

Oak Screens

IT Setup and Administration Guide

Overview

Screens displays content from your Oak Areas on TVs, monitors and other display devices across your organisation. Once a device is paired and assigned to an Area, it plays content from that Area in a rotating carousel, updating in real time whenever the content changes.

This guide covers the technical setup: hardware and browser requirements, network configuration, permissions, pairing devices, scheduling, and ongoing device management.

i Screens is currently in beta. Some features described in this guide are not available in the beta release and will arrive at MVP. These are flagged as you go, so if a setting is not where you expect it yet, check for a note in that section.

This guide takes you as far as a paired, working device pointing at the right Area.

Everything after that, which content types appear, how long each item stays on screen, and how campaigns are scheduled, is configured on the Screens Homepage by the content or comms team and is covered in the [Screens Comms Team Getting-Started Guide](#).

Before You Begin

Work through these before pairing your first device. Most setup problems trace back to one of them.

#	Prerequisite
1	Display device meets the minimum browser version (Chrome 61 / Chromium 2017 or later)
2	Network access confirmed and the required domains allowed through any firewall or proxy
3	Screens security roles assigned to the relevant users
4	Target Area exists in Oak and has published content ready to display
5	Physical install complete: display mounted, powered and connected

6	Standby and sleep timers adjusted on both the display and the streaming device
7	Device naming convention agreed with the content team

Part 1: Hardware and Browser Requirements

Google TV sticks (recommended) Google TV sticks are the recommended way to run Screens. They offer a consistent, modern browser environment and are straightforward to set up. To ensure compatibility, your stick must be running a version of Android WebView that supports container queries and JavaScript modules (Chrome 61 / Chromium 2017 or later).

The Screens app is available to download from the Google Play Store: [Oak Screens - Apps on Google Play](#)

Smart TVs with a built-in browser

Screens can run directly in a smart TV's browser, provided the browser is sufficiently modern. The minimum supported version is Chrome 61 (Chromium, 2017). TVs running older browsers, for example Samsung Tizen 4, which maps to approximately Chrome 56, are not supported.

i An external device is the safer choice. Most digital signage deployments use a streaming stick rather than a TV's built-in browser, because the browser can be updated independently of the display hardware. If you are using a smart TV's native browser, verify the browser version before proceeding.

Standby and sleep settings

Both streaming sticks and TVs have their own standby timers. Screens cannot override OS-level power settings, so these need configuring manually to stop the display sleeping during operating hours.

On Google TV sticks the default standby timer is three hours. Extend this to match your intended display hours, for example 12 to 16 hours for a typical working day. The setting is found in the device's system settings under the display or power and sleep options.

The TV has a sleep timer of its own, separate from the stick. Both need adjusting, and a display that blanks after a few hours despite the stick being configured correctly is almost always the TV's own timer.

Behaviour after power loss or reboot

The Screens app relaunches automatically when the device powers back on, so a display recovers from a power cut or an overnight shutdown on its own. The device returns to Offline while it is unreachable, then back to Live once it reconnects, and playback resumes without anyone attending the site.

Displays running Screens in a web browser do not have the same guarantee, because the browser controls what happens on start-up rather than Screens. For those devices, the Homepage recovery link in Device Settings is the quickest way to restore playback without going through pairing again.

Media and cache limits

Videos are cached on the device, so file sizes matter. Several high-resolution videos totalling multiple gigabytes may exceed the available cache on a streaming stick, and if a display starts behaving unpredictably on a video-heavy Area, cache is a likely cause. Audio is muted by default for all video content in the current release, and subtitles are not available in beta.

Images are handled differently: each image in the carousel is preloaded and then left to the browser's standard HTTP cache, rather than cached by Screens.

Part 2: Network Requirements

Screens devices sit on your network and hold a live connection to Oak so that displays update without manual intervention. On a managed corporate network this is the most common point of failure, so confirm the following before installing at a site.

