MARK*NET™ Service

ASYNCHRONOUS-TO-3270 PROTOCOL CONVERSION

Extending Access Without Expanding Cost

Proven Professionalism in Worldwide Information Services

Companies around the world rely on the proven professionalism of GE Information Services products and capabilities to help satisfy their information needs efficiently and economically.

Proven professionalism means over 20 years of GE excellence in developing and integrating information systems to fit specific business needs. Systems that get the job done quickly, efficiently.

Proven professionalism means applying the key resources needed to make information work — the right people, capabilities, and products. People who can understand a business like yours, its objectives and issues, and help apply the right mixture of telecommunications, computing power, hardware, and software.

Among these capabilities and products are the ones described in this publication, plus:

- The world's largest commercially available teleprocessing network. Available in more than 750 cities worldwide, 24 hours a day, 365 days a year. Handling over a quarter million user sessions per day, transmitting over 300 million characters per hour.
- GE's own network-based computing service called MARK III® Service.

- IBM-compatible network-based MARK 3000™ Service, operating on IBM 3090 and 3081 CPUs and running under MVS/XA and VM/SP HPO operating systems.
- MARK-NET™ value added network services, providing asynchronous, IBM-compatible synchronous, and X.25 services.
- Integration products that let microcomputers communicate with hosts, control distribution of software, and transfer data between micros and mainframes.
- Over 2,600 employees worldwide — computing, communications, and business professionals — who provide custom software design, development, installation, and consulting.
- A wealth of network-based business applications, from 20 years of experience and a client base of over 5,000 corporations and trade associations. Focused on controlling the movement of goods and services, electronic data interchange between companies, automated clearinghouses, dealer communications, and global electronic messaging services.

MARK*NET™ Service For Your Information Needs

GE Information Services combines advanced technology, expertise, and creativity to offer a value-added networking service called MARK*NET Service — a comprehensive solution to the problem of sharing business information.

MARK*NET Service offers a combination of features unavailable elsewhere, intelligent networking that multiplies the power of ordinary communications transactions, and micro-integration tools that take advantage of your processing power from desk top to data center.

Expanding Your Access To 3270 Applications

GE Information Services has developed MARK*NET Service Asynchronous-to-3270 Protocol Conversion to enable you to economically access 3270 applications. Through

MARK*NET Service, you can connect your asynchronous terminals and Personal Computers to IBM[1]-compatible mainframes running either VM/VTAM, MVS/VTAM, or VM systems. Asynchronous-to-3767 protocol conversion is also available.

Our Asynchronous-to-3270 Protocol Conversion capability supports the following asynchronous devices:

- Terminals operating with asynchronous protocols and ASCII data format transmitting at speeds ranging from 50 to 2400 bits per second (bps).
- Terminal connections via dial-up, leased-line, and single or multiple terminal concentration devices.
- More than 50 different asynchronous terminal types.
- Asynchronous-to-3767 protocol conversion is also available for asynchronous devices not supported for 3270 protocol conversion.

GE INFORMATION SERVICES

U.S.A.

Protocol conversion takes place within MARK*NET Service, so no hardware or software modifications are required. Both Systems Network Architecture (SNA) and non–SNA hosts are supported:

- SNA hosts are supported via the SNA Network Interconnection (SNI).

- Hosts supporting the 3270 Binary Synchronous Communication (BSC) protocol are accessed via Pass–Thru VM (PVM).

Why MARK*NET Protocol Conversion Service . . .

. . . Because MARK*NET Service Asynchronous-to-3270 Protocol Conversion increases the functionality of your existing asynchronous terminals and PCs and provides you with efficient and reliable connections to 3270 applications on one or several hosts. MARK*NET Asynchronous–to–3270 Protocol Conversion allows you:

- To maintain your current investment by expanding the capabilities of your asynchronous terminals, since MARK*NET Service supports virtually all asynchronous terminals types.

- To minimize your communications costs — protocol conversion takes place on MARK*NET Service, thus providing you

with local dial access in over 600 cities. Also, we can extend this access from over 70 countries worldwide through Public Data Networks (PDNs).

- To reduce the amount of network management required to support protocol–converted asynchronous terminals. These terminals can be presented to your communications controller across a single interface, thus conserving communications controller ports. Additional access to your 3270 applications for new terminals can be added without altering your communications controller GEN after initial setup.

- To expand the capabilities of your PCs by offering optional PC software.

Unique Service Features

MARK*NET Service Asynchronous Protocol Conversion provides:

At the Terminal End
- More than 5,000 ports for local access in over 600 cities in the United States, Canada, and Puerto Rico. In addition, local access in the United Kingdom, Switzerland, and West Germany is planned for 1987. Local access will be made available in other countries as regulations permit.

- Optional local error detection provided via SIM3278/PC.

