COMTECH Fluent in the Future

Location-Based Services

Global Leader in Precise Location

Comtech provides comprehensive location solutions supporting mobile network operators, enterprises, and end-consumers globally.

Compliant with 3GPP and OMA standards, Comtech's solutions support 2G, 3G, 4G, 5G, Wi-Fi positioning, active, and passive methods. Coupled with our Dynamic Cloud Platform (DCP), we provide high availability, reliability, scalability, and security. All technologies are cloud-native capable.

Comtech's Approach

The principal strength of Comtech's location solution is our accuracy and performance, which is obtained through various location methods and technologies across Control Plane (CP) and Secure User Plane Location (SUPL) environments. Our solutions enable position determination to be done either by the end user device or by the Comtech location solution itself. Different position determination methods can be calculated simultaneously, depending on the conditions.

Comtech's position determination method aims to achieve the highest level of accuracy and efficiency by combining and configuring various techniques. For situations that involve a combination of devicebased and hybrid location methods, Comtech offers additional validation tools and the ability to select the best results before integrating them into the location information process. Comtech offers a variety of techniques that cover all aspects of location determination including cellular signal-based, Wi-Fi, Assisted-GNSS, handset-sensors, and hybrid location methods. These methods are suitable for different network configurations and use cases.

By using our patented technologies, we can determine the precise location of any device in realtime. Comtech has been at the forefront of location solutions for over 25 years and our complete suite is backed by our extensive know-how and expertise. Comtech is in lockstep with the latest advancements in automation and orchestration, particularly those that come with 5G deployments, making it easier for operators to deploy the solution.

Automated "one touch" deployments in cloud agnostic infrastructures





The Solution

As technology evolves, Comtech remains a leader in bringing new positioning technologies to market. With 5G, Comtech's containerized Mobile Location Center (cMLC) solution offers 5G positioning techniques such as UL-AoA and MC-RTT to achieve greater accuracy in all environments, including indoors. Additional technologies such as PPP-RTK are on the horizon bringing submeter GNSS accuracy for navigation and autonomous routing.

Comtech's cMLC leverages the DCP, dashboards, and associated tools to provide a comprehensive LBS solution. The DCP is a framework that allows for integrating applications into a variety of infrastructure and management systems, providing high-availability, reliability, scalability, and security. The DCP supports applications that are integrated with the 3GPP 5G ecosystem such as the Gateway Mobile Location Center (GMLC) and Location Management Function (LMF). Dashboards give an easy-tounderstand overview of the location system's performance, allowing for positioning optimization and targeted troubleshooting. The analytics tools provided by Comtech validate the Base Station Almanac and identify potential issues and recommended improvements to optimize it.



Flexibility

By working with Comtech, you can meet regulatory requirements, enhance the safety and security of your customers, increase revenue from new and existing customers, and reduce customer churn.

Comtech supports the integration of your existing applications and enables new ones with high-accuracy location information, and our solutions are designed to meet your specific needs, supporting deployments in both public and private environments.

Customer Benefits

- Flexible deployment models for private, public, and hybrid cloud environments that support rapidly evolving needs
- High-availability, reliability, scalability, and security
- Precise location of any device in real time
- Advanced Mobile Location (AML)
- Automated "one touch" deployments

- Ability to leverage a team with 25+ years of domain expertise who have deployed solutions across Tier- 1/2/3 carriers
- Mass location capabilities
- Capture location data for analytics
- Compliance with 3GPP and OMA standards
- Access to global support

About Us

Comtech Telecommunications Corp. is a leading global technology company providing terrestrial and wireless network solutions, next-generation 9-1-1 emergency services, satellite and space communications technologies, and cloud native solutions to commercial and government customers around the world. Our unique culture of innovation and employee empowerment unleashes a relentless passion for customer success. With multiple facilities located in technology corridors throughout the United States and the world, Comtech leverages its global presence, technology leadership and decades of experience to create the world's most innovative communications solutions.

Call to explore 5G location technologies

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