Cradlepoint Takes Out-of-Band Management to the Cloud

Event

On April 28, 2015, Cradlepoint introduced a new wireless router and a new edition of its cloud management solution that provides a failover WAN connection to LTE, as well as the ability to perform out-of-band (OOB) configuration and management of offline remote branch routers. The announcement expands Cradlepoint's product portfolio of failover solutions and extends its Enterprise Cloud Manager (ECM) to include more advanced location-based management features, including OOB and Power over Ethernet (PoE). This announcement follows a recent round of investments where the company received $48 million in new Series B funding led by Sorenson Capital and other investors such as Delta-v Capital and The CAPROCK Group.

Managing the Remote Branch in the Age of Cloud

No longer limited to traditional leased-line options, connectivity to the branch now encompasses broadband and cellular as well. With the growing acceptance of colocations, shared data centers, and cloud computing changing the face of IT infrastructure, networks are transforming from siloed, wholly owned and managed network designs to hybrid networks that encompass both internal and externally hosted components. Amid all this change, the challenge is maintaining the integrity of the corporate network. Remote branches can be a particularly problematic piece of this puzzle since they often do not have IT personnel on site. However, the good news is that the growing adoption of broadband and cellular networks provides alternative access routes to these remote branch locations.

Cradlepoint was a pioneer in the consumer mobile MiFi market, but the company has since shifted its focus to address the business needs of the corporate remote branch. Cradlepoint has leveraged its expertise in cellular routing to develop a product portfolio that includes a variety of wireless routers and cloud-based management services designed to make cellular networks reliable, secure, and cost-effective across a variety of business use cases. Cradlepoint even developed a lightweight alternative protocol to SNMP in order to further reduce network management overhead across cellular networks.

The newest member of the Cradlepoint wireless router family is the ARC CBA850, which is designed to provide a secondary path for accessing and controlling a remote site when the primary connection is lost. Key features of the ARC CBA850 include the following:

- **WAN security** – The solution includes NAT, SPI, ALG, inbound filtering of IP addresses, port blocking, service filtering, protocol filtering, and WAN ping (allow/ignore).
- **Intelligent routing** – The router provides UPnP, DMZ, virtual server/port forwarding, routing rules, NAT-less routing, WAN-to-LAN IP passthrough, route management, multiple filter options, various DHCP client and server support, IP filtering, website filtering, per-client Web filtering, local DHCP server, and DNS features, as well as VLAN 802.1Q, IP setting overrides, and IPv6 support.
- **Performance & health monitoring** – Modem Health Management (MHM) provides self-health monitoring of the modem, WAN port speed control, and several levels of basic and advanced logging for troubleshooting.
- **Management** – Cradlepoint provides ECM support through a subscription-based cloud management and application platform.

ECM is a subscription-based management service, and, as part of this announcement, Cradlepoint has released a new PRIME edition. ECM is a cloud offering so it does not require installing any management software on-premise. ECM PRIME adds new location, protocol, and management features such as the following:

- Location services that include mapping and geofencing
- Linked Router Management (LLDP)
- Additional VPN tunneling protocols: OpenVPN (SSL VPN) and L2TP
- A new console interface for CLI and OOB management
- Additional routing protocol support: OSPF/BGP/RIP, VRRP, STP, and NHRP

EMA Perspective

Thanks to mobility and changing business models, the requirements and functionality of remote branches are changing as well. In some business use cases, the branch has been elevated from "poor distant cousin" to "critical core business component." As a result, connectivity to the branch has become less of a "nice to have" and more of a business imperative. So it is really no surprise that WAN connectivity has become a hot topic recently, with new terminology such as "SD-WAN" and "WAN virtualization" popping up in addition to a renewed interest in bandwidth bonding and aggregation. IT operations teams need ways to leverage existing infrastructure to provide secure, reliable connectivity to the branch while at the same time maintaining visibility and control. What differentiates the Cradlepoint approach is the company's knowledge and usage of cellular networks as a viable and affordable option for failover or even as the primary means of connectivity in some cases. ECM takes advantage of cloud computing as a way to both manage and support remote sites with no administrative overhead. EMA expects to see ongoing interest in WAN connectivity with more new products and service offerings to come.