Workgroup Extensions for Microsoft Excel

The Workgroup Extensions let Microsoft Excel developers include electronic mail and simple network management functionality in their custom applications. With Microsoft Excel macros, you can now:

- Send messages, including attached files, to multiple users on your network.
- Search for messages stored in you inbox.
- Connect to, display, and disconnect from network resources.
- Copy files between computers running on a network.

To use the Workgroup Extensions, you must have:

- Requirements for Message Functions: A MAPI-compliant electronic mail program, such as the mail client of Microsoft Windows for Workgroups 3.1 or Microsoft Mail for Windows 3.0.
- Requirements for Network Functions: Microsoft Windows for Workgroups 3.1 or networks supported by Microsoft Windows 3.1.

Before using the Workgroup Extensions you should be familiar with the concepts and use of the Microsoft Mail client application and understand how to connect and disconnect Lanman network resources.

For information on the complete MAPI specification and more detailed conceptual information on messaging, refer to the *Microsoft Mail Technical Reference*.

Functions Included in the Workgroup Extensions

This section lists, in alphabetical order, the message and network functions included in the Workgroup Extensions:

Message Function

Description

GET.MAIL Returns information about the Workgroup Extensions **GET.MAIL.ATTACHM** Returns information about the attachment(s) to the current message **ENT GET.MAIL.MESSAGE** Returns information about the current message **GET.MAIL.RECIPIENT** Returns information about the recipients of the current message **MAIL.ADDRESS** Displays the mail addressing dialog box Deletes the current message and replaces the current MAIL.DELETE.MESSA message with a new, blank message **GE MAIL.DETAILS** Displays information about a specified recipient MAIL.FIND.NEXT Finds messages stored in the inbox MAIL.LOGOFF Cancels the current mail session MAIL.LOGON Establishes a mail session for Microsoft Excel

Clears the current message and replaces it with a new,

MAIL.NEW.MESSAGE

	blank message
MAIL.RESOLVE.RECI PIENT	Resolves the address of the recipients of the current message
MAIL.SAVE.MESSAGE	Saves the current message to the mailbox
MAIL.SEND.MESSAGE	Sends the current message
SET.MAIL.ATTACHM ENT	Attaches documents to the current message
SET.MAIL.MESSAGE	Sets fields of the current message
SET.MAIL.RECIPIENT	Sets information about the recipient(s) of the current message
Network Function	Description
FILE.COPY	Copies a file
	•
GET.NET	Returns information about the network
GET.TEMP.FILE	Creates a temporary file

NET.BROWSE Displays dialog boxes that let the user change network

connections and find network resources.

NET.CONNECT Connects a computer to a network resource

NET.DISCONNECT Disconnects a computer from a network resource

Loading the Workgroup Extensions

To use the Microsoft Excel Workgroup Extensions, first copy the file XLMAPI.XLL from the Workgroup Extensions diskette onto your hard drive. If you want the Workgroup functions loaded automatically whenever you start Excel, place the XLMAPI.XLL file in your \XLSTART sub-directory. Otherwise, the Workgroup Extensions can be loaded into Excel by using the File-Open command or Excel's Add-in Manager. To load the Workgroup Extensions from the macro language use the REGISTER function:

REGISTER("C:\EXCEL\XLMAPI.XLL")

Sending Messages Using the Workgroup Extensions

There are seven steps to creating and sending messages using the Workgroup Extensions with your Microsoft Excel macros.

- 1. Start a mail session for Microsoft Excel with the MAIL.LOGON function.
- 2. Create a new current message with the MAIL.NEW.MESSAGE function
- 3. Build the recipient list, contents, and attachments of your message using the SET.MAIL.MESSAGE function. You need to use this function once for each part of the message you are building.
- 4. If you want, you can add to or change the attachments to your message using the SET.MAIL.ATTACHMENT function.

- 5. If you want, you can add to or change the recipients of your message using the SET.MAIL.RECIPIENT function. You may also use MAIL.ADDRESS, MAIL.DETAILS, and MAIL.RESOLVE.RECIPIENT to let the user choose recipients, see information on recipients and resolve recipient names.
- 6. When you are done creating your message, you can send it using the MAIL.SEND.MESSAGE function.
- 7. When you are done working with messages, close the mail session using the MAIL.LOGOFF function.

Understanding Mail Sessions

The Workgroup Extensions messaging functions require that a mail session be established before they can be used. A mail session validates the identity of the sender and indicates which message store to use when finding and saving messages. Mail sessions with the Workgroup Extensions require a password for security.

