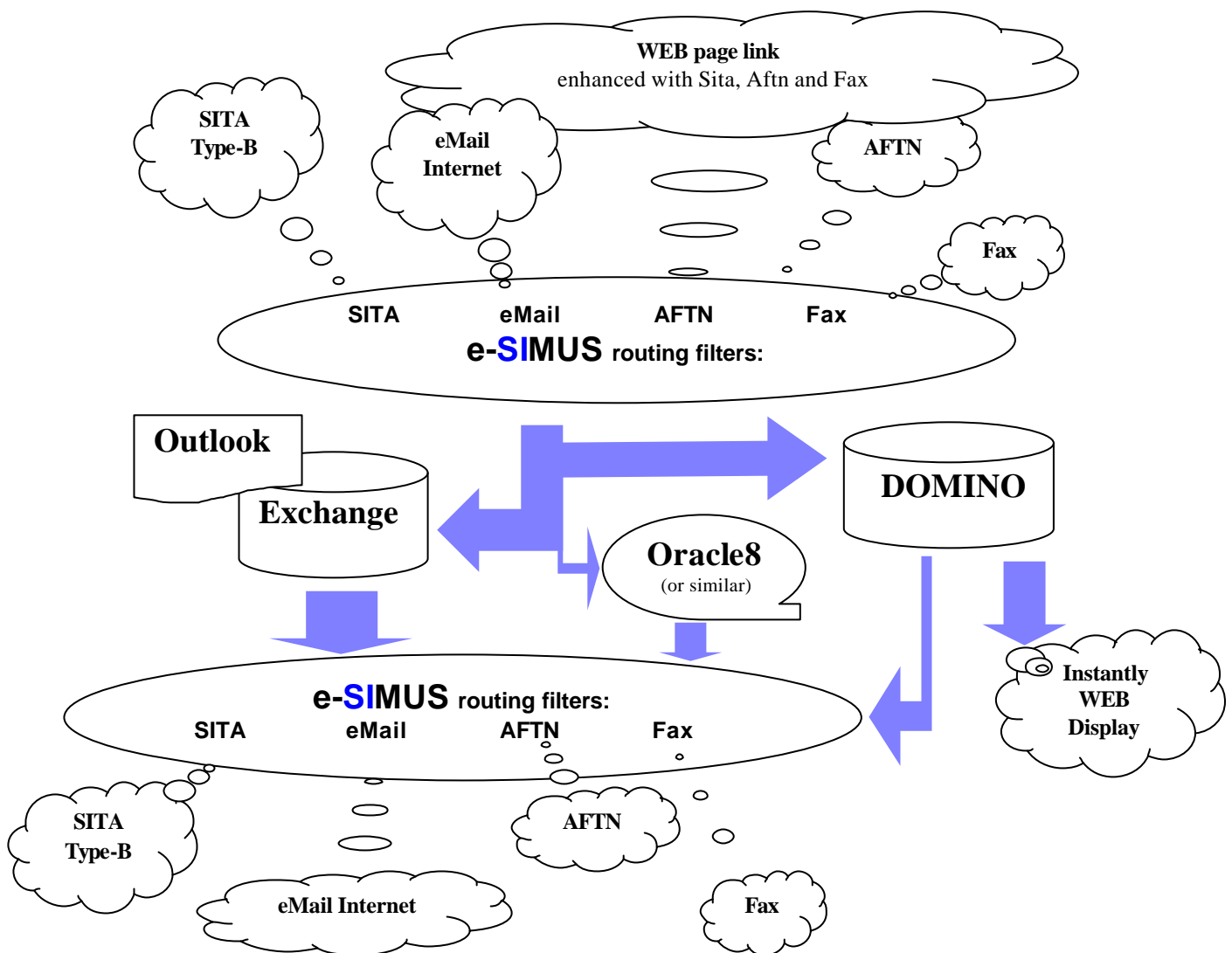


eSIMUS Overview WinNT



eSIMUS the integration into one single product:
Exchange/Outlook or similar

NOTICE

Confidentiality and Copyright.

This document is the property of
Nosewheel Inc.

This is a Nosewheel Inc. confidential document. All information contained in this document is provided in strict confidentiality for the sole purpose of installing and administrating the eSIMUS complex. The information in this document shall not be used for any other purpose other than as referred to above. This document must not be disclosed, either wholly or in part, to any other party except to the eSIMUS Licencee and his staff involved, without prior written permission from Nosewheel Inc.

Disclaimer. All brand names and product names in this document are trade marks, service marks, trademarks, or registered trade marks of their respective owners. Nosewheel Inc. is not associated with any product or vendor mentioned in this document. Nosewheel Inc. shall not be held liable for products, techniques or names mentioned herein which are trade names, service marks, trademarks or registered trade marks or otherwise protected by law.

WinNT Version 1.1 / Release 5

SITATEX is a trademark of Société Internationale de Telecommunications Aéronautiques
MS and Windows are trademarks, and MS-DOS and Microsoft are registered trademarks of Microsoft Corporation.
IBM is a registered trademark of International Business Machines Corporation.
PKZIP and PKUNZIP are registered trademarks of PKWARE Inc.
Oracle is a registered trademark of Oracle Corporation.