SIM3278/PC provides full 3278 keyboard functionality, error-free ASCII communications, improved response time, and printer support.

At the Host End
- SNI host connections permit flexible access across network boundaries. SNI allows autonomous SNA networks to communicate while minimizing the exchange of internal information between networks.

As an added benefit, Asynchronous–to–3767 Conversion via an SNI link is an attractive alternative to asynchronous–to–X.25 conversion using NPSI or COMPRO on your communications controller.

- Pass–Thru VM (PVM) connections which provide support for non–SNA hosts by presenting 3270 BSC streams to the client hosts.

The Added Value of Our Network Services

Data Transport
MARK*NET Service is designed for uniform, fast response on interactive applications. There are over 400,000 daily users of the network today, generating peak character volumes exceeding 300 million per hour.

Administrative Control
GE Information Services' unique administrative system, called ADM, is available for controlling the use of MARK*NET

Service customer accounts. You may administer your own user numbers, passwords, and mainframe access control on–line. Or you can share administrative responsibilities with GE Information Services in a way that is suitable to you. Your changes take effect almost instantly, on–line.
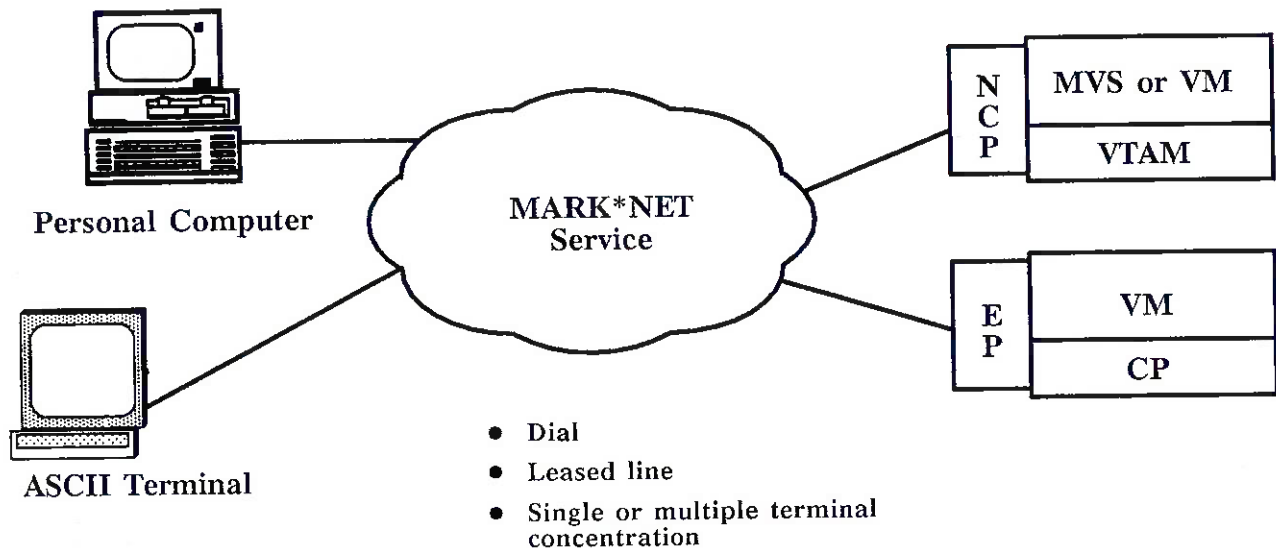
Access Control
The MARK*NET Service signon procedure includes a user number, a password, and a resource address. This information is validated before a network connection is established to help preclude unauthorized access to host resources. No billing will be incurred for attempted access by unauthorized users.

Network Management and Field Service
Highly skilled personnel are available to assist you in all phases of MARK*NET Service operations, from planning the initial configuration to installing and maintaining network hardware, software, and circuits.

With over 200 skilled professionals strategically place around the world, we can quickly provide experienced personnel to assist in installing your telecommunications interface with our network — both on the terminal side and the host side. These Network Operations team members monitor and trouble-shoot the GE Information Services network interface. Also, in cases where we manage your private circuits, we can work directly with telephone service companies.

MARK*NET ASYNCHRONOUS–TO–3270 PROTOCOL CONVERSION

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Personal Computer ─┐
                   ├─── MARK*NET Service ───┬─── [NCP] MVS or VM / VTAM
ASCII Terminal ────┘                        └─── [EP] VM / CP
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- Dial
- Leased line
- Single or multiple terminal concentration

Network Performance

The network configuration provides excellent throughput and reliability through the use of redundancy, alternate routing, and high speed links.

Client Assistance

Our Headquarters Client Services Operation provides assistance to our clients using both remote systems and the Headquarters pool of applications and communications engineering expertise. Headquarters Client Services can be reached any-time via phone call (toll–free in the U.S.A. — 800–638–8730), electronic mail service, or Telex. Support is available 24 hours a day, 7 days a week.

