ARTour Gateway and Mobile Client

Highlights

Extends IP connectivity across leading wireless and dial networks

Integrates diverse networks under a single interface—TCP/IP sockets

Shields applications from the underlying network complexities Provides optimizations to minimize data traffic, reduce network costs, and enhance performance

Extends enterprise-level security with authentication and encryption

Features SNMP network management with integration into TME 10 NetView

Go wireless with ease

In today's highly competitive business environment, every moment counts. Staying in business means staying in touch, and the need for information is crucial whether you're at the office, on the road, or with a customer. That's why businesses are turning to mobile and wireless solutions.

Enabling applications for the mobile and wireless environment has been complex, time consuming, and costly in the past; but it is no longer necessary to completely rewrite your existing applications or to modify your applications to a specialized API.

ARTour is IBM's communications middleware which enables and simplifies the management and implementation of applications in the mobile environment. ARTour extends IP connectivity across a diverse set of wireless and dial networks to seamlessly enable TCP/IP applications to access the networks.

A client and gateway

ARTour is based on a client/server architecture and focuses on communications between its two components: the ARTour Mobile Client and the ARTour Gateway.

The ARTour Mobile Client resides on the users mobile computer and communicates with the ARTour Gateway via wireless and/or dial networks. The ARTour Gateway integrates the mobile networks and provides the link to the enterprise network. All your mobile users can use the same ARTour Gateway and access the same enterprise applications, regardless of the networks they use. ARTour also enables mobile users to connect to multiple applications, even if the applications are in different networks—like LAN, WAN, intranet, and Internet.

Network integration

ARTour consolidates the leading international wireless packet data, cellular, and wireline networks—including Mobitex, DataTAC, DataTAC PMR, GSM, AMPS, PCS, and PSTN—under a single interface. All the network-specific details are hidden to make the network transparent to your application, so you can support multiple networks without additional effort. It also frees your technical staff from needing to understand the complexities of each network. Best of all, your mobile users will have the flexibility to use the network that is just right for their individual needs.

TCP/IP sockets interface

ARTour is based on the Internet Protocol (IP) transport, the industry-standard communications protocol. It resides beneath the IP layer and is accessed through standard TCP/IP and UDP/IP sockets so you don't need to worry about special interfaces, proprietary APIs, and SDKs (Software Developer Kits).

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ARTour is transparent to TCP/IP applications, which means that your existing applications can be quickly and easily deployed in a wireless environment. New applications for wireless are simply written to TCP/IP sockets, just as you normally would do. They can even be developed and tested in a wired environment, such as a LAN, then migrated to wireless without making additional changes.

Data reduction

ARTour data compression reduces the size of the IP packets, often by half, while header reduction decreases TCP/IP packet headers by 80%. And less data means faster response times, which is particularly important over wireless networks. In addition, network fees are often based on the amount of information transmitted — so data reduction is crucial to providing an affordable mobile solution.

Connection management

When using networks where fees are based on connection time, such as GSM and AMPS, ARTour can provide significant cost savings. Once a connection has been established, ARTour will dynamically disconnect from the network during idle periods and reconnect when data transmission occurs.

Packet filtering

ARTour can filter out certain TCP/IP packets to prevent their transmission to the mobile user. These packets include control messages and network management packets, both of which unnecessarily increase data traffic and network costs. Filters can be configured to tailor this feature to your specific environment.

Address management made easy

Network addressing can be complex in the mobile environment because each network may have unique or proprietary (non-IP) network addressing schemes. With ARTour, applications simply use IP addresses. Moreover, addresses are managed in the ARTour Gateway. This means that an ARTour mobile user will always be known by the same IP address regardless of the network being used. It's that easy.

Secure access and privacy

Wireless networks can raise concerns about security, and ARTour provides a complete solution. Authentication assures the identity of both the mobile user and the ARTour Gateway to prevent unauthorized access.

To provide for data privacy and protection from eavesdropping, ARTour encrypts your data using the Commercial Data Masking Facility (CDMF), an algorithm based on the Data Encryption Standard (DES) with a 40-bit encryption key. All data sent between the mobile user and the ARTour Gateway can be encrypted for true end-to-end security.

Simplified configuration

The ARTour Mobile Client includes a user interface that enables easy setup and configuration. The AIX System Management Interface Tool (SMIT) makes the ARTour Gateway configuration easy and helps you perform administrative functions, like adding mobile users to the Gateway—even remotely.

Integrated network management

ARTour lets you manage mobile resources using the industry-standard Simple Network Management Protocol (SNMP) manager. The ARTour gateways, networks, and mobile users are seamlessly integrated into your TME 10 environment, with the status of mobile users and their connection state displayed in a familiar NetView manner. The gateway acts as a proxy network management agent for all mobile clients, eliminating all SNMP traffic between the mobile clients and the gateway. And the status displays are sent to the appropriate upper levels to help you identify suspicious conditions immediately.

The ARTour family

In addition to the ARTour Gateway and Mobile Client, the ARTour family includes

other products designed to enable and optimize application solutions for the mobile environment:

- ARTour Web Express—Provides costeffective and responsive access to intranet and Internet applications, using the browser of your choice, without requiring application changes.
- ARTour Emulator Express—Provides efficient and optimized access to 3270 and 5250 applications.

For more information

If you'd like more information about the ARTour family of products, contact your IBM representative, or call 1-800-735-7638. To learn more about IBM's mobile offerings visit our Home Page at http://www.software.ibm.com/mobile.



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