The Workgroup Extensions allow only one mail session per instance of Excel. Macro Add-in using the Workgroup Extensions must share this common session by not assuming exclusive ownership. Add-ins should:

- Check whether a session is already established by another add-in. If appropriate, this session can be used. GET.MAIL(4) indicates whether a session is currently present.
- Close the existing session and create a new one if the existing session username is incorrect. GET.MAIL(5) returns the name of the current session.
- Close sessions when they are no longer needed.

Understanding Messages

The Current Message

The Excel Workgroup Extensions maintain a single *current message* which is maintained in memory. The current message corresponds to a note window in the Microsoft Mail client application. When you use the Workgroup Extensions messaging functions you are implicitly editing this message. Unless explicitly saved, any changes to the current message are discarded when the message is cleared.

When a mail session is established there is no current message. A blank current message is created for editing with MAIL.NEW.MESSAGE. When a message is found in the inbox with MAIL.FIND.NEXT that message is copied into memory.

In both cases, changing the current message automatically clears the previous current message.

Recipients

Messages are sent based on a recipient list. Each recipient is identified with a *friendly name* and an address. A friendly name is the descriptive name of the user. Friendly names can be ambiguous, therefore additional information is required to guarantee unique addressing. The address is a unique string that contains the account name of the user and must be unambiguous. The address string format varies depending on the configuration of the mail transport system and must be obtained from the Workgroup Extensions before it can be used.

When setting and storing message recipients you should use both the name and the address strings to avoid ambiguous naming problems. The Workgroup Extensions return both strings for recipients that are picked using the mail address book or for recipients of messages read from the inbox. You should use both strings when passing recipients to the Workgroup Extensions, although both strings are not required. If you do not supply an address string the Workgroup Extensions will attempt to automatically resolve the name. Should the name be ambiguous this resolution process may cause the function to fail or require that the user choose between possible candidates. To avoid this interruption you can force name resolution by using the MAIL.RESOLVE.RECIPIENT function.

Attachments

Attachments are files that are sent with messages. Attachments appear as icons within the body text and are positioned by replacing one character of the message with the attachment. The Excel Workgroup Extensions do not support OLE attachments but instead require that attachments be true DOS files.

When a message is read from the inbox its attachments are stored as temporary files. These temporary files are maintained by the Workgroup Extensions and are automatically deleted when the current message is changed. If you want to store the attachment file for future use you must copy it using the FILE.COPY function.

If you provide your own attachment files to the Workgroup Extensions, you are responsible for deleting them using the FILE.DELETE macro function. Supplied attachments should not be moved, renamed, or deleted until after the message containing the attachments is sent or saved.

Understanding Recipient and Attachment Arrays

Recipients and attachments are commonly retrieved and set as a list. Lists of

recipients and attachments are stored as *array constants*. An array constant works much like a range of cells. For more information on array constants, see Chapter 5, "Creating a Worksheet," in the *Microsoft Excel 4.0 User's Guide*, *Book 1*.

Excel functions that are useful with arrays include COLUMNS, HLOOKUP, INDEX, LOOKUP, MATCH, ROWS, and VLOOKUP. For information on these functions, see the *Microsoft Excel 4.0 Function Reference*.

Recipient Arrays

In the recipient array, the information for each recipient is stored in a separate row. Each row has three columns:

- The first column stores the name of recipient as a text string. This column can be left blank, but the column itself is required.
- The second column stores the recipient's mail address as a text string. This column can be empty if there is an entry in the first column.
- The third column stores the recipient class as a number: 1 = To recipient, 2 = CC recipient, 3 = BCC (blind carbon copy) recipient. When this column is blank or missing, it is assumed to be 1.

Recipient arrays are used for both providing information to functions and returning information from functions. When a recipient array is used to provide information to a function, only the first column of the array is required. When a function returns a recipient array, it returns all three columns of the array.

Functions that set or use recipient arrays are GET.MAIL.MESSAGE, GET.MAIL.RECIPIENT, MAIL.ADDRESS, MAIL.RESOLVE.RECIPIENT, SET.MAIL.MESSAGE, SET.MAIL.RECIPIENT.

Attachment Arrays

Attachment arrays store information describing attachments to the current message. Like recipient arrays, attachments arrays have three columns:

- The first column stores the MS-DOS pathname of the attachment as a text string. You can use relative pathnames, but fully-qualified pathnames are recommended.
- The second column stores a label for the attachment as a text string. If this column is blank, the filename of the attachment is used as the label. Use labels when attachments have temporary filenames that don't describe the contents of the attachment. Note that it is not necessary that the label be a valid DOS file name, for example

- "Russell's message" would be appropriate.
- The third column stores the character position of the attachment in
 the message as a number from 1 to the length of the message text.
 Using -1 as the position places the attachment before any body text
 in the message. Using -2 places the attachment after any body text at
 the end of the message. When the contents of this column is blank,
 missing, or larger than the length of the message, it is assumed to be
 -2. The attachment icon replaces the character of the message body
 text.