Local, professional support is available in more than 33 countries where GE Information Services has offices, affiliates, or distributors. These local specialists are familiar with the often unique subscription, access, and technical interconnection requirements of in–country Public Data Networks. In addition, they can serve as a liasion between our clients and local tele-communications service providers. Such in–country support is available throughout the local business day and is backed by knowledgeable, teleprocessing profession-als located in our Amster-dam Supercenter who use remote monitoring and troubleshooting systems to investigate and solve serv-ice problems.

To Obtain Further Information

For more information on MARK*NET Asyn-chronous Services and how you can most benefi-cially use them, contact your local MARK*NET Service sales representa-tive, or write:

GE Information Services
401 N. Washington St.
Rockville, MD 20850
ATTN: Manager, Network Service Marketing

For further information related to this service, re-fer to these publications available from GE Infor-mation Services.

- SIM/PC Users's Guide (publication 2051.70)

- 3270 Emulation Serv-ice product profile (publication 3918.19)

- MARK*NET Terminal Operations (publication 3918.04)

- MARK*NET Asyn-chronous VAN Service product profile (publi-cation 3918.05)

- MARK*NET SNA Us-er's Guide (publication 3918.24)

- MARK*NET Nation-wide Access Directory (publication 3918.09)

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[1] IBM and IBM Personal Computer (PC) are regis-tered trademarks of Interna-tional Business Machines Corporation.

**THE CASE
OF THE
PURLOINED
PARROT**

The Case of the Purloined Parrot
The story continues...

Chapter Two

"I'm going to search the house," said Cash, "everyone stay here."
Cash looked for clues in every room. There were no signs of forced entry and the
caretaker locked the house every day when he left. How had the parrot been taken?

In the parlor downstairs, Cash found the empty parrot perch. In Thelma's
room upstairs, a window had been left open about fifteen centimeters,
presumably to allow the room to air out. In the kitchen, Cash found nothing unusual,
except that the only food in the pantry was a dozen cans of chop suey.

When cash returned from his inspection, Mary Lou Thornapple approached
him and asked, "Mr. Quikly, are we all suspects?"

"You are all suspects," said Cash, "until one of you becomes a prospect."
"Now I need to talk with you individually."

In questioning Siegfried in private, Cash found out that Thelma and her parrot
both loved Chinese food, a fact that Siegfried learned from his cousin Mary Lou.
Siegfried also mentioned that MaryLou had been the friendliest of the three of them to
old Aunt Thelma, perhaps because she had lived the closest and had been able to visit
from time to time.

Although he knew very little about the parrot himself, Siegfried seemed to
have been the most concerned with the whereabouts from the beginning. And weren't
those parrots on his necktie?

The fearless detective questioned Reginald next. Reg seemed intent on incrim-
inating Siegfried by revealing that he was desperate for money and might have taken
the parrot if he thought it held secrets to the riches. Cash was interested in Reg's com-
ments, but noticed that Reg had a beautiful red feather in the band of his hat. Could
this have come from the parrot?

MaryLou seemed to be the only one of the three that was distressed by the
loss of her Aunt. Or was it the loss of the parrot that disturbed her? Reginald ran a
restaurant in Hong Kong and was an expert on Chinese cuisine. She did more than
mention it. In the course of Cash's questioning she brought the topic up serveral
times. When his questioning was completed, Cash brought all three cousins back into
the room.

"I know who stole the parrot," he told them, "but to prove it, we have to play
a little game to reveal the BASIC FACTS."

TO BE CONTINUED... Access InfoTalk and select the Products and Services bulletin board. Select Messaging Products
  'er and then QUIK-COMM Basic folder. Hidden in one of the subfolders are two questions. To be eligible for the Chapter
 ιwo prizes, send your answers in a QUIK-COMM message to CASHQUIKLY.

GET THE BASIC FACTS

What is QUIK-COMM Basic?

QUIK-COMM Basic is a service offering in the QUIK-COMM System family that provides message/file transport for an application. QUIK-COMM Basic is a pre-assembled (by Marketing/Product Development) mailboxing component designed to talk with another program (not person) .
QUIK-COMM Basic operates on the MARK III Service and provides a limited subset of the QUIK-COMM Toolkit store and retreive mailboxing functionality. SDC develops the "front end" or "surrounding" (micro or host) custom user interface software that matches the client application requirements.
The QUIK-COMM Basic Developer's Guide provides the technical specification to SDC, distributors, and the industry focuses so that their user interface programs can interact successfully with QUIK-COMM Basic.

