



IBM ARTour Web Express Meets Needs of Mobile Workforce

Overview

The ARTour™ Web Express Server and Client enhance the productivity of your mobile workforce by providing cost-effective access to the Internet and intranet. Designed for customers that use the Web to distribute information or process transactions, the ARTour Web Express Client intercepts HTTP commands from your Web browser and, together with the ARTour Web Express Server, provides highly optimized data flows. Access can be extended to Lotus resources when a Lotus Domino server is in your network. Designed to be used with the ARTour Gateway and Mobile Client, a wide range of packet radio and dial protocol support is available. In addition, the ARTour Web Express products can be run natively over cellular digital packet data (CDPD) networks. These connectivity options combined with the ARTour Web Express functions of disconnected operations and background processing allow the mobile worker to optimize his work style by choosing:

- Real-time processing over a mobile connection (as if working from an office terminal).
- Client-side execution and queueing of requests for processing at a later time after a server connection is established. For example, forms filled out while on a plane could be submitted for processing once you arrive at your destination.
- Bundling of multiple data requests to be processed in the background while other work (such as reading your e-mail) is being done. The user is notified when the data requests are completed.

The ARTour Web Express Servers and Clients are part of IBM's family of mobile communication products, which also includes the ARTour Gateway and Mobile Clients and the ARTour Emulator Express Servers and Clients.

Intended Customers

Customers whose mobile workforce needs to access the Internet or the corporate intranet to run existing applications over one or more wireless or dial-up connections

Key Prerequisites

- ARTour Web Express Server for AIX® requires either AIX V4R1.4, or later, or AIX V4R2.
- ARTour Web Express Server for OS/2® requires either OS/2 Warp, OS/2 Warp Connect, or OS/2 V4.
- ARTour Web Express Client for OS/2 requires OS/2 Warp, OS/2 Warp Connect, or OS/2 V4.
- ARTour Web Express Client for Windows® requires Microsoft® Windows V3R1 or V3R11 or Windows for Workgroups V3R11 and TCP/IP with loop-back feature.
- ARTour Web Express Client for Windows 95 requires Microsoft Windows 95.

In addition, the ARTour Web Express Clients require a Web browser.

Planned Availability Date

February 21, 1997

At a Glance

The ARTour Web Express Servers and Clients provide a mobile workforce with optimized access to the Internet and intranet. Key features include:

- Support for most Web browsers and any Web server
- Caching of documents and data objects to reduce data transmission
- Differencing algorithms for CGI forms and HTML text so that only modified data is transmitted
- Background (asynchronous) processing to allow consecutive submission of HTML requests without waiting for a response
- Disconnected operations
- Persistent connections and optimized communication
- Multiprotocol support for wireless and dial networks when used with the ARTour Gateway and Mobile Clients
- Standard SNMP Network Management interface

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Description

ARTour

The ARTour family of software meets today's need for making information available to mobile workers over a wide variety of wireless and dial networks without having to rewrite existing applications. This family of modular servers and clients includes:

- ARTour Gateway and Mobile Clients
- ARTour Emulator Express Server and Client
- ARTour Web Express Server and Client

Together these servers and clients provide the widest range of optimized wireless and dial protocol support through standard programming interfaces to existing applications. For announcement materials related to the other ARTour products, refer to Software Announcement 297-028, dated February 18, 1997. Information is also available on the ARTour Web site at URL:

<http://www.networking.ibm.com/artour>

ARTour Web Express Server and Client

World Wide Web technology has become a widespread interface for network access to information. Companies are increasingly taking advantage of HTML (Hypertext Markup Language) to implement forms-based applications using HTTP. While Web protocols were designed for high-speed, inexpensive wired networks, there is an ever growing need for mobile access. The ARTour Web Express products are specifically designed to extend the reach of Internet and intranet applications to your mobile workforce. Sitting on either side of the wireless (or wired) network, the ARTour Web Express Client and Server work together to reduce the number of HTTP/HTML requests and resultant data sent over the network. The ARTour Web Express Client acts as a local Web proxy to the Web browser and communicates over a local TCP/IP connection (using the TCP/IP loopback feature) via the HTTP protocol. The ARTour Web Express Client communicates with a remote ARTour Web Express Server over a TCP connection, which in turn communicates with the Web or proxy server.