Functions that set or use attachment arrays are GET.MAIL.ATTACHMENT, GET.MAIL.MESSAGE, SET.MAIL.ATTACHMENT, SET.MAIL.MESSAGE.

Handling Message Text

Excel only permits strings that have a maximum of 255 characters. If you wish to build message bodies that are greater than 255 characters in length, you must do so by manipulating text files with the FOPEN, FCLOSE, FREAD, and FWRITE macro functions.

Workgroup Extensions Functions

FILE.COPY

Macro Sheets Only

Copies a file to a new name and/or destination. Use FILE.COPY as an equivalent to an operating system file copy command, especially to share copies of files with other users across a network.

FILE.COPY(*source_file_text*, *dest_file_text*, *overwrite_dest_logical*)

Source file text is the name of the original file you want to copy.

Dest_file_text is the name and location of the copied file. If dest_file_text consists only of a directory name, a copy of the source file with the source file name is made in the destination directory. If dest_file_text consists only of a drive letter, a copy of the source file with the source file name is made in the current directory of the destination drive. If the destination directory or drive does not exist, FILE.COPY returns the #VALUE! error value.

Overwrite_dest_logical is a logical value that specifies whether you want to replace a file in the destination that has the same name as dest_file_text.

- If *overwrite_dest_logical* is TRUE, FILE.COPY overwrites a file in the destination that uses the same name as your destination file and returns the value TRUE.
- If *overwrite_dest_logical* is FALSE or omitted, and a duplicate filename exists in the destination, FILE.COPY does not overwrite the file and returns the value FALSE.

The following example makes a backup copy of the file SALES.XLS to SALES.BAK, replacing any previously existing version of SALES.BAK:

FILE.COPY("SALES.XLS","SALES.BAK",TRUE)

The following example copies SALES.XLS to the current directory of drive G, unless a file named SALES.XLS already exists in the destination:

FILE.COPY("SALES.XLS","G:")

Description
Sets the current drive and directory to the specified path and returns the name of the new directory as text
Returns a horizontal array of files in the current directory
Creates a uniquely named temporary file and returns the file name as text
Saves a document and allows you to specify the name, file type, password, backup file, and location of the document

GET.MAIL

Macro Sheets Only

Returns information about the Workgroup Extensions. Use GET.MAIL to get

information about the current Mail session.

GET.MAIL(*type_num*)

Type_num is a number that specifies what type of information you want about the Workgroup Extensions. The following list shows the possible values of *type_num* and the corresponding results.

Type_num

Returns

Number indicating the type of error caused by the last Workgroup Extensions function:

0 = Success

1 = User aborted

2 = Failure

3 = Login failure

4 = Disk full

5 = Insufficient memory in MAPI

6 = Access denied

8 = Too many sessions

9 = Too many files

10 = Too many recipients

11 = Attachment not found

12 = Attachment open failure

13 = Attachment write failure

14 = Unknown recipient

17 = Invalid message

18 = Text too large

19 = Invalid mail session

20 = Type not supported

21 = Ambiguous recipient

23 = Network failure

25 = Invalid recipients

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	1000 = Memory failure in Workgroup Extensions 1001 = MAPI not installed 1002 = No mail session established 1003 = Out of range index value 1004 = Invalid argument type 1005 = File cannot be written or read 1006 = No current message present Use error codes to provide detailed information to the user (through an error handler) and attempt recovery.
2	Version number of Workgroup Extensions as text.
3	If MAPI or a Microsoft Mail compliant transport layer is installed and available, returns TRUE; otherwise FALSE.
4	If a Mail session is currently established, returns TRUE; otherwise FALSE.
5	Returns the Friendly Name of the current Mail session as text; if there is no current Mail session, returns FALSE.
6	The number of unread messages in the Mail inbox.

If a Mail session is established, then:

GET.MAIL(4) equals TRUE

If a Mail session is established, and there are 10 unread messages in the inbox, then:

GET.MAIL(6) equals 10

Function

Description

GET.MAIL.ATTACHM

Returns information about an attachment in the current

ENT

Mail message

GET.MAIL.MESSAGE

Returns information about the current Mail message

GET.MAIL.RECIPIEN

T

Returns information about the recipients of the current

Mail message

MAIL.LOGON

Establishes a mail session

GET.MAIL.ATTACHMENT

Macro Sheets Only

Type num

Returns information about an attachment in the current Mail message. Use GET.MAIL.ATTACHMENT to handle attachments within Mail messages.