Capabilities

QUIK-COMM Basic allows data to be mailboxed from a single address to any number of other addresses. Error free protocol (XMODEM) is supported. A header (e.g. TO, FROM, SUBJECT, etc.) is associated with the message. The message itself consist of one (not multiple) body part which can be ASCII or Binary. Body part size is limited only by MARK III file size limitation.

Features and Benefits

QUIK-COMM Basic is competitively market priced, operates cost effectively, is permitted internationally under the QUIK-COMM System licenses, and can be brought to market quickly as the mailboxing component of a custom application solution.

The value of QUIK-COMM Basic is that it provides "basic" applied messaging services on behalf of the client's custom developed application. Therefore, we can provide the client with a business solution that is tailored to meet their application requirement.

- o   QUIK-COMM Basic has the ability to efficiently transport either ASCII or Binary data.

- o   QUIK-COMM Basic can be folded into the required customer user interface quickly and easily.

- o   QUIK-COMM Basic is based on an "open system" which will allow compatibility among future systems and applications.

SALES STRATEGY

Suggested Selling Strategy

The Suggested selling strategy is to target QUIK-COMM Basic as a price effective file transport capability for custom application solutions. We are presenting a consultative selling approach, a solution where we combine a service offering (QUIK-COMM) with a GE (SDC) custom developed user interface to suit the client's specific application need. With this approach we can deliver a timely business solution that is tailored to meet the client's requirements. Because QUIK-COMM Basic is positioned to be a part of a custom application solution, the sale would include an appropriate implementation package charge that is in line with the client-specific or industry-specific opportunity.

Prospecting and Qualifying

QUIK-COMM Basic, with the appropriate user interface, is suitable for a wide variety of client applications that require 'basic' mailboxing and message transport capabilities.

- Applications that need to serve a large geographical distribution, especially an international distribution.

- Applications that require transport of large files, particulary binary data.

- Where the client already has de-centralized PC applications and needs an application interface to message transport, QUIK-COMM Basic with an SDC developed custom interface could be an excellent fit.

Since QUIK-COMM Basic is a new service offering, there are no 'live' client applications as yet. As applications go into productions, we will profile them. For now, the following often asked questions regarding QUIK-COMM Basic applications may prove helpful.

1. In what sort of application situation will QUIK-COMM Basic be useful?

   We envision that QUIK-COMM Basic will be very useful as a message/file transport component to serve in custom applications that need 'store and retreive' mailboxing capability.

2. Is QUIK-COMM Basic a "slimmed-down" version of QUIK-COMM?

   QUIK-COMM Basic is a "slimmed-down" version of QUIK-COMM in the sense that it provides a fundamental SUBSET of the funtionality available via QUIK-COMM (QUIKM***). QUIK-COMM Basic is different from our current QUIK-COMM offering in that it must (was built to) talk with another program (not a TTY user as in QUIKM***). SDC adds the 'other' program(s) to provide a custom user interface for the client. Further, the QUIK-COMM Basic client 'user' is expected to be a computer application (rather than an individual user whose objective is interpersonal messaging).

3. Is QUIK-COMM Basic the shell that custom messaging systems can be built upon?

   QUIK-COMM Basic is intended to be a pre-assembled component that you can 'build into' a custom client application that requires file transport. QUIK-COMM Basic is not intended to be the 'shell' from which you build a full-featured custom email for your client -- the QUIK-COMM Toolkit routines are the building blocks for such a custom system. QUIK-COMM Basic, as a service offering, stays under marketing/product development 'control'. The QUIK-COMM Basic program, as a sample of one possible assembly of the Toolkit, will be made available via the Transport Program to SDC.

4. Can QUIK-COMM Basic be used for an existing QUIK-COMM (QUIKM***) client?

   It can be sold as an additional application to the client, but not to interface directly into his existing system (or 'community'). QUIK-COMM Basic operates in our new technology QUIK-COMM (II) Toolkit environment and uses a set of different database structures than QUIKM***. The two environments can coexist, but not directly interact.

5. Will BusinessTalk and PC Mailbox work with QUIK-COMM Basic?

   QUIK-COMM Basic was not designed to work as the email service for BusinessTalk or PC Mailbox -- it lacks functionality expected and required by these products. QUIK-COMM Basic, with an SDC developed user interface, could be implemented as an icon under BT to serve a client's specific application need for file transport.

6. What should we offer clients who want full-featured email products?

   PC Mailbox and the email portion of BusinessTalk serve that market today. In the future, Marketing/Product Development will be using the QUIK-COMM Toolkit to build such a product for the BT II and QUIK-COMM (II) environment.

7. What if my client wants 'basic' mailboxing but needs access to Telex or Connector's?

   QUIK-COMM Basic is not a total solution in this case. Look carefully at the client requirement to see if there are really two 'application' needs here -- one that is electronic mail that could be served by our QUIKM*** based email products and services, and one that is a custom application that requires file transport using QUIK-COMM Basic.

