

 **Automa**


SUPER-FLASH

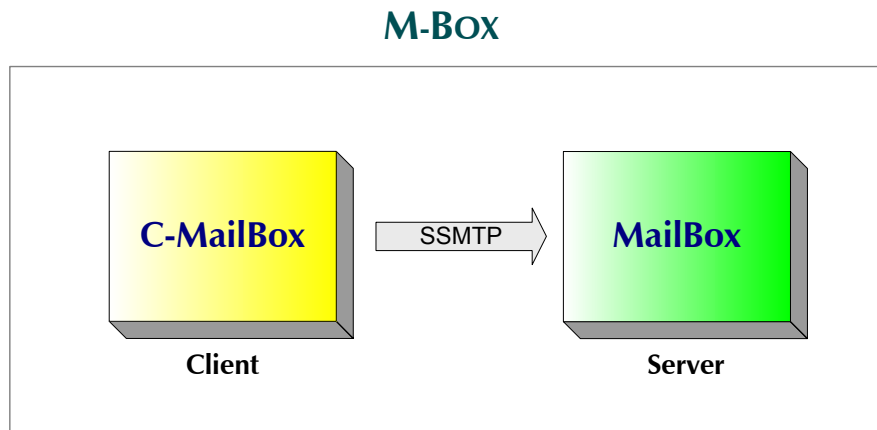


M-BOX v. 1.00

Product Profile

1 Description

M-BOX is a product which allows plants to send e-mails from a SUPER-FLASH application. The product was developed in order to simplify the e-mail sending operation by managing interaction problematics with the mail server. M-BOX is divided in two modules: MAILBOX e C-MAILBOX.



- **MAILBOX:**
the MAILBOX server module is a Windows application with a standard interface developing mail server operations. It permits client workstations to send the required information through the SSMTP^① protocol for e-mail composition. MAILBOX is, therefore, an open product: any client implementing the SSMTP protocol may use its services. MAILBOX solves internally composition complexities and e-mail sending through the SMTP protocol. As a matter of fact MAILBOX is a client application towards mail servers: it sends and receives e-mails through SMTP^② and POP3 protocols.
- **C-MAILBOX:**
the C-MAILBOX client module is a MICROC DRIVER which communicates with MAILBOX through the SSMTP protocol. It can be integrated with a supervision application developed with SUPER-FLASH to send required information for e-mail composition: sender's e-mail address, receiver's e-mail address, message subject and text. It is also possible to allow more heterogeneous client modules (DOS and Windows) to communicate with the server module.

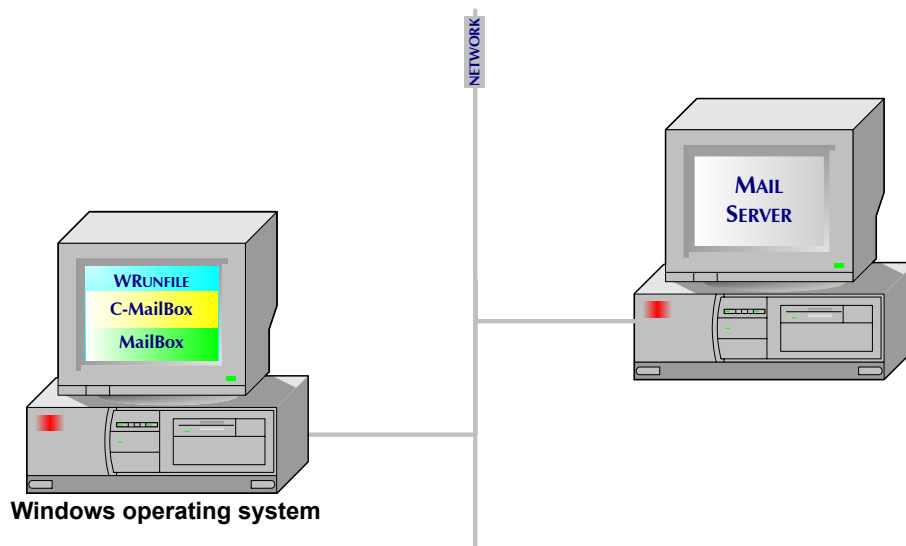
① SSMTP (Super Simple Mail Transfer Protocol) is a protocol created by Automa to communicate with MAILBOX. This ad-hoc protocol, simpler than the standard one (SMTP), was created in order to allow programmers with low-level knowledge regarding the SMTP protocol to implement their own client applications in a simple way. MAILBOX solves e-mail composition complexities and sending through the SMTP protocol internally.

