The background

A managed server provider needed to allow for secure access to firewalls at multiple remote locations. Locations existed in multiple countries including the United Kingdom, Germany, Australia, Chile, Poland, South Africa, South Korea, and India. The Managed Service Provider is a global information technology, consulting, and outsourcing company with 145,000 employees serving over 900 clients in 61 countries. The end user has 44 factories in 39 countries.

Configuration changes requiring a reboot that leaves the device without remote access would require an onsite visit from a technician. The vast distance from location to location was too far and travel for maintenance was becoming too expensive for this client.

A new solution

The managed service provider has been managing firewall devices for the end user. In order to remotely manage the firewall appliances that had lost connectivity to the Internet or had an interface fault occur, a local visit was needed to access the console port of the device.

Black Box India was able to identify the problem and suggest our robust line of console servers to enable remote access to the appliance console port. The managed service provider worked with Black Box to create a test plan and vet the solution.

After testing and creating a secure connection between the remote location and administration location, the managed service provider also needed a way to provide setup instructions for non-technical users. Black Box also provided multiple customized user and setup guides to enable easy distribution and implementation of the console server solution.

The new strategy

Ultimately, the managed service provider and end user chose the Black Box Remote Console Manager, 3-Port with Modem (LES1203A-M) with an integrated V.92 modem for the remote locations, with a U.S. Robotics 56K V.92 Fax modem USR5686G for local administration. This enabled an added layer of redundancy to the remote access network. Also, by using the public switch telephone network, the solution was scalable to all the remote locations that the managed service provider required.

Because the managed service provider uses Black Box console servers to remotely manage the firewall appliances, they can keep a constant eye on the status of the network. This will reduce network downtime and allow for a more reliable firewall service for the end user. The managed service provider also will save operation expense by eliminating travel to correct issues at the remote locations.
Application Diagram
Using the public switched telephone network, the managed service provider was able to connect to the console ports of the end users’ firewalls for secure remote access. Phone lines were chosen because they are available at each location. By creating a backup path to the console ports of the firewalls, the managed service provider was able to create a remote access path without entering the end users' Ethernet connection, increasing customer data security.