

ALPS MATIP Protocol Networking

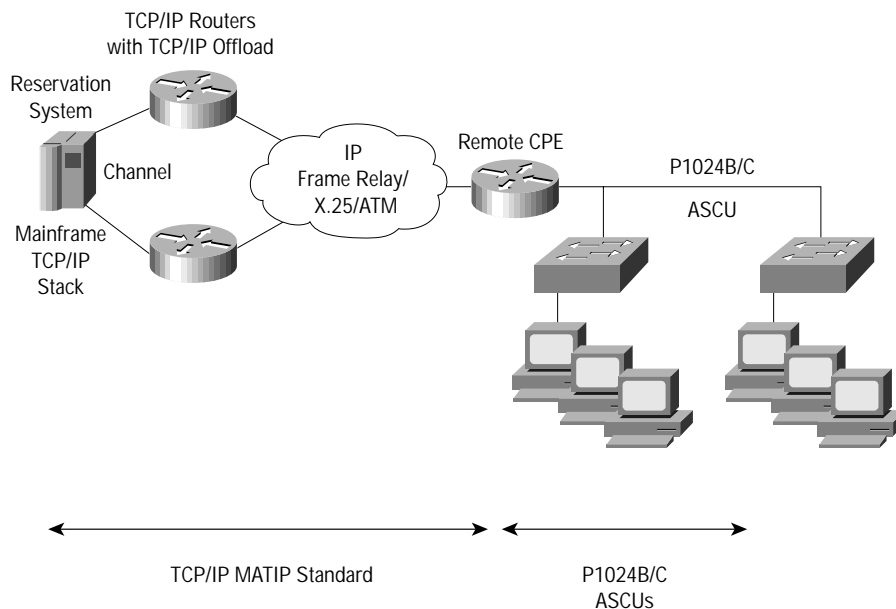
THE MAPPING OF AIRLINE TRAFFIC OVER IP (MATIP) SPECIFICATION PROVIDES A SOLUTION FOR INTEGRATING TRAFFIC FROM AIRLINE APPLICATIONS ON IBM AND UNISYS HOSTS USING THE P1024B AND P1024C PROTOCOLS INTO A SINGLE TCP/IP NETWORK. MATIP SUPPORT IS NOW AVAILABLE FROM CISCO SYSTEMS AND ALLOWS AIRLINE TRAFFIC TO BE COMBINED WITH SNA, VOICE, AND TCP/IP TRAFFIC INTO A SINGLE NETWORK. THIS CONSOLIDATED NETWORK REDUCES COSTS FOR AIRLINES AND PROVIDES AN INFRASTRUCTURE THAT PROMOTES NEW APPLICATIONS, NEW USERS, AND A COMPETITIVE EDGE.

With Airline Product Set (ALPS) MATIP protocol networking, Cisco provides support for translating P1024B (Airline Line Control [ALC]) and P1024C (Universal Terminal Support [UTS]) protocol traffic on properly configured Cisco 2500, 2600, 3600, 4500, and 4700 series router serial interfaces into IP traffic using TCP/IP according to the MATIP specification defined by RFC 2351. MATIP support is added to the Cisco IOS[®] software as part of the Plus feature packages. MATIP translation allows enterprises to transport the ALC and UTS traffic from agent set control units (ASCUs) at remote locations across a TCP/IP network to TCP/IP-based applications running on mainframes and other servers as shown in Figure 1. Routers in the data center see only IP traffic and do not participate in the processing of ALC and UTS protocols.

Network Consolidation Reduces Costs

Maintaining separate networks for P1024B, P1024C, SNA, telephone, and TCP/IP implies overhead in costs and complexity. MATIP protocol translation eliminates the need for a separate network for ALC and UTS data by incorporating that traffic into the TCP/IP network. SNA traffic can be consolidated into a TCP/IP network, using technologies such as data-link switching (DLSw). Furthermore, telephone traffic can be consolidated into the TCP/IP network using technologies such as voice over IP. With a single TCP/IP network, cost savings can be realized in line costs, management, and a reduction in customized software and hardware.