GET.MAIL.ATTACHMENT(type_num, index_num)

Returns

Type_num is a number specifying the type of information you want about an attachment in the current Mail message. The following list shows the *type_num* values and their corresponding results:

1ype_nam	
1	Returns the file and path name of the attachment as text.
2	Returns the attachment label as text.
3	The character position of the attachment within the message body as an integer from 1 to GET.MAIL.MESSAGE(16). This value is -1 if the attachment is at the start of the message, and -2 if the attachment is at the end.
4	If the attachment file will be automatically deleted with the message, returns TRUE; if the attachment file must be deleted by the user, returns FALSE.

Index_num is an integer that specifies which attachment you want information about in the current Mail message. You can use GET.MAIL.MESSAGE(10) to return the total number of attachments in a message and GET.MAIL.MESSAGE(8) to return a list of all attachments.

If the attachment label of the first attachment in the current Mail message is "Budget Template," then:

GET.MAIL.ATTACHMENT(2,1) equals "Budget Template"

Function	Description

GET.MAIL Returns information about the current Mail session

GET.MAIL.MESSAGE Returns information about the current Mail message

 $\begin{array}{ll} GET.MAIL.RECIPIEN & \text{Returns information about the recipients of the current} \\ T & \text{Mail message} \end{array}$

GET.MAIL.MESSAGE

Macro Sheets Only

Returns information about the current Mail message. This function can return recipient and attachment arrays. For information on these, see "Understanding Recipient and Attachment Arrays" earlier in this document.

GET.MAIL.MESSAGE(type_num)

Type_num is a number specifying the type of information you want about the current Mail message. The following list shows the *type_num* values and their corresponding results:

Type_num Returns

2	Returns the first 255 characters of the message as text. Use <i>type_num</i> 3 to access the full message text.
3	Creates a temporary file containing the full text of the current message and returns the file name. Returns #N/A if the message body contains no text. You can use Microsoft Excel file functions to access message text in the temporary file. This file is maintained by the Workgroup Extensions and is deleted when the current message is changed.
4	Returns the message type, such as "IPM", as text. The message type is used by the mail transport to support custom message forms and handling of messages. Message types begin with either "IPM." or "IPC." and are optionally followed by application-specific information such as "IPM.Microsoft Excel.Document Routing". IPM messages appear in the inbox like messages sent from a Mail client. IPC messages do not appear in the inbox and are useful for interprocess communication. Messages sent from the Mail client have the type "IPM.Microsoft Mail.Note". Refer to the Microsoft Mail Technical Reference for more information on message types.
5	Message conversation ID as text. Returns the empty string if there is no conversation ID.
6	If the message is marked Return Receipt, returns TRUE, else FALSE.
7	Returns a recipient array containing all recipients of the current message. If there are no recipients, #N/A is returned. Use MAIL.GET.RECIPIENT to obtain information about a single recipient of the current message.
8	Returns an attachment array containing all attachments of the current message. If there are no attachments, returns #N/A. Use MAIL.GET.ATTACHMENT to obtain information about a single attachment.
9	Number of recipients of the current message.

10	Number of attachments in the current message.
11	If the current message has been sent and received at least once, returns TRUE; otherwise FALSE. Useful for determining whether the message is a sent or composed but unsent message. If a sent message has been edited, still returns TRUE.
12	Returns the date the current message was received or saved as a date serial number. Returns #N/A if the message has not been sent or saved.
13	Returns the name of the sender as text. Returns #N/A if the message has not been sent or saved.
14	Returns the address of the sender as text, or a null string if the name suffices. Returns #N/A if the message has not been sent or saved.
15	If the message is unread, returns TRUE; otherwise FALSE.
16	Returns the number of text characters in the message body as an integer.
17	If the message is present in the inbox, returns TRUE; if the message is dynamically created and is not present in the inbox, returns FALSE.
18	Creates a temporary file containing the full text of the current message and returns the file name. This function differs from function 3 in that place holder text for attachments is inserted within the body text. The resulting body text is similar to the attachment place holders inserted by Mail clients when replying to a message with attachments. Returns #N/A if the message body contains no text and no attachments. You can use Microsoft Excel file functions to access message text in

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the temporary file. This file is maintained by the Workgroup Extensions and is deleted when the current message is

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If the current message is unsent and contains two attachment files, one at the beginning and one at the end:

Description

GET.MAIL.MESSAGE(8) equals
{"C:\TMP\BUDGET.XLS","Departmental Budget",-1;
"C:\TMP\COMMENTS.DOC","Comments",-2}

changed.

GET.MAIL.MESSAGE(10) equals 2

Function

GET.MAIL.MESSAGE(11) equals FALSE

GET.MAIL	Returns information about the current Mail session
GET.MAIL.ATTACH MENT	Returns information about an attachment in the current Mail message
GET.MAIL.RECIPIEN T	Returns information about the recipients of the current Mail message

GET.MAIL.RECIPIENT

Macro Sheets Only

Returns information about recipients of the current Mail message. Use GET.MAIL.RECIPIENT to get detailed information about a particular message recipient.

