



Esper Guide

9 Ways Esper is Next-Gen MDM



What is “Next-Gen MDM?”

Modern devices and use cases require modern management tools. Today’s businesses need more than basic MDM software, so a full-stack, fully integrated solution that marries hardware and software with robust device management is the way.

A truly integrated experience is all about taking a smarter, more dynamic approach to device management. For example, **full automation of repetitive tasks** and intelligent responses to trigger-based alerts. Or access to **advanced APIs and SDKs** that simplify device management for developers without complicating it for IT teams. **Secure remote debugging with advanced diagnostic tools** so you can not only fix issues from anywhere, but start to pinpoint them before they even become a problem. **Granular device grouping** so you can manage your device fleet in a way that makes sense.

That’s what the future of device management looks like, but it’s just the beginning. Our end to end solution brings hardware, software, and device management together like never before.

01

Kiosk Mode

Kiosk mode lets you lock down any type of device (not just kiosks!) to a single application or interface.

Users will only be able to access what you want them to, preventing device tampering and eliminating unnecessary distractions.



The Esper Difference

Determined users can bypass traditional kiosk modes on most GMS Android devices. When your devices could be in big trucks or prisons, you can't afford this risk.

That's why we built a truly unbreakable, unpassable kiosk solution using AOSP Android. With Esper's hardened kiosk mode, we pin the app to the screen using the Esper Agent, which is uninstallable by default. If a user is somehow able to remove the Esper Agent, the device would cease to function. It won't even boot without the Agent. So yeah, unbreakable.

Learn more about kiosk mode

[Esper kiosk mode](#)

[Kiosk mode for Android](#)

[Kiosk security tips](#)

[Kiosk mode for iPad](#)

02

Remote Control

Remote control allows you to see and control a device without physical access. You can replicate an issue, transfer files, record the screen, retrieve logs, and more — from anywhere.

This increases efficiency, reduces IT costs, and streamlines the troubleshooting process.



The Esper Difference

Whether you need to remotely access 100 or 10,000 devices, Esper has the platform to do it. Using our secure remote viewer plugin (which we deploy to your devices), you can control devices* remotely from anywhere.

And the best part? It's fully integrated with our device management console. With Esper, you can provision devices over the air in minutes, debug and troubleshoot from anywhere, modify compliance policies on the fly, and more, all from the same console.

* - Currently only available for Android devices

Learn more about remote control

[Esper remote control](#)

[Remote access vs remote control](#)

03

Blueprints

Device configuration is a complex process — defining your ideal state like Wi-Fi options, screen brightness, app installs, etc. is time consuming. And then what happens when you need to change those settings? It gets worse.

That's why we built Blueprints. Set your ideal state once, apply to as many devices as you need. Change it whenever you want. Rinse and repeat.



The Esper Difference

Blueprints is the most effective, scalable way to configure, manage, and update devices. It gives you total control over all the most important settings on your devices, like networks settings, app installations, screen brightness and orientation, volume, and a whole lot more. Plus, it works seamlessly across Android and iOS devices — one blueprint works on everything you have.

Flip policies, manage devices in drift and quickly converge them, or reconfigure hardware as needed — all without a factory reset (or even a reboot!). Blueprints is a time saver and a game changer.

Learn more about Blueprints

[Esper Blueprints](#)

04

Advanced Telemetry

Device telemetry involves collecting crucial real-time usage statistics and hardware status of your devices.

This lets you manage your devices with precision. It's a proactive approach to preventing issues, refining your device strategy, and getting more from your existing hardware.



The Esper Difference

With Esper's telemetry data, you can get a detailed snapshot of any device in your hardware fleet — from anywhere in the world, in real-time, and in a single location.

At any moment you'll be able to see things like:

- Current battery or power status,
- Wi-Fi and Bluetooth connectivity and signal strength
- Data usage (download and upload)
- Device temperature
- Compliance policy status and drift
- Detailed software information ...and much more

Learn more about telemetry

[Esper Advanced Telemetry](#)

05

Provisioning

Device provisioning is defined as setting up a device to work in a specific manner. How detailed this process is, can vary wildly. It might mean disabling or enabling certain features or replacing the entire operating system for specialized functionality.

It can be a cumbersome and time-consuming process. Fortunately, not all provisioning processes are the same.



The Esper Difference

Typically, enrollment, provisioning, and configuration are all separate processes, but we've combined them into a single step. Our process is templated so you can set your custom rules and device requirements once, then apply them to as many devices as you want, all at the same time — even if they're running different operating systems. Whether you need to onboard a single device or 10,000, our one-step provisioning process is a real time saver.

By streamlining this process and combining it into a single step, we reduce onboarding time, avoid unnecessary downloads, reduce repetitive manual actions, slash the number of required steps, and simplify the onboarding process.

