPLOYING APPLE TV

A zero-touch deployment strategy is the easiest and most efficient way for your IT admins to get your Apple TV fleet equipped with the functionality your organization needs. It's as simple as following these steps:

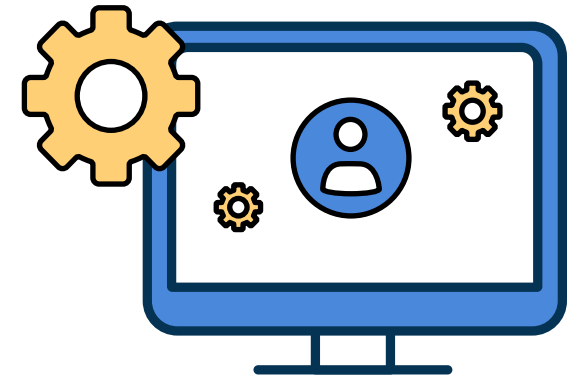
- 1.** Sign up via Apple School Manager or Apple Business Manager and add your MDM server to your portal.
- 2.** From the deployment program portal, find and procure app licenses from the “Apps and Books” menu.
- 3.** Add app licenses to your MDM server, including free apps.
- 4.** Deploy apps directly to devices.

Pairing MDM with Apple’s deployment programs

Your MDM server communicates to devices via the Apple Push Notification service (APNs) and tells them how to behave. This maintains a constant connection to your devices, so you don’t have to. Commands, apps and profiles are all sent to the device over the air.

MDM software leverages the MDM framework built into Apple’s operating systems. With your MDM solution, you can build configuration profiles based on the various settings you’d like to deliver and push them to your devices over the air via APNs. Configuration profiles can be built inside of Jamf.

DEVICE MANAGEMENT POST-ENROLLMENT



Once your fleet of tvOS devices has been enrolled and provisioned, there are a number of functions that you can use to manage the devices.

tvOS updates

Using an MDM solution like Jamf Pro, it's easy to download and install [new tvOS updates](#) on all of your supervised devices at a time. Simply perform a search to identify each Apple TV needing an update and issue a mass action command. If you want to install a specific tvOS version that isn't necessarily the latest but is still signed by Apple, you can do that without difficulty.

Configuration profiles

Using an MDM solution, you can define settings with tvOS configuration profiles and distribute them to your Apple TV fleet. As a result, Wi-Fi, restrictions and AirPlay settings are more easily applied over the air. tvOS devices can also be placed in Single App Mode to customize the Apple TV experience by class or Conference Display Mode for an intuitive presentation workflow.

Smart targeting

With the ability to automatically collect inventory details, including Apple TV device names from all managed devices, you can quickly and accurately identify which devices require action. Based on this inventory information, IT admins can build targeted groups to trigger automatic device management tasks. For example, you can now find all tvOS devices without AirPlay settings configured and then deploy that configuration.

AirPlay management

You can mass associate and configure iOS devices with Apple TV, making it easy to display content from personal devices on a TV screen. This functionality eliminates the hassle of syncing devices every time and helps to free up IT staff from troubleshooting display issues.

Wipe and restart

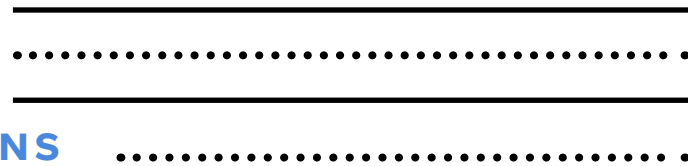
With the ability to remotely wipe and re-boot an Apple TV anywhere and at any time, admins can easily troubleshoot devices without having to go to each device's physical location. Wiping and re-enrolling tvOS devices after users finish with them ensures the security and privacy of usernames, passwords and other personal information by removing them from the Apple TV.

App and display support

You can leverage MDM to deploy both custom in-house and App Store apps directly to Apple TV devices. Additionally, IT can set a Home Screen layout, show or hide apps and restrict media content based on age guidance.