GET.MAIL.RECIPIENT(type_num, index_num)

Examples Related Functions

GET.MAIL.ATTACHM

ENT

Microsoft Excel Function Reference

Type_num is a number that specifies what information you want about a recipient of the current Mail message. The following list shows the possible values of *type_num* and their corresponding results.

Type_num	Returns	
1	Returns the name of a recipient as text.	
2	Returns the address of the recipient as text.	
3	Returns the type of the recipient as a number: 1 = To 2 = Cc (carbon copy) 3 = Bcc (blind carbon copy)	
<i>Index_num</i> is the number of the recipient you want information about. You can use GET.MAIL.MESSAGE(9) to return the total number of recipients and GET.MAIL.MESSAGE(7) to return a list of recipient names.		
If the current message is addressed to Dennis Smith and Ellen Kim on the To line and Dave Martinez on the Cc line:		
GET.MAIL.RECIPIENT(1,2) equals "Ellen Kim"		
GET.MAIL.RECIPIENT(3,3) equals 2		
Function	Description	
GET.MAIL	Returns information about the current Mail session	

Mail message

Returns information about an attachment in the current

GET.MAIL.MESSAGE Returns information about the current Mail message

GET.NET

Type_num

Macro Sheets Only

Returns information about the network. Use GET.NET to determine connections to network resources or to detect macro errors caused by network functions available through the Workgroup Extensions.

GET.NET(*type_num*, name_text)

Type_num is a number that specifies what type of information you want about the network. The following list shows the possible values of *type_num* and the corresponding results:

Returns

1	A number indicating the last macro error caused by a network function available through the Workgroup Extensions: 0 = Success 1 = Not supported 2 = Network error 5 = Bad value 6 = Bad password 7 = Access denied 11 = Out of memory 12 = User canceled 48 = Local device not connected 49 = Open files are present on network drive 50 = Bad network name 51 = Bad local device name 52 = Local device already connected 1000 = Memory failure in Workgroup Extensions 1004 = Invalid arugment type
2	If the network is compatible with the NET.CONNECT and NET.DISCONNECT functions, returns TRUE; otherwise FALSE.
3	Returns the name of the network resource connected to the drive <i>name_text</i> as text in the form "\server\share".

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Returns the name of the first local device connected to the network resource <code>name_text</code> as text (in order from A: to Z: or LPT1: to LPT9:). The resource <code>name_text</code> must be in the form "\server\share".

Returns a two-column array of network device connections currently present. The first column contains the local device name as text, and the second column contains the network resource name as text. Returns #N/A if no network resources are in use.

Name_text is text for a local device name or network resource name, depending on which *type_num* argument you use. Local device names take the form such as "G:" or "LPT1:" and network resource names take the form "\\ server\share".

If the local drive G: is assigned to the server \\FINANCE\PUBLIC, and LPT1: is assigned to \\FINANCE\LASERJET then:

GET.NET(3,"G:") equals "\\FINANCE\PUBLIC"

GET.NET(4,"\\FINANCE\PUBLIC") equals "G:"

GET.NET(5) equals

{"G:","\\FINANCE\PUBLIC";"LPT1:",\\FINANCE\LASERJET"}

Function	Description
,	
NET.BROWSE	Displays dialog boxes for browsing, connecting to, or disconnecting from networks
NET.CONNECT	Connects to a network resource
NET.DISCONNECT	Disconnects from a network resource

GET.TEMP.FILE

Macro Sheets Only

Creates and returns a unique temporary filename that does not currently exist. The temporary file is stored in the specified directory used by Windows for temporary files. Use GET.TEMP.FILE to manage long text for a Mail message.

GET.TEMP.FILE()

It's up to you to delete the temporary file when you no longer need it, using the FILE.DELETE function.

To create a temporary file, use the following function:

GET.TEMP.FILE()

Function	Description
FILE.COPY	Copies a file to a new destination.
FILE.DELETE	Deletes a file from disk.
FILES	Returns a horizontal array of files in the specified directory.
GET.MAIL.MESSAGE	Returns information about the current Mail message

MAIL.ADDRESS

Macro Sheets Only

Class fields num

Displays the Mail addressing dialog box. Use MAIL.ADDRESS to allow the user to construct or modify the recipients of the current message.

MAIL.ADDRESS(recips array, caption text, class fields num)

Returns

Recips_array is an array of text names for recipients, used to initialize recipients in the addressing dialog box. If recips_array is omitted, the addressing dialog box initially displays no recipients. For information on recipient arrays, see "Understanding Recipient and Attachment Arrays" earlier in this document.

