

Liquid Galaxy has a vast range of implementation in the field of Real Time Patient Tracking. Real Time Patient Tracking System helps increase Patient Safety, operational efficiencies, cost reduction and the biggest advantage being time saving. This Tracking System uses two types of RFIDs which are as follows :

Active RFID :

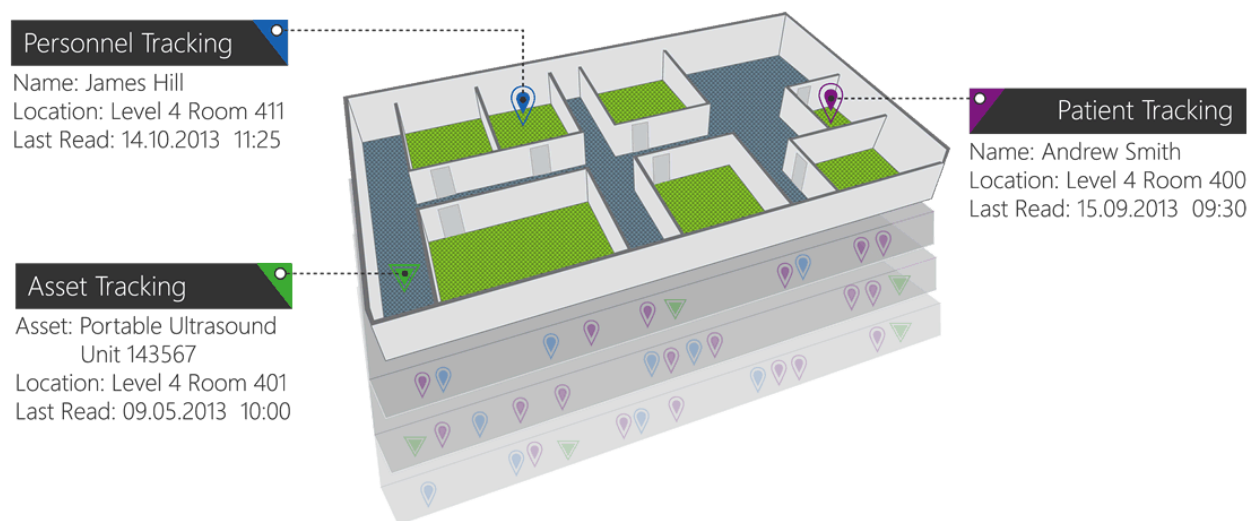
It tracks all kinds of actors in a hospital environment - personnel, patients, visitors, and mobile assets with high accurate, room-level resolution.

Passive RFID :

It tracks non-mobile assets or assets that have less location critical roles and therefore require less location resolution accuracy. This is battery-free.

With this kind of technology one can perform loads of activities like asset management, equipment maintenance, temperature monitoring and Patient and Staff Tracking. These advantages gives rise to the use of Liquid Galaxy. Liquid Galaxy will help them to enhance the efficiency of this Tracking System.

Diagram of a Real Time Patient Tracking System.



With the use of Liquid Galaxy the controlling system can be sub divided into floors where each screen would represent each floor this can be even further modified to represent a category where one display could emulate the assets while other emulating the Patients. This would also lower the risk of theft as there would be constant logging about the activities of the personnels and visitors. Locating the assets and the Personnels would be more easier. The RFID id tags modified to use vibrators. Let's say an emergency case arrives at the Hospital and the doctor has gone for the inspection of Patients and checking of their reports. Using Liquid Galaxy multiple objects can be vibrated at the same moment. Instead of sending a person to look for the doctors we'll simply send the vibration command using the Liquid Galaxy so without losing the track of patients and assets at the same time getting the real time location and other information we can

Liquid Galaxy is also helpful to construct an approval system where a patient arrives at another department so instead of getting his reports from the hospital, using his RFID id tag one screen can be engaged in displaying his medical report and another his personal information and other health related information which might be useful for the doctor this will save paper, time and will also lessen the complexity of managing the medical records of a Patient as all the reports will be synchronized with the RFID tags and Liquid Galaxy will help in displaying them.

You can refer to this webpage for more info on RFID and its use in healthcare and explore devices : <https://www.zebra.com/ap/en/solutions/healthcare.html>

Liquid Galaxy also has a large implementation for reminding the Patient to take medicine at the right time as the controller can remotely send a vibration command to remind the Patients on each floor as Liquid Galaxy gives you more control over the floor to floor reachability of the hospital and provides individual attention to each patient. This

can be further expanded to use of Liquid Galaxy to instruct various Staff members about the timings when their shift starts and ends.

The use of Liquid Galaxy is just not limited to increase the reachability but it can also establish an amazing system for surveillance within the hospital. To protect the assets and other important object from being stolen. An interface using the Liquid Galaxy could be setup to check the expiry and stock which will result as a huge saving on the part of hospital as it will have to employ less people. We can even make a push button for every room where anyone having any kind of issues can push that button and that will raise an issue on the controller's liquid galaxy. In my previous article, I talked about the use of WebRTC along with Liquid Galaxy and this is probably one of the finest examples. A Patient having a fracture can not move so whenever he needs anything or has anything to say he can use a WebRTC based Video or Audio Conferencing and communicate with the Receptionist or the concerned doctor anytime where Liquid Galaxy will be present in every doctor's room and even on reception. So neither the doctor nor the Patient needs to walk down those floors in order to meet and talk.

Liquid Galaxy when used with Real Time Patient Tracking System can even be used to guide the Patients to reach the correct room in order to get the right treatment using a mic announcing system or having a smartwatch on their wrist to guide them. Locating Patients is very easy after the involvement of Liquid Galaxy so we can guide them very accurately as it uses an Active RFID.