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Hermes

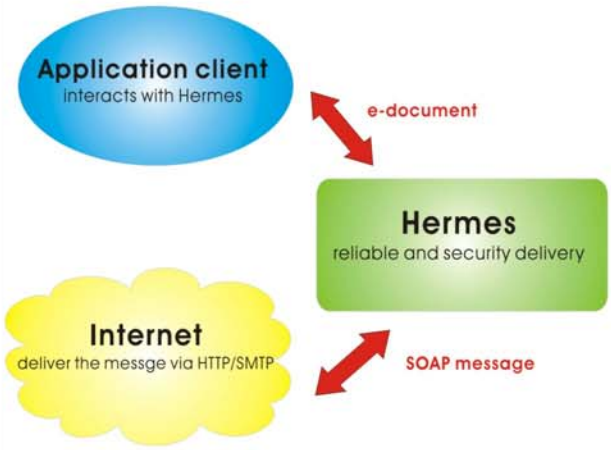
Reliable and secure

Hermes is a reliable messaging gateway in compliance with the international standard ebXML Message Service (ebMS). It utilizes SOAP, Internet transport protocols, and other security standards to provide a standardized, reliable, and secure infrastructure for enterprises to exchange business documents.

Hermes is a Message Service Handler (MSH) implementation and is compliant with the OASIS ebXML Message Service (ebMS*) standard. Hermes utilizes SOAP, Internet transport protocols, and other security standards to provide a standardized, reliable, and secure infrastructure for enterprises to exchange business documents.

Reliable delivery features, defined in ebMS Standard, has been implemented in Hermes to ensure the exchanged message is received and intact. Hermes also supports secure messaging functions through widely-adopted Internet security technologies, such as XML Signature, SSL (Secure Socket Layer) and S/MIME (Secure Multipurpose Internet Mail Extensions). The features of Hermes, for example message packaging, reliable messaging and RDBMS persistent storage, all target for the vision of creating a single global electronic marketplace for enterprises of any size, any industry, and in anywhere.

Receive and send electronic document using Hermes



* OASIS ebXML Message Service (ebMS) is one of the technical specifications of ebXML. The latest version is v2.0. For download, please go to www.ebxml.org

Feature list

Transporting, Routing, and Packaging using international Open standards

Transporting, routing and packaging and the message in SOAP format. Interoperability is enabled using international open standards

Reliable messaging (QOS)

Able to specify different level of Quality of Service (QOS). QOS define how "reliable" a message is sent, using acknowledgement and retry mechanism

Secure messaging

Ensure security of data during delivery by adopting Internet security standard like SSL, digital signature with PKI, S/MIME, etc.

Multiple delivery modes

Messages can be passed to or received from your Hermes by multiple methods e.g. API call or deliver to URL

Firewall-friendly

Hermes architecture can work with corporate firewall conveniently without complicated setting required

RDBMS Persistent storage

Persistently store all messages passing through Hermes, allowing message status logging and tracing

Message ordering

Multiple coherent messages are received in the exact order as they are sent, no matter how they travel in the net

Cross Platform

Developed using Java language enable Hermes to be deployed in multiple platforms

Support HTTP and SMTP

Message can be delivered through multiple transport protocols e.g. HTTP and SMTP

Support CPA

As the messaging service gateway for the ebXML framework, Hermes supports Collaboration Protocol Agreement (CPA)'s parameters to deliver e-document

Others...

Message archive, message backup and restore, and more.

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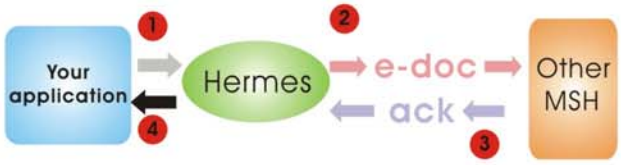
Reliable and Secure Document Exchange Using Hermes

When you send paper document to your valuable business partners, you trust your international express carrier and package delivery company. While for e-business document, Hermes is the definite choice.

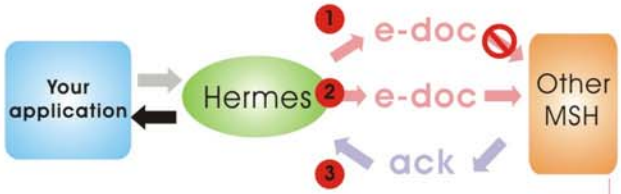
Scenario 1: First Delivery is Successful

1. Your Application passes e-document to Hermes
2. Hermes delivers the e-document to other ebMS compliant Message Service Handler(MSH) securely e.g By SSL.
3. On successful receipt, your partner's MSH sends an acknowledgement to Hermes
4. Hermes notifies your application the delivery is successful



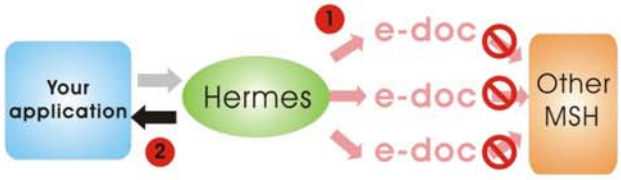
Scenario 2: First Delivery is Unsuccessful

1. Hermes send the e-document, but gets lost
2. Hermes cannot receive acknowledgement. After timeout, Hermes re-sends the e-document
3. MSH receives the document and replies with an Acknowledgement



Scenario 3: All Deliveries are Unsuccessful

1. Hermes cannot receive the acknowledgement. After timeout, Hermes re-sends the e-document
2. After a number of unsuccessful retries, Hermes sends an error message to your application



System Requirements:

- Java Development Kit 1.4.0 or above
- Java Servlet container or J2EE compliant server
- A relational database that supports JDBC

About freebXML

FreebXML is an initiative that aims to foster the development and adoption of ebXML and related technologies. The mission of freebXML is to provide a centralized Website for ebXML users and developers to access and share 'free' ebXML code, applications, and development and deployment experience. Founding members of this initiative include technical leaders from international technology firms, government, organizations, standardization bodies, and academic institutions. For details or download, please go to www.freebxml.org.

FreebXML is sponsored and hosted by Center for E-Commerce Infrastructure Development (CECID) and the Department of Computer Science & Information Systems of HKU.

ebXML Background:
The mission of ebXML[1] is to provide an open XML-based infrastructure enabling the global use of electronic business information in an interoperable, secure and consistent manner by all parties. ebXML, sponsored by UN/CEFACT[2] and OASIS[3], is a modular suite of specifications that enables enterprises of any size and in any geographical location to conduct business over the Internet. Using ebXML, companies now have a standard method to exchange business messages, conduct trading relationships, communicate data in common terms and define and register business processes. More information about ebXML can be found at www.ebxml.org

1. Electronic Business using eXtensible Markup Language
2. United Nations Centre for Trade Facilitation and Electronic Business
3. Organization for the Advancement of Structured Information Standards

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