② SMTP (Simple Mail Transfer Protocol) is the standard protocol used to send e-mails.

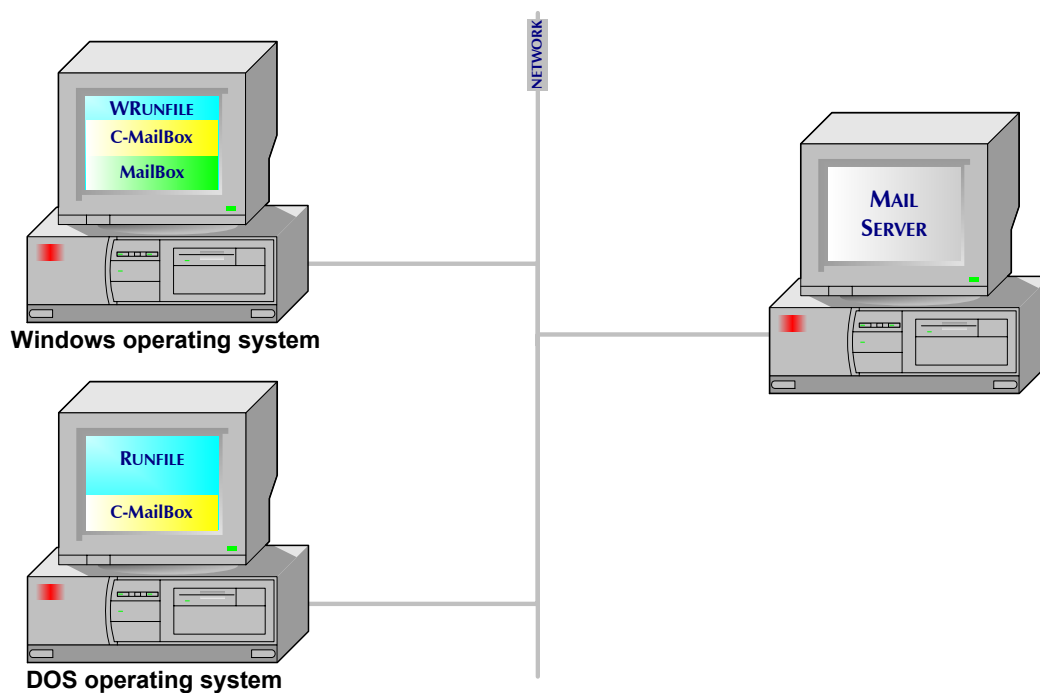
1.1 Architecture

Some possible M-BOX architectures are showed below.