SALES AIDS

QUIK-COMM Basic Profile   OLOS# 3410.145

PROMOTIONAL MATERIAL

Business Comm Building Blocks Cube   OLOS# 3410.137

TECHNICAL DOCUMENTATION

QUIK-COMM Toolkit Application Development Binder Contains:	OLOS# 3410.140
QUIK-COMM Basic Developer's Guide	OLOS# 3410.139
QUIK-COMM Toolkit Utilities Guide	OLOS# 3410.135
QUIK-COMM Toolkit Reference Guide	OLOS# 3410.134
QUIK-COMM Toolkit Developer's Guide	OLOS# 3410.133

PRICE SCHEDULE & CONTRACT

QUIK-COMM Basic Schedule   OLOS# 3410.142
  (United States & Puerto Rico)

Supplement for QUIK-COMM Basic Service   OLOS# 3410.141
Attachment A to QUIK-COMM Basic Suppl.   OLOS# 3410.141-1

The contract for QUIK-COMM Basic is a supplement to the Teleprocessing Services Agreement. Guidelines on contracting, ordering, implementing, and supporting QUIK-COMM Basic can be found in the Sales Strategy folder on InfoTalk.

$$$$ Success Story #22 $$$$

*International Managed
Network Services*

National Data Corporation --
Cash Management Services

The Client

National Data Corporation (NDC) provides high–volume, high–speed, high–quality processing of credit card, cash management, and health care data, as well as telemarketing transactions -- with approximate sales of $150M. NDC has been a GE Information Services customer for several years, reselling a MARK III Service-based cash management application to major banks, both domestically and internationally.

Business Requirements

NDC currently provides cash management services to international customers via its GE IS MARK III application. Over the past several years, NDC has migrated large portions of the MARK III application to an in-house Tandem–based system. As new international bank customers are added, NDC plans to establish them on the in–house system. To accomplish this, NDC requires international data communications support for both 1200 bps asynchronous dial–up terminal traffic (using both TTY and block mode) and 2780/3780 Bisync dial–up terminal traffic.

Alternative Solutions

One possible solution for NDC was PDN/PTT access to an international record carrier (IRC). Because of the administrative overhead, high costs, and start–up delays associated with international data communication services, this was an unsatisfactory alternative for NDC.

Offering another solution, CSC Infonet made aggressive international communication services pricing proposals to NDC and began beta-testing in early October, 1987. CSC had severe problems servicing the application, however, and could not support "parity conversion" through its network. This forced NDC to allocate logical channels on its X.25 link for each parity combination and to make changes to the application itself, delaying by 4–5 months the deployment of NDC cash management services.

Why GE Information Services?

While negotiating to renew NDC's Processing Facility Agreement in mid–November, 1987, GE Information Services learned of NDC's international communication requirement. To address NDC's needs, GE IS enlisted the aid of Managed Network Services (MNS).

Since NDC is a long–time customer of GE Information Services, we had already established relationships with the Vice President of Network Operations, the Vice President of Cash Management Services Marketing, and their associated reporting groups. The quality of our past performance qualified us to present an alternative solution.

Building on this precedent, we explained that NDC customers currently dialing GE IS nodes in foreign countries to access MARK III applications were, in effect, already GE IS network users. With our solution, the only changes visible to NDC's customers would be a new set of RIDs mapping to an NDC host, rather than a GE Information Services host.

In early December, GE IS installed one X.25 link connecting to NDC's Tandem in Atlanta for benchmark testing from Europe. This testing demonstrated our ability to handle parity conversion through the network and perform in both TTY and block mode, without changing NDC's existing environment.

Subsequently, MNS delivered pricing to match CSC Infonet's proposals. After considering the options, NDC decided to buy international Managed Network Services from GE IS for the following reasons:

- demonstrated service
- minimal changes were needed to provide customer terminal access
- no changes to the host application or host communications environment were needed
- competitive pricing

The GE Information Services Solution

The GE IS MNS solution combines the global reach of GE Information Services' Network Services with a MARK III application Session Manager to provide connectivity to NDC's Tandem host in Atlanta.

Initially, NDC plans to use the GE IS solution to support selected major European banks in the U.K., West Germany, The Netherlands, and Luxembourg, as well as six major Japanese banks.

To support these banks, NDC will supply them with Dante and PCLINK software and a PC/AT compatible terminal, which will emulate Tandem 6530 and standard TTY terminals. Two 9600 baud X.25 links will provide the host connection from the GE IS Network. In addition, a 10–port synchronous Host PAD will be installed on–site, with two 9600 baud links supporting it, to provide 2780/3780 Bisync access to the Tandem.

