ipls

PeSIT,
This protocol's usage is not only confined to the banking environment.

SIT Network

bank A

bank B

bank C
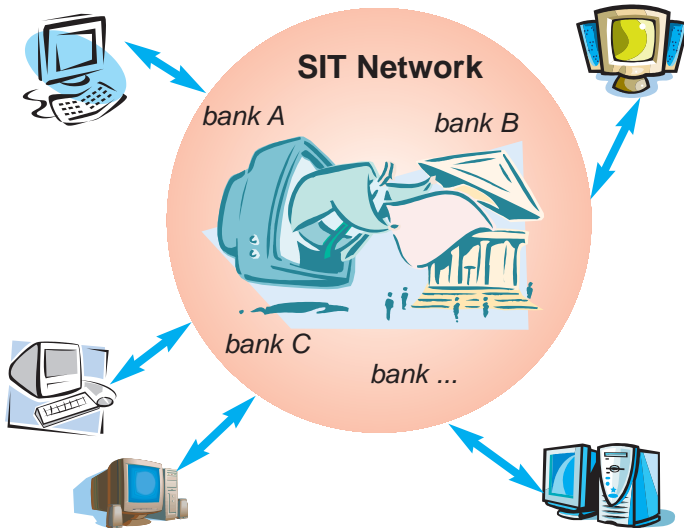
bank ...

The PeSIT protocol results from the work effected by the banking profession, in conjonction with the GSIT, with specific regard to file transfer.

The connection of the Banking Processing centers of the members of the SIT network to the stations of this network, necessitates the choice of a file transfer protocol which needs to respond to the following two requirements:

⇨integration with the ISO/OSI model, and the ability exist on different hardware,

⇨ease of use of the different communication supports (dedicated lines, public networks, local networks...).

The ISO file transfer protocol, FTAM, could have responded to these requirements but unfortunately this was not the case. The banking profession thus decided in 1985 to define a **file transfer protocol to connect the SIT network: PeSIT.**

FUNCTIONS PROVIDED BY The PeSIT SERVICE:

- **Writing of remote file:** a user can transfer the contents of a file to another user of the PESIT service.

- **Reading of remote file:** a user can request from another user the transfer of the contents of a file.

- **Installation of synchronization points:** the transmitter of the data file can pose stakes (synchronization points, numbered sequentially, during the transfer).

- **Recovery of a transfer:** a requesting user can restart a transfer interupted before its completion.

- **Resynchronization during a transfer:** a user can request his partner to restart the transfer from a previous synchronization point, if there has been an incident during the transfer.

- **Suspension of a transfer:** a user can stop a transfer (closing and removing of the selection of the file concerned) to re-use the current connection in order to process an higher priority transfer, on this connection. The transfer thus suspended will be thereafter subject to a recovery procedure.

- **Protection of the transfers:** the users of the PESIT service can implement mechanisms contributing to the reciprocal authentification of the partners, the data transmitted confidentiality and the integrity of the transmitted data.

- **Compression of data:** the users of the PESIT service can implement compression mechanisms of data from files transmitted in order to reduce the volumes actually transferred.

- Using an error detecting polynomial associated with each message of PESIT protocol, **the error control** provides a check that they are not corrupted by the transmission on a support which is not very reliable.

PeSIT is a file transfer protocol which allows the writing and the reading of file from one computer to another, connected by a telecommunication connection (dedicated line, public network, local network).

In order to free itself of the differences between the file management systems specific to each machine, PeSIT uses the concept of virtual file which is a common model to each computer for the files organization.

In accordance with the terminology adopted by the international standards, we note:

⇨The **PeSIT service** which is the interface between the file transfer software and its user,

⇨and the **PeSIT protocol** which defines the set of communication rules and the format of the exchanged messages between two counterparts PeSIT.

The Technical Specifications of PeSIT describe at the same time the PeSIT service and its protocol

Additional requirements

- Hardware:

  For the option X25 PeSIT, *no specific material is required.*
  For the option X32 PeSIT, *an X32 modem is necessary.*
  For the option PeSIT in TCP/IP, *your IBM AS/400 must be connected to a newtwork suporting TCP/IP.*

- Connections:

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

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.
- 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.

Miscellaneous functionalities

- Integrated scheduler.
  files transmission, scanning, submission of jobs.
- 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 differnets 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, Etebac, Odette , FTP ,PeSIT, X400...)*
- in EDI *(Atlas400, Calvacom,Diva, GEIS, IBM GN,Allegro...)*
- with internal protocol - Telemaintenance *(TBT protocol)*
- by fax, telex...