Caption_text is a text value specifying the desired tittle of the addressing dialog box. If *caption_text* is omitted or is a null string, the dialog box title defaults to "Address Book".

Class_fields_num is a number specifying the default type of addressing dialog box displayed. Class_fields_num is forced to the maximum recipient class number in the incoming recipient array. If class_fields_num is omitted, it is assumed to be 1. The following list shows the possible values of class_fields_num and their corresponding results.

0	Addressing dialog box allows only browsing. For <i>class_fields_num</i> of 0, <i>recips_array</i> is not used and #N/A is returned.
1	Displays the To box of the addressing dialog box.
2	Displays the To and Cc boxes of the addressing dialog box.
3	Displays the To, Cc, and Bcc boxes of the addressing dialog box.
4	Displays edit controls for all types of addressing supported by your electronic mail system.

If the user chooses the OK button in the addressing dialog box, MAIL.ADDRESS $\,$

returns a recipient array of the selected addresses, or #N/A if no addresses were selected. If the user chooses the Cancel button, MAIL.ADDRESS returns FALSE.

To display the Mail addressing dialog box with no special settings, use the following function

MAIL.ADDRESS()

To display the Mail addressing dialog with the Finance Department as recipients and a special title, use the following function

MAIL.ADDRESS(FinanceArray, "Finance Dept", 4)

Function	Description	

MAIL.DETAILS Displays the Mail details dialog box for a recipient

MAIL.RESOLVE.RECI PIENT Resolves the mail addresses specified in recipient array

MAIL.DELETE.MESSAGE

Macro Sheets Only

Deletes the current message using MAIL.FIND.NEXT, or if the message has been saved, using MAIL.SAVE.MESSAGE. If the current message was obtained from the Mail inbox, MAIL.DELETE.MESSAGE deletes the saved message from the inbox.

MAIL.DELETE.MESSAGE()

When the current message is deleted, any temporary attachment and message body text files set up by macro functions available through the Workgroup Extensions are also deleted. Attachment files provided by user are not deleted. If the current message is not in the inbox, MAIL.DELETE.MESSAGE has the same effect as MAIL.NEW.MESSAGE.

Examples Related Functions

Syntax

Reampless

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To delete the current message, use the following function:

MAIL.DELETE.MESSAGE()

Function

Description

MAIL.FIND.NEXT Accesses messages stored in the inbox

 $MAIL.NEW.MESSAGE \quad \mbox{ Replaces the current message with a new, blank}$

message

MAIL.SAVE.MESSAG

Saves the current message in the inbox

MAIL.DETAILS

Macro Sheets Only

Displays the details about a Mail recipient in a dialog box.

MAIL.DETAILS(name_text, address_text)

Name_text is the name of the recipient you want details about, as text.

Address_text is the address text, if needed, of the recipient you want details about, as text.

You must specify either the *name_text* or *address_text* argument.

If the recipient is successfully resolved, MAIL.DETAILS displays the Mail details dialog box and returns TRUE. If the recipient name is ambiguous and error dialog boxes are enabled, the resolve dialog box is displayed to allow the user to choose the correct recipient name. If the user chooses the Cancel button, MAIL.DETAILS returns FALSE.

The following example displays the Mail details dialog box for information about Dennis Smith:

Related	Syntax
Functions	

MAIL.DETAILS("Dennis Smith")

Function

Description

MAIL.ADDRESS

Displays the Mail addressing dialog box

MAIL.RESOLVE.RECIP IENT

Resolves the recipients specified in an input array

MAIL.FIND.NEXT

Macro Sheets Only

Accesses messages stored in the Mail inbox, according to the search conditions you specify. Use MAIL.FIND.NEXT to search the inbox for messages. MAIL.FIND.NEXT sets the current message to the result of the search.

MAIL.FIND.NEXT(*first_message_logical*, sender_search_text, to_search_text, cc_search_text, subject_search_text, file_type_search_text, message_type_text, unread_logical, ordered_logical, mark_read_logical)

First_message_logical controls searching for messages matching the specified criteria (see explanatory text in the Remarks section).

Sender_search_text is the name of the sender to search for, as text. If omitted, all are matches.

To_search_text is the name of a recipient on the To line to search for, as text. If omitted, all messages are matches.

Cc_search_text is the name of a recipient on the Cc line to search for, as text. If omitted, all messages are matches.

Subject_search_text is the message subject to search for, as text. If omitted, all messages are matches. If you're searching for replied or forwarded messages by subject, you need to consider those message subject prefixes, such as "RE:"

File_type_search_text is a list of file extension types of attachments to search

for, as text of the form "XLS,XLM" for example. In order to match, the message must contain at least one attachment with the same file extension as at least one of the extensions provided by file_type_search_text. If omitted, all messages are matches.