NDC will serve as the "model account" for the Session Manager (Version 2.0 product). MNS examined NDC's existing international use of the GE IS host applications as a basis in developing the pricing proposal. Based on 1,400 + hours of international use in October, 1987, the conversion of NDC traffic to the in–house Tandem application would generate approximately $39K MPR. However, as NDC adds new customers to its user base, total MPR will exceed this amount. In other words, NDC's ability to sell its cash management services will determine how high this number goes.

Possibilities for future expansion include outbound 2780/3780 communications, 3270–type access, and international Point–Of–Sale (POS) transport services, all of which could leverage the GE Information Services MNS facility. Successful implementation of MNS may also lead GE IS to win domestic VAN and domestic Point–Of–Sale business away from Telenet, a strong incumbent at NDC. In short, the MNS solution opens international markets for NDC and also creates domestic opportunities for GE Information Services.

Client Benefits

NDC receives the following benefits from GE Information Services:

- an efficient, cost–effective solution
- support for all modes of remote terminal access
- one–stop vending for a variety of communication services
- continuing, high–quality service and support

The Winning Team

The account manager for NDC is Todd Fryburger from Lin Register's Southern Region. Larry McNeill and John Travis of SDC provided implementation and technical support. Also providing invaluable assistance were Jon Frey and Ken Takemoto of Managed Network Services, and Greg Morton of Client Custom Engineering.

More Information

For additional information about the MNS solution for NDC, contact Todd Fryburger (QC=FRY) in the Atlanta Sales Office or Jon Frey in MNS (QC=JON-FREY). For information on the Transport Program, contact SDC Programs (QC=SDCADMIN) or call 8*273-4444.

GE Information Services

GE USA

$$$$ **Success Story #23** $$$$

Putting the Fizz into Billing

Coca-Cola ®

Business Problem

Coca–Cola distributes soft drink syrup through a network of 7,000 wholesalers. The wholesalers in turn sell to retailers who are invoiced by, and remit payment directly to, Coke. The wholesaler then bills Coke for their services, and Coke reimburses them. Wholesaler's billing records were submitted in batch form: by tape, in hard copy which had to be rekeyed, or in a few cases via direct transmission. The wholesaler records then had to be matched with retailer invoices. As a result, the reimbursement process ranged from weeks to months, presenting a cash flow problem for the wholesalers. In order to maintain a favorable competitive position, Coke was therefore interested in a speeding up the process.

System Requirements

GE Information Services took the initiative to propose a fast telecommunications solution to Coke. Coke had concerns about the security of their host processing environment with a direct dial–in solution, and therefore requested bids from GE IS and other service vendors for a "store and forward" type system. The solution had to provide for batch 2780/3780 BSC communications from a variety of hardware environments (including IBM System 36s and 38s), as well as asynchronous communications from PCs.

Why GE Information Services?

Since the original concept originated with GE IS, Coke requested our help in drafting an RFP, which was then submitted to several possible service providers, including Telenet, Tymnet, Compuserve, and CSC, as well as GE Information Services. Some of the potential vendors did not bid, since the RFP was specifically intended for only a small pilot community of dealers, and it looked like a small deal.

The GE IS bid was received first (well ahead of the deadline) and addressed all of Coke's connectivity concerns. In addition, the GE IS bid was competitively priced (using a modified extended CUP 4 plan) and offered the benefit of continuing GE Information Services "single vendor" relationship with Coke for their telecommunications needs.

The GE IS Solution

The GE IS solution used SDC to custom develop a store and forward system which assembles the files submitted by the wholesalers and batches them in to Coke. Wholesalers with IBM System 36s and 38s use RPG 3780 Emulator packages. (The version for the System 38 is supported by IBM, while the System 36 version was supplied by a third party contractor). Format conversion for High Speed Service files is also provided.

Client Benefits

Benefits to Coke are primarily related to improved service to the larger wholesalers, who realize much improved cash flow. This gives Coke a competitive advantage in negotiating wholesaler agreements. Coke has also realized productivity increases by their own staff resulting from less rekeying.

A related benefit stems from the use QUIK-COMM®, which was made available to Coke when the wholesaler billing system was installed. The time taken to approve new wholesalers has been reduced since the original request can be copied to the appropriate Area and Region offices, who can then reply approval on-line. This further improves relationships with wholesalers in key marketing areas.

GE Benefits

The wholesaler billing system forms a foundation on which a projected bottler billing system can be built. In addition, there is an opportunity to extend the billing system to wholesaler order entry, which should further improve Coke's productivity and efficiency by reducing errors and rekeying.

The Winning Team

Long hours by the technical staff and a professional approach to documentation and rollout were key to successful and timely implementation of the system. The account executive is John Adams from Lin Register's Southern Region. Technical support was provided by John Travis and by Chuck Taylor and Steve Bain from Dave Votta's SDC group. Irene Mazeika from Frank Hart's Training and Documentation Services organization prepared customized documentation and helped orchestrate the rollout.