0. CONTENTS

INFO

1. System Overview
 - 1.1 eSIMUS - Main Module
 - 1.2 eSISITA - SITA/ARINC Interface Module
 - 1.3 exSIMUS - eMail/Internet via MS Outlook/MS Exchange
 - 1.4 eSISQL - SQL Database Module
 - 1.5 eSIWATCH - WinNT Service/Program Control with Restart
 - 1.6 eSIMAIL - Message Broadcast
 - 1.7 eSIAFTN - AFTN Interface Module
 - 1.8 eSIWSND - Enhancement to send messages from the WEB
 - 1.9 eSIWEB - Display messages/emails instantly on a WEB page

REQUIREMENTS

3. Requirements
 - 3.1 Hardware
 - 3.2 System licenses from third party
 - 3.3 Development/Tools licenses

CONTROL

4. Operation Control
 - 4.1 eSIMUS (service) Control
 - 4.2 eSIWATCH (watchdog) Control
 - 4.3 eSIMAIL (message broadcast) Control
 - 4.8 Update new Releases
 - 4.9 Handling of Exceptions, Errors and Difficulties
5. Working with emails and messages
 - Working with Outlook message and email composing
 - 5.1 Message (SITA) eMail Format
6. Working with Address Books
7. Log-Files Examples
 - 7.1 Message Log
 - 7.2 Process Log

INSTALL

10. Install / Set-Up
 11. Install eSIMUS
 12. Install eSISITA
 13. Install exSIMUS
 14. Install eSISQL
 15. Install eSIWATCH
 16. Install eSIMAIL
 17. Install eSIAFTN
 18. Install eSIWSND
 19. Install eSIWEB

CONFIGURATION

80. Files Configuration
 81. Configuring the eSIWATCH Watchdog File
 82. eSIMAIL
 - 82.1 Broadcast Lists
 - 82.2 XMIT Broadcasts/Transmits the Message
 - 82.3 XMIT Mechanismen
110. Configuring eSIMUS
 111. eSIMUS Configuration
 - 111.1 Configuration
 - 111.2 Log/Monitor
 - 111.3 Licensee Info - preset
 - 111.4 Internet - email error reporting
 112. eSISITA - SITA connection
 113. exSIMUS - Exchange Server Connection
 - 113.1 e-Mail Server
 - 113.2 Filter: InAddrType --> Email Server
 - 113.3 eMail Filter Definition
 114. eSISQL - Message Database
 115. eSIWATCH - Service/Program Control
 116. eSIMAIL - Message Broadcast
 117. eSIAFTN - AFTN Connection
 118. eSIWSND - Send Messages from the Web
 119. eSIWEB - Display Messages Instantly on the Web

Appendixes:

A. Documentation Issues and Version Control

B. MS Exchange / MS Outlook for exSIMUS

Preface

B.1 Concept

Set-up Process

B.2 MS Exchange Server

B.3 MS Outlook - exSIMUS - Client

B.4 MS Outlook - messaging/email - Clients

Set-Up Exchange Server

B.5 eMail/Message Mechanism

B.6 Address-Types and Addresses

Install / Create

B.10 Install Procedures

B.11 Install exSIMUS Address-Types Templates

B.12 Create "eSIMUS" Mailbox on Exchange Server

B.13 Create eSIMUS Profile on Outlook, on Exchange Server

B.14 Install exSIMUS Outlook - messaging/email - Clients

Un-Install / Remove

B.20 Un-Install Procedures

B.21 Un-Install exSIMUS Address-Types Templates

B.22 Remove "eSIMUS" Mailbox from Exchange Server

B.23 Remove eSIMUS Profile from Outlook, on Exchange Server

B.24 Un-Install exSIMUS Outlook - messaging/email - Clients

C. SITA Connection

C.1 Configuration

C.1 General Info

C.2 SITA Type-B Gateway

C.2.1 X.28 Dial-Up connection

C.2.2 X.25 Leased Line

C.3 EICON for SITA X.25

C.3.1 Eicon S51 Application Interface - V4R2

C.3.2 Eicon S51 Card/Port Interface

C.4 SITA Message Daemon

C.5 Start-Up and Systems Variables

C.5.1 System Variables

C.5.2 Add to Start-Up

D. SQL Database Table Requirements ORACLE8

E. MS EXCHANGE / MS OUTLOOK for eSIWSND

Preface

E.1 Concept

Set-up Process

E.2 WEB-Page Enhancement

E.3 MS Outlook eSIWSND Script - on Exchange Server

Install / Create

E.10 Install Procedures

E.11 WEB-Page Enhancement

E.12 Install eSIWSND Inbox Script on MS Outlook Client, on Exchange Server

E.13 Configure the eSIWSND Script

Un-Install / Remove

E.20 Un-Install Procedures

E.21 WEB-Page Enhancement

E.22 Un-Install eSIWSND Inbox Script on MS Outlook Client, on Exchange Server

F. WEB Database Requirements LOTUS DOMINO

INDEX

1. SYSTEM OVERVIEW

If you have a special request or need, please do not hesitate in contacting us – we are experts for message switching and interchanging software.