SECURITY AND ACCESS CONSIDERATIONS



As noted earlier, the ability to use a simple command to wipe an Apple TV after a user is done with it prevents subsequent users from accessing logged in apps, viewing history and other private information. By ensuring that each device will be restored to its default settings, you can give users the ability to enjoy whatever functionality you make available without worries. Healthcare providers can even use **Jamf Healthcare Listener** to enable remote wipe commands for electronic medical records.

In an institutional setting, you have all the standard security concerns about bad actors accessing your devices to steal information or install malware. But with tvOS devices connected to large public displays, you also need to think about who can put content on your screens. Allowing vandalism to occur – or even accidental misuse – can have a profound negative impact on your workplace morale or brand image. That's why you need an MDM solution that makes it easy to fine-tune user profiles and permissions. You can also adjust your security settings relating to AirPlay, including setting passwords to allow specific Apple TV devices to automatically share associated iPads.

Jamf solutions allow you and your IT staff to handle permissions for users, associated devices and apps in such a way that you safeguard the privacy of your users and the reputation of your organization. While a distributed network of potential unattended media players can raise significant security issues, you have all the tools you need to make sure that each user is provided with the appropriate level of access – or lack thereof.



REAL-WORLD USES FOR THE APPLE TV

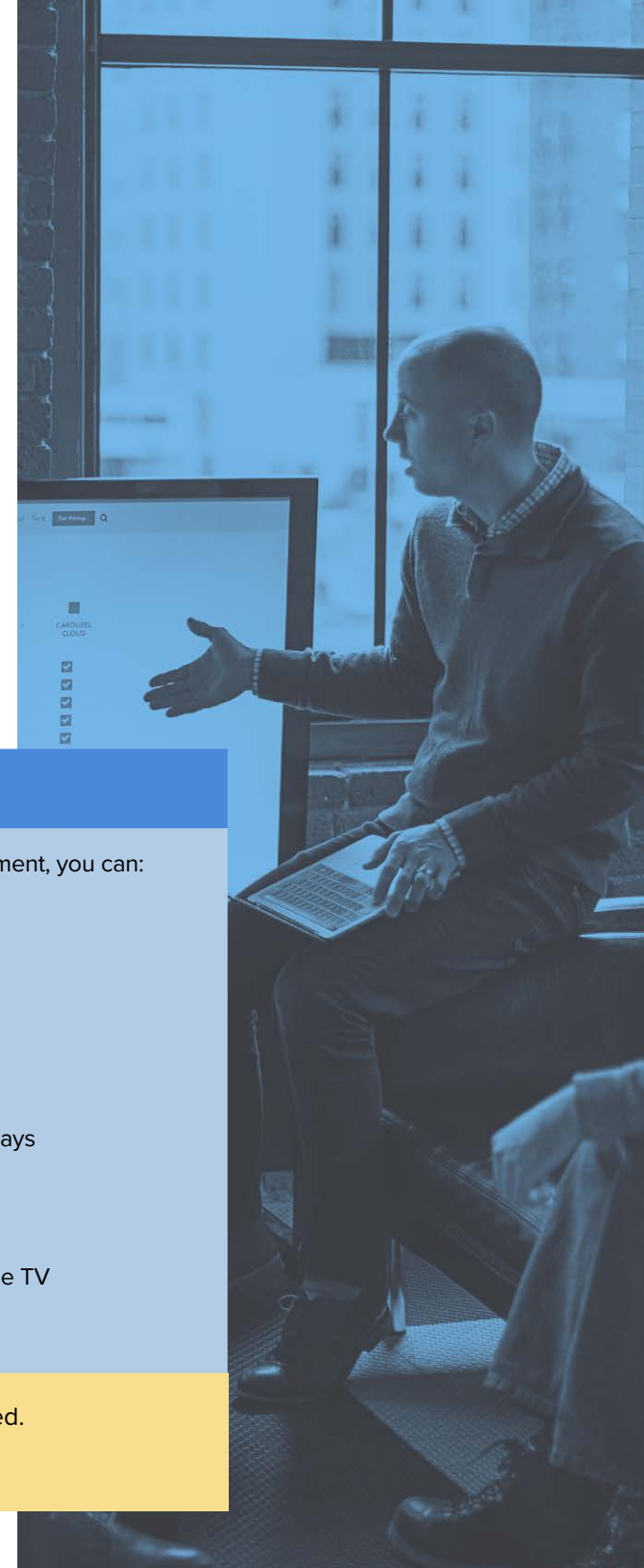
So where would you put an Apple TV, and what would you use it for? The good news is that all you need is a TV or other digital display, a power source and Wi-Fi connectivity; it's the ideal media player for integrating with your existing hardware and infrastructure. Here is a sampling of some of the places where Apple TV is revolutionizing work, school, hospitality and healthcare in the real world.

