

REPORT REPRINT

Widespread high-speed LTE rollouts enable new opportunities for Cradlepoint

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Modern LTE provides very high bandwidth connectivity (300M/100Mbps to and from clients), with inexpensive modems comparable to consumer cable broadband, albeit at a significantly higher usage cost and price. Cradlepoint connectivity has primarily been used as a backup link, should all else fail, and for a growing number of uses where LTE provides deployment flexibility or agility. Recently, the emergence of virtual WAN offerings has enabled LTE to be added to a WAN technology mix, and used only when LTE bandwidth and performance are the cost-effective solution.

THE 451 TAKE

Cradlepoint has done an admirable job as a 4G LTE connectivity pioneer, largely self-funding a significant business and building strong market share in the existing market. Recently, the company added a significant funding war chest to fuel growth and new markets, and with the evolution in WAN usage and WAN architectures, we think the time is right for significant expansion to Cradlepoint's opportunity, if it can move beyond the applications that got this far, and successfully accelerate its market development.

CONTEXT

LTE mobile network and 4G transitions are predominantly complete in North America, Europe and Southeast Asia, and well under way in the rest of the world, with continuing capacity expansion ongoing (LTE is more cost-effective for the mobile operator, as well as providing higher bandwidth services). This near-ubiquitous, high-speed wireless access creates a platform for communications and systems innovation, and opens up new opportunities for products and services that build on these networks.

At the same time, there has been rapid growth in stand-alone Internet-connected retail devices (such as ATMs) in locations that do not support (physically or financially) traditional wired MPLS networks or other forms of connectivity (DSL or cable). Increasingly, the fact that LTE can be instantaneously deployed and used makes it an attractive element, even if the usage is replaced by a more cost-effective hardware link at a later time.

Cradlepoint is a nine-year-old company with roots in providing cellular-backup communications links to enterprises and organizations with distributed network endpoints. As the availability and bandwidth of cellular connectivity has grown, the company has expanded its portfolio commensurately, extending into a number of WAN and Internet-of-Things/Mobile-to-Mobile applications. More recently, enterprises are augmenting, or entirely replacing, legacy MPLS networks with competitive offerings that incorporate 'consumer' Internet connectivity and create overlay networks with virtual WANs (sometimes referred to as software-defined WANs) from companies such as Viptela, CloudGenix and VeloCloud.

Cradlepoint's portfolio attaches to existing enterprise routers, or in some use cases, as a substitute for a larger router, and connects to the LTE mobile data network to provide additional bandwidth on demand, an alternate path to the network should the primary connection fail, and out-of-band access (via a serial port) to network devices should they require configuration changes.

Cradlepoint's cellular broadband adapters can be used to provide primary connectivity for locations that either cannot receive conventional wired Internet access (e.g., stores within stores, such as tax-preparation pop-up locations at Walmart during tax season) or where deployment agility is of high value. There is also a developing market for vehicle-to-vehicle networks in critical services such as police and first responders (fire, emergency medical care), as well as further penetration into the legacy strongholds of mobile routing, including transportation networks and military applications.

PRODUCTS

Cradlepoint offers four distinct families of mobile routers, as well as a cloud-based management platform. The AER router is the company's newest offering and positioned for 4G/LTE failover and WAN augmentation (which the company calls 'parallel networks'), as well as out-of-band management. The MBR family of routers is targeted at the enterprise branch and small business, as well as 'pop up' instant networks, such as events.

The IBR family was designed for ruggedized and space-constrained environments such as automated teller machines, kiosks and digital-signage deployments where the physical environment may be susceptible to wide humidity and temperature variances. The ARC series of cellular broadband adapters are just that – adapters for existing networks to connect to cellular networks without the extensive policy and routing capabilities of the AER, MBRs or IBRs. The Enterprise Cloud Manager service provisions and administers the AER, MBR and IBR family devices from a central Web service, including in-service upgrades.

COMPANY

Cradlepoint, founded in 2006, is headquartered in Boise, Idaho. The company is led by George Mulhern, who came to Cradlepoint after a long tenure as the SVP of HP's LaserJet business unit. It also recently hired another industry veteran as its chief marketing officer: Ian Pennell, who was previously VP/GM of Cisco's access products.

The company has raised more than \$65m in five rounds of funding, primarily equity, most recently with a \$40m round in January 2015. Primary investors are CAPROCK group, Delta-V capital, Sorenson Capital, Trinity Capital Investment, and OVP Venture Partners. The company currently employs more than 250 staff.

COMPETITION

As in most of networking, Cradlepoint's primary competitor in its WAN ambitions is Cisco, which offers a number of different WAN interface cards for its various routing platforms, both with integrated cellular capabilities or with serial interfaces to off-board cellular connections. Cisco's platform-integration (more or less) is hard to sell against as a separate vendor, because it introduces additional management complexity and 'another throat to choke' in troubleshooting outages. In addition to Cisco, a number of smaller companies offer cellular 'dongles,' primarily for out-of-band management of datacenter racks, such as Opengear.

SWOT ANALYSIS

STRENGTHS

Cradlepoint has targeted offerings at specific markets, positioning it well against more general (and expensive) Cisco WIC offerings. Additionally, Cradlepoint understands the wireless-provider ecology, and provides services that help customers find and work with cellular service providers.

WEAKNESSES

Cradlepoint will need to spend heavily on brand awareness to be included in competitive RFPs against larger competitors.

OPPORTUNITIES

The rapid growth of Internet-connected devices (machines, vehicles, etc.) expands the market opportunity for Cradlepoint's portfolio. The emergence of virtual WAN-overlay-network offerings provides a particularly interesting new market opportunity for Cradlepoint.

THREATS

Cradlepoint has benefited by being a farsighted pioneer in the use of LTE connectivity, and has built a substantial business as a result. As the LTE opportunity becomes more broadly visible, other competitors will follow; and since Cradlepoint doesn't develop core technology (e.g., cellular modems) it will have to leverage its system and ecology knowledge and experience to defend its market position.