

SOLUTION OVERVIEW

CLINICAL-GRADE REAL-TIME LOCATION SYSTEM FOR TODAY'S SMARTER HOSPITALS

The unique character of hospital operations results in a lot of spontaneous clinical activity, which is less efficient and more costly than highly coordinated, orchestrated workflows. Recognizing that this inefficiency impacts time management and the overall patient experience, many facilities are being re-engineered as “smart” hospitals, and employing knowledge tools to optimize human and capital assets.

Preeminent among these are real-time location system (RTLS) applications that can locate assets and personnel in real-time to better coordinate and orchestrate clinical workflows. These real-time systems can dramatically reduce costs, more efficiently manage staff, and improve the quality of clinical services.

In the clinical setting, location awareness is dependent upon the ability to segment spaces into clinically meaningful zones. These zones typically include patient rooms, beds, bays, chairs, nursing stations, hallway segments, and other relevant workflow areas. The finer the granularity of location awareness, the more efficiently assets can be managed.

WHY CENTRAK AND ARUBA NETWORKS®

- Real-time location, telemetry, and asset management over Wi-Fi
- Orchestrates workflows and improves efficiency
- Tracks people and assets down to the room
- Multi-mode tags combine infra-red, low frequency RF, and Wi-Fi
- Verified interoperability speeds deployment
- Compatible with a wide-range of industry-standard hospital applications

SOLUTION OVERVIEW

CentTrak® addresses location awareness using a combination of its Multi-Mode tags, Certainty-based RTLS Monitors and Readers, Aruba Wi-Fi infrastructure to transport Wi-Fi tag data, and a wide range of industry-standard hospital applications. The resulting solutions touch virtually every element of typical clinical workflows.

CENTRAK APPLICATION ECOSYSTEM

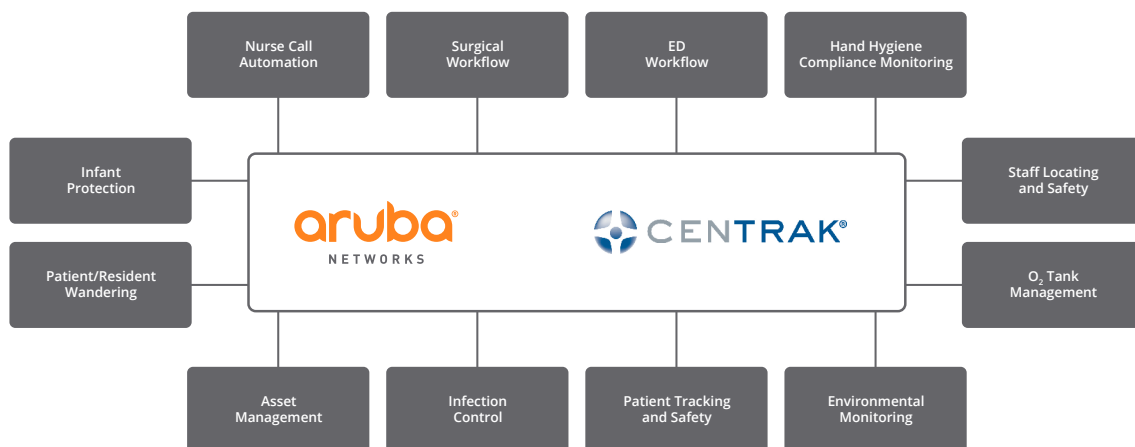


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CENTRAK AND ARUBA WI-FI SYSTEM OVERVIEW

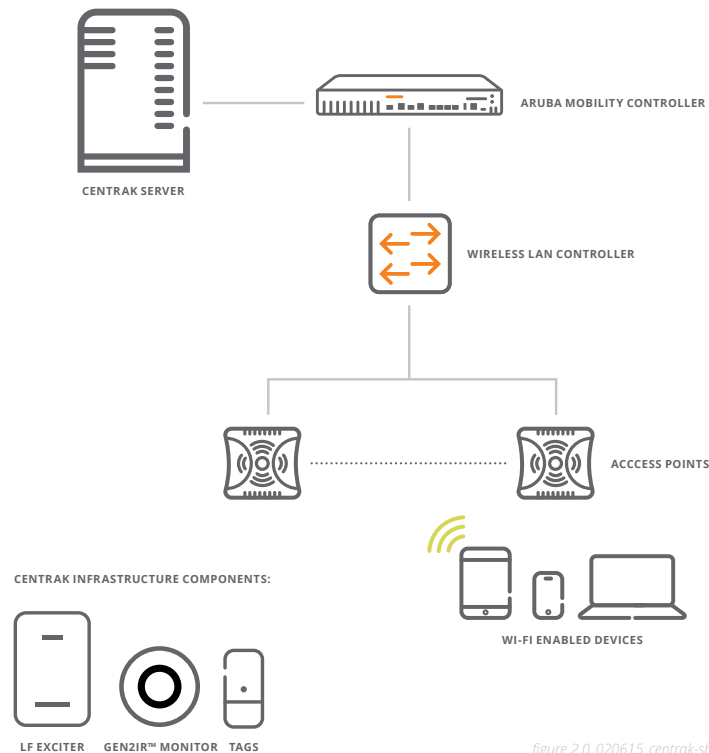


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Multi-mode tags can be affixed to assets or worn by people to provide accurate location data in real-time. The tags feature a unique combination of Wi-Fi, infrared, and low-frequency RF locationing to address virtually any deployment scenario. Tags are available in different form factors and with different features needed to locate physical assets, staff, patients, and to monitor telemetry like temperature.

The tags make use of Aruba's RTLS blink feature, which reliably transports tags' location pings across the wireless infrastructure to the CenTrak location server. Tag position is determined by one of two methods: RF triangulation using

raw received signal strength indication (RSSI) data which is then processed by the CenTrak software; and using infrared and low-frequency RF in rooms served by a CenTrak Monitor and Exciter.

Once location is determined, the positioning data are streamed in real-time by the CenTrak server to compatible ecosystem partner application.