From the breakroom to the factory floor

Digital signage is changing the way that organizations deliver **key messaging** to employees, customers and more. From facility maps to safety rules to inspirational thoughts, you can use your array of TV screens as a canvas to say exactly what you want at any given time. **Carousel Digital Signage**, **Ditto** and **others** provide signage solutions that pair with Jamf offerings to enhance your creative control.

Carousel Digital Signage	Carousel + Jamf
<p>Carousel Digital Signage is a leading developer driving what Apple TV can deliver for organizations using digital signage. From helping keep employees in the loop to creating a collaborative space or delivering a fresh, sleek look to rooms, companies are using Carousel to grab people's attention and immerse them in engaging, digital communication.</p> <p>As the result of long and fruitful relationships with both Jamf and Apple, Carousel allows you to fully unlock the potential of the Apple TV as a means of communicating with your institution and with the world.</p>	<p>Providing users an out-of-box experience with zero-touch deployment, you can:</p> <ul style="list-style-type: none">Zero-touch enrollment of each device into Jamf: Shrink-wrap to signage in secondsAutomated deployment of Carousel's app: No Apple ID requiredSecurity controls over Apple TV: Disable remotes and lock device in Single App ModeAdvanced AirPlay permissions: Only allow certain individuals the ability to AirPlay to specific displaysReal-time data always visible: Show business data analytics across all your displaysExtended safety and alerting: Integrate your CAP-based alerting system with Carousel and Apple TVtvOS and Carousel app management: Easily update your digital signage deployment

With Jamf and Carousel Digital Signage, all a user has to do is open the Apple TV box, plug it in and get started. That's it. **Find out more** about how our partnership can bring your display goals to fruition.





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REAL-WORLD USES FOR THE APPLE TV

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Boardrooms

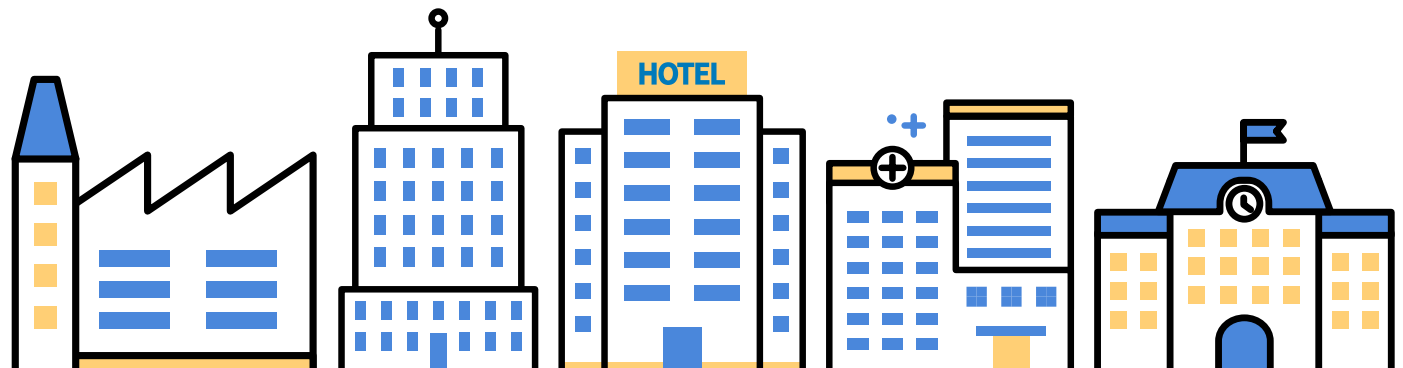
Apps like **Numerics** and **Splunk TV** drive beautiful, informative dashboards that can keep your team apprised of KPIs and other data-driven insights. More and more business leaders are discovering the benefits of presenting this information in a way that motivates harder work and drives innovative conversations.

