



communications



Talon®

(KOV-26)
Product Overview



Cleared by DoD/OSR for Public Release Under OSR Case Number
08-S-1770 on 10 July 2008



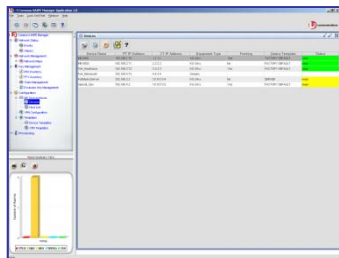
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NetCentric Security

Faster networking
Interoperable security
Smaller, mobile packaging
Industry's broadest set of options

***All focused on supporting your
fixed-site, mobile, airborne
& tactical requirements***



Common HAIPE® Manager
HAIPE IS v3 MIBs
Northbound Interface
Wizards, Templates
Client and Browser Capable

5 Mbps



L-3 Talon™
SCIP and HAIPE®
Wired and Wireless
Ethernet, 802.11b/g, v.90, RS-232
Voice and Data
NSA Certified

100 Mbps



L-3 KG-240A (alpha)
HAIPE® and Foreign Interoperability
Ruggedized
Copper and Fiber

1 Gbps



L-3 KG-245A (alpha)
HAIPE® and Foreign Interoperability
Full Tactical
Copper and Fiber

10 Gbps



L-3 KG-245X
HAIPE®
Enterprise / Backbone
Fiber XFP Modules
NSA Certified

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www.L-3Com.com/HAIPE



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Talon Overview



- Talon is a Type-1 COMSEC Device
- Used with a laptop computer to secure data-in-transit
- Offers unsurpassed
 - Security
 - Interoperability
 - Flexibility
 - Portability
 - Ease of use, and
 - Value





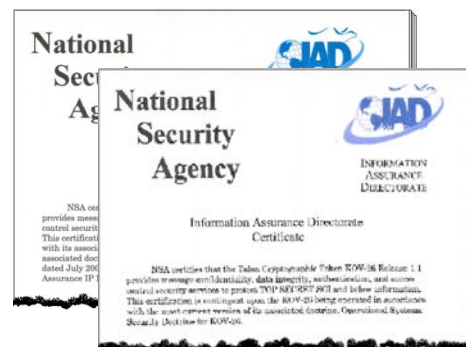
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Talon Security



- NSA Certified to protect voice and data up to **TOP SECRET/SCI**

- Confidentiality
- Authentication
- Data Integrity
- Access Control
- High-Assurance Implementation



- Supports both Pre-placed and Modern Key
 - Up to 384 Traditional (pre-placed/symmetric) Keys
 - 12 months for each of 32 Security Associations
 - Up to 8 Firefly or Enhanced Firefly (SDNS) Key sets
 - Current and Next, including CKLs
 - Supports all major key fill devices
 - DTD, SKL, SDS-2000, and KSD
 - Supports Rekey via SCIP rekey call to NSA CF



- Releasable to CCEB Nations and NATO
 - U.S., U.K., Canada, Australia, New Zealand



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Talon Interoperability



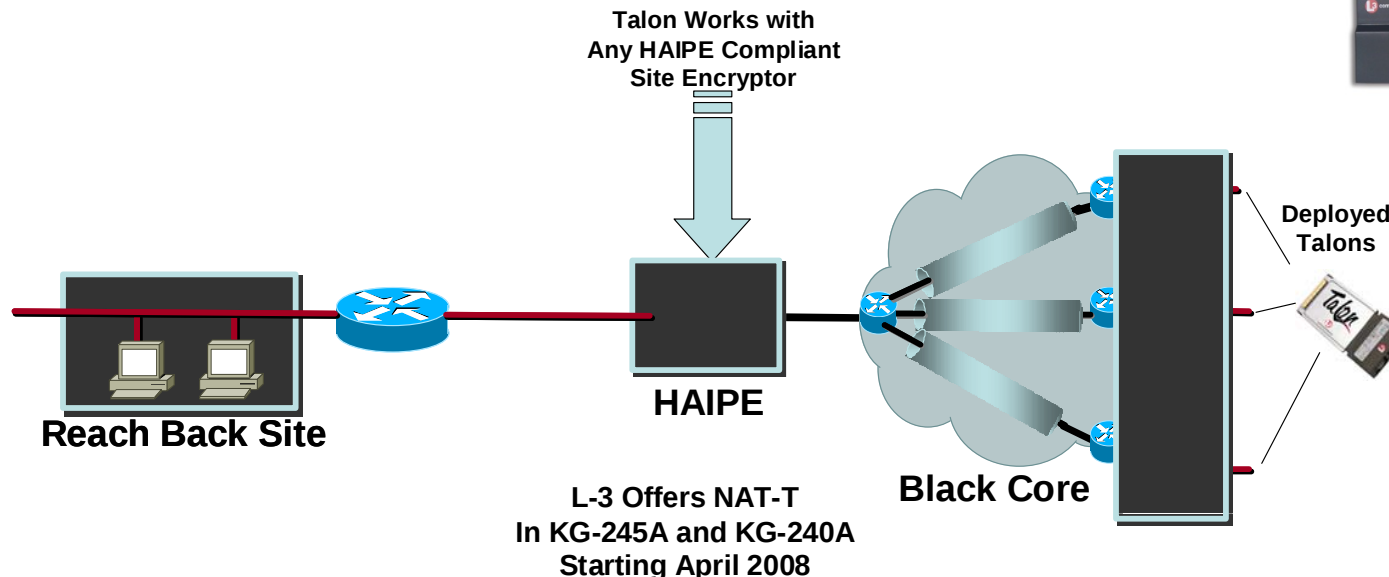
- Employs both NSA Open-standard Communication Protocols: SCIP and HAIPE IS™ for voice/data up to TS/SCI
- SCIP = Secure Communications Interoperability Protocol
 - Used for circuit-switched telephone voice and data
 - Voice using standard MELP and G.729D vocoders
 - Data, including Fax, Reliable Transport, and Guaranteed Throughput
 - Mode Change
 - Auto answer, auto secure, speed dial, secure dial, mute, redial, favorite numbers list
 - Secure Access Control System (SACS) - access control list based on DAO, KMID, or Min/Max security levels
 - Interoperable with any NSA-certified SCIP device, e.g. STE, OMNI, Sectera Wireline Terminal, Guardian, Edge



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Talon Interoperability (cont'd)

- HAIPE IS™ = High Assurance Internet Protocol Encryptor Interoperability Specification
 - Used for packet-switched IP data and includes:
 - Dynamic Addressing
 - Network Address Translation Traversal
 - Blackside/Redside Ping
 - Dial-up support HAIPE to ISP
 - Multiple INE protecting the same red network (failover)
 - Interoperable with any manufacturer's HAIPE certified device, e.g. KG-240A, KG-245A, KG-245X, Taclane, KG-250



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Talon Flexibility

- Talon supports a range of Network Interfaces for virtually any operational situation
- Network interfaces via COTS USB adapters
 - Ethernet
 - Office access to SIPRNET instead of PDS
 - Home cable modem
 - Hotels
 - Wi-Fi (802.11b/g)
 - Infrastructure and Ad Hoc Modes
 - Supports WEP, WPA, 802.1x authentication
 - Dial-up Modem (V.90)
 - Supports standard Hayes AT command set
 - Can be used for both HAIPE and SCIP
 - Serial (RS-232)
 - Supports legacy SATCOM terminals and ISDN Terminals