More Information

For more information, contact SDC Programs (QK "SDCADMIN", or call 8*273-4444).

GE Information Services

$$$$ **Success Story #24** $$$$

Rolling Over the Competition

Michelin ®

Business Problem

Michelin Tire manufactures and markets a wide variety of tires. End users range from the construction industry (for heavy duty off–road uses) to standard tires for automobile fleets, to Original Equipment Manufacturers (OEMs) such as Ford and GM. In particular, the OEMs are becoming an increasingly important piece of their business. Michelin was faced with the need to accept customer production orders electronically and then transmit advance ship notices (ASNs) in proprietary formats to the OEMs, which meant converting from the ANSI X12 format.

In addition, Michelin wanted to help their distributors improve the quality and timeliness of their sales proposals by providing on–line access to central data bases on product usage and pricing. Finally, Michelin needed an Electronic Mail capability, preferably with a "Registered Mail" feature which would help them monitor delivery of Telexes.

System Requirements

The first requirement was Electronic Data Interchange (EDI): Michelin needed a cost–effective conversion of ANSI X12 to the Ford and GM formats for ASNs. In addition, both manufacturers required that suppliers dial in to them. Michelin wanted access to the network from their host in Michigan, as well as from manufacturing plants in Georgia and South Carolina and over twenty distribution centers across the country. Michelin also needed positive confirmation of receipt of the ASNs by the customer.

In addition to the EDI service, Michelin was looking for a Value Added Network to supply telecommunications services among their locations. They needed enhanced security and audit trail capabilities to keep usage under control. Finally, they were interested in electronic mail through the DISOSS system installed on their host.

Alternatives Considered

Michelin considered a proposal from AT&T for a WATS implementation and a joint proposal from CDC/Redinet. They were not satisfied with the level of security on WATS, however, and they anticipated problems with resolving service quality issues between CDC and Redinet.

Why GE Information Services?

Michelin initially insisted on a 100% SNA solution. However, Chris Brook from Technology Operations enhanced GE Information Services technical

credibility by posing a number of issues which Michelin could not resolve with that approach. These included cost effective asynchronous access from IBM® PCs at remote locations, access to a DEC® VAX, and the need for 3780 BSC access at Ford and GM. The GE Information Services solution offered an established vendor with market leadership in EDI a "single vendor" for both EDI processing and telecommunication with customizable security features and high service quality.

The GE Information Services Solution

The GE solution used SDC to custom develop:

(1) Efficient ANSI X12 to private format conversion for ASNs. Michelin transmits a single standard document to MARK III® Service, where custom conversion and delivery for each OEM is performed.

(2) A customized "MARK*NET® Security Logon" program which allows MARK III Service to intercept VAN logons and provide password change control and access audit trails. DATA*MARK® record–level locking is used to allow access by many simultaneous users.

Michelin uses the MARK III 3780 Emulator (over a 9600 bps leased line) to transmit ASNs to MARK III Service, and the EDI dialout feature to access Ford and GM. Confirmations of ASN receipt by the customer are returned to the sender. The 3780 Emulator is also used to receive production orders from GM.

District Sales Offices, a total of 124 users in the U.S., access the network with IBM PCs using asynchronous connections at 2400 bps. Users are routed to either an IBM 3090 or a DEC VAX through a single X.25 connection.

In addition, Michelin purchased a license to the QUIK–COMM®/DISOSS Connector for their electronic mail needs. A customized "registered mail" capability is used to confirm delivery and provide status on DISOSS/Telex traffic.

Client Benefits

The GE Information Services solution provides highly reliable delivery of ASNs to Ford and GM, allowing Michelin to stay competitive in this key business segment. Access to central product databases allows faster turnaround and higher quality proposals; what–if modeling can be used, for example, to analyze alternative bid strategies. The Registered Mail capability is used to meet legal requirements for ensured delivery of Telexes to outside companies.

GE Information Services Benefits

The Michelin business shows how an apparent EDI opportunity can be used to gain entry for other products and services which leverage GE Information Services "intelligent networking" capabilities. In this case, both the EDI and VAN opportunities use SDC custom development capabilities and the power of MARK III Network integration to provide a complete solution. Business Communications products and services round out the "single vendor" approach.

The Winning Team

The account manager is John Adams from Lin Register's Southern Region. Technical assistance was provided by Chuck Taylor, Mike Moore, and Steve Bain from Dave Votta's SDC group.

More Information

For more information, contact SDC Programs (QUIK–COMM "SDCADMIN", or call 8*273–4444).