GENERAL MODULES

The eSIMUS complex of automatic message handling services gives access to and between the different mail/message networks.

eSIMUS

- makes it possible that eMail, SITA/ARINC messages, AFTN and Fax, can **use 1 (one) and the same message composer**.
- can **route, split and interchange** messages and emails, to and between the different networks.
- can **replace and exchange addresses** for the different networks.
- can **broadcast** messages and emails.
- update and download messages from an **SQL-Database**.
- can **send SITA/ARINC/Fax from the WEB**, and
- can **display messages directly on the WEB**.

new modules -ready soon

- generic **Edifact/XML** (IATCI/PADIS) message conversion and control.
- passenger lists - to **PNL (IATA) format** with **WEB display, SSR-request, Pre-Seating, email handling and DCS-forwarding**.

Mandatory modules

eSIMUS consist of the **mandatory** module:

- **eSIMUS - main module.**
The module handles, the configuration, monitor, log, filter definitions, message management, and error handling control function for eSIMUS.

Optional modules

and the **optional** modules, according to your needs:

(modules under consideration/development are described on the end of this paragraph).

- **eSISITA - SITA/ARINC interface module.**
The module connects eSIMUS to the SITA/ARINC network. It includes SITA/ARINC message handling, message daemon, send & receive, message cleaning, and other control

functions needed.

- **exSIMUS - eMail/Internet/MS Outlook/MS Exchange module.**
connects, converts and makes a bridge between SITA messages and the email composer MS Outlook/MS Exchange, so thus SITA messages are made available and composed on the email composer - it means only one message/email browser/composer is necessary.
Compose, send and receive IATA (SITA/ARINC) messages from/to MS Outlook/MS Exchange
- **eSISQL - SQL-database module.**
updates and downloads SITA/ARINC IATA messages, and even emails, from/to an SQL database. Attachments are supported.
The database has a default configuration for ORACLE8. Any other Ansi-SQL database can be used, such as Sybase, MS SQL, Informix, etc.
Nevertheless, eSISQL can interface Lotus Domino, MySQL and Oracle8i.
- **eSIWATCH - WinNT Service/Program control.** Stand-alone program and consists of all the functions that ensures that eSIMUS or SITA (**and any other service/program**) under WinNT, is online, operating and functioning.
If eSIMUS (or any other WinNT service/program) is not operating, eSIWATCH will automatically restart (or close) all processes necessary to get the program in operation again.
The eSIWATCH control list is set-up with a simple XML script, which the user can create and/or modify themselves.
- **eSIMAIL - Message Broadcast module.** Also available as stand-alone program, and consists of all the functions needed to create broadcast-lists (recipients addresses: SITA, ARINC, email, fax, X400) and broadcast the message to the recipients (single wise) on the different networks using simple commands.
Attachments and any SITATEX feature, is supported.
- **eSIAFTN - AFTN module.**
connects AFTN messages to eSIMUS so thus AFTN messages can be composed, send and received, on Outlook/Exchange.
- **eSIWSND - send SITA/ARINC from a WEB page.**
makes it possible to send SITA, ARINC and AFTN messages from a WEB site/page.
- **eSIWEB - displays instantly SITA/ARINC messages on a WEB page**
by sending the message to eSIWEB, getting it updated on a web-database, and instantly available and displayed on a WEB site/page.

CUSTOMIZED MODULES

When dealing with these modules - certain information's - from you and about your Trading-Partner's are required.

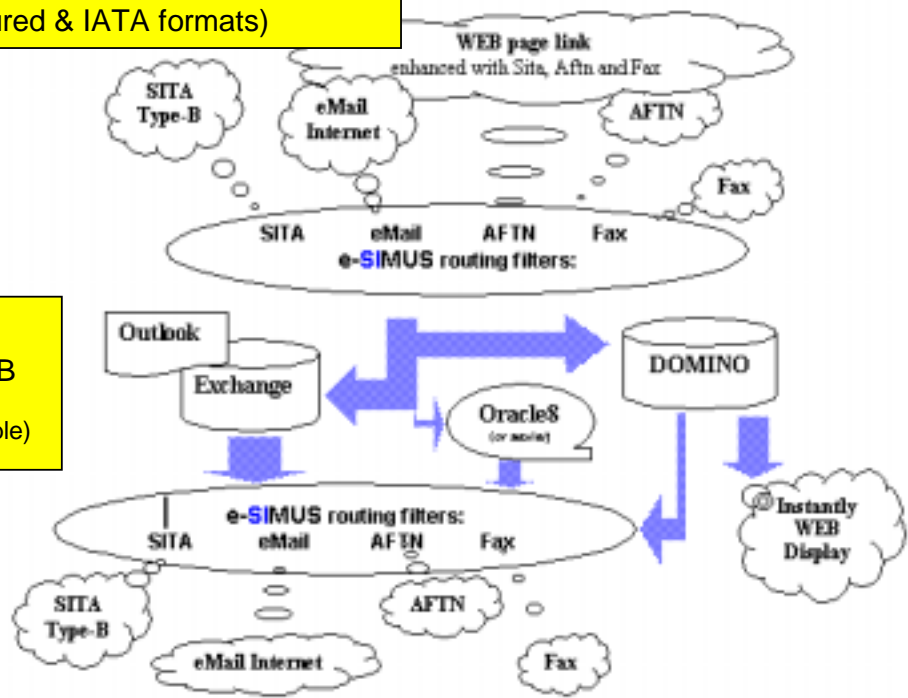
Please contact us - with your details - and we state you the delivery time and the one-time licensee fee - in reply.