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Talon Portability

- Talon weighs 3 ounces, easily fits in a shirt pocket or laptop bag, and is indistinguishable from a commercial NIC
- Talon is powered by the host laptop – no AC adapter, no batteries, wireless
- CCI Handling – unclassified even when keys are loaded
 - Can be hand carried
 - Can be configured centrally and shipped by FedEx, DHL, or U.S. Postal Service
- One Talon can be assigned to up to 15 users accounts
 - Ranges from 1 User on 15 laptops to 15 users on 1 laptop
 - Also supports up to 3 Site Security Officer (SSO) Accounts
- Can be used with Laptop, Desktop, or Thin Client
 - Operates with Windows OS's, including XP-embedded and Server 2003
 - Linux OS support in development





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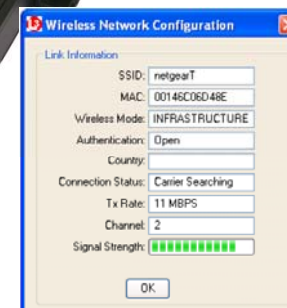
Talon Ease of Use

- Talon uses a simple, intuitive graphical user interface
- For HAIPE users, login to the card and you're ready to go
- If a Modem or Serial adapter is attached the user is presented a dialer screen
- If the Wi-Fi adapter is attached, the user is presented a commercial-like scan and connect screen
- Card configuration is simplified by cloning – set up your network configuration once and clone to other Talons with a single command.
- Talon supports rekey via annual Central Facility rekey call – no need to return the unit from the field for rekey!

-- if you can use Windows – you can use Talon --



TCT
Activated
TCA
Ready



TCT Not
Activated





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Talon Value



- **Talon is the lowest cost HAIPE device on the Market -- and supports SCIP too!**
 - Talon leverages the power of the laptop to perform the work of two crypto devices on a single card
 - The price of a Talon is comparable with the lowest cost SCIP devices and less than ¼ of the next closest HAIPE device (FREE HAIPE!)
- **L-3 has negotiated high-volume pricing with the NSA which is available to the user for quantity of one**
- **Talon achieves low cost by:**
 - Using COTS ancillaries to minimize cost and simplify logistics
 - State-of-the-art manufacturing processes to reduce cost and increase reliability (MTBF of 528K hours)





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Typical Talon Secure Network Applications



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HAIPE Overview



- **What is a HAIPE?**
 - HAIPE = High Assurance Internet Protocol Encryptor
 - INE = In-line Network Encryptor
 - A HAIPE INE protects Red Data that needs to transverse a Black Network through use of secure tunnels
- **HAIPE Interoperability Specification (IS) is the NSA required format to secure classified data on IP Networks**
 - Working group defines specification
 - NSA performs security testing
 - SPAWAR Systems Center San Diego performs HAIPE™ IS Interoperability Testing (HIT)
 - Status:
 - Current Products are certified to HAIPE IS 1.3.5
 - NSA contract for Foreign Interoperability provided to two vendors: L-3 Communications, GD
 - NSA provided contract for HAIPE IS version 3 to three vendors: L-3 Communications, GD, Viasat



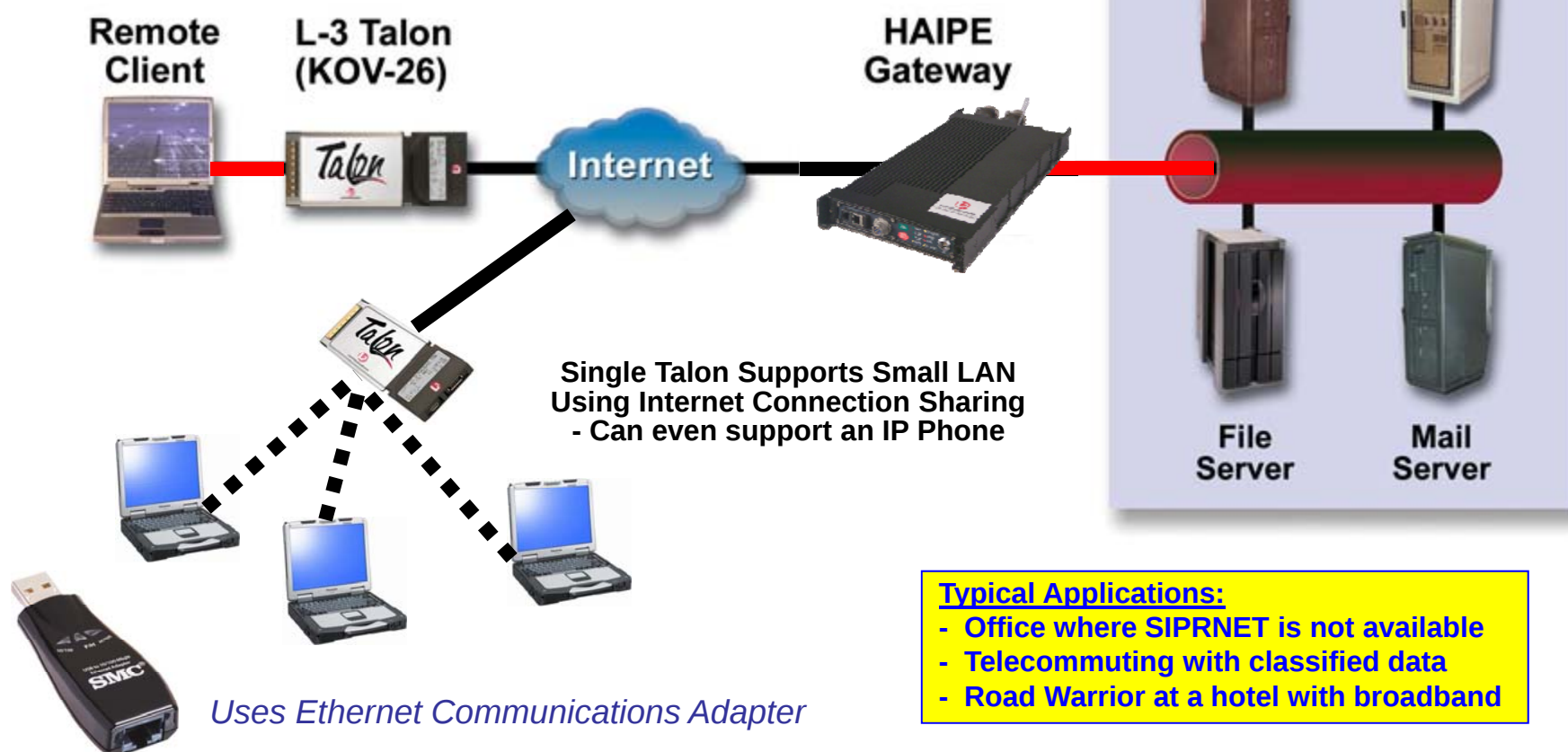
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HAIPE over Ethernet