GE Information Services

GE USA

"Teleprocessing with a personal touch"

Jim Walter Homes

The Client

Centered in the Southeastern United States, Jim Walter Homes is the nation's largest "on your lot" home builder and one of the largest builders of single family homes in the country. With over 100 locations in 30 states, JWH sells and provides financing for some 27 home models. Homes are built to between 10 and 90 per cent completion "from the ground up," using subcontractors, making the construction a joint effort with the home buyer. Prospective customers include moderate income families in small towns and in rural locations, as well as vacation home buyers.

Homes are sold through direct sales at display locations, usually in rural areas. Advertising is conducted through full page ads in newspaper inserts (such as Parade Magazine) and through telemarketing.

Sales locations report through 9 regional offices to headquarters in Tampa, Florida.

Business Problem

JWH considers weekly "teleconferences" among sales managers — with printed records of the dialogue — to be a critical element in keeping the sales force sharp and on the competitive edge. This approach forces recorded commitments and keeps company management close to the sales situation. JWH also emphasizes the importance of the "real-time" nature of the discussion. Unlike most line-at-a-time conferencing applications, JWH insisted on immediate transmission of each character to all users as it is typed, in order to preserve the real-time nature of the meeting. In addition to the weekly national teleconference, JWH needed daily regional teleconferencing and a general messaging capability. An interface to their inhouse Amdahl mainframe was also desirable to facilitate dissemination of customer account data.

Old Network

Using a 55 bps shared teletype communications network, JWH had achieved this real-time interaction requirement, but were faced with escalating costs and a "dead end" technology. At the same time, JWH was concerned about keeping the user interface as simple as possible to smooth any conversion pains.

Limited Technology

A related problem stemmed from the limitations of the Telex technology: it is important to get weekend telemarketing leads back to the field sales offices as quickly as possible, but the limited number of Telex circuits available required several hours of clerical time to enter the information.

Alternative Solutions

The existing system, provided by Western Union, was functionally acceptable but was constrained by the Telex technology. In particular, the cost of providing communications circuits was rising. JWH established three criteria for selection of a replacement system: price, a demo which could depict the quality and functional capability of the solution and ease of use.

JWH looked at proposals from Western Union, AT&T, Compuserve, and Lane. In addition, VAN alternatives from Telenet, and Tymnet were con-

sidered. No solution could provide the character–at–a–time effect desired using a packet switched network.

An inhouse alternative was also considered but rejected due to the costs of leasing communications circuits and supporting the system.

The GE Information Services Solution

GE IS proposed using a combination of standard products and custom applications:

- For electronic mail and forms, PC Mailbox and Quik–Comm were proposed.

- For conferencing, GE IS proposed a custom IBM PC front end which would flush each character down the communications line as it was entered, together with a custom MARK III FCM application.

- For the Amdahl connection, High Speed Service using 3780 BSC was proposed, using Quik–Comm® and PC Mailbox to distribute the information to end users.

SDC development and 50 copies of PC Mailbox were bundled under a $30K up front fee. The conferencing function was bid under an ATQ. Activity priced Quik–Comm was proposed at list, as was the Amdahl HSS interface. MPR was projected at $20K, with a 24 month commitment and a $15K minimum.

The Prototype

To prove it could be done, SDC built a prototype and demonstrated it to JWH management. The front end used a simple menu–driven approach. The GE IS system, through Quik–Comm, also allowed JWH to quickly return telemarketing leads and to communicate the latest customer "current account" information to the sales force.

Concerns Overcome Via Training and Documentation

JWH field sales personnel are relatively "computer illiterate," and there is frequent turnover. As a result, JWH was quite concerned about the viability of such a "high tech" PC solution. To meet

these concerns, the GE IS proposal included an additional $20K of custom training and documentation, to be provided by Training and Documentation Services. This effort successfully overcame JWH concerns and was key to achieving a full ramp to $25K MPR in less than two months.

Why GE Information Services?

GE IS used a consultative sell. The solution focused on client requirements rather than "product" and used prototype demos and client feedback to tune the solution to client needs. The proposal demonstrated our understanding of both current requirements as well as future growth alternatives, and leveraged FCM for a custom conferencing capability. While the GE IS solution was the most expensive of the alternatives considered, it was cheaper than the old system and had the most functional capability.

Client Benefits

The system's merging of technology and online interaction is a key element in managing Jim Walter Homes' rising sales. Specific benefits include:

- Real–time "in person" teleconferencing at packet switched network costs;

- Rapid followup of telemarketing leads in less than a third the time previously required;

- Timely notice to the field sales force of customer current account changes, saving many hours of time for collection and preserving good customer relations.

The Winning Team

The account manager is John Knoop from Jim Porath's South Atlantic Region. Technical support was provided by Larry McNeill, Ad McGarrity, and Steve Bain of Dave Votta's SDC organization.

More Information

For more information on this and other winning solutions compiled by the Transport Program, contact SDC Programs, Quik–Comm SDCADMIN, or call 8*273-4444

GE Information Services