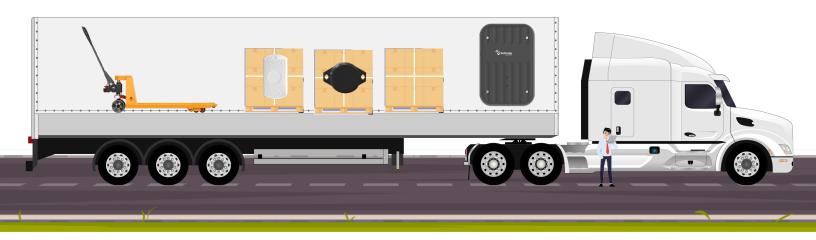


A trailer-as-a-platform trailer tracking model refers to a system of asset tracking that seeks to transform trailers into intelligent assets to provide complete visibility of the trailer and its associated assets. By leveraging advanced location technologies, tags, and sensors, trailers become interactive platforms capable of delivering real-time data and insights. This form of asset tracking provides a range of benefits beyond conventional tracking systems by treating these assets as parts of a whole and collecting data accordingly. Let's break down what Link Labs' trailer-as-a-platform setup looks like, how it differs from other systems, and the unique benefits it brings to the table.

# **Anatomy of Trailer-as-a-Platform**

The core principle of a trailer-as-a-platform IoT solution is that through your trailer, you are able to maintain visibility and control over all mobile assets involved in your logistics and trucking operations. No additional platform is needed, just a central solution that revolves around your trailer. The components that a trailer-as-a-platform solution helps you connect include – but are not limited to – the following.





#### **Trailer**

As the name of the concept indicates, the trailer serves as the focus point for a trailer-as-a-platform trailer tracking solution. It is through the trailer that everything else is tracked and recorded. By equipping a trailer with our SuperTags and other components of the system with whatever asset tag is deemed appropriate, the system can detect what assets are within proximity to and traveling with the trailer before recording this information for the cloud.



#### **Truck**

The truck is usually the focus point for tracking systems, especially telematics. Although it is not as central in a trailer-as-a-platform model, it's still a critical component of the whole. By tagging your truck, you provide a method for the trailer to communicate with the truck that it is connected to. This can show you exactly which truck has hooked up to exactly which trailer, letting drivers quickly verify with managers that they've taken the correct trailer before they leave the facility.



#### **Pallets and Containers**

The pallets, containers, and other units of cargo within a trailer are also unique components of the trailer-as-a-platform system. After all, by only tracking the trailer, you have very little visibility over what's inside the trailer, only the unit itself. That's why, under this model, each pallet or container can be individually tagged to verify the location and condition of the cargo. Not only does this tell you what products are on a given trailer, but additional sensors can be used to detect condition information like temperature, humidity, shock, and tampering to better ensure product safety.



## **Equipment**

In addition to cargo, trucks and trailers tend to contain portable unloading and maintenance equipment that stays with the vehicle or trailer so that it can be used on the road. It's easy to fall into the trap of only thinking about this equipment when it's needed, but the consequences of not having it can be disastrous. This is why equipment is considered a critical component of the trailer-as-a-platform model. By tagging this equipment, you can receive alerts when it is separated from its designated truck or trailer before you go too far. This prevents leaving equipment at truck stops or unloading docks and ensures that you always have what you need.



#### **Driver**

For even further benefit, you can include a truck's driver in your trailer-as-a-platform set-up. Our system is compatible with wearable personnel tags that can help you establish a record of custody. When drivers wear these tags, you are provided with insight into which driver is currently transporting a given trailer at any given time. This is especially useful in case something is forgotten or something goes wrong, as it gives you a quick method of identifying which driver needs to be contacted to remedy the issue.



# Trailer-as-a-Platform vs. Other Tracking Methods

So what's the difference between tracking your trailers and mobile assets with a trailer-as-a-platform model and other tracking models? The two alternative models that we must consider are telematics and traditional asset tracking.

## **Telematics Systems**

It is prudent to address telematics systems first, as trucks are already required to have these installed; as a result, companies rarely consider the benefits of going beyond this solution. As opposed to being trailer-centric, telematics are a truck-centric system, and only provide visibility of trailers when they are hooked up and turned on. While it can incorporate a level of visibility for trailer conditions and custody while on the road, these systems are not adequately equipped to provide visibility at a pallet level or to help keep track of equipment. Telematics systems also cannot track idle trailers, limiting its use outside the traditional on-the-road location tracking.