- *HAIPE over 10/100 Base T Ethernet up to 5 Mbps*
- *Supports Static or Dynamic IP Addresses*
- *Supports NAT Traversal*

Classified Network



Typical Applications:

- Office where SIPRNET is not available
- Telecommuting with classified data
- Road Warrior at a hotel with broadband

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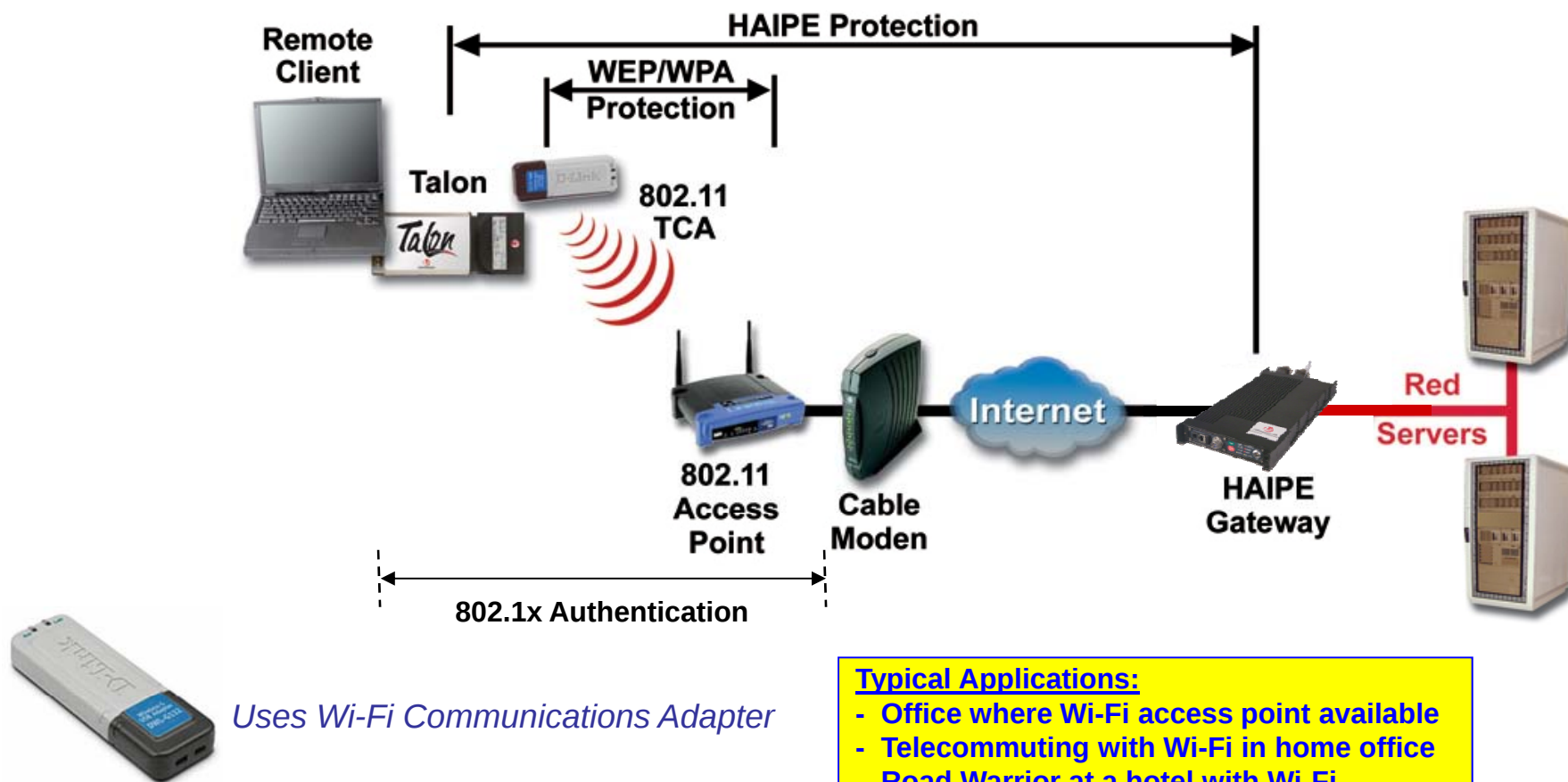


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HAIPE over Wi-Fi (Infrastructure Mode)

- 802.11b/g Infrastructure Mode

- Up to 5 Mbps
- 802.11 Security
 - WPA, WEP, 802.1x
- Works with any COTS access point



Typical Applications:

- Office where Wi-Fi access point available
- Telecommuting with Wi-Fi in home office
- Road Warrior at a hotel with Wi-Fi
- Cable-less rapid deployment

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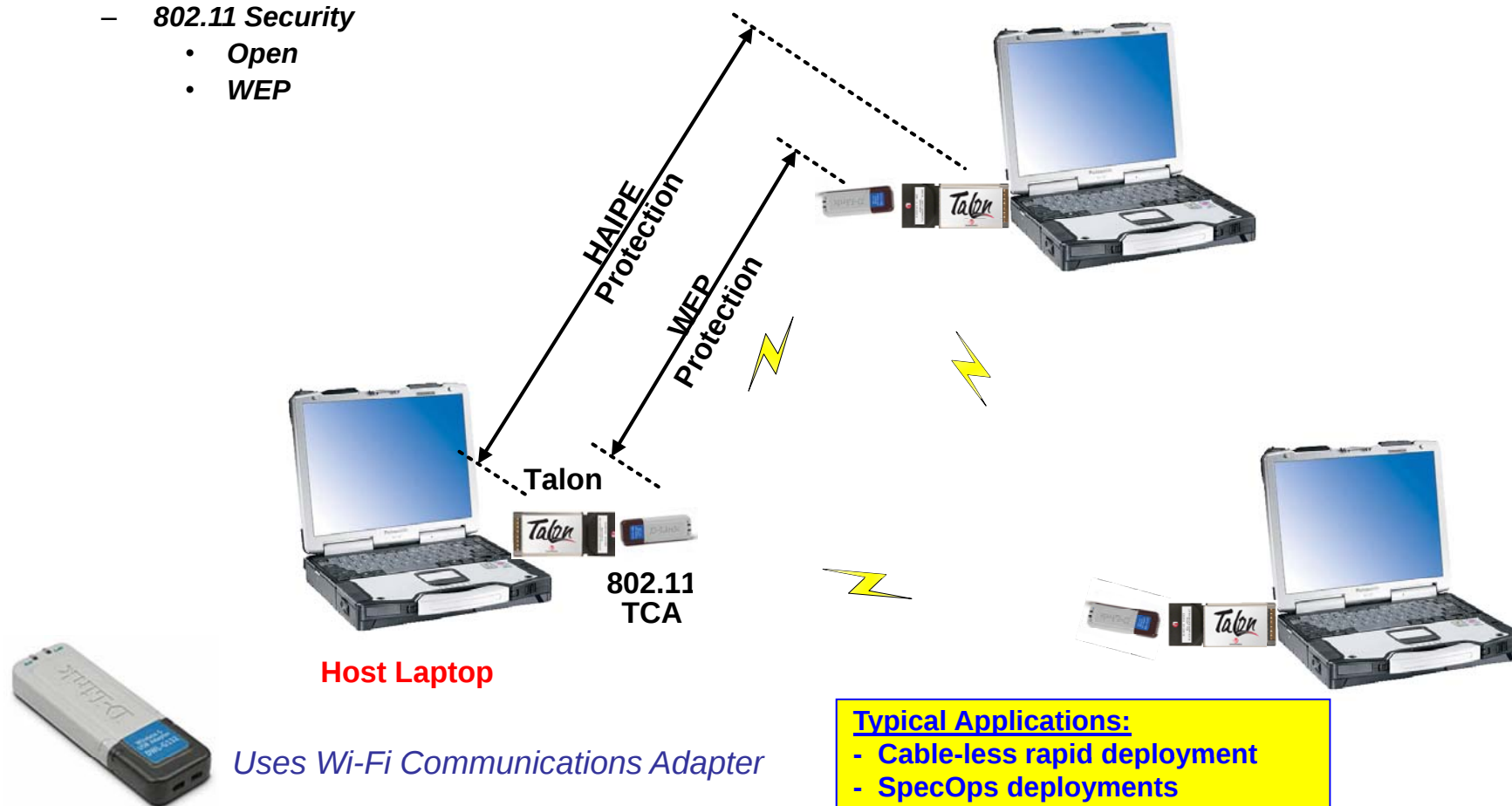


