LocationAI™ FAQs

1. What is LocationAI™?

LocationAI™ is next-generation RTLS technology that uniquely combines high-confidence room-level tracking accuracy with the lowest total cost of ownership of any asset tracking solution in the market today. Using advanced machine-learning and AI to determine location, it leverages Cognosos' proprietary long-range networking technology to track mobile assets throughout entire facilities with a minimal hardware infrastructure. The combination of these networking and machine learning technologies results in room-level accurate tracking capabilities at the lowest TCO and fastest time to ROI.

2. How does Cognosos' LocationAI™ work?

LocationAI™ uses machine-learning and artificial intelligence to locate and track your mobile assets. Rather than calculating coordinates of tracked objects and determining room-occupancy using geo-fencing (the traditional approach), LocationAI™ leverages machine-learning algorithms to classify which room objects are in. In just the same way that an image-recognition algorithm can be trained to categorize images (ex: dog, cat, etc…), so too can the LocationAI™ algorithm, enabling it to understand when an asset is in Room 1 versus Room 2. More than this, LocationAI™ continuously updates its learned classifications so it gets better over time.

3. How is this different from Fingerprinting?

Fingerprinting can be thought of as a precursor to LocationAI™, but from the days before cloud-based machine learning. Fingerprinting uses static signal-strength maps to determine low-confidence coordinates based on signals from overhead beacons. Additionally, fingerprinting techniques are plagued by changes in the environment, causing the static maps to become obsolete shortly after implementation. In order to recover the necessary accuracy, static maps require constant tweaking and recalibration to remain usable, which is cost-prohibitive and disruptive.

LocationAI™ also uses overhead beacons, but requires many fewer than legacy solutions because modern machine learning algorithms have has become so good at learning high-confidence classifications, even from sparse data. In addition, LocationAI™ continues to learn, so it can take environmental changes in stride, keeping itself automatically in-tune and even improving as it collects more and more data ensuring accuracy from day one and beyond.

4. What are the benefits of LocationAI™?

Simply put, you will be able to find your assets with confidence, today, tomorrow and, five years from now. LocationAI™ breaks the traditional trade-off between cost and quality, delivering high accuracy at the lowest total cost-of-ownership due to the sparse infrastructure required. The quick installation process delivers the best time-to-value and that value keeps on delivering as the AI continues to gain confidence over time.

5. How is LocationAI™ implemented?

LocationAI™ is implemented using a handheld system configurator. This is a simple one-time-only process that requires a rapid and non-disruptive walk through the facility to "survey" the environment and train the classification model that LocationAI™ uses as a foundation on day one. Over time the algorithm will automatically continue the survey process and adjust where needed to maintain accuracy.

6. Does LocationAI™ require in-room infrastructure?

No. LocationAI™ works entirely using beacons located along hallways to provide room-level accuracy. No devices are installed in patient rooms, eliminating disruptive system installation and maintenance headaches.

7. Do doors need to be closed to get in-room accuracy?

Our solution does not require a closed-door to get in-room accuracy. This is one of the many benefits of a responsive solution, like LocationAI™. In fact, it doesn't even need walls: the AI can learn to recognize a "virtual room," for example an open storage area at the end of the hallway.

8. How can LocationAI™ help support efficient workflows?

Efficient workflows aren't just about knowing where your critical assets are, they're about your critical assets always being in the right place. Cognosos' applications deliver proactive insights to help asset management teams efficiently collect and distribute assets so clinical staff always have them when needed.

Proactive asset management requires the knowledge of the location of all assets, at all times, and that's what LocationAI™ delivers.

9. How can LocationAI™ help with patient care?

The most important focus for clinical staff is providing the best healthcare for patients. Having an asset management system with LocationAI™ supports clinical staff by ensuring each asset needed is available where care is provided, and enables the clinical staff to maintain their focus on what they do best, patient care.