Telematics systems are still undeniably important. They collect important data on route history and driver behavior, and they are required by law. A trailer-as-a-platform trailer tracking model does not look to replace a telematics system, but rather, to fill in the gaps in control and visibility that telematics cannot. In fact, the best systems will essentially combine the data provided by both to facilitate better decision-making and provide information that is both truck-centric and trailer-centric.

## **Asset Tracking Systems**

To be perfectly clear: a trailer-as-a-platform IoT solution is, in fact, a type of asset tracking system. It is a way of strategically setting up asset tracking tags and infrastructure so that collected data revolves around a trailer so that it can provide a more complete picture of logistics and trucking operations. The comparison being drawn here is to how asset tracking systems are usually set up for transportation and distribution purposes.

For most trailer and cargo tracking strategies, each asset is treated as largely independent. This is in direct contrast to a trailer-as-a-platform model, which finds its greatest benefits by treating the assets that travel together as interconnected parts of a whole. This means that a trailer-as-a-platform setup is primed to paint a more comprehensive picture of where your assets are, what they're doing, and how they're being used rather than simply providing isolated pieces to the puzzle.

# Unique Capabilities of an Interconnected Trailer

A trailer-as-a-platform model offers many of the same benefits as traditional trailer or asset tracking, facilitating location visibility, regulatory compliance, condition monitoring, loss reduction, data collection, resource allocation, and more. However, by tracking assets directly alongside a trailer, these benefits are fully realized and provide reliable solutions for far more intricate problems. Some of these problems and solutions are depicted in the following scenarios.







## Scenario 1: Stranded Cargo

You're a fleet manager and you've received notification that one of your trucks has broken down. It's not going to be a quick fix and there's no unused trucks currently available, but there's cargo on its trailer that is on a deadline for delivery. You need to figure out a way to ensure the cargo reaches its destination with limited resources and without disrupting operations more than necessary.

With a trailer-as-a-platform solution in place, all you need to do is check on the trailers that are in the vicinity of the stranded cargo. Then, since your system also records what cargo is already on those trailers, you can determine which trailers have enough room to retrieve and deliver the stranded cargo without needing to make extra trips or disconnect the trailer. Once you've figured out which trailer or trailers have the time and space to fulfill this task, you can use the custody records provided by the personnel tags to figure out which drivers you need to contact to set your plan into motion.

# Scenario 2: Loading Errors

You receive a call from a driver at an unloading dock. The cargo that is on the trailer does not account for everything the customer was expecting, despite your plans to have it all delivered in one trip. Something must have been overlooked in the loading process, and now you have to figure out where the rest of the cargo has gone. A quick check of the warehouse inventory system reveals that it's not on site. You suspect it might have been loaded onto the wrong trailer.

To verify your suspicions with your trailer IoT platform, you review historic records of trailers that were present on site around the time that the one with the incomplete load was there. Next, you go into each trailer's records individually to determine what cargo is traveling with that trailer. In doing so, you're able to establish that one of the trailers is fuller than it should be and seems to be partially loaded with the misplaced cargo. You pull up the corresponding driver's contact information and call them to verify, proving your suspicions correct. You are able to explain what happened to the customer and take steps to deliver the remaining cargo.

## Scenario 3: Forgotten Equipment

You're a driver and you're getting ready to leave the pick-up facility. The trailer's been loaded and connected, and you're heading out on your route. You're on a tight schedule, so you tried to get in and out as quickly as possible. However, when you're only a few



miles out of the facility, you get a call from the operator. Apparently, some of the trailer equipment was shuffled around to make room for the cargo, but the loaders forgot to put it back in. You've left it behind!

With a trailer-as-a-platform solution, this problem isn't much of a problem at all. With geofencing setup to alert operations when a trailer leaves the premises, fleet managers can verify trailers and their contents as they leave. This lets them notice when something is missing, and it helps them identify what the missing asset is. Without this solution, the driver runs the risk of breaking down somewhere without the tools needed to make repairs, or to arrive at the final destination without the equipment necessary to conduct unloading. Instead, the problem is caught at the beginning of the journey, the driver is contacted, and the trailer can set out again fully prepared.

# **Turn Your Trailer into an IoT Platform**

With the right technology and the right people behind it, any trailer can become an IoT platform! No matter your company's scope or what you're transporting, a trailer-as-a-platform asset tracking model allows you to maintain total control and visibility over your fleet, giving you the ability to respond quickly in a crisis and make better decisions informed by the collected data. Take advantage of Link Labs' innovative approach to fleet and trailer tracking to bring your logistics and trucking operations to the next level. With solutions available for all kinds of trailers and other transport vehicles, we work with you to connect your assets for a better solution. Visit our website to learn more!