Learn more about provisioning

[Esper provisioning](#)

[Android provisioning options](#)

[What is provisioning?](#)

[What is seamless provisioning?](#)

06

Pipelines

A pipeline is a repeatable, scalable process for driving software down the path of testing and deployment.

When applied to device management you can use pipelines to stage software rollouts — start with your test devices to ensure it works, then gradually push the update to device groups until it's available on your entire fleet.



The Esper Difference

Esper Pipelines enable the critical software deployment tools you need. Staged software rollouts allow you to start small and effortlessly scale up, avoiding the pitfalls of pushing updates to your entire device fleet simultaneously. Along the way, automatic checks are conducted to ensure a smooth rollout, with automated tests detecting any potential issues.

If a problem arises, the update is paused, and you receive a notification, eliminating the need for constant monitoring. You can use pipelines for pushing new versions of your apps as well as implementing comprehensive system updates such as full OS upgrades and essential security patches.

Learn more about pipelines

[Esper Pipelines](#)

[What is CI/CD?](#)

[How pipelines lower costs](#)

[Optimizing software delivery](#)

07

Android and iOS All in One Place

Not all devices are created equal — nor should they be. Your device management solution should offer all the tools you need to manage your full fleet, whether that's all Android devices (GMS and/or AOSP), iOS devices, or a mix of both.

When you can manage them all in one place, that's true harmony.



The Esper Difference

Esper works seamlessly with AOSP devices, GMS devices, iOS devices, or a mix of all three. That means you can build your device fleet your way — piecemeal from off the shelf hardware, full custom out of the gate, or anything in between. All in the same place from a single pane of glass.

Supporting AOSP devices is where most device management solutions start to fall apart. But AOSP is the perfect choice for building a custom operating system for dedicated devices — you get a fully customized experience, unmatched versatility, long term support, and enhanced security. Trust us, we even built [our own version](#).

Learn more about Android hardware

[Esper for AOSP](#)

[Make AOSP without Google](#)

[Using AOSP](#)

[GMS vs Non-GMS devices](#)

08

Hardware Compatibility

Many MDMs are notoriously inflexible when it comes to hardware choices and changes. That inflexibility could cost your business time and money.

If you need to iterate your product or diversify your fleet, your device management solution should easily pivot with you. And your hardware choices should be on your timeline, no one else's.



The Esper Difference

Esper doesn't think your product should be subject to the whims of anyone but you. That's why Esper is designed to manage the full gamut of mobile devices, from consumer-grade GSM handsets to headless display signage running customized AOSP to [legacy devices on x86](#) or a mixed group of Apple iPhones and iPads. In fact, we've validated our platform on over 1400 device models, both custom and off the shelf.

It's hard to predict what's your device fleet is going to look like in the future so we've made sure our platform won't get in the way. Plus, we have a robust catalog of hardware partners that are read to help you scale when you need to.

Learn more about our hardware support

[Esper's hardware guide](#)

[Ordermark chooses Esper](#)

[Esper validated hardware](#)

09

DevOps for Devices

Many MDMs offer the same features with similar execution. And for some use cases, that's all they need!

But for more advanced devices and modern hardware strategies, old school management techniques simply don't cut it.

That's sort of the foundational idea that Esper was founded on. We call it DevOps for Devices.



The Esper Difference

If you ask us what our biggest differentiator is, we'd say it's DevOps for Devices. It's a reimagining of what device management should be for modern hardware. It builds on a core software development philosophy called DevOps.

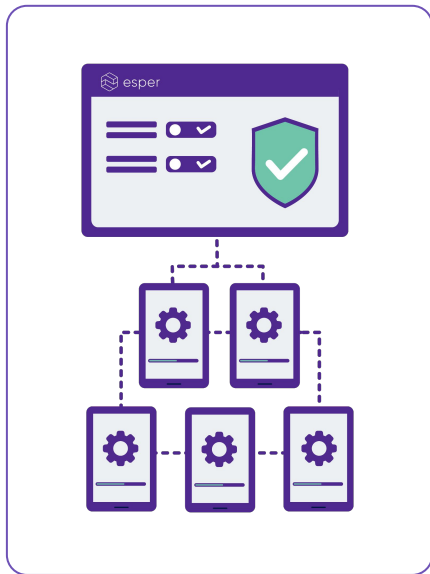
Without getting too into the weeds here, DevOps is the combination of development and operations — software testing and delivery essentially become intertwined. But we don't think it should stop at just software, so we apply the principles of DevOps to device management.

We make hardware, software, and device management work together in harmony. That's DevOps for Devices.

Learn more about DevOps for Devices

[The Beginner's Guide to DevOps for Devices](#)

Learn more about Esper



Time to level up your device management

If your devices won't work how you need them to with your MDM, you're paying for software that costs you time instead of saving it. The same can be said if it kind of works but it's holding you back — when you can't scale because of your management software, there's a problem.

That's why Esper exists. Esper is next-gen device management, but you don't have to take our word for it — [book a demo](#) and let us show you the Esper difference.