Requirement	Detail
Domains to allow	<i>In order for the Screens to continue to display content, it needs an active internet connection to your Oak site. Therefore, if you need to lock down network access for each device, then please ensure the HTTPS port is open to allow outbound traffic.</i>
Connection type	<i>Screens uses HTTPS traffic only</i>
Bandwidth per device	<i>Each device will check in and update its content regularly. This payload is dependent on how much content you have</i>

	<i>configured the device to show. From our test results, to display 10 items on a device, it will use approx 60kB of bandwidth, every 15 seconds.</i>
Wired or wireless	<i>Wired connections are more stable and are therefore recommended, however wireless connections are supported as long as the signal strength is strong</i>

 **Test connectivity at the site before mounting the display.** Pairing a device at a desk on the office network proves very little about whether it will work on the warehouse wireless network. When a display is going somewhere awkward to reach, confirm it pairs and plays in that physical location first.

Part 3: Planning a Rollout

Setting up one display is a different exercise from setting up forty across six sites. A little planning before you start pairing saves a lot of renaming later.

Agree a naming convention

Device names are how displays are searched and identified on the Device Management page, and they are the only thing distinguishing one screen from another once you have a few dozen. Agree a pattern before pairing anything, for example Site, then location, then number: "Manchester Reception 1", "Leeds Warehouse 2".

Map devices to Areas with the comms team

Which Area each display points at is a content decision, not a technical one, and it determines everything the screen shows. Work the mapping out with the comms team before pairing begins rather than pairing first and deciding later.

Part 4: Setting Up User Permissions

Screens are accessed from the Control Panel menu in the top navigation bar. Select **Manage**, then **Screens**, to reach the **Device Management page** where all paired devices are listed.

Before devices can be added or managed, users need the appropriate security roles. There are two Screens-specific roles:

- **Device Manager.** Can manage devices for Screens, including **adding, editing** and

removing them, as well as everything a device assigner can do.

- **Device Assigner.** Can link devices to Areas and control the Area schedule, including pausing and playing a display.

To assign these roles, go to Advanced Permissions within your default business Area, scroll to the Screens section, and use the edit button on each role to add the relevant users. If you are using simplified permissions, the Manager permission provides access to all Screens functionality.

i Device Assigner is usually the right role for the content team. It lets them pause, play and reassign displays without giving them the ability to remove hardware from the estate. Reserve Device Manager for whoever owns the physical devices.

Content responsibility

Linking a device to an Area makes that Area's content visible on a physical display in a shared space. This sits outside Oak's normal permission model, because anyone in view of the screen can see what plays, regardless of their Oak access.

Oak is not responsible for sensitive information being seen by unauthorised personnel.

When assigning an Area, choose one you know is safe to display in that location, and use the holding screen or pause the display if you need to stop content appearing.

A paired device keeps displaying its assigned Area wherever it physically is. If a display is moved or removed from the building, it carries on showing that content until it is unpaired or deleted, and it will keep updating as long as it has power and a connection. Treat the hardware as something that carries your intranet content, and mount devices where they cannot easily be taken. If a device is lost or stolen, Unpair it immediately from the Device Management page. This cuts the device off while keeping its record for your audit trail, and it does not need physical access to the display. Delete it once you know the hardware is not coming back.

Part 5: Adding a New Device

Step 1: Add the device

From the Device Management page, click **+ Add Device** in the top right corner. A dialog appears asking for:

- **Device name (required).** A clear, recognisable name following your agreed

convention.

- **Device description (optional).** Useful notes such as the physical location, for example "fourth floor, by the lifts".
- **Area.** Search for and select the Area whose content this device should display. If no Area is assigned, the device shows a holding screen until one is set. Only Areas the user has permission to view will be returned by the Area picker.

Click **Next** to continue.

Step 2: Pair the device

There are two ways to display content on a device: the Screens app from the Google Play Store, or a web browser.

Pairing in a browser. The Step 2 dialog provides a pairing URL. Open a browser on the display device and navigate to that URL. The screen shows a seven-digit verification code. Type those digits into the dialog and click **Verify** to complete pairing.

