



OFTP2

Odette File Transfer Protocol version 2

An Odette Standardization Project

*Odette Sweden TC –day
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- SASIG XMTD Software Providers Meeting September 2004:
Question: **How to exchange ENGDAT data globally?**

- Existing transfer based on OFTP Version 1
 - Defined in 1986 by Odette
 - Used extensively in Europe for ENGDAT/CAD and Trade EDI by
 - Automotive
 - Retail
 - Transport
 - Government Organizations, ...
 - Used over secure networks ISDN, X.25
VPN, ENX IP-services

- ENGDAT involves very large (>100 MByte) files
- Fast and low cost network services are important
- ENGDAT have become a global standard that shall support global data exchanges
- These characteristics are valid also for trade EDI

- ISDN and X.25 network services
 - Slow
 - Expensive (especially international calls)
 - Are mostly used in Europe
 - In the long term they will be closed country by country

- **SOLUTION:**
Extend OFTP for secured transmissions on the public Internet

■ Objectives:

“To develop an OFTP (Version 2) suitable for the exchange of EDI files and large files, such as CAD/CAM drawings, between trading partners under the auspices of a cryptographically secure environment necessary to meet the increasingly sensitive needs for data transfer within the automotive community on a world wide basis.”

■ Deliverables:

- Define and publish a **OFTPv2 protocol** as an **Internet RFC**
- Publish the **OFTPv2 protocol** also as a new **Odette recommendation**
- Create **Implementation Guidelines** for sw-implementers and users
- Conduct basic **interoperability tests** between different soft wares and platforms
- Initiate **pilot projects**

Security services

Secure authentication, Confidentiality, Integrity, non-repudiation of files and of receipts by

- Transport session authentication and encryption (TLS)
- OFTP authentication
- File encryption
- File signing
- Receipts signing

Based on security certificates with asymmetric and symmetric keys

File compression

- compressing on file level, better than existing on data buffer level.
- Down to 10 %, dependant on file contents
- Reduces transmission times and costs

Additional file description

- UTF-8 encoded file description
- Allows companies to send descriptive text with a file in any language
- Maximum file description (999 octets)

Larger files

- Maximum files size extended to 9,3 PetaBytes

- OFTP2 may be used by
 - X.25 Native
 - X.25 over ISDN
 - ENX/ANX/JNX / Private Links
 - TCP/IP, Public Internet

For OFTP-users:

General information about OFTPv2 and security certificates.

For OFTP software developers:

Information about implementing OFTPV2 software, especially about handling of certificates in the software.

Information regarding implementation of a complete function for exchanges of user certificates between OFTP-systems.

As reported latest OFTP2 meeting 2008-05-06:

Interoperability test:

Performed by most SW-suppliers.

Limited regarding OFTP exchange of certificates. ■

Pilot projects:

BMW, PSA, VW already started

Volvo, initiated 2008

Scania, initiated 2008

Usage and trust of certificates. Exchange of CA certificates and certificate revocation information:

Accepted as an important new topic. Agreed as out of scope for the OFTPv2 workgroup. A new project SCX, Security Certificate Exchange have been in operation since 2007. Finalized during 2008

Thank you.