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HAIPE over Wi-Fi (Ad Hoc Mode)



- **Ad-hoc Mode (Talon to Talon)**
 - *Rapid System Interconnect without running cable*
 - **802.11 Security**
 - Open
 - WEP



Typical Applications:

- Cable-less rapid deployment
- SpecOps deployments
- Comms in transit

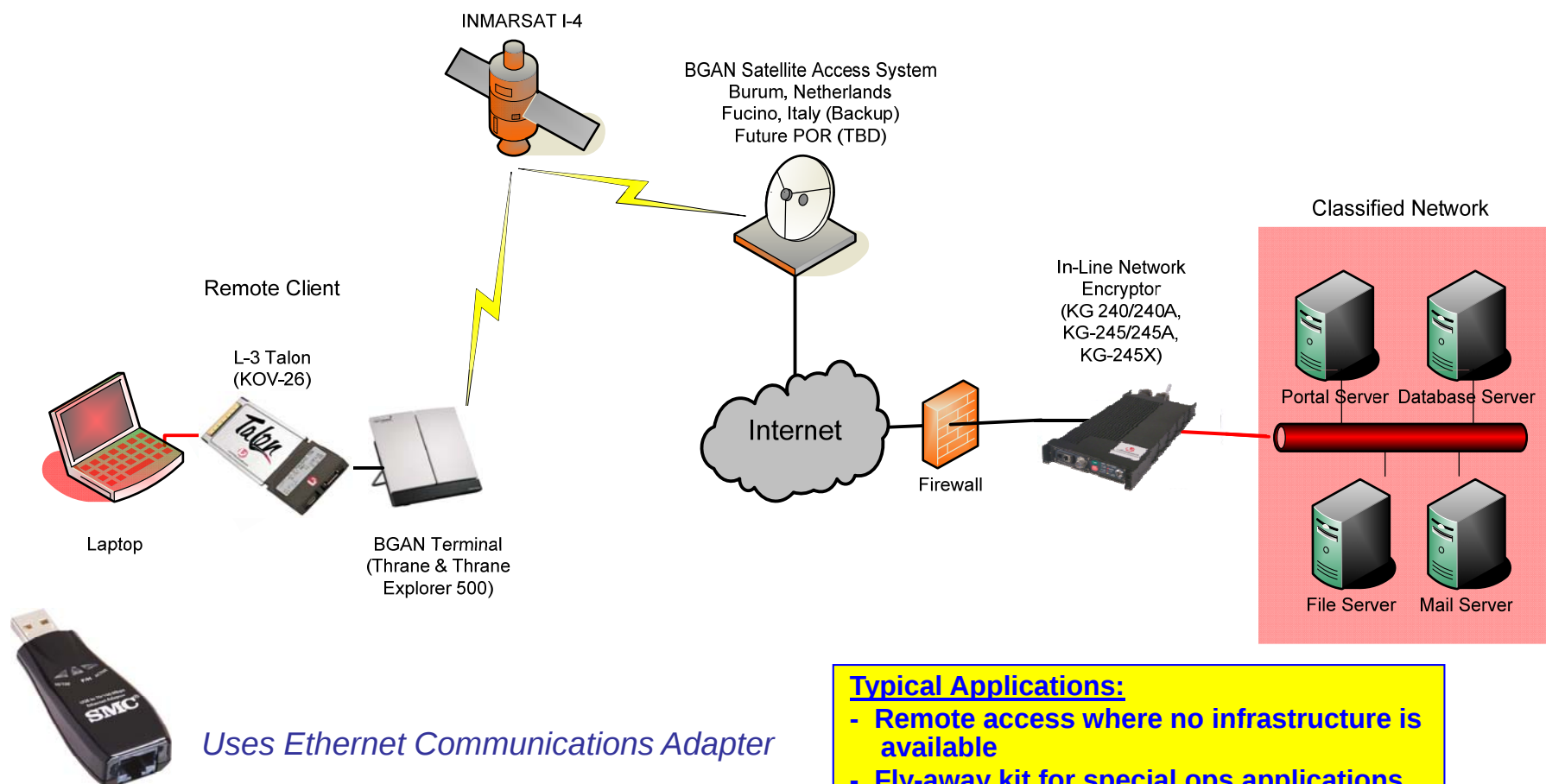
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HAIPE over Inmarsat BGAN

- **Secure IP at Broadband Speeds**
- **Also supports SCIP Secure Voice & Data (not shown)**



Typical Applications:

- Remote access where no infrastructure is available
- Fly-away kit for special ops applications