The applications for ARTour Web Express continue to grow as the breadth of "browser access" expands. For example, with Lotus Domino installed on your corporate network, ARTour Web Express enables mobile access to Lotus resources.

Product Characteristics

Optimized Communication: The ARTour Web Express products increase the overall efficiency of standard HTTP communications making wireless Web access an affordable, convenient solution for mobile computing. This is achieved by tailoring the standard communication flow between a Web browser and a Web server. By intercepting all communications between the browser and Web server, the ARTour Web Express products can control how, when, and if requests are sent over the wireless network.

- To eliminate the constant "open socket/close socket" traffic for each send/receive pair, the socket is kept open for the duration of the client session.
- To eliminate repetitive transmission of data, the ARTour Web Express Server performs differencing algorithms on CGI forms and HTML text so that only

the modified content is sent over the wireless network to the Client.

- To eliminate transmission of unnecessary information, the HTTP headers are substantially reduced.
- To reduce the overall amount of data, ARTour Web Express uses a software variation of the Limfel-Ziv compression algorithm.

Caching: Most Web browsers provide caching; however, the ARTour Web Express Server and Client provide unique extensions that yield optimal performance over low-speed, low-bandwidth connections.

- Cache management allows cached documents or data objects to be designated as "persistent" so they will not be deleted, eliminating the need to repeatedly fetch frequently referenced elements. In addition, you can view the list of cached elements, refresh cached elements, and delete cached elements.
- Refresh intervals are assigned to each object in the ARTour Web Express cache. When the Web browser requests one of these objects, the ARTour Web Express Client will satisfy the request from local cache unless the refresh interval has expired. Only in this case will the client send a request over the network to the ARTour Web Express Server to determine if the item has changed. If so, these changes are sent to the ARTour Web Express Client; otherwise, only an acknowledgement signaling no change is returned.
- Initial cache loading or "prewarming" can be done by accessing your Web applications while connected to the server by a low-cost, hard-wired connection.
- Blocking image and data object requests is an ARTour Web Express feature that can be activated when you don't want images and data objects retrieved across a wireless network. Only those objects stored in the local cache will be displayed.

Disconnected Operations: Usually there must be a connection to the Internet in order to use your browser; however, ARTour Web Express can overcome this limitation by queuing requests made while disconnected, pending a network connection. Once a connection is made, the ARTour Web Express Client will automatically send each queued request or form to the ARTour Web Express Server for processing. It will then intercept and save each document returned and notify the user that the document is available for viewing. This feature is especially useful when report forms must be completed and sent to a data server to be recorded in a database. As many forms as required can be completed and "sent". The ARTour Web Express Client queues the forms pending a network connection, at which time they are automatically transmitted.

Background Processing: Normally, when you use a Web browser to request a document, you must wait until the document and all its data objects are retrieved before another document request can be made. By using the background mode, the ARTour Web Express Client saves each request in a background queue and immediately returns control to the browser so another request can be entered. Meanwhile, the queued requests are processed and the results saved for viewing.

Note: Disconnected operations and background processing require either ARTour Web Express Client for OS/2 or Windows 95.

Network and Installation Management

- Installation support via AIX Systems Management Information Tool (SMIT)
- Network Management via SNMP interface to AIX NetView® /6000 or TME 10

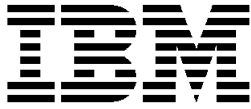
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IBM US Announcement Supplemental Information

February 18, 1997

Publications

The following publications can be ordered for a fee after February 21, 1997:

Title	Order Number
ARTour™ Web Express Server Guide	GC31-8414
ARTour Web Express Installing the OS/2® Client	GC31-8453
ARTour Web Express Installing the Windows® 3.1 Client	GC31-8451
ARTour Web Express Installing the Windows 95 Client	GC31-8452

Technical Information

Specified Operating Environment

Hardware Requirements

ARTour Web Express Server for AIX®, V1R1

- Any RS/6000™, Power PC, or SP2® system that supports either AIX V4R1.4, or later, or V4R2, or later
- A minimum of 6MB disk space for the ARTour Web Express Server code, with an additional amount of disk space required for caching

Note: Cache size is based on number of clients and type of activity

- LAN connection (for example, Ethernet or token ring)

ARTour Web Express Server for OS/2, V1R1

- A Pentium® class 100MHz is the recommended minimum machine.
- A minimum of 6MB disk space for the ARTour Web Express Server code, with an additional amount of disk space required for caching.