PNL/ADL

PNL / ADL
 FROM: **TOUROPERATOR / TRAVEL-AGENTS**
 (Un-structured & IATA formats)

PNL / ADL
 DISPLAY on WEB
 pr FLIGHT/TO/...
 (Pre-SEATING available)

PNL / ADL
 TO: **CARRIER / DCS / CATERING / SSR-provider**
 (IATA & un-structured formats)



PNL processing - self-automatic controlled

- **eSIPAX - converts Tour-Operators PAX-Lists to an IATA PNL-list**
according to IATA/PADIS standards, and keeps the PNL-lists in an info-store, available from the WEB and for other functions.
 - a) accepts passenger lists - send from a tour-operator, travel agent, etc.
 - b) via Internet and SITA (BBS, H2H is under consideration)
 - c) keeps the total PNL-lists, according to IATA/PADIS standards, pr. flight, date, tour-operator/travel-agent, etc.
 - d) instantly available
 - on a Web-pages (via eSIWPAX, eSIWSSR and eSIWSEAT),
 - for the DCS (via eSIPNL)
 - for SSR handling (via eSISSR) and
 - pre-seating (via eSISEAT).

- **eSIWPAX - displays PNL-lists on the WEB**
with a browser selection possibility.
 - a) displays, PNL lists from the info-store, on the WEB
 - b) pr. flight, date, tour-operator/travel-agent, etc.
 - c) Instantly when pax-lists are received.

- **eSIPNL - sends the PNL/ADL-list to the DCS**
in IATA PSC or handler/trading-partner format.
 - a) sends the PNL list, incl. the SSR and seat-requests,
 - b) based on the DCS trading partner property description
 - c) on a time-schedule basis
 - c) to the DCS,
 - d) via SITA, Internet or Fax
 - e) additional updates - after PNL is sent - are send by ADL's.

SSR processing - self-automatic controlled - a supplement to the PNL process

- **eSISSR - SSR-requests control and SSR-lists forwarding**
to the SSR-handler/function in IATA PSC or handler/trading-partner format (catering, seating, handler for: disabled persons, unaccompanied minors, etc.)
 - a) controls SSR-requests on flight/date sends the SSR lists,
 - b) based on the SSR-handler/function property description
 - c) on a time-schedule basis
 - c) to the SSR-handler/function,
 - d) via SITA, Internet or Fax
 - e) additional updates - after 1. issue - are send as an add-list instantly when received

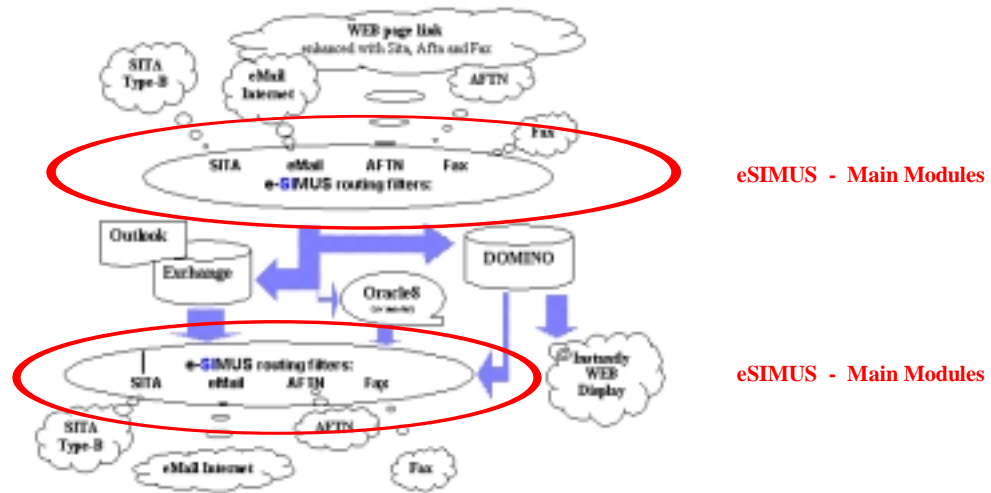
- **eSIWSSR - displays SSR-lists on the WEB**
with a browser selection possibility.
 - a) displays, SSR lists from the info-store, on the WEB
 - b) pr. flight, date, SSR-type/code, handler, etc.
 - c) instantly when pax-lists are received.

SEATING processing - self-automatic controlled - a supplement to the PNL process

- **eSISEAT - controls SEAT-plans and passengers SEAT-Requests**
based on seat-plan messages, PAX lists, and seat-requests issued
 - a) accepts aircraft seat-plan changes, instantly from authorized sources
 - b) uses IATA/PADIS defined seat-attributes
 - b) via Internet and SITA and
 - c) confirms the changes/denied-changes to the issuer, if appropriate.
 - d) accepts seat-requests, instantly from authorized sources
 - e) from pax-lists and seat-request messages (./R element),
 - b) via Internet and SITA (BBS, H2H is under consideration) and
 - c) confirms the changes/denied-changes to the issuer, if appropriate.