Hotel rooms

Monscierge for Apple TV and **Glyde TV** are two solutions that provide in-room entertainment for hotel guests, providing age-appropriate content and allowing users to access their personal accounts for streaming services. Guests can also locate information about hotel amenities and room service options. And Jamf makes it easy to remotely wipe the Apple TV whenever a guest leaves, making sure the room is ready for the next occupant.

Hospital rooms

As with hotels, **hospitals** can provide in-room entertainment for patients with Apple TV devices, enhancing the healing process with distraction therapy. Healthcare providers can also deliver detailed treatment and therapy instructions by casting video content from their personal devices with AirPlay. The **Jamf Healthcare Listener** integration allows admins to automatically trigger remote MDM commands like remote wipe to tvOS devices in patient rooms.



REAL-WORLD USES FOR THE APPLE TV

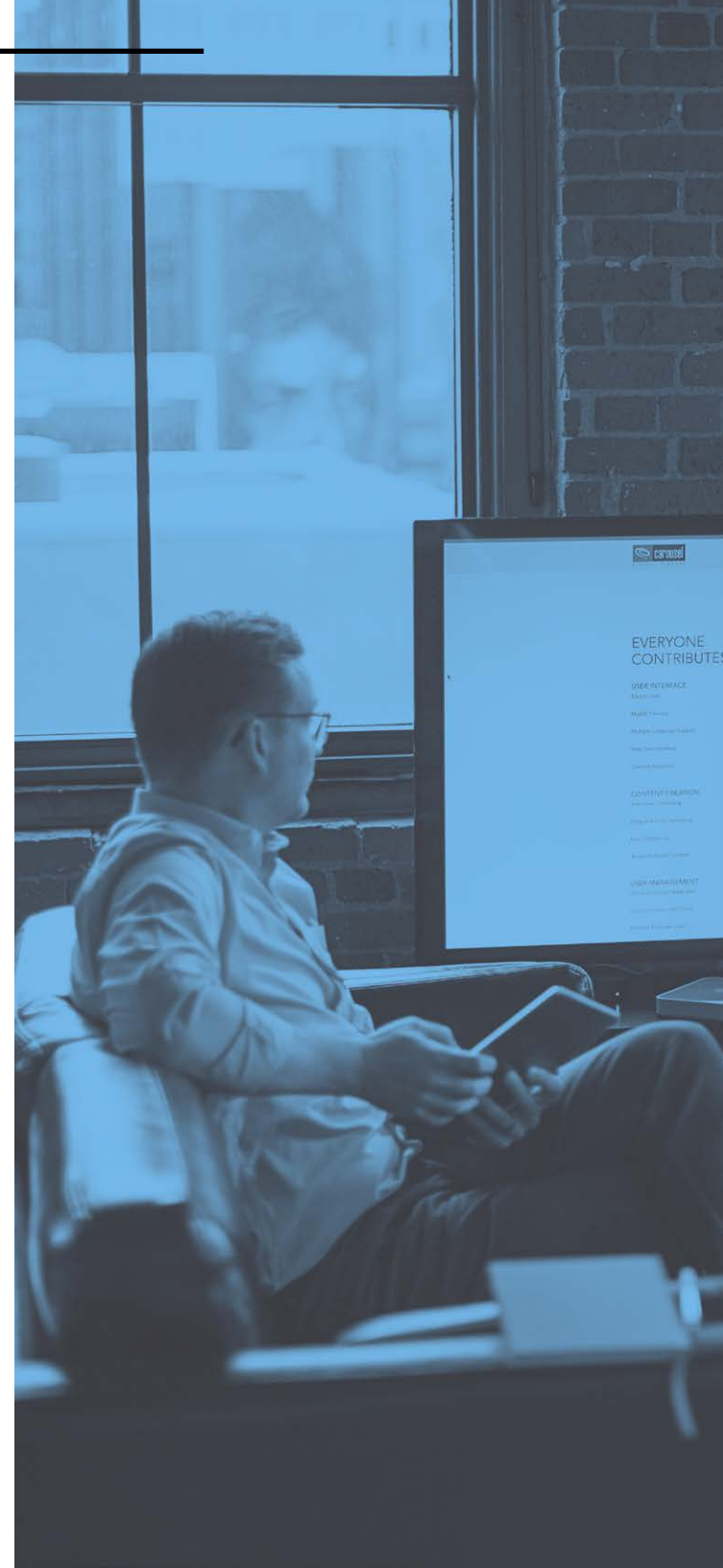
Classrooms

In both **K-12** and **higher education** classrooms, educators can use Apple TV to replace expensive and high-maintenance projectors, easily displaying digital slides and documents without being tethered to a board at the front of the room. Teachers and students alike can AirPlay presentations from Macs, iPads, iPhones or even non-Apple devices. It's easy to allow students to collaborate in real time and to expand the conversation with videoconferencing capabilities. The Apple TV is now your best option for an all-in-one classroom tool!

There's really no limit to what Apple TV can do for your organization, whether it's a single device or an extensive fleet. Just plug it in to a TV screen and you're ready to begin the process of transformation.

AirPlay interrupt with Jamf + Carousel

