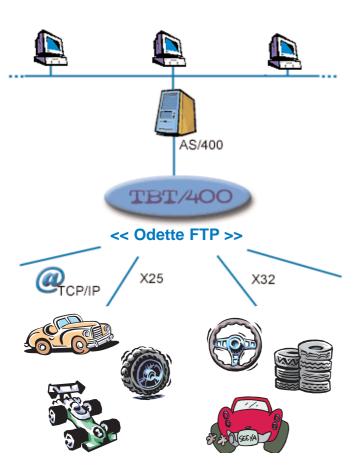
Protocol information sheet



Designing communications software for the **IBM AS/400**



Odette FTP, the standard for the tranfers in the automobile sector.



OFTP (Odette File Transfer Protocol) is now used by most of the main European car manufacturers as well as their providers. It is also used by the chemical industry, by the electric household appliances manufacturers and adopted more and more in other sectors such as the banking environment.

This protocol consists of:

- an international standard (native X25) for the first three layers of the OSI model, or an access TCP/IP,
- a protocol specific to ODETTE for layers 4 to 7 of the OSI model.

The protocol defines the dialogue which is established between two sites, using messages respecting a predefined rigorous sequence.

The POINT-TO-POINT COMMUNICATION.

The point-to-point communication is the direct link between two trade partners. It can use:

- either a leased line,
- or the switched network.
- or a packed switched network (X25: Transpac in France),
- or ISND.

INDIRECT TRANSFERS BY USING VAN.

A company can communicate indirectly with its trade partners through a VAN (Value Added Network). A VAN can be considered as mailbox service. A company transmits data via a VAN which is "sent" to a trade partner. The message is put into a "mail box" where the recipient will be able to recover it later. This service is commonly called "store and forward".

- The advantage of this approach is that the VAN supports all the available protocols in such a way that the trade partners using EDI do not need to use the same protocol as the transmitting company.
- The other advantage is that several messages transmitted to various trade partners can be sent in a single transmission because there is only one direct receiver: the VAN itself.
- It is usual that the VAN invoices the two EDI partners, the transmitter and the receiver. For this reason, during large data transfers, the VAN is an expensive solution.
- Another disadvantage of the VAN is that there is a delay when the data is presented to the recipient and that with no evidence of transmission.



SOME TECHNICAL STANDARDS

- **OFTP commands:** To control the data transmission, OFTP defines a set of signals which indicate when a message can be sent to the reception system.
- Files supported by OFTP: OFTP allows various types of file transfers. Those include the fixed-length recordings, the variable length recordings, the not formatted files and the files with text type.
- Access methods and OFTP: OFTP supports TCP/IP, ISDN, native access to X25 network, commutated connections by using a combination of the X28, X3 and x29 recommendations. It provides for error detection and the recovery procedures. As well, the ISDN connection to X25 networks can be used according to the X31 recommendation.

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Additional requirements

• Hardware:

For X25 ODETTE option, no specific material is required.

For X32 ODETTE option, an X32 modem is necessary.

For TCP/IP ODETTE option, a local network is necessary, it must be openended to ENX, ANX or Internet.

• Connections:

For X25 ODETTE option, your IBM AS/400 must have a connection and current subscription to TRANSPAC, with 1 CVC minimum available for TBT/400. For X32 ODETTE, you need a phone connection with an X32 modem.

If you use an X32 connection, you must also ask TRANSPAC for an identifier ID32

For TCP/IP ODETTE option, your IBM AS/400 must be connected to a network which supports TCP/IP protocol.

Lines integral support

• Multi-lines:

TBT/400 supports as many X25, X32, ISDN or TCP/IP lines that you wish to assign to it.

• Multi-circuits:

TBT/400 manages as many concurrent communications that the available resources permit.

Lines supervision:

TBT/400 has an automatic procedure which periodically reviews the state of the lines and as an option, responds to operator messages.

Files functionalities

- TBT/400 uses, in transmission as well as in reception, several types of OS/400 files on all of the available networks: *Physical files, source files, back-up files, spool files (in transmission).*
- Access to files is done by transcodification, page codes management...

Automated installation

• TBT/400 has a procedure which ensures that the installation is effected in a minimum amount of time.

Directory functions

• Multi-protocols directory.

or consult our website www.ipls.fr

- Address cheking X25 and IP.
 Enforcement of access security.
- Access control to applications. *Securise the applications.*

Supervisory functions

Several supervisory services and monitoring of message exchanges are provided by TBT/400:

- Supervision menus.
- Messages Queues.
- Output Queues.
- OS/400 view.

of jobs.

Miscellaneous functionalities

- Integrated scheduler. files transmission, scanning, submission
- Archives all received end transmited files.
- Automatic purge.

clean-up history files, remove the archived files, clean up the various OS/400 components.

- Dynamique menus management.
- A contextual and conceptual on-line help is provided for the differents menus and commands.
- Integrated editor, similar to PDM, providing for message input and modification.

Gateways with translators or messaging software

TBT/400 provides a set of gateways to well-known AS/400 software packages which have communications needs. The available gateways are:

EDI400, EDITRADE, EDIBASE, GENEDI, OFFICE/400, OPEN400...

Evolutionary

Other communication modules can be added to communicate:

- with your partners (*Atlas440*, *Odette*, *FTP*, *PeSIT*, *X400*...)
- in EDI (Atlas400, Calvacom, Diva, GEIS, IBM GN, Allegro...)
- with internal protocol Telemaintenance (*TBT protocol*)
- by fax, telex...

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