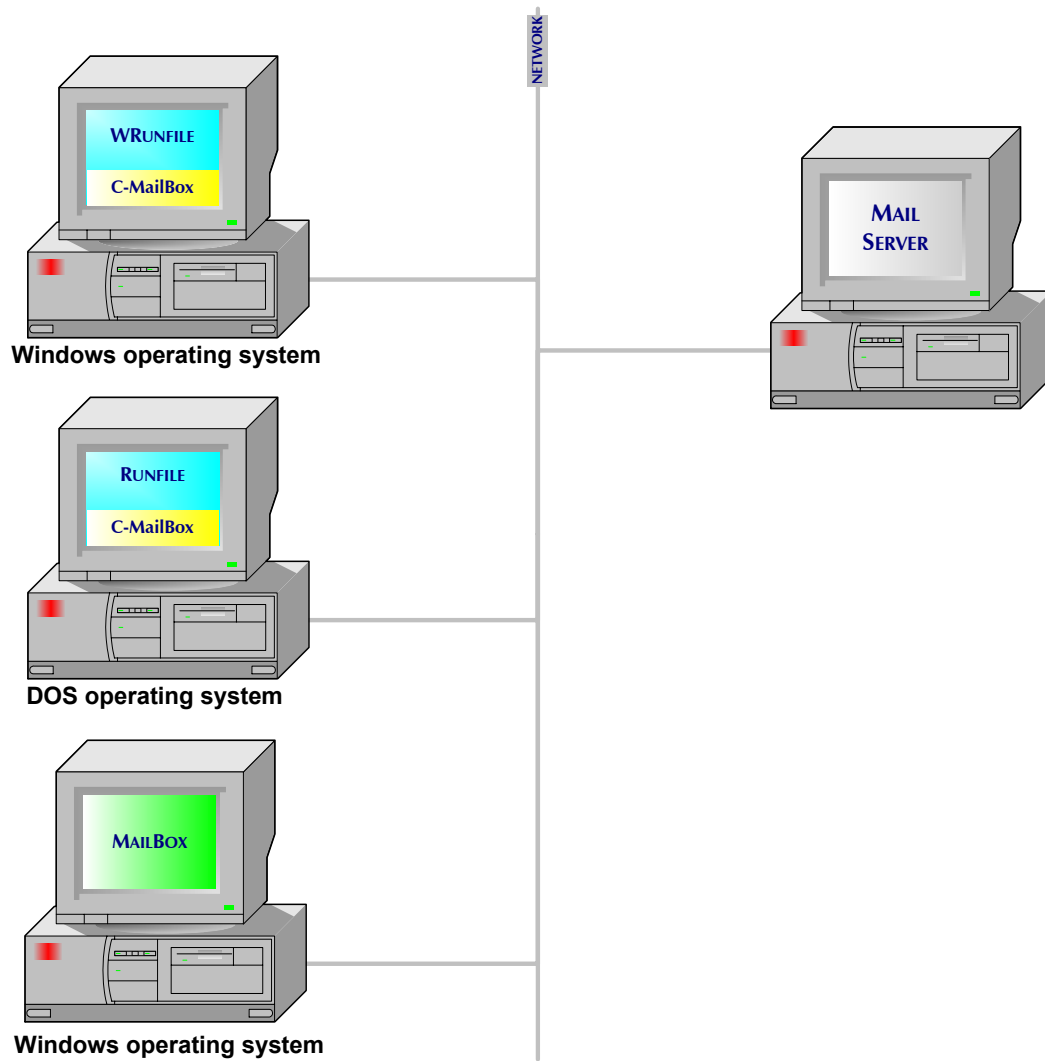
STAND-ALONE ARCHITECTURE



M-BOX - DISTRIBUTED ARCHITECTURE



M-BOX - SERVER-SIDE DISTRIBUTED ARCHITECTURE



2 Features

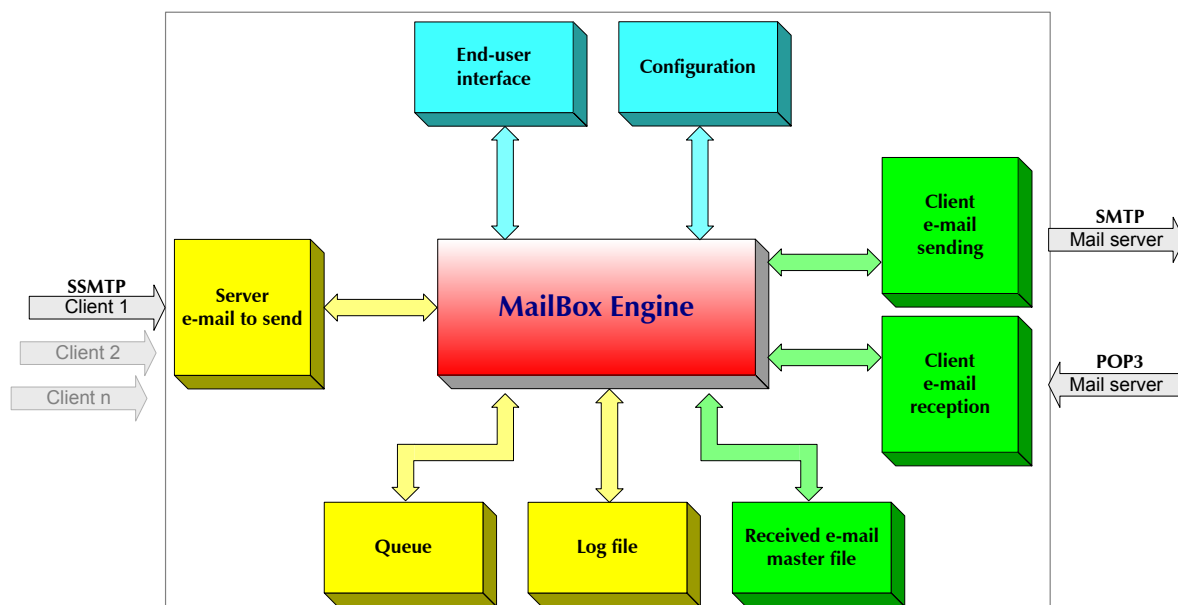
M-BOX features are distinguished between:

- MAILBOX
- C-MAILBOX

MAILBOX:

- MAILBOX sends and receives electronic mail interfacing with the mail servers (SMTP and POP3 protocols)
- MAILBOX is a mail server that receives required information for e-mail composition from client workstations through the use of a simplified Automa SSMTP protocol, composing the e-mail and sending it
- MAILBOX manages queues of messages received from client workstations
- Manages log files that indicate the presence of messages coming from client applications in the queue and e-mail sending results
- The software does not have restrictions regarding the quantity of connected client workstations (the restrictions are those settled by the operating system)
- MAILBOX has a friendly interface that allows e-mail composition, as well as, e-mail sending
- MAILBOX manages a master file with e-mails received from the mail server (POP3 protocol)
- Allows the saving of only some e-mail parts received from the mail server (POP3 protocol) into a database through
- Allows the configuration of required information for external connection: client workstations and mail server information communicating with MAILBOX
- Runs on Windows environment
- The product is in English language

MAILBOX - LAYOUT



C-MAILBOX:

- Can be integrated with a supervision application developed with SUPER-FLASH
- Communicates with MAILBOX to send the required information for e-mail composition by using the SSMTTP protocol
- Runs on DOS and Windows environments
- The driver was developed with MICRO C v. 1.6

3 Restrictions

The M-BOX restrictions are distinguished between:

- MAILBOX
- C-MAILBOX

MAILBOX:

- Client workstations can not use attachment management
- There are not present display services for e-mail received from client workstations
- Client workstations do not receive directly e-mail sending results
- The command for e-mail download from mail servers is only manual
- There is not available a file for saving e-mail sent
- The log file is implemented for e-mail sent directly from MAILBOX interface
- Database saving management was tested only by using Access

C-MAILBOX:

- The maximum data length supplied to the mail server is 8Kb (client id, sender and receiver e-mail addresses, message subject and text)
- C-MAILBOX does not manage attachments
- C-MAILBOX does not receive e-mail

4 End-user requirements

The end-user requirements for using M-BOX are distinguished between:

- MAILBOX
- C-MAILBOX

MAILBOX:

- Basic knowledge regarding the use of electronic mail:
 - terminology
 - connection with a mail server
 - e-mail account configuration
 - e-mail use

C-MAILBOX:

- Use of MICROC DRIVER in SUPER-FLASH

5 System requirements

The system requirements for the use of M-BOX are distinguished between:

- MAILBOX
- C-MAILBOX

MAILBOX:

- Windows 98 operating system
- Access to a mail server
- Availability of an account in a mail server

C-MAILBOX:

- SUPER-FLASH v.3.2

6 Package description

M-BOX is distributed in CD-ROM, and can be downloaded from <http://www.automa.it> through the download section. Each package contains:

- C-MAILBOX driver v. 1.0
- SUPER-FLASH demo application
- MAILBOX v. 2.0 batch file
- M-BOX documentation