Figure 1 Airline Network with MATIP Translation



Cisco IOS Software Provides Enhanced Network Services

By incorporating MATIP support into the Cisco IOS software, users gain value from the network services provided. As TCP/IP messages, the MATIP traffic can take advantage of security features such as encapsulation, firewall protection, and authentication, authorization, and accounting (AAA). Using weighted fair queuing (WFQ) or custom queuing, MATIP traffic can be prioritized to meet response time criteria.

MATIP Benefits

Table 1 summarizes MATIP support features and their benefits.

Table 1 MATIP Features and Benefits

Features	Benefit
Transform ALC Protocols to MATIP Protocols	A TCP/IP infrastructure for all enterprise traffic
Support Devices and ASCUs that Use the P1024B and P1024C Protocols without Modification	Investment protection, less training costs, and faster network implementation
Use Properly Configured Standard Synchronous Serial Interfaces on the Cisco 2500, 2600, 3600, 4500, and 4700 Series Routers	Standard hardware and software, rather than customized, proprietary solutions
Support Point-to-Point and Multidrop Configurations	Network design flexibility
Security and Quality of Service Features of the Cisco IOS Software	Enhanced network services that enable new services and end users

MATIP Support Product Components

Table 2 itemizes the platforms and feature sets that support remote MATIP translation.

Table 2 Cisco IOS Feature Sets on Supported Platforms

Router Platform	Feature Set	Image Name
Cisco 2520, 2521, 2522, 2523	IP Plus	c2500-is-1
	IP Plus 40	c2500-is40-a
	IP Plus 56	c2500-is56-a
	Enterprise Plus	c2500-js-1
	Enterprise Plus 40	c2500-js40-1
	Enterprise Plus 56	c2500-js56-1
	Enterprise/APPN Plus	c2500-ajs-1
	Enterprise/APPN Plus 40	c2500-ajs-40-a
	Enterprise/APPN Plus 56	c2500-ajs-56-a

Router Platform	Feature Set	Image Name
Cisco 2600 Series	IP Plus	c2600-is-mz
	IP Plus 40	c2600-is40-mz
	IP Plus 56	c2600-is56-mz
	IP Plus IPsec 56	c2600-is56l-mz
	Enterprise Plus	c2600-js-mz
	Enterprise Plus 40	c2600-js40-mz
	Enterprise Plus 56	c2600-js56-mz
	Enterprise Plus IPsec 56	c2600-js56l-mz
	Enterprise/APPN Plus	c2600-ajs-mz
	Enterprise/APPN Plus 40	c2600-ajs40-mz
	Enterprise/APPN Plus 56	c2600-ajs56-mz
Cisco 3620	Enterprise Plus	c3620-js-mz
	Enterprise Plus 40	c3620-js40-mz
	Enterprise Plus 56	c3620-js56-mz
	Enterprise/APPN Plus 40	c2500-ajs40-a
	Enterprise/APPN Plus 56	c2500-ajs56-a
	Enterprise/APPN Plus 56	c3620-ajs56-mz
Cisco 3640	Enterprise Plus	c3640-js-mz
	Enterprise Plus 40	c3640-js40-mz
	Enterprise Plus 56	c3640-js56-mz
	Enterprise/APPN Plus	c3640-ajs-mz
	Enterprise/APPN Plus 40	c3640-ajs40-mz
	Enterprise/APPN Plus 56	c3640-ajs56-mz
Cisco 4500 and 4700 Series	Enterprise Plus	c4500-js-mz
	Enterprise Plus 40	c4500-js40-mz
	Enterprise Plus 56	c4500-js56-mz
	Enterprise/APPN Plus	c4500-ajs-mz
	Enterprise/APPN Plus 40	c4500-ajs40-mz
	Enterprise/APPN Plus 56	c4500-ajs56-mz

Any Cisco router can be used to support MATIP in the data center.



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