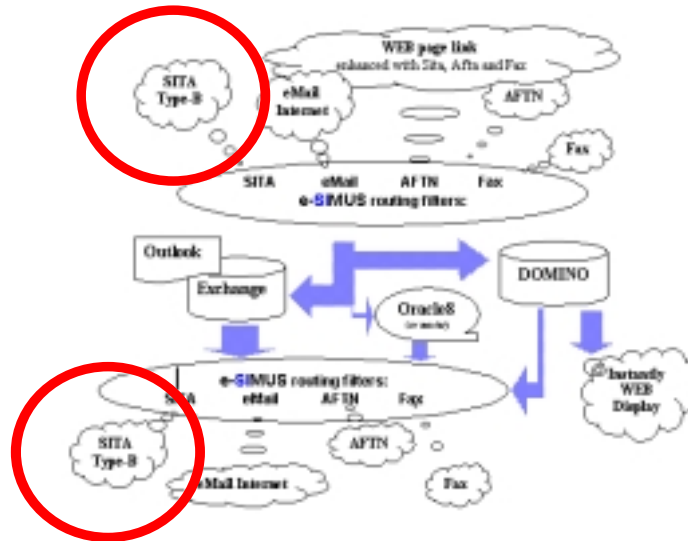
- **eSIWSEAT - displays Seat-plans and flights seating conditions**
on the WEB with a browser selection possibility.
 - a) displays aircrafts actual seat-plans and
 - b) the flights actual seating-conditions (pr. flight, date)
 - c) on the WEB
 - d) instantly when updated.

1.1 eSIMUS - the Main Module
(mandatory)



The main module consists of the configuration, monitor, log, filter definitions, routing definition tables, message management, error handling, network control, user access, file housekeeping (remove) facility, program control, user control and time schedule function.

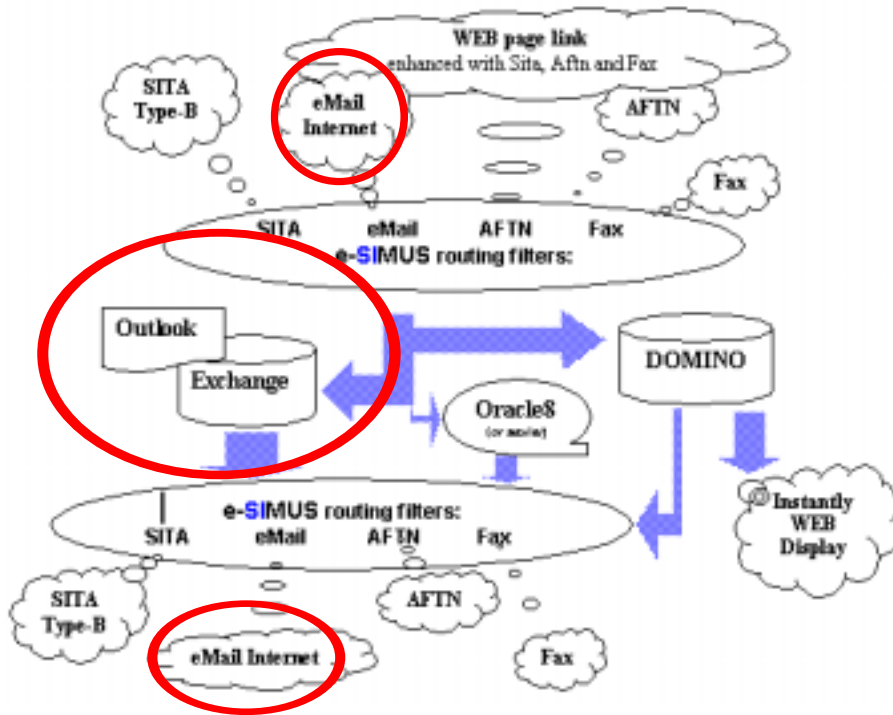
1.2 eSISITA - SITA interface Module
(optional)



The SITA/ARINC Link Module makes it possible to connect to the SITA Message Type-B network.

The SITA/ARINC network can - with more or less success - transmit but not compose - all kind of message formats and types like STX, X400, AFTN, Fax, Internet, FDS, Telex , and etc..

1.3 exSIMUS - eMail/Internet Module
(optional)



SITA/ARINC messages received are forwarded (and stored) to the appropriate recipients mailbox on the Intranet Server, and sends - email composed messages - from MS Outlook through the exSIMUS message handler to the SITA/ARINC, Email, AFTN and/or Fax address.

eSIMUS accepts cross-message addressing using SITA/ARINC, AFTN, Fax and Email addresses on the address book.