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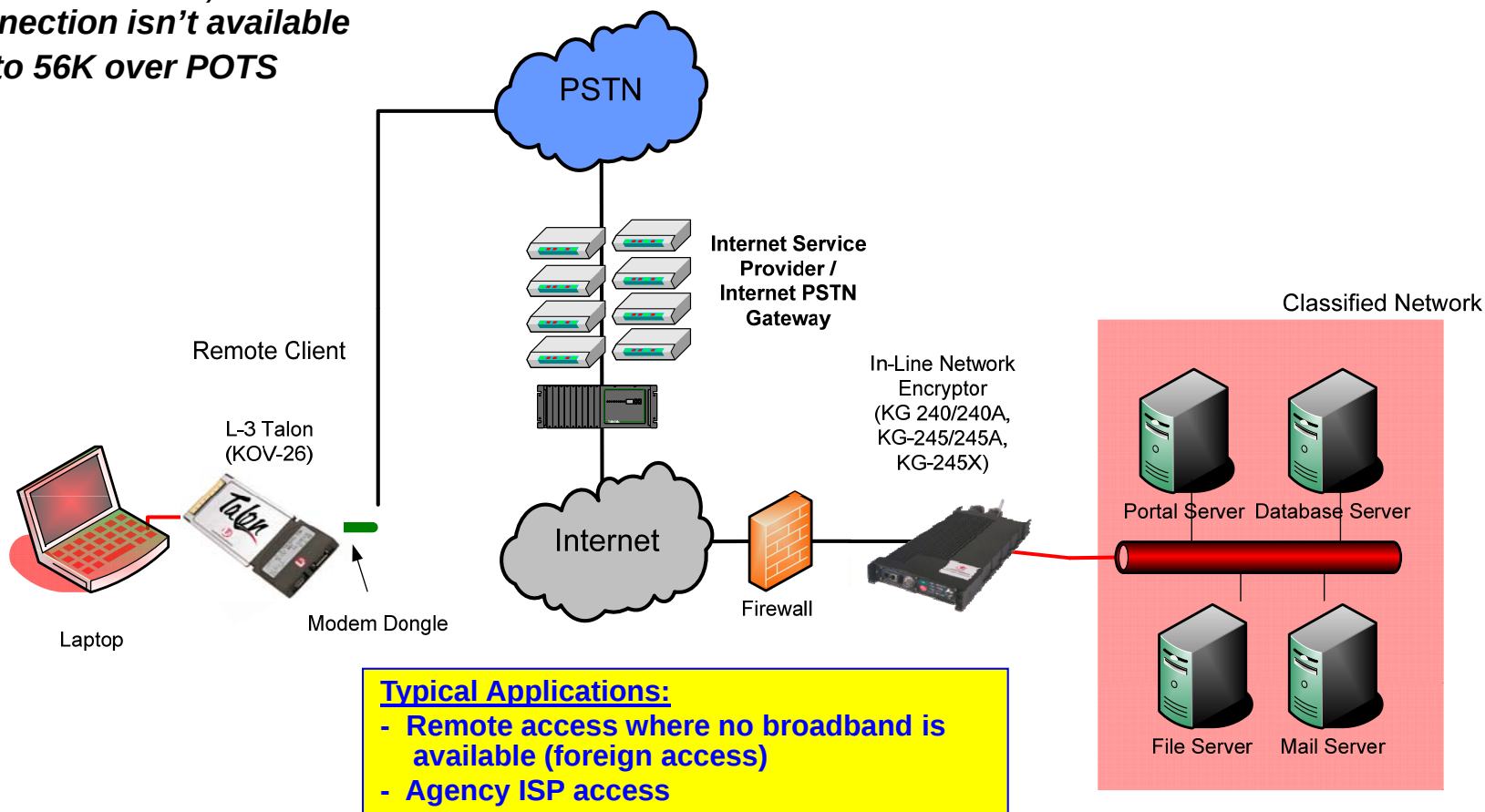


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HAIPE over Dial-up



- *HAIPE via an ISP, when Broadband connection isn't available*
- *Up to 56K over POTS*



Uses V.90 Modem Communications Adapter

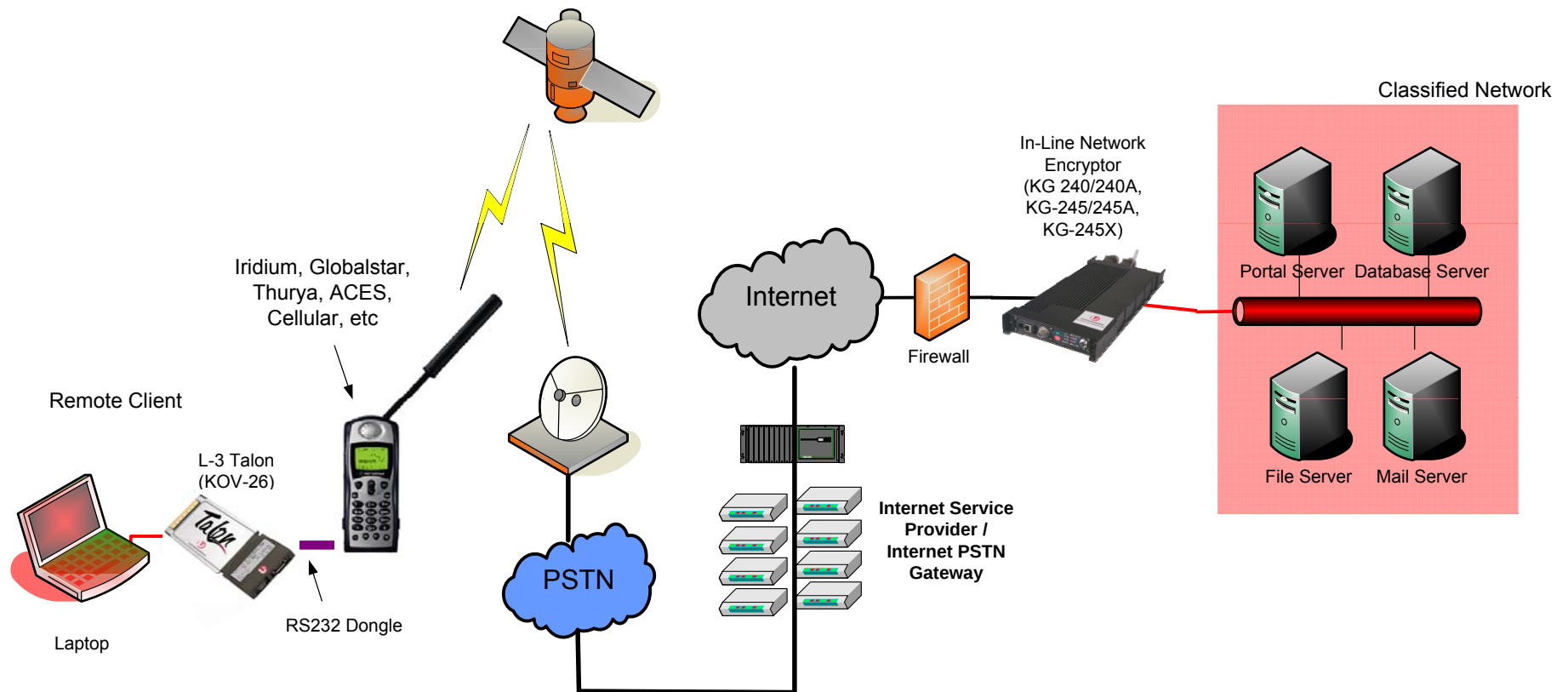
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HAIPE over Serial SATCOM