Note: Cache size is based on number of clients and type of activity.

- LAN connection (for example, Ethernet or token ring).

Software Requirements

ARTour Web Express Server for AIX requires one of the following AIX configurations:

- AIX V4R1.4, or later
 - Base operating system
- AIX V4R2, or later
 - Base operating system

ARTour Web Express Server for OS/2 requires one of the following OS/2 configurations:

- OS/2 Warp
 - Base operating system
 - TCP/IP
- OS/2 Warp Connect
 - Base operating system
 - TCP/IP
- OS/2 V4
 - Base operating system
 - TCP/IP

ARTour Web Express Client for OS/2 requires one of the following:

- OS/2 Warp
- OS/2 Warp Connect
- OS/2 V4

and one of the following:

- Internet Access Kit from the OS/2 Warp Bonus Pak
- IBM TCP/IP V2R1
- IBM TCP/IP V3R0 (included in OS/2 Warp Connect)
- IBM TCP/IP V5R0 (included in OS/2 V4)

ARTour Web Express Client for Windows requires one of the following:

- Microsoft® Windows V3R1 or V3R11
- Microsoft Windows for Workgroups V3R11

Also required is a TCP/IP stack that supports the “loop-back” feature.

ARTour Web Express Client for Windows 95 requires Microsoft Windows 95.

All clients require a Web browser.

Compatibility: ARTour Web Express Servers and Clients are compatible with:

- ARTour Gateway for AIX, V3R1 (5765-C17)
- ARTour Mobile Client for OS/2, V3R1 (5639-B82)
- ARTour Mobile Client for Windows, V3R1 (5639-B83)
- ARTour Emulator Express Server for AIX (5799-QRF)
- ARTour Emulator Express Server for OS/2 (5799-QRG)
- ARTour Emulator Express Client for Windows (5799-QWQ)
- ARTour Emulator Express Client for OS/2 (5799-QTW)

Performance Considerations: The performance of the ARTour Web Express Server for AIX can be affected by many different variables, some of which can be tuned with program parameters and some of which are external to the Server. For example:

- Wireless network characteristics
- Number of users and concurrent sessions

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- Type of applications
- RAS and/or trace activity

For information on the parameters that affect performance, refer to *ARTour Web Express Server Guide* (GC31-8414).

Planning Information

Packaging: Entitled documentation is provided with the programs.

The ARTour Web Express Server for AIX is available on either 4-mm or 8-mm tape. The program package includes a hardcopy of the *ARTour Web Express Server Guide* (GC31-8414).

The ARTour Web Express Server for OS/2 is available on 3.5-inch diskette only. The program package includes a hardcopy of the *ARTour Web Express Server Guide* (GC31-8414).

The ARTour Web Express Clients are available on 3.5-inch diskette only. The program package for 5639-B85 includes a hardcopy of *ARTour Web Express Installing the OS/2 Client* (GC31-8453). The program package for 5639-B86 includes a hardcopy of *ARTour Web Express Installing the Windows 95 Client* (GC31-8452). The program package for 5639-B87 includes a hardcopy of *ARTour Web Express Installing the Windows 3.1 Client* (GC31-8451).

Security, Auditability, and Control

ARTour Web Express Server for AIX uses the security and auditability features of the AIX operating system.

User management is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Ordering Information

Some changes have been made to the terminology used for IBM software. These changes do not affect terms and conditions, charges, or ordering processes.

Key elements are:

- **License:** The license shows rights and obligations that complement copyright protection provided by law, and applies to all use of IBM software.
- **Charging:** IBM software is charged according to the number of Use Authorizations acquired. Definition of this use and its associated charges for a given product are stated in the product announcement. Use Authorizations come with the program package or are available separately, and may be for users or resources. They are reflected as Proofs of Entitlement (PoE), provided by IBM.

Use Authorizations continue to be available for some products in use-packs of 1, 5, 10, and 50.