Message_type_text is the message type to search for, as text of the form "IPM" for example. If omitted, all messages are matches.

Unread_logical is a logical value specifying whether to search for read or unread messages.

- If *unread_logical* is TRUE, only unread messages are matches.
- If *unread_logical* is FALSE or omitted, all messages are matches. *Ordered_logical* is a logical value specifying the order in which messages are matched.
- If ordered_logical is TRUE, messages are matched in the order they were received .
- If ordered_logical is FALSE or omitted, no order is guaranteed. *Mark_read_logical* is a logical value specifying whether found messages are marked as read.
- If *mark_read_logical* is TRUE, messages are always marked as read when they are found.
- If mark_read_logical is FALSE or omitted, matched messages are not marked as read. If a found message is already marked as read, no change occurs.

This function returns TRUE if a matching message is found, FALSE if no more matching messages are available, or #VALUE! if an error occurs.

To start searching for messages, specify TRUE for <code>first_message_logical</code>. When <code>first_message_logical</code> is TRUE, MAIL.FIND.NEXT returns TRUE when it finds the first matching message. The first matching message then becomes the current message. Once the first matching message is found, subsequent messages matching the criteria can be found by setting <code>first_message_logical</code> to FALSE. When <code>first_message_logical</code> is FALSE, MAIL.FIND.NEXT returns TRUE for the next matching message and makes that message the current message. When there are no more matching messages, returns FALSE.

When MAIL.FIND.NEXT returns FALSE or #VALUE!, the current message is unmodified. If TRUE is returned, the matching message becomes the current message. Any previous current message is freed before the new message is read. When the current message is deleted, any temporary attachment and message body text files set up by macro functions available through the Workgroup Extensions are also deleted. Attachment files provided by user are not deleted.

Examples Related Function

Microsoft Excel Function Reference

This function is thus suitable for using in a WHILE() loop.

Use of the search parameters to filter messages is significantly faster than reading all messages and then manually comparing the subject or sender by using GET.MAIL.MESSAGE.

To display the subjects of all messages in the order they were received, where the messages have an Excel worksheet attachment:

Done=MAIL.FIND.NEXT(TRUE,,,,,"XLS",,,TRUE)
WHILE(Done=TRUE)
 ALERT("Subject:"&GET.MAIL.MESSAGE(1))
 Done=MAIL.FIND.NEXT(FALSE,,,,,"XLS",,,TRUE)
NEXT()

Function **Description**

GET.MAIL.MESSAGE Returns information about the current message

MAIL.SAVE.MESSAG Saves a message in the Mail inbox E

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Excel Workgroup Extensions

MAIL.LOGOFF

Syntax

Macro Sheets Only

Ends the established Mail session.

MAIL.LOGOFF()

If the Mail session is successfully ended, MAIL.LOGOFF returns TRUE. When the session is ended, the current message is deleted, and any temporary attachment and message body text files set up by macro functions available through the Workgroup Extensions are also deleted. Attachment files provided by user are not deleted.

Function	Description
MAIL.LOGON	Starts a Mail session

MAIL.LOGON

Macro Sheets Only

Establishes a mail session for the current instance of Microsoft Excel.

MAIL.LOGON(name_text, password_text, download_logical) **MAIL.LOGON?**(name_text, password_text, download_logical)

Name_text specifies the username of the mail account (not the friendly name). If *name_text* is omitted, displays the logon dialog.

Password text gives the password for the account and may be omitted if the user is to enter the password. This parameter is ignored when the question mark form is used.

Download_logical forces any new mail to be downloaded to the user's mailbox. Setting this value to TRUE causes new mail to be downloaded at the cost of some extra processing time. Using FALSE or omitting the parameter does not guarantee that new mail is downloaded.

Returns TRUE on success, FALSE if the user cancels the logon dialog box, or #VALUE! upon error. If the function fails when the regular form of the function is used and error trapping is turned off, the function returns #VALUE!.

Once established, a mail session remains until either MAIL.LOGOFF is called or the Workgroup Extensions or Microsoft Excel is closed.

If a session already exists when this function is called, the existing session is silently closed *before* attempting to open the new session.

To start a new mail session, be prompted for your password, and download your new mail, use the following example:

MAIL.LOGON(,,TRUE)

For Heikki Bardell to start a new mail session and download her new messages, she would use the following function:

MAIL.LOGON("HeikkiBa",,TRUE)

Function Description

MAIL.LOGOFF

Closes a Mail session

MAIL.NEW.MESSAGE

Macro Sheets Only

Clears the current message and replaces it with a new, blank message. Use this function to simply clear out the previous message and to guarantee a clean slate when constructing a new message.