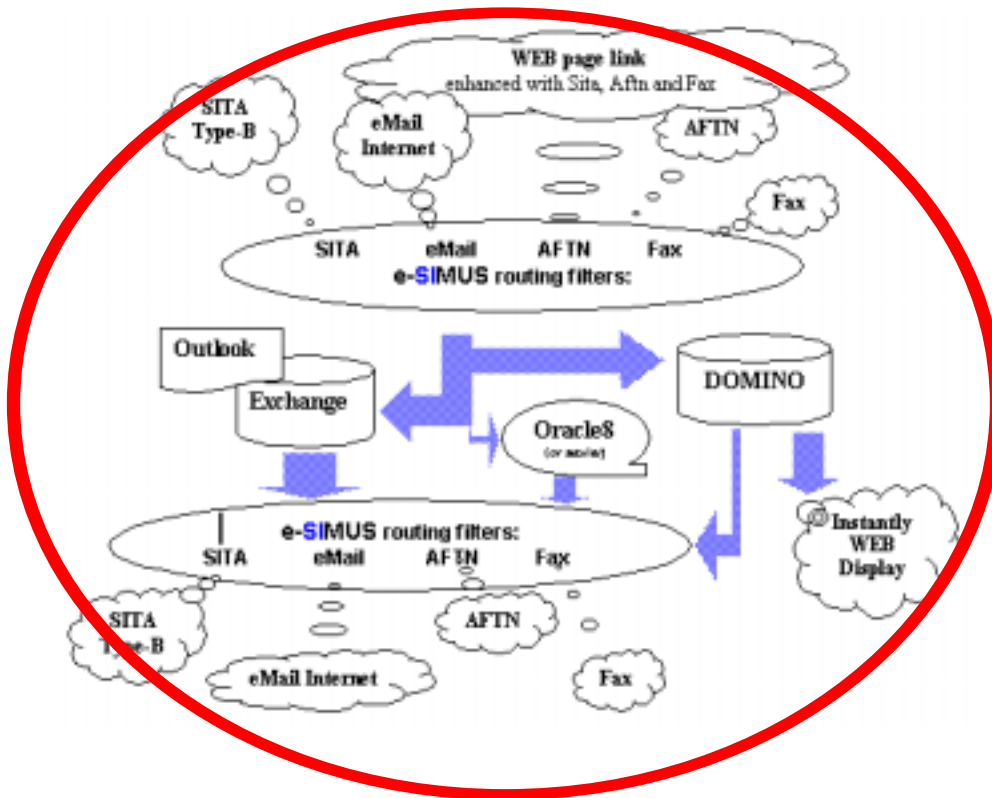
1.4 eSISQL - SQL Database Module (optional)



The SQL-Database stores received SITA/ARINC and Email messages and sends db-downloaded messages through eSIMUS message handling - via SITA/ARINC, Email, AFTN and/or Fax.

Besides that - the SQL Database Concept makes it easy to use an UNIX/LINUX message composer - even for SITA/ARINC messages.

1.5 eSIWATCH - WinNT Service/Program Control Module (optional)



All necessary programs for eSIMUS are supervised and controlled by eSIWATCH.

Based on a timer, eSIWATCH is constantly checking that programs and services from the definition control list are operating.

If a program or service is not functioning, eSIWATCH will:

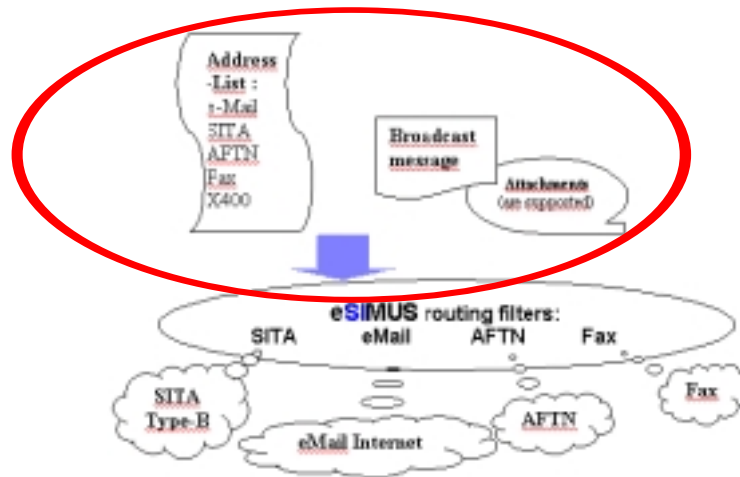
1. wait for the shut-down tolerance, based on an individual timer,
2. close the service/program if necessary and
3. start the service/program (definable) again.

eSIWATCH is designed so that:

- a defined process can be started by another program or service
- the starting program or service can be several programs or services
- if needed, the checked process can be killed before the start procedure takes place
- a log-on can be performed
- an e-mail can be sent
- all required parameters could be supplied on the program command line.

The eSIWATCH can supervise, control and restart any service/process under WinNT !

1.6 eSIMAIL - Message Broadcast Module (optional)



eSIMAIL provides a message broadcast service for single and multi-addressing possibilities.

All functions for broadcasting messages on the different networks from the same address list are provided in this module.