- **Supply of Code:** The software program itself will be available in various forms; for example, on magnetic media, CD-ROM, or electronically. This supply is accompanied by a Use Authorization.

The following highlights the key changes.

Previous Terminology	New Terminology
Program Package	Program Package
Additional License	Use Authorization for the right to copy and use the program (for example, a PoE for "One Server Install")
Use Based Feature	Use Authorization for users or resources (for example, a PoE for "Five Concurrent Users" or "10 Connected Ports")
Distributed Feature	Use Authorization for optional or selectable portions of a program (for example, a PoE for "Five Client Installs")

Orders for new licenses will be accepted now.

Shipments will begin on February 21, 1997.

Program packages include a program supply (for example, diskettes, CDs, and electronic programs) with documentation and PoE. Use Authorizations apply when the customer has a program package and orders a Use Authorization to copy and use the program (or that portion of the program identified as the base or server component) and the printed documentation.

For each program package or Use Authorization ordered, enter the program number with the appropriate feature numbers. Each feature number can only be ordered as a quantity of one per program number.

To order the programs described in this announcement for type model, specify the type model number, order type description, asset feature number 9001, media feature number, one-time charge (OTC) feature number, media, and quantity.

Program Name: ARTour Web Express Server for AIX, V1R1 (5765-C18)

To order a basic license for ARTour Web Express Server for AIX, V1R1, specify the program number, feature number 9001 for asset registration, the appropriate medium feature number, and feature number 4000 for OTC.

Description	Medium Feature Number	OTC Feature Number	Medium
Machine Type/Model: 5765-C18			
Program Package	5500		4-mm Tape
Program Package	5905		8-mm Tape
Authorization to Use		4000	
User Authorization	NA	4001	

User Authorization: Charges for ARTour Web Express Server for AIX, V1R1 are based on the number of registered users. In addition to the authorization to use, order OTC feature number 4001 with quantity equal to the number of registered users. (Maximum feature quantity allowed per order is 250.)

For example, to order an ARTour Web Express Server for AIX, V1R1 on 4-mm tape with 125 registered users, specify 5765-C18 OTC feature 4000, medium feature 5500, and quantity 125 of feature 4001.

Adding Users: If, after initial order, a customer wants to add more users, order the appropriate quantity of feature 4001. (Maximum feature quantity allowed per order is 250.)

Program Name: ARTour Web Express Server for OS/2, V1R1 (5639-B84)

To order a basic license for ARTour Web Express Server for OS/2, V1R1, specify the program number, feature number 9001 for asset registration, the appropriate medium feature number, and feature number 4006 for OTC.

Description	Medium Feature Number	OTC Feature Number	Medium
Machine Type/Model: 5639-B84			
Program Package	5805		3.5-inch diskette
Authorization to Use		4006	
User Authorization	NA	4007	

User Authorization: Charges for ARTour Web Express Server for OS/2, V1R1 are based on the number of registered users. In addition to the authorization to use, order OTC feature code 4007 with quantity equal to the number of registered users. (Maximum feature quantity allowed per order is 250.)

For example, to order an ARTour Web Express Server for OS/2, V1R1 on 3.5-inch diskette with 125 registered users, specify 5639-B84, OTC feature 4006, medium feature 5805, and quantity 125 of feature 4007.

Adding Users: If, after initial order, a customer wants to add more users, order the appropriate quantity of feature 4007. (Maximum feature quantity allowed per order is 250.)

Program Name

- ARTour Web Express Client for OS/2, V1R1 (5639-B85)
- ARTour Web Express Client for Windows 95, V1R1 (5639-B86)
- ARTour Web Express Client for Windows, V1R1 (5639-B87)

To order a basic license for 5639-B85, 5639-B86, or 5639-B87, specify the program number, feature number 9001 for asset registration, feature 5805, and the OTC feature number.

To order Use Authorizations for 5639-B85, 5639-B86, or 5639-B87, specify the program number, feature number 9002 for additional asset registrations, the OTC feature number, and the appropriate quantity (maximum 250 per order).