MAIL.NEW.MESSAGE()

Returns TRUE on success, or #VALUE! on failure.

The MAIL.NEW.MESSAGE function clears temporary attachment and message body text files and message memory. Use this function after completing a send mail operation to free temporary files and memory for the next message. Attachment files provided by the user are not deleted. Note that MAIL.NEW.MESSAGE does not alter the inbox.

Examples Related Function Systems

n Syntax Remarks

Excel Workgroup Extensions

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To create a new, blank message, use the following function:

MAIL.NEW.MESSAGE()

Function Description

SET.MAIL.MESSAGE Sets message fields and options

MAIL.LOGON Starts a Mail session

MAIL.FIND.NEXT Searches for a mail message in the inbox

MAIL.DELETE.MESS Dele AGE

Deletes the current message

MAIL.RESOLVE.RECIPIENT

Macro Sheets Only

Resolves the unresolved addresses of the recipients in the recipient array and returns a recipient array of resolved recipients. For information about recipient arrays, see "Understanding Recipient and Attachment Arrays" earlier in this document.

MAIL.RESOLVE.RECIPIENT(recips_array)

Recips_array is the recipient array for the current message.

If the array contains no recipients, #N/A is returned. If the array cannot be parsed, #VALUE! is returned. If the user canceled the resolution dialog box that is displayed when resolving an ambiguous name, FALSE is returned. If an error occurred when resolving a name, the index number of the unresolvable recipient is returned.

Microsoft Excel Function Reference

If a recipient cannot be resolved and you have error-trapping turned off (with ERROR(FALSE)), the resolution dialog is not displayed. Instead, the index number of the unresolvable recipient is returned.

You can use GET.MAIL.MESSAGE(7) to return the recipient array of the current message.

Resolves the names "Heidi Bardell" and "Miles Bodine" into unambiguous form suitable for use with SET.MAIL.MESSAGE(7):

MAIL.RESOLVE.RECIPIENT({"Heikki Bardell";"Miles Bodine"}) equals {"Heikki Bardell","MS:\SERVER1\HEIKKIBA",1; "Miles Bodine","MS:\SERVER4\MILESB",1}

Note the string returned in the second column is the full unambiguous MAPI addressing syntax and varies according to your installation of Microsoft Mail.

Function	Description
GET.MAIL.MESSAGE	Returns information about the current mail message
SET.MAIL.RECIPIEN T	Adds individual recipients to a message
MAIL.DETAILS	Displays information about a specified recipient

MAIL.SAVE.MESSAGE

Macro Sheets Only

Syntax

Saves a message in the Mail inbox.

MAIL.SAVE.MESSAGE(create_new_logical)

Create_new_logical is a logical value specifying whether you want to create and save a new mail message from the current message or save the current message.

- If create_new_logical is TRUE, a new Mail message is created with the contents of the current message.
- If *create_new_logical* is FALSE or omitted, the current Mail message is saved with changes.

Description

The following example saves changes to the current message:

MAIL.SAVE.MESSAGE()

Function

Tunction	2.001.191.011
MAIL.FIND.NEXT	Finds messages in the Mail inbox
MAIL.NEW.MESSAG E	Creates a new blank message
MAIL.DELETE.MESS AGE	Deletes the current message

MAIL.SEND.MESSAGE

Macro Sheets Only

Syntax Remarks Note Examples Related Function

Microsoft Excel Function Reference

Sends the current message. All recipients are resolved during the sending process.

MAIL.SEND.MESSAGE()
MAIL.SEND.MESSAGE?()

Returns TRUE on success, FALSE on user cancellation, and #VALUE! on failure.

Normally if either the message cannot be sent without further information or a recipient cannot be resolved and requires user input, the resolution dialog is displayed . If you have error-trapping turned off (with ERROR(FALSE)), #VALUE! is returned if a recipient cannot be resolved or the message cannot be sent without more information.

If the dialog box is displayed, users can modify any item accessible form the dialog box including the subject, body text, attachments, recipient list, and sending options.

This function does not delete or change the current message in any way. The current message may be sent multiple times. Note that sending a message does not mark it as sent. For a message to be marked as sent, it must have been sent and received.

Description

To send a complete message, use the following function:

MAIL.SEND.MESSAGE()

Function

GET.MAIL.MESSAGE	Returns information about the current message
SET.MAIL.ATTACHM ENT	Sets individual attachments to the current message
SET.MAIL.MESSAGE	Sets contents of the current message
SET.MAIL.RECIPIEN	Sets individual recipients to the current message

Т

NET.BROWSE

Macro Sheets Only

Displays dialog boxes for browsing, connecting to, and disconