What is **Kinetic Mesh and InstaMesh?**

Rajant networking is not traditional. We call our networks Kinetic Mesh. They are uniquely designed for environments and applications where client devices and even the network itself are in a state of constant change and motion due to challenging, changing environments.

Rajant Kinetic Mesh networks are built around superior reliability and security. To achieve these goals, Rajant utilizes a multi-frequency, multi-peer mesh connection to give every node in the network the ability to talk directly to each other using multiple radios simultaneously.

Each node, or BreadCrumb®, such as the Peregrine pictured below, behaves as a smart wireless device, maintaining connections to every other BreadCrumb that can be connected wirelessly or wired. This web of connections gives Rajant unparalleled reliability, ensuring that packets always have a path home, even in the toughest environments. Rajant BreadCrumbs also support Wi-Fi to connect to any Wi-Fi sensors, tablets, phones, PC's, augmented reality and more providing connectivity to billions of devices deployed today.

InstaMesh is the advanced, patented protocol developed by Rajant that directs the continuous and instantaneous forwarding of packets from wireless and wired connections. It enables complete network mobility, high throughput, and low latency with very low maintenance and administrative requirements. Operating at Layer 2 and not requiring a root node or LAN Controller, InstaMesh provides robust fault tolerance in the face of lost connections or node outages. No matter how the network is configured, InstaMesh networking software always determines the most efficient pathway between any two points, even when those points are in motion.

Applications:

- **Military**
- **Mining**
- **Oil & Gas**
- **Utilities**
- **Public Safety**
- **Agriculture**
- **Rural Broadband**
- **Action Sports**
- **Healthcare**