- **Interconnect to Legacy SATCOM via RS-232**



Uses RS-232 Communications Adapter

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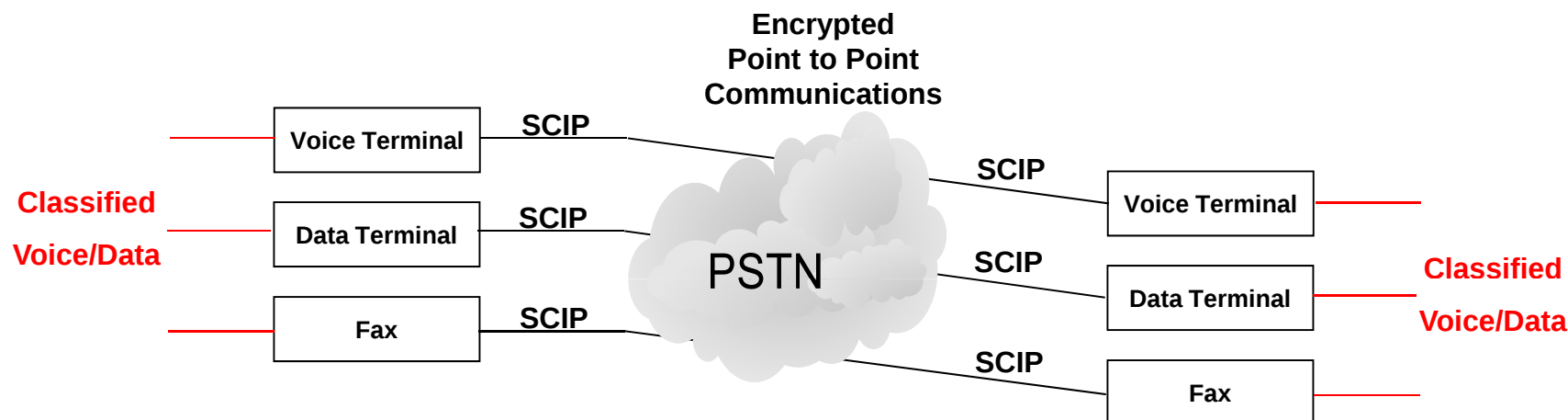
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SCIP Overview



- **What is a SCIP?**

- SCIP = Secure Communications Interoperability Protocol (formerly known as FNBDT - Future Narrowband Data Terminal)
- Terminal = A circuit switched device that handles voice and/or data over a variety communications systems including commercial land line telephone, military radios, satellites, and the several different cell phone standards
- Similar to a dial-up modem - once a connection is made, two SCIP phones negotiate security and operational parameters and then communicate in the best way possible



- **SCIP is the U.S. Governments standard for secure voice and data communication.**

- Working group defines specification
- High-Assurance Implementation supports communications up to TS/SCI
- NSA performs security testing
- GD Needham performs SCIP Interoperability Testing

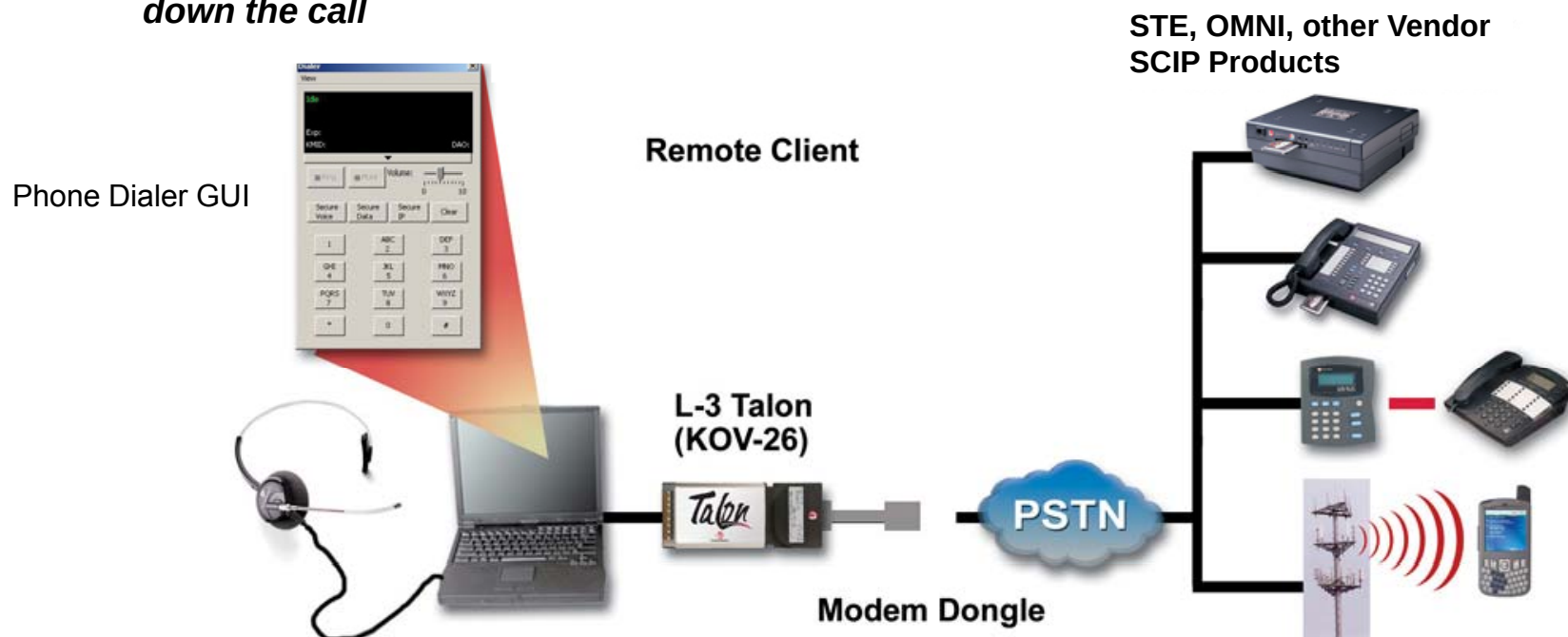


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SCIP Voice



- **SCIP Voice over POTS**
- **Uses Laptop Sound Card**
- **Supports MELP and G.720 vocoders**
- **Can switch to Data without breaking down the call**



Typical Applications:

- Access to SCIP devices like a STE/OMNI



Uses V.90 Modem Communications Adapter

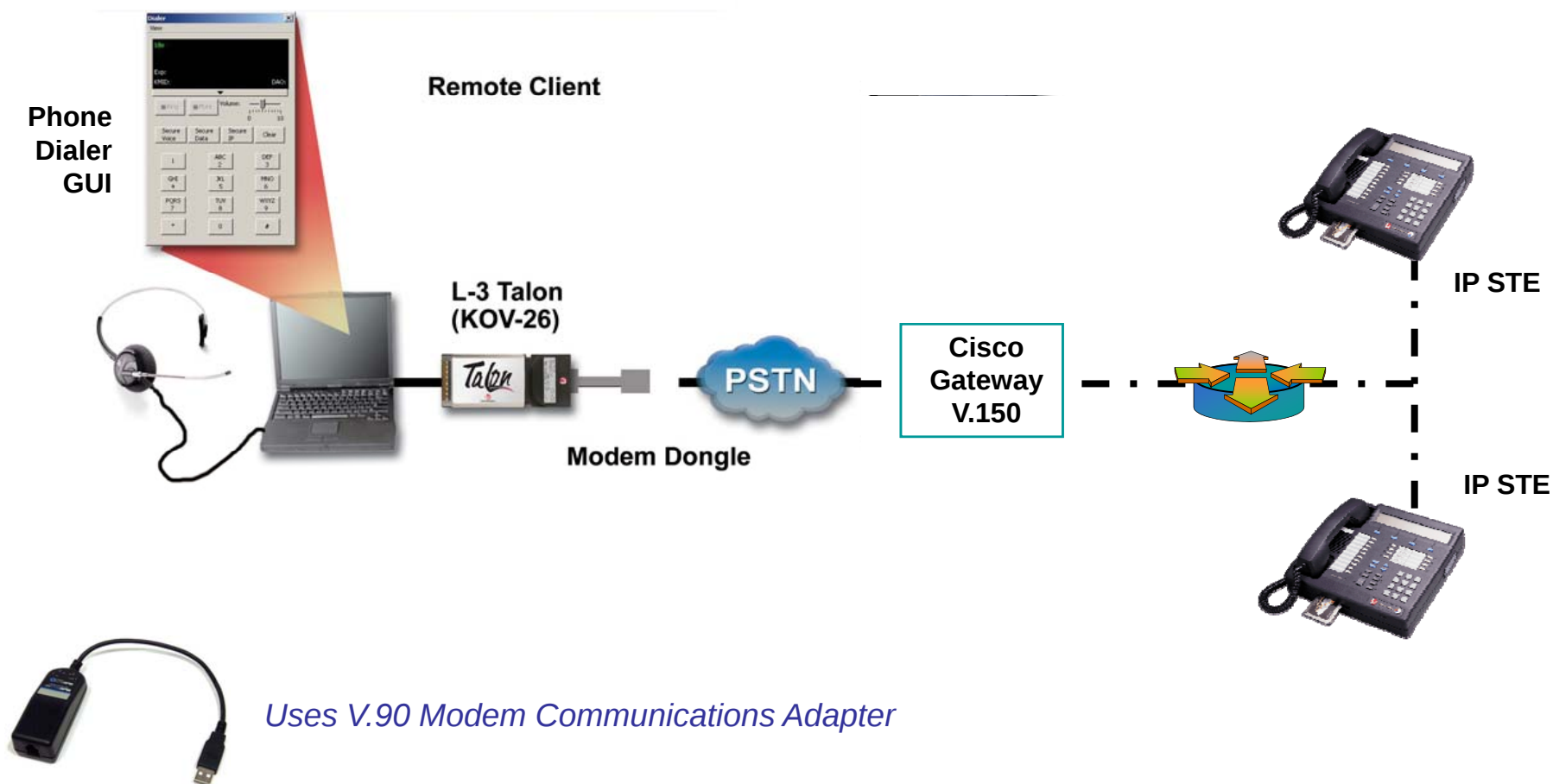


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SCIP with VOIP-STE



- *SCIP Voice over POTS to a CISCO Gateway*
- *Cisco Gateway handles transition from Circuit to Packet switch networking*