Pairing with the Screens TV app. Open the app and enter your site address, for example 'company.oak.com', on the welcome screen, then tap **Continue**. In the Step 2 dialog you are shown a device pairing link. Take the unique code from the end of the link, following "DS-", enter it into the app on the TV, and tap **Continue**. If the code is correct the device pairs and links to the Area.

If the device is not yet available, click **Skip for now** and complete pairing later from the device's settings.

Step 3: Choose how content appears

Once paired, choose one of three options:

- **Play content immediately.** Content from the linked Area begins displaying straight away.
- **Holding screen.** The display is paused and shows a holding screen with your site's default logo until you are ready to go live.
- **Set up a schedule.** Configure specific dates and times for when content should play.

Click **Save** to complete setup. The device card now appears on the Device Management page.

i Use the holding screen during installation. If you are pairing devices ahead of a launch, or the comms team is still building out an Area, the holding screen lets you prove the

hardware works without putting half-finished content in front of employees.

Part 6: Scheduling a Device

Step 1: Add the device

The Schedule Display dialog controls when a device displays content. You can set it during setup or add it later. Options are:

- **Start date, start time and end time.** The window during which content plays.
- **All day.** Content plays all day on the selected date.
- **Repeats.** A frequency of Never, Daily, Weekly or Monthly. Monthly schedules support ordinal day rules, for example the first Monday of each month.
- **Ends.** Whether the schedule runs indefinitely or ends on a specific date.

A plain-English summary of the schedule appears at the bottom of the dialog before you confirm. Click **Schedule Display** to save. The device card then shows a Scheduled status badge.

i **There are two kinds of scheduling in Oak, and they do different jobs.** The device schedule described here controls when a display is on. The comms team can also schedule individual content within an Area, which controls what appears while the display is running. If a screen is blank when it should not be, check the device schedule first.

Part 7: Managing Existing Devices

The Device Management page

All paired devices appear as cards. Each card shows the device name and description, its current status, the Area it is assigned to, and where available a Preview content link. The preview shows the content currently available on that Area's Screens Homepage rather than a live mirror of the display itself.

Use the search bar to filter devices by name or Area. This is what makes a consistent naming convention worth the effort once you are managing displays across multiple sites.

Device states

Each device shows a status chip. The three states and their technical causes are:

State	What it means	Action
Live	The device is connected and actively displaying content.	None. This is the normal state.
Offline	The device is unreachable, for example the display has been switched off or has lost its connection. Playback resumes automatically once it reconnects. A warning appears beneath the chip confirming this.	Expected outside operating hours. During the working day, check power and network connectivity at the device.
Scheduled	The device has an active display schedule. Hovering over the status shows the configured start and end time.	Hover to confirm the schedule matches what was intended.

i Offline is not always a fault. Plenty of displays are switched off overnight, so an offline chip in the evening is expected behaviour. What matters is a device that stays offline while the site is open.

Editing device settings

Click the three-dot menu on a device card and select the settings option to edit the name, description or assigned Area.

The Device Settings dialog also shows a **Homepage recovery link**. This is a URL you can open in a web browser to restore playback without going through pairing again. Use the **Copy** button to copy it.

The recovery link does not work on the Oak app. If a device running the app has a problem, unpair it by pressing the back button on the remote control, then pair it again from the device management area.

i Recovery differs by deployment method. Browser displays are recovered with the link, app displays are recovered by unpairing and re-pairing. Note that re-pairing needs someone at the display with a remote, so for app devices in awkward locations it is worth checking the device state remotely first to confirm the problem is not simply a power or network issue.

Removing a device or reassigning an Area

There are three ways to detach a device, depending on what you are trying to achieve.

Action	Where	Result
Remove Area	Device Settings	The Area is unassigned. The device stays paired and shows a holding screen, ready to be assigned to a different Area.
Unpair from the device	The three-dot menu on the device card, under Unpair , or on the device itself using the back button on the remote	The device is unpaired at the display end. Pair it again from the device management area when needed.
Delete the device	Device Management page	The device is removed from Screens entirely and no longer appears on the Device Management page.