One of the great features of using Apple TV is that each device can be available for individual use up until the point when you need to display important messaging across your fleet. Jamf and Carousel Digital Signage make it easy to interrupt AirPlay sessions and instantly override them with your priority content. Whether it's a student giving a presentation, a patient watching instructional videos or even one of your employees streaming a personal playlist for background music, you don't need to let it get in the way of emergency updates like weather alerts or other safety notifications. [Learn more](#)



Jamf solutions tailored to your needs

Regardless of what type of organization you represent, Jamf has a solution for you. Jamf is the standard in Apple Enterprise Management, boasting a long history with Apple products and same-day support for new tvOS updates. The Jamf platform offers a wide array of solutions, including powerful security applications, and is extended by integrations with numerous third-party apps. We're prepared to help you revolutionize your institution with the power of Apple TV.

[Request Trial](#)

Enterprise

Jamf Pro is the trusted MDM solution for businesses, with extensive training available for IT admins and dedicated customer support. Perform zero-touch deployment and all of your management tasks without wasting time. Jamf Pro allows you to strategically organize your devices into groups so everyone has the right tools – no need for one-size-fits-all measures.

[Learn more](#)

SMB

Small and medium-business customers often need to be able to manage their Apple devices without hiring and training a sizable IT team. That's why Jamf Now offers the MDM capabilities that you need without the complicated features that you don't. This solution is easy to understand and use but powerful enough to quickly get your business up to speed.

[Learn more](#)

Education

For both K-12 and higher education, Jamf School provides functionality tailored to the classroom. Enforce age restrictions, keep track of inventory, handle shared devices and customize the content to the individual teacher's or student's needs. Jamf School pairs with three special apps designed for teachers, students and parents, allowing each user to perform their role with the right tools.

[Learn more](#)