Description	Number	Medium Feature Number	OTC Feature Medium
Machine Type/Model: 5639-B85			
Program Package	5805	4008	3.5-inch diskette
Use Authorization for Right to Copy and Use the Program	NA	4009	

Description	Number	Medium Feature Number	OTC Feature Medium
Machine Type/Model: 5639-B86			
Program Package	5805	4010	3.5-inch diskette
Use Authorization for Right to Copy and Use the Program	NA	4011	

Machine Type/Model: 5639-B87

Program Package	5805	4012	3.5-inch diskette
Use Authorization for Right to Copy and Use the Program	NA	4013	

The total number of ARTour Web Express Clients should not exceed the number of registered users that have been ordered for the ARTour Web Express Server (5765-C18 feature 4001 in US, EMEA, LA, CAN; feature A8BA in AP or 25639-B84 feature 4007). These clients can be any combination of 5639-B85, 5639-B86, and 5639-B87.

Customization Options: Select the appropriate feature numbers to customize your order to specify the delivery options desired.

Description	Feature Number
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Initial Shipments

Serial Number Only (suppresses shipment of media and documentation)	3444
Ship Media Only (suppresses initial shipment of documentation)	3470
Ship Documentation Only (suppresses initial shipment of media)	3471

Expedite Shipments

Local IBM Office Expedite (for IBM use only)	3445
Customer Expedite Process Charge (\$30 charge for each program)	3446

Expedite shipments will be processed to receive 72-hour delivery from the time IBM Software Manufacturing Solutions (SMS) receives the order. SMS will then ship the order via overnight air transportation.

Program Package: Program supply (for example, diskettes, CDs, and electronic programs), documentation, and PoE

Use Authorization: Authorization to copy and use the program package supply and documentation.

For customers who order Use Authorizations and want extra copies of the documentation in the program package, separate copies can be ordered directly. Refer to the **Publications** section of this announcement for information.

Terms and Conditions

Licensing: IBM International Program License Agreement. Proofs of Entitlement (PoE) are required for all authorized use.

Limited Warranty: Yes

Program Services: Available until February 27, 1999

Program Services do not apply to the Microsoft Win32S Version 1.30, which is shipped with the ARTour Web Express Client for Windows (5639-B87).

Guarantee: Two months, unconditional guarantee

Copy and Use on Home/Portable Computer: Yes

Program Transfer: Yes

Usage Restriction: Yes

For: ARTour Web Express Server for AIX, V1R1
ARTour Web Express Server for OS/2, V1R1

The customer cannot exceed the number of registered users ordered without obtaining additional quantities of the feature that extends the permitted usage.

For: ARTour Web Express Client for OS/2, V1R1
ARTour Web Express Client for Windows, V1R1
ARTour Web Express Client for Windows 95, V1R1

The customer cannot obtain use authorizations in excess of the number of registered users ordered for the ARTour Web Express Server.

Support Line: Personal Systems AIX

Complimentary Introductory Support: Not available for the Personal Systems platform software

- Length of time: 60 days
- Must be part of solution with: RS/6000 brand system acquired from IBM
- Applies to: First installation in customer enterprise

Volume Orders: Not applicable

Software Advantage applies: No

Upgrade Protection applies: No

Entitled Upgrade for Current Upgrade Protection Licensees: No

Variable Charges Apply: No

Educational Allowance available: No

Charges

Description	Authorization to Use	User Authorization
ARTour Web Express Server for AIX, V1R1 (5765-C18)	\$4,000	\$109
ARTour Web Express Server for OS/2, V1R1 (5639-B84)	\$4,000	\$109

Description	Authorization to Use	User Authorization
ARTour Web Express Client for OS/2, V1R1 (5639-B85)	\$49	\$29
ARTour Web Express Client for Windows, V1R1 (5639-B87)	\$49	\$29
ARTour Web Express Client for Windows 95, V1R1 (5639-B86)	\$49	\$29

Use Authorization Charge for the Right to Copy and Use the Program: Customers who pay an OTC for Use Authorizations may copy and use machine-readable program materials and printed documentation previously acquired from IBM in a program package. One copy may be made for each Use Authorization ordered.

Charge for Use Authorizations for Users or Resources: Customers who pay an OTC for Use Authorizations for users or resources are authorized for a number of users to access the program and/or resources available. Use may not exceed the total number of users or amount of resource authorized.

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