

# EDIINT: a solution for connecting SME's – ST Best Practices



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EDIFICE 94th Plenary / 8-September-2005

# Scope

- What is EDIINT ?
- Why EDIINT would be a possible solution for SMEs ?
- How EDIINT could it be a solution for SMEs ?
- EDIINT implementation @ST

# A few reminder on EDIINT ...

- A standard MIME-based data exchange protocol released by IETF for secure electronic exchange of business transactions over Internet.
- Payload documents are not limited to EDI: they could be EDIFACT, X12, XML, flat files, or any binary type files.
- No payload validation, no payload conversion.
- 2 Applicability Statements available:
  - AS1 using SMTP protocol.
  - AS2 using HTTP/HTTPS protocol (most popular as of today)
- AS3 *is coming* ... using FTP/FTPS protocol.

# EDIINT : Secure exchanges

- Confidentiality:

Ensure that only the originator and the recipient can read the exchanged payload document.

- Authentication:

Ensure the recipient the originator of the message.

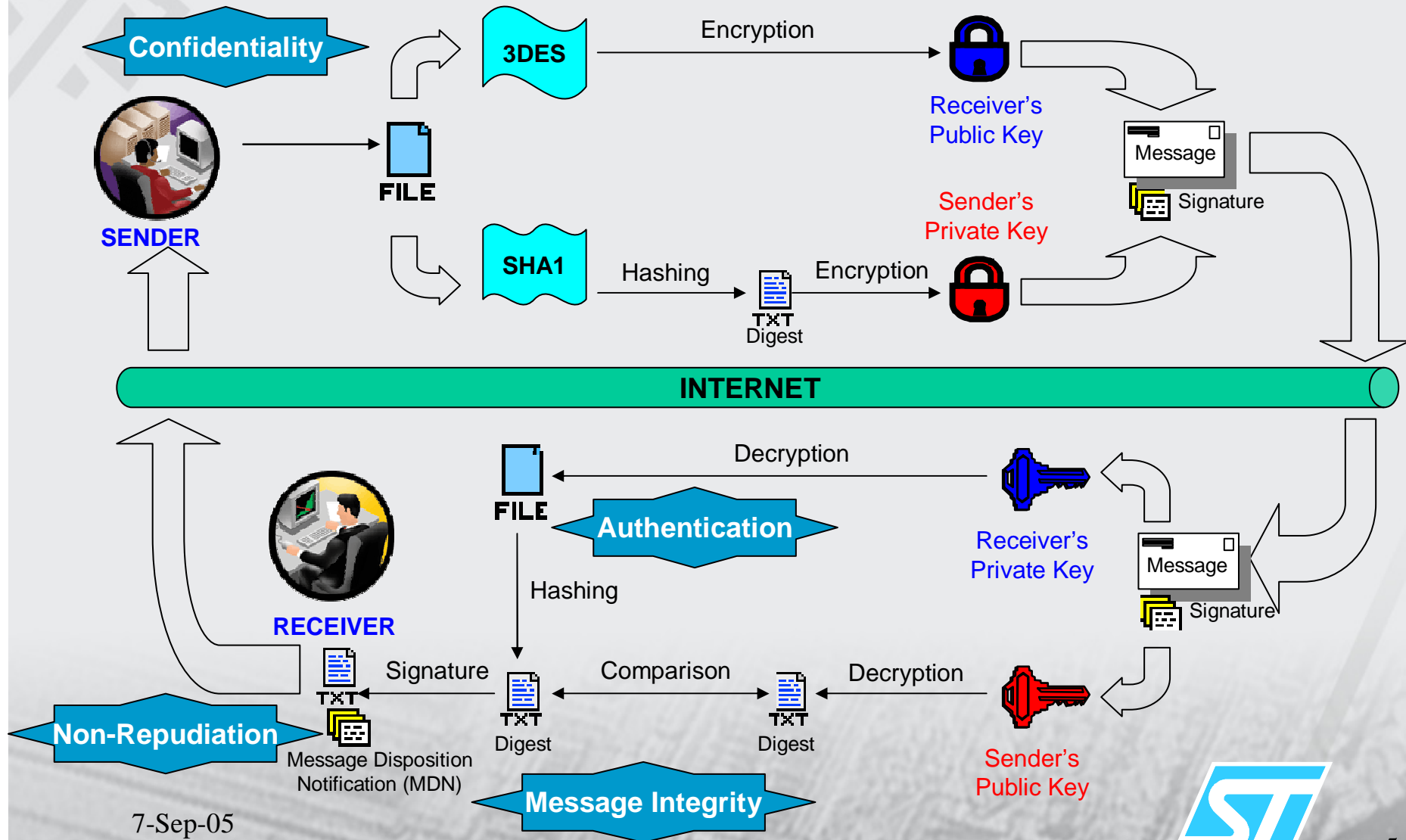
- Message integrity:

Ensure the integrity of the message with detecting whether an alteration or modification occurred during the transmission.

- Non-repudiation:

Provide confirmation to the sender that the message has been received by the recipient.

# EDIINT : Secure exchanges (Cont'd)



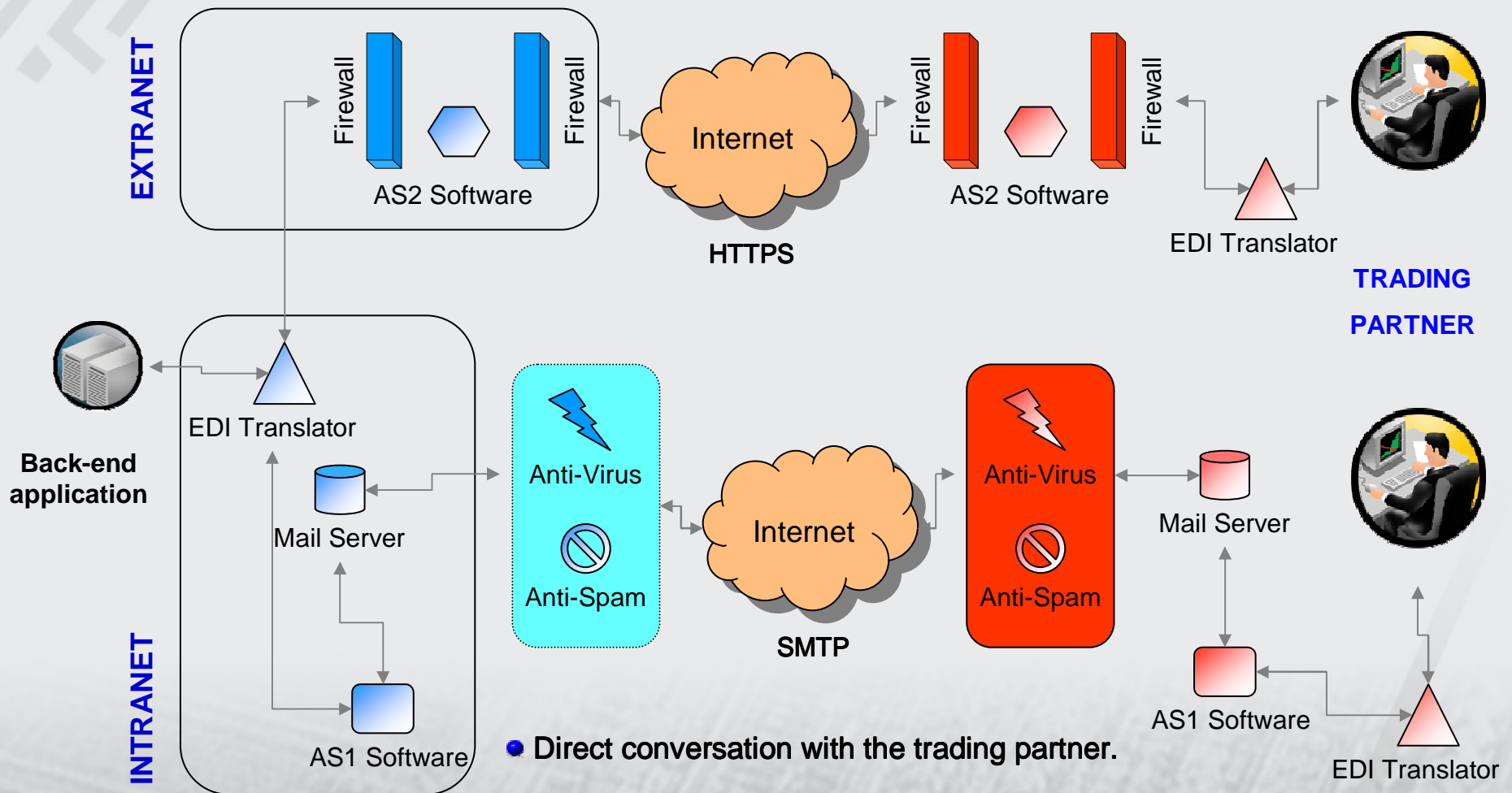
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# EDIINT: Why a solution for SME's ?

- Supports any business model.
- Application-To-Application solution.
- Security and reliability for all communication protocols.
- Kilo characters fees cost saving.
- Rely on open international standards :
  - Consortia: IETF, EAN-UCC, Rosettanet (MMS)
  - Security: S/MIME, SSL (AS2)
  - Protocols: SMTP (AS1), HTTP/HTTPS (AS2), FTP/FTPS (AS3)
  - Syntax: MIME, SMIME, MDN ...
  - Algorithms: TripleDES, RSA-SHA1, ...
- Ensures acknowledgement and non-repudiation handling.
- Multiple implementation scenario options:
  - stand-alone point-to-point.
  - use of a Hub.

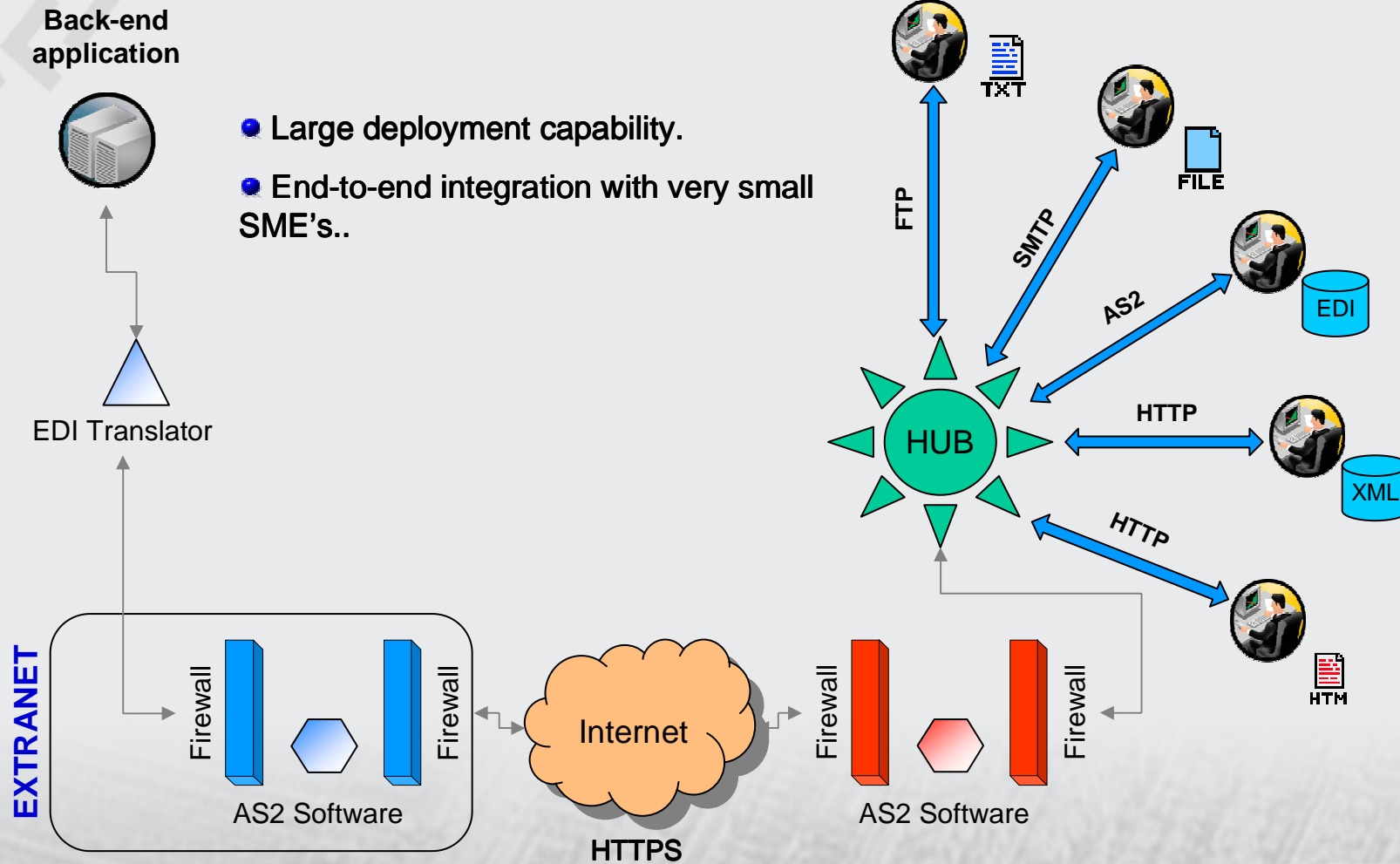
# EDIINT : Stand-alone Implementation



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# EDIINT : Hub-based Implementation



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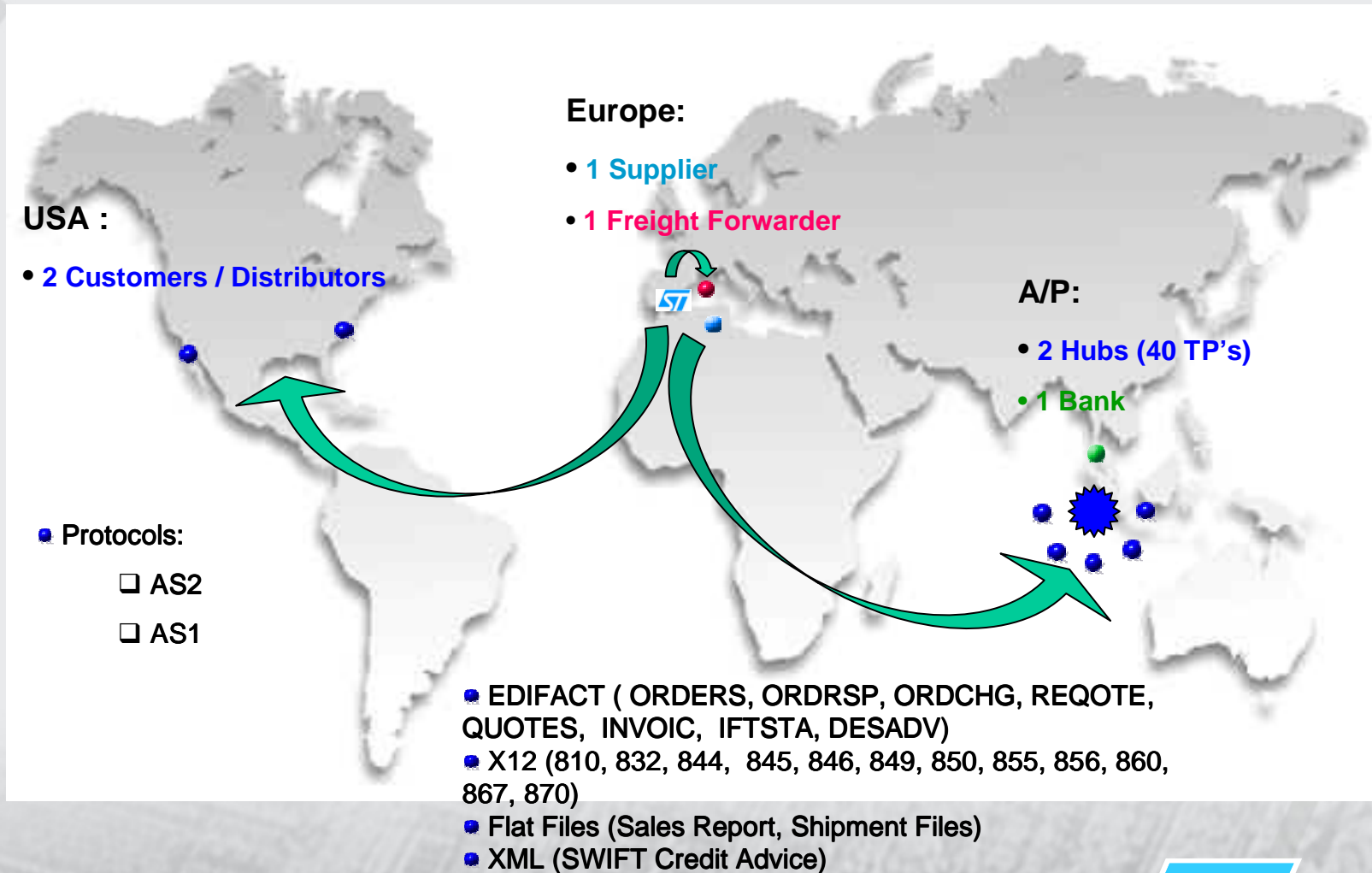
# Best Practices: « DO » ...

- Rather use CA-signed certificates to reduce security breaches risk factors.
- Use interoperable software certified by Drummond Group Inc.
  - 30 certified interoperable software for AS2 as of Q1 2005 (<http://www.ebusinessready.org/as1.html>) .
  - 15 certified interoperable software for AS1 as of Q2 2005 (<http://www.ebusinessready.org/as2.html>) .
- Exchange Trading Partner Agreement.
- Use AS2 for real-time processes.
- For AS1:
  - Decouple mail server and EDIINT software.
  - Put an anti-virus and anti-spam in front of the mail server.
  - Use dedicated e-mail address (with keywords 'edi' / 'ediint' ...).
- For AS2:
  - Use permanent and persistent Internet line.
  - Use meaningful AS2-System Identifiers (DUNS, explicit names, ...).

# Best Practices: « DON'T ... »

- Don't neglect the EDIINT software tool investment: don't develop the protocol and tool by yourself.
- Don't use a shared desktop PC.
- Don't exchange very large sized payloads (PRICAT, SLSRPT, INVRPT, ...) without compression.
- Don't use AS1 for critical messages with possible arrival order problem (DELJIT, ORDRSP, DELFOR Response ...).

# EDIINT implementation @ST



# Thank you ...

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