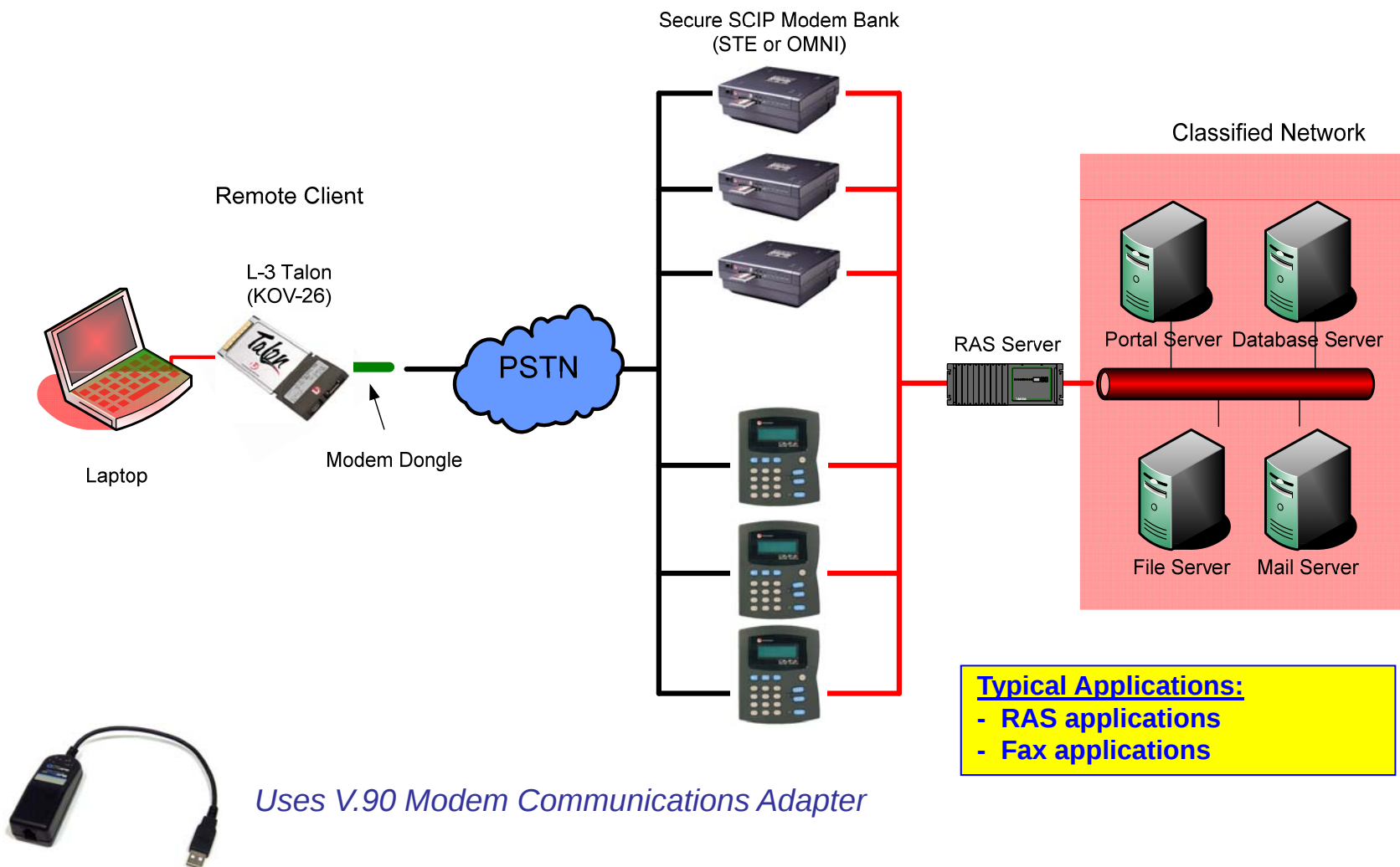


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SCIP Data over PSTN



- *SCIP Data over POTS*
- *Also supports Fax capability*

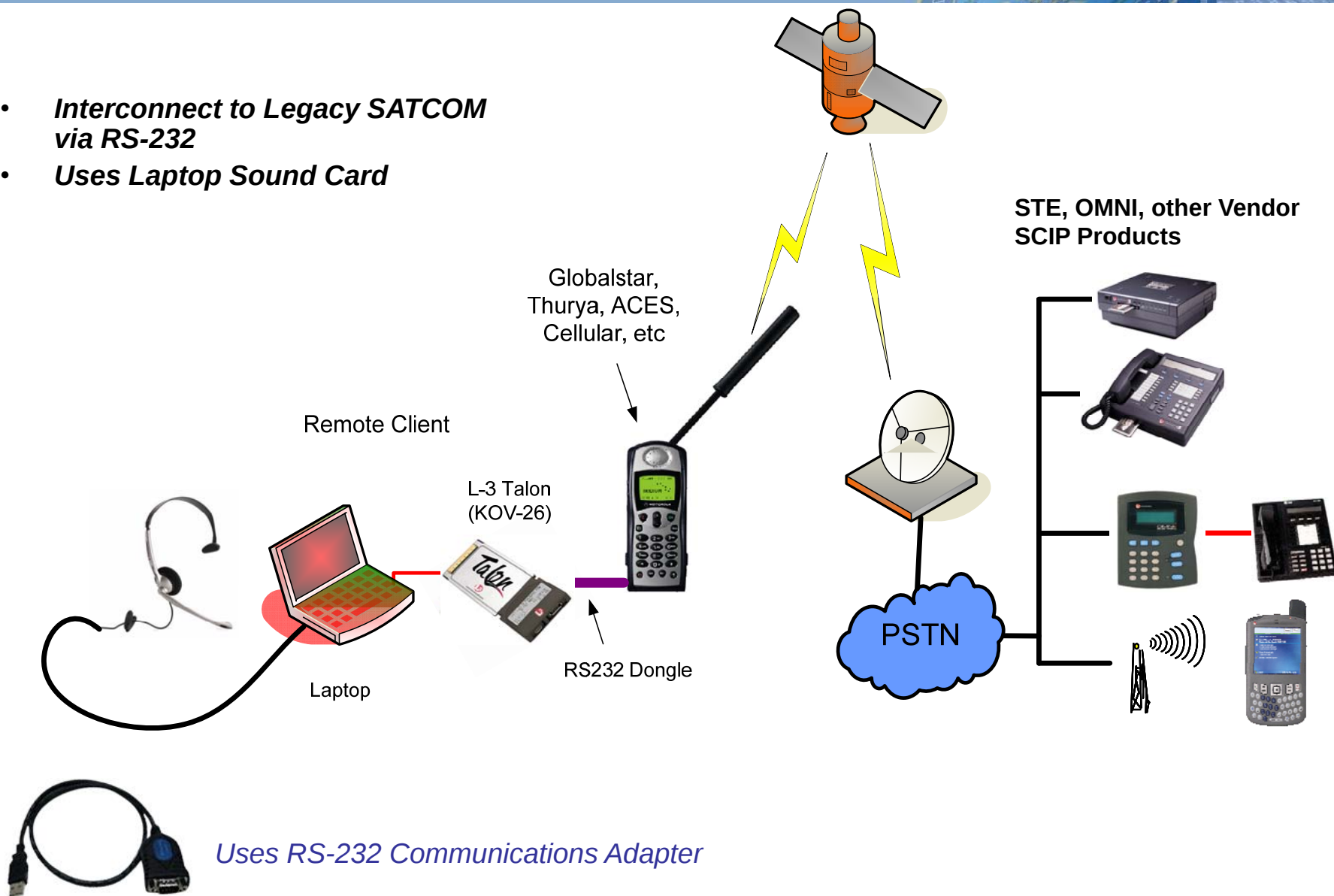




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SCIP over Serial SATCOM

- **Interconnect to Legacy SATCOM via RS-232**
- **Uses Laptop Sound Card**



Uses RS-232 Communications Adapter

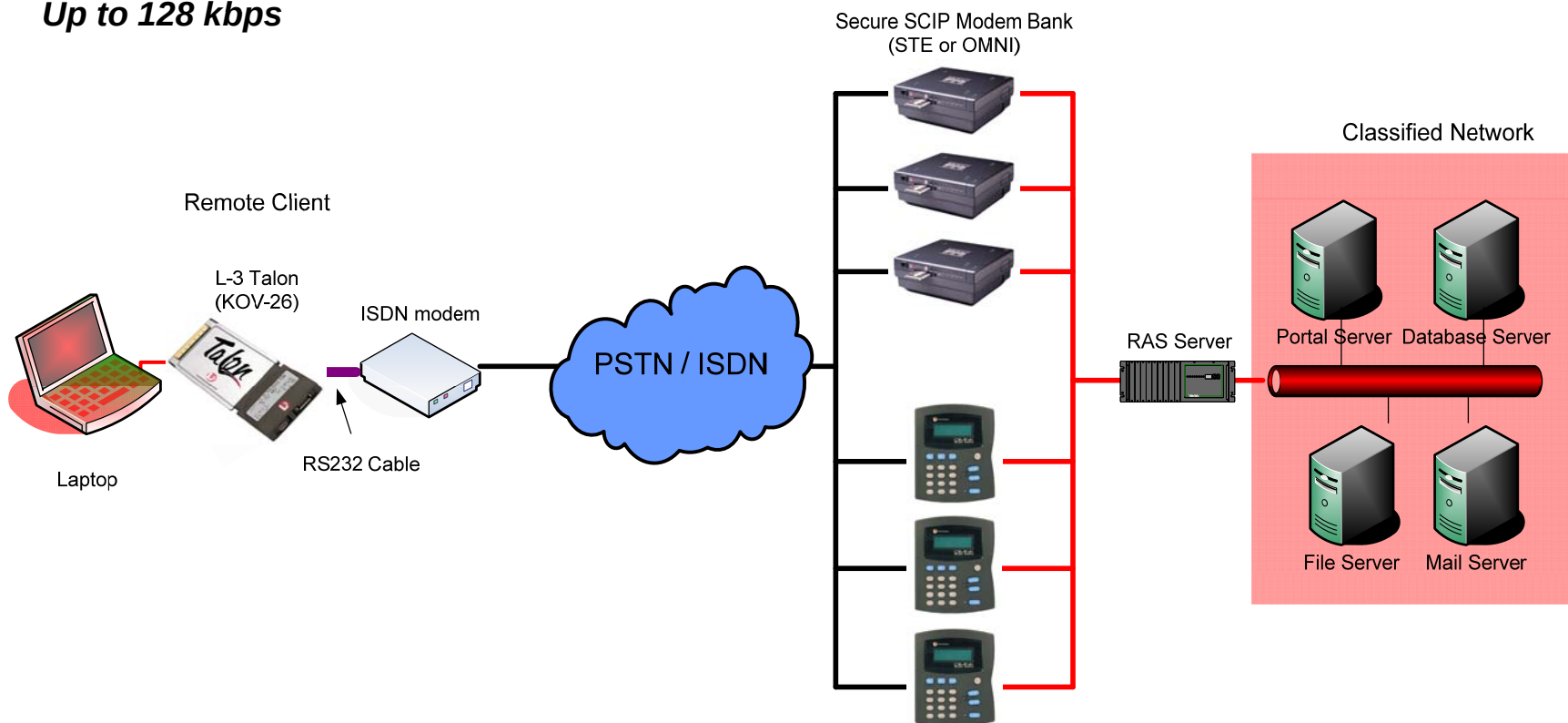


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SCIP over ISDN TA



- **Interconnect to ISDN Terminal Adapter via RS-232**
- **Uses Laptop Sound Card**
- **Up to 128 kbps**



Uses RS-232 Communications Adapter



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