Which to use:

Remove Area when a display is being repurposed or is temporarily out of use.

Unpair when you are troubleshooting an app-based display, or swapping the streaming stick behind a screen.

Delete when hardware is being retired, has been lost, or is leaving the estate for good.

Note that **Preview content** is unavailable while no Area is assigned or if a device has been unpaired.

i Unpair is the fastest response to missing hardware. Both Unpair and Delete can be done from the Device Management page without physical access to the display, so neither depends on someone finding the device first. Unpair is the better first move for a display that has been lost or stolen, because it cuts the device off while keeping the record for your own audit trail. Delete once you know the hardware is not coming back.

Part 8: The Screens Homepage

What appears on a display is drawn from the Screens Homepage for the linked Area. This is configured by the content or comms team, and is covered in full in the [Screens Comms Team Getting-Started Guide](#). Three things are worth knowing when supporting content owners:

- A Screens Homepage is created automatically when an Area is first linked to a device. It cannot be deleted manually, and is removed automatically once all devices have been unlinked from that Area.
- Changes to the homepage only reach the display once it has been published.
- If videos are cut off partway through, the 'play videos in full' setting has not been enabled and the video is playing only for the length of the carousel interval.

Part 9: Handover to the Content Team

Once a device is live, pass the following to whoever owns the content.

What to hand over	Why they need it
The device name and physical location	So they can find it on the Device Management page and know who walks past it.
The Area it is linked to	This is what determines the content shown, so it is the first thing they will need to change.
Where the Screens Homepage settings live	Content types, item count, carousel interval, QR codes and display ordering are all set here.
Any device schedule you have configured	So they do not spend an afternoon debugging a holding screen that is simply outside its scheduled hours.
A link to the comms guide	Covers everything they own from this point on.

Troubleshooting

Symptom	What to check
White screen after pairing	Most commonly an outdated browser. Confirm the device meets the minimum version (Chrome 61 / Chromium

	2017 or later) and that it is running the latest version of the Screens app.
Device shows Offline	Check the device is powered on and connected. The status updates automatically once connectivity returns. If playback does not resume, use the Homepage recovery link for browser displays, or unpair and repair app displays using the remote.
Device pairs but content never updates	Points to the live connection being blocked rather than a content problem. Check for a proxy or inspection appliance between the device and Oak, and confirm the comms team has published their changes.
Device goes to standby during the day	Both the TV and the streaming stick have their own standby timers. Adjust both.
Display shows a holding screen	Either no Area is assigned, or the device was set to holding screen during setup. Both are fixed in Device Settings.
Nothing at all is showing	Check the device state first. Offline means the display or its connection is the issue rather than the content. Scheduled means the display may simply be outside its scheduled hours.
Videos cut off partway through	Expected behaviour when play videos in full is not enabled. The video plays only for the length of the carousel interval. This is a Screens Homepage setting owned by the comms team.
Display behaves unpredictably on a video-heavy Area	Likely exceeding the device's browser cache. Ask the content team to reduce video file sizes or the number of videos in the carousel.
Wrong content on the display	Confirm the device is linked to the intended Area. If the Area is correct, the content types enabled on the Screens Homepage are the next thing to check, and that sits with the comms team.

Getting Help

If you're unable to resolve an issue using this guide, our team is here to help.

Technical Support	Implementation Team
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For device pairing, browser compatibility, network configuration and playback issues. support@oak.com

For rollout planning, deployment strategy and product configuration. Contact your dedicated Oak CSM.

Quick Reference: Setup Checklist

#	Task
1	Confirm the device meets the minimum browser version
2	Allow the required domains through the firewall or proxy
3	Test connectivity in the display's actual physical location
4	Extend the standby timers on both the streaming device and the TV
5	Agree a device naming convention
6	Map each device to its Area with the comms team
7	Assign the Device Manager and Device Assigner roles
8	Add and pair each device
9	Choose immediate playback, holding screen or a schedule
10	Confirm the device shows Live and is displaying the expected Area
11	Save the Homepage recovery link somewhere central
12	Hand over to the comms team