



SENTINEL SOFTWARE

The Sentinel suite of software applications provides a standards-based tactical communications system, specifically designed to meet the needs of highly mobile subscribers and dynamic networks. The Sentinel Internet Protocol (IP) software provides a network with a complete and comprehensive suite of applications, supporting voice, video and data communications.

Sentinel Soft Switch

Voice over Internet Protocol (VoIP) systems rely on a Soft Switch (Gatekeeper) function to support addressing and location functions. Commercial Soft Switches are generally designed for environments featuring many subscribers connected through a limited number of static installations, using good quality, high bandwidth links. This contrasts sharply with the dynamic, low bandwidth networks found in military operations.

The Sentinel Soft Switch provides a tactical Gatekeeper that, in addition to being standards-based, is designed to deal with the reality of highly mobile subscribers and dynamic networks.

For Headquarters use, a single Soft Switch can support up to 300 user terminals. It also provides call supervisory functions with a comprehensive set of civil and military features, such as flat numbering, multiple affiliation and subscriber mobility.

It is fully H.323 compliant and can be used in conjunction with commercially available standard equipment. The application can be replicated to provide a distributed service with built in redundancy and reliability.

Features

- Tactical Soft Switch
- Soft conference Bridge
- VoIP Soft Phone and Soft Intercom
- Designed for operation in military environments
- Requires no centralised database or management function
- Places low demand on bearers for management traffic
- Copes with intermittent bearer availability and network fragmentation
- Features graceful network degradation.

Sentinel VoIP Soft Phone & Soft Intercom

The Sentinel VoIP Soft Phone complements the Sentinel Soft Switch to provide users with voice access. A full colour display provides an intuitive user interface, including graphical call progress indications and user options. This replaces the complexities of facility codes and reduces key presses.

The Sentinel VoIP Soft Intercom provides the user with a similar graphical based facility from which to access the Sentinel Intercom services.

Sentinel Soft Conference Bridge

The Sentinel software suite includes a tactical Soft Conference Bridge providing flexible audio mixing and distribution for a variety of different multi-party calls. The application also includes full support of half duplex and PRESSEL controlled conferences. It is capable of supporting large conferences, limited only by the host processor resources, e.g. available memory and processor speed.

The Sentinel Soft Conference Bridge also supports multibrIDGE operation with distributed processing ensuring the most efficient use of bandwidth.

The Sentinel Conference Management application can be used by administrators to remotely manage, and initiate or terminate, conference calls.

Host platforms

The Sentinel Soft Switch and Soft Conference Bridge applications can be housed on a variety of platforms:

- The Sentinel Desk Access Unit + (DAU+) – supplies user access to provide the foundation for a scalable local area IP communications system
- The Sentinel MSIP115 Gateway – provides transparent access to non-IP networks
- The Sentinel MSR115 Router – provides routing and WAN access links to tactical bearer equipments
- A commercial/military PC or server for either Windows or Linux.

The Sentinel VoIP Soft Phone and Soft Intercom applications can be housed on:

- The Sentinel VoIP Phone Terminal – to offer a fully rugged tactical platform
- A commercial PC – with the same interface running under Windows or Linux.

Call features

- Two-party calls
- External network calls
- Ad hoc conference and broadcast calls
- Pre-determined conference and broadcast calls
- Meet-me conference calls
- INTCOM, UPE/UIP conference calls
- Half and full duplex calls
- PTT/PRESSEL support
- Call hold/second call
- Call transfer
- Multi-level precedence
- Camp on/call back
- Call diversion
- Call pickup
- Call waiting or intrusion
- Display calling number (CLIP/CLIR)
- Received/dialled calls log
- Call restoration
- Line group
- Multi-service access
- Non-secure warning
- Hot line
- Intercom
- Speed dial
- Abbreviated dial.

Military features

- Flat numbering
- Subscriber location
- Precedence and pre-emption
- Affiliation (single and multiple)
- Multi-level QOS.