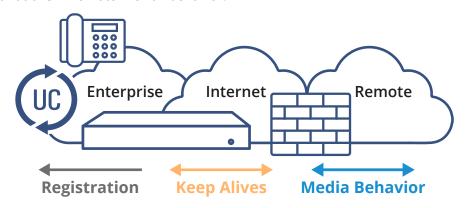# Far End NAT Traversal (FENT)

When deploying Remote Phones, whether in a Hosted Solution or with Home or Remote workers, these phones will reside behind some type of firewall. Firewalls are meant to provide security by hiding the private network addresses and prevent all unsolicited network traffic from entering the private network. In addition, the SIP Protocol (RFC 3261) is an application and many firewalls don't provide application support.

The Sangoma SBC provides several features to enhance the deployment of VoIP of Remote Phone behind a Firewall at a remote location. One key feature is the use of Far End NAT Traversal (FENT). FENT is a feature of the SBC that detects SIP Requests, such as REGISTER and INVITE, and looks at the SIP Addresses contained within and compares these addresses against the TCP/IP Addresses to determine if the SIP device is behind a Firewall. Once detected, the SBC will then change the behavior of communication to work within the rules of a UDP or TCP transport session to ensure bidirectional communication can continuously occur. In addition, the SBC will change the behavior of Audio processing to ensure that audio is bi-directional. The SBC will continue to manage the communication automatically, adjusting for variations in remote firewall behavior.