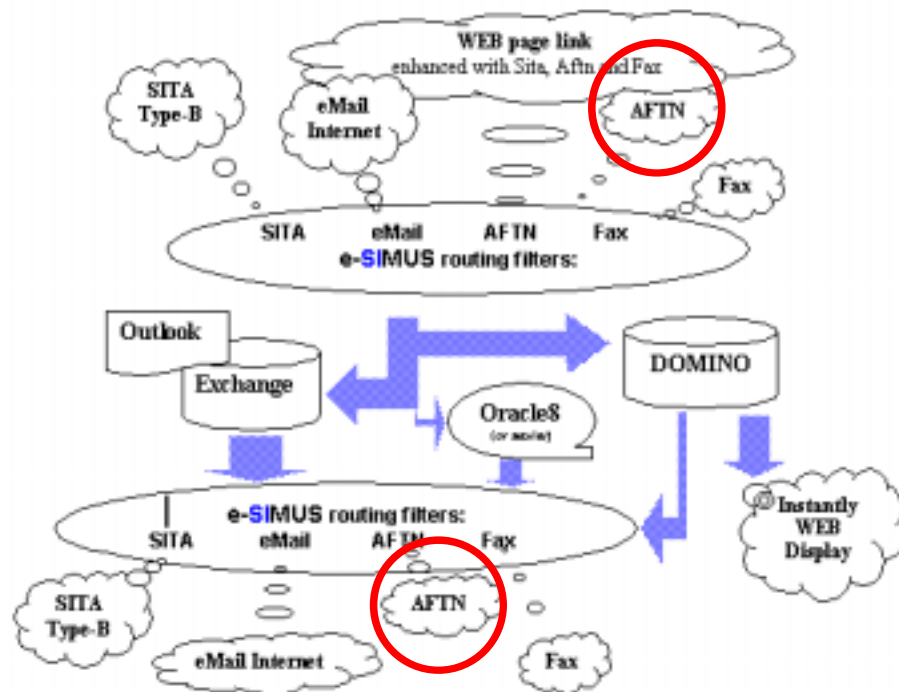
For SITA/ARINC messages are all features, - attachments, double signature, etc. - supported !

The module consists of all the functions to create broadcast-lists (recipients addresses: SITA/ARINC, email, fax, X400, AFTN) and broadcast a message to the recipients on the different networks using simple commands.

eSIMAIL handles email-, SITA/ARINC-, Fax/SITAFax-, AFTN and X400 - addresses from the same broadcast list and selects the communication transport automatically. This means:

- all broadcast lists are local and there is no registration or authorisation needed to broadcast messages.
- e-Mail addresses will be sent over the Internet or Intranet
- FAX addresses will be sent over a proprietary fax-connection, the Exchange fax-connection, or the SITA/ARINC nets fax feature.
- AFTN addresses will be sent over the AFTN-connection or the SITA/ARINC nets AFTN feature
- STX (normal) SITA/ARINC addresses will be sent
 - either over the Internet or Intranet, if an email address replacement can take place
 - or over the SITA/ARINC net.
- X400 addresses, will be sent over the SITA/ARINC net,
- FDS (SITAFax) will be sent over the SITA/ARINC net's SITAFAX feature

1.7 eSIAFTN - AFTN Interface Module
(optional)



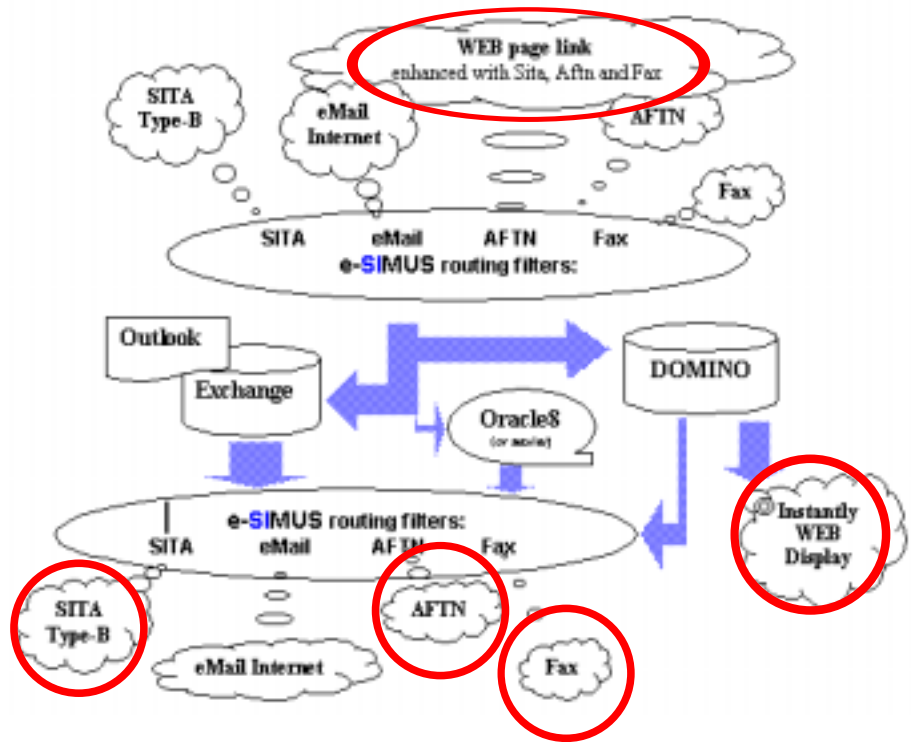
This module is optional - but requires exSIMUS.

The module consists of all functions needed when eSIMUS is connected to AFTN, and AFTN messages can be composed, send and received, on Outlook/Exchange.

The function is also available via the SITA/ARINC Link module.

The AFTN connection fulfils the requirements of ICAO, Annex 10.

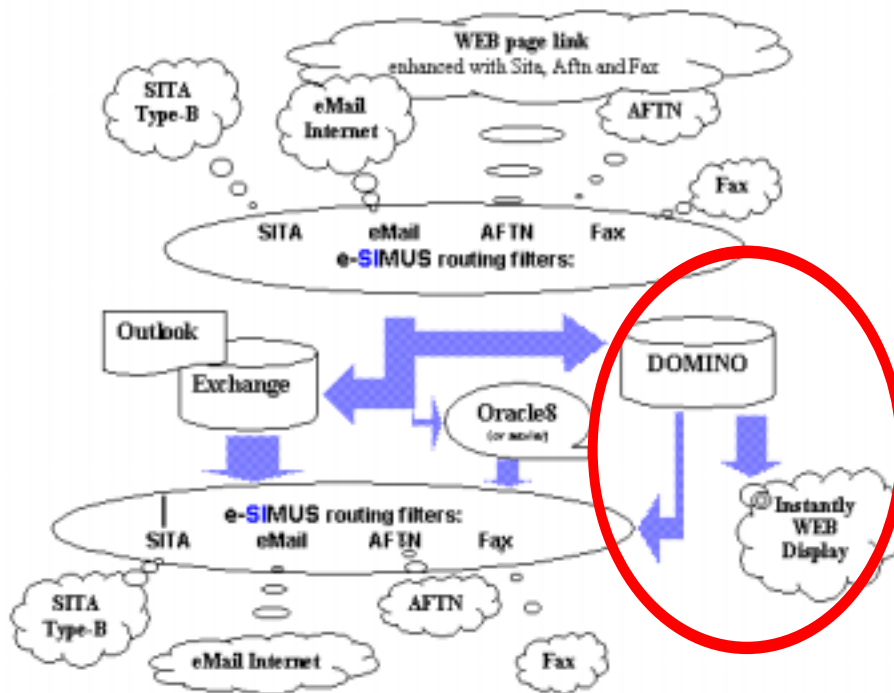
1.8 eSIWSND - send SITA/ARINC/etc. from a WEB page
(optional)



The WEB page/site can be enhanced, to send SITA/ARINC (AFTN, X400, and Fax) messages from the WEB.

You can also send messages/emails from the WEB to eSIWEB, for instantly display on the WEB.

1.9 eSIWEB - displays messages/emails instantly on the WEB
(optional)



By sending messages/emails to eSIWEB, the information is instantly available on the WEV and can be displayed on a WEB page.

This module is used for displaying on the WEB: NOTAM's, Weather Reports, Flight Information, etc.

NOSEWHEEL - eSIMUS pricelist pr. 1. November 2002	One-Off Licensee Fee in US\$		
	1. Copy	2.-5. Copy	6.+ Copies
e-SIMUS			
Main (Kernel) module - mandatory			
Configuration, monitor, log, filter definition, error handling, message management, etc..	\$ 895	\$ 595	\$ 395
SITA Link module - optional			
SITA message handling, message daemon link, SITA send & receive, etc..	\$ 895	\$ 595	\$ 395
e-mail, Internet, Intranet module - optional			
Message routing, transfer, composing, send and receive between SITAnet, INTERNet and INTRAnet. If not otherwise stated MS Exchange is used.	\$ 895	\$ 595	\$ 395
SQL-Database connection module - optional			
Message update and download from SQL-Database with message transforming to/from SITA and email format. If not otherwise stated ORACLE8 is used.	\$ 895	\$ 595	\$ 395
e-SIWATCH module - optional			
Control, supervision and restart of services/programmes on WinNT	\$ 895	\$ 595	\$ 395
e-SIMAIL module - optional			
Message mailing and broadcast to SITA, fax, X400 and email addresses.	\$ 795	\$ 595	\$ 295
When ordering : Please specify your SITA Gateway address for personalizing your copies.			
e-SIMUS related modules - as stand alone			
e-SIWATCH stand alone	\$ 1495	\$ 995	\$ 795
e-SIMAIL stand alone	\$ 1495	\$ 995	\$ 795

Please when ordering eSIMUS modules.

eSIMUS modules are delivered on a CD for use with WinNT.
The package also includes a setup-installation program,
and an electronic media user/installation - guide.

System- and proprietary software, SITA, MS Outlook, MS Exchange, database, drivers, etc.
are not included.

For order amounts less than US\$ 2000 - pre-payment is required.
For order amounts exceeding US\$ 2000, pre-payment of US\$ 2000
plus 30% of the exceeding amount is required.

PLEASE use the ORDER-FORM on our web-site: www.nosewheel.com

Nosewheel Inc., 101 North Frenchstreet, 19801 Wilmington, Delaware, US
info@nosewheel.com - www.nosewheel.com