

# SNIFFER TECHNOLOGIES GUIDE TO COMMUNICATION PROTOCOLS

OSI LAYERS    TCP/IP    Routing/Switching Protocols    Microsoft    Novell NetWare    IBM Protocols    ISO    VoIP    VPN/Tunneling

## 7 APPLICATION LAYER

• Provides interface to end-user processes  
• Provides standardized services to applications

## 6 PRESENTATION LAYER

• Specifies architecture-independent data transfer format  
• Encodes and decodes data; encrypts and decrypts data; compresses data

## 5 SESSION LAYER

• Manages user sessions  
• Reports upper-layer errors

## 4 TRANSPORT LAYER

• Manages network layer connections  
• Provides reliable packet delivery mechanism

## 3 NETWORK LAYER

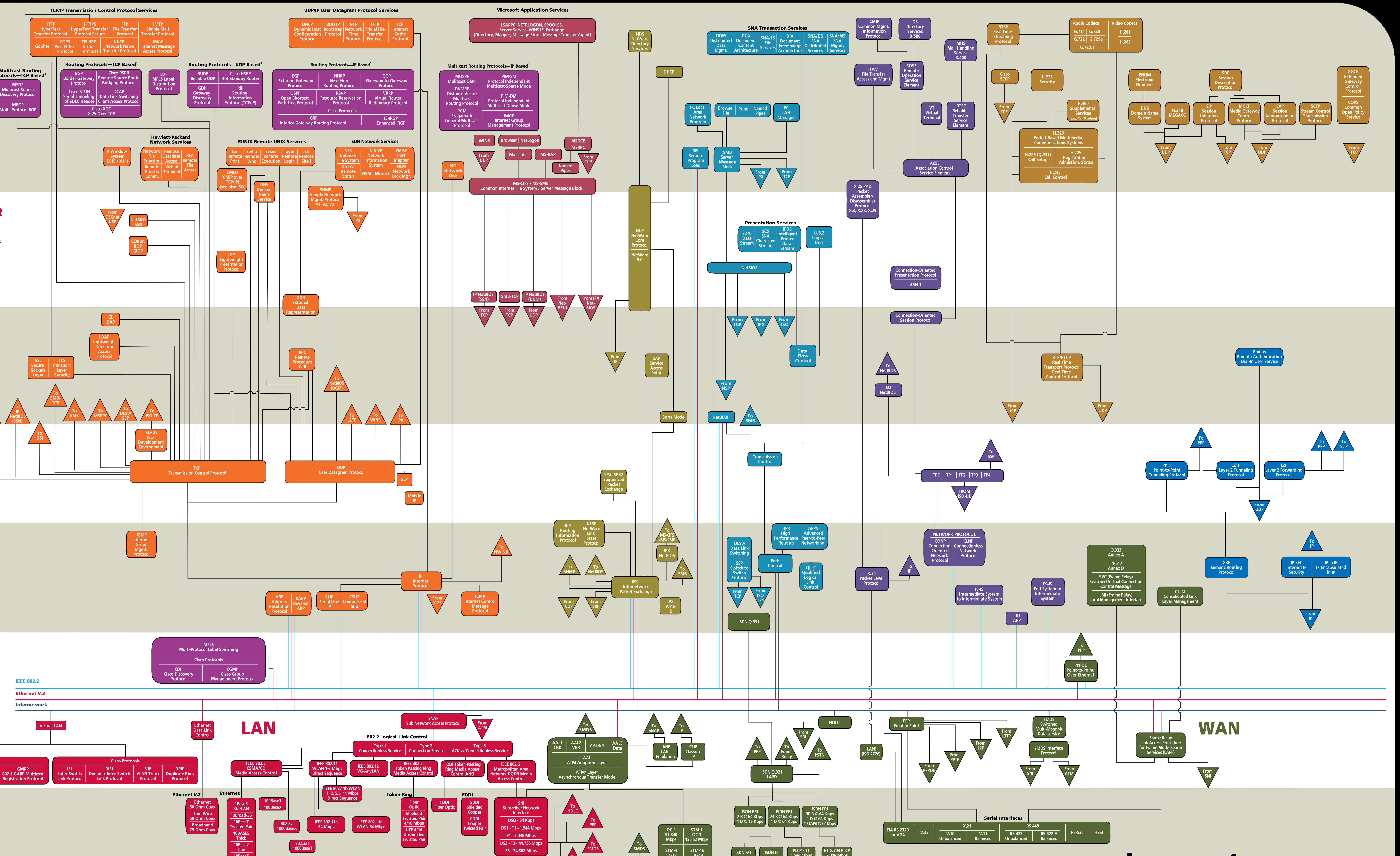
• Addresses and routes packets

## 2 DATA LINK LAYER

• Frames packets  
• Controls physical layer data flow

## 1 PHYSICAL LAYER

• Interfaces between network medium and network devices  
• Defines electrical and mechanical characteristics



<sup>1</sup> Distributed or complex routing protocols that provide their own transport or use TCP/UDP/IGMP.  
<sup>2</sup> ATM cannot be transported over DS0.  
 Note: Mobile protocols are located in a separate diagram. In addition to the protocols depicted in this diagram, Sniffer Technologies also decodes DECnet and AppleTalk.

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## Sniffer Technologies Guide to Communication Protocols

Better performance for your network, and your bottom line. Sniffer® Technologies realizes that your network has become central to your business. A network slow-down or outage can easily translate into hundreds of thousands of dollars in lost revenue and productivity. To ensure around-the-clock availability for customers and partners, you need proven solutions that detect and resolve bottlenecks before they become problems.

Sniffer maintains peak performance across all LAN and WAN topologies, from 10/100 Ethernet to the latest Wireless LAN and VoIP Network Protocols—across the enterprise and the Internet. Built to analyze the entire network, Sniffer software proactively monitors and troubleshoots all network layers from the physical to the applications layer—all in real-time.

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# 24x7

The Sniffer Enterprise Management Architecture provides unsurpassed network visibility.

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Sniffer® University™ is a comprehensive educational resource for building and enhancing all network professionals' skills in fault and performance management. Sniffer University has trained over 70,000 network professionals worldwide. The Sniffer Certified Professional Program provides network professionals industry-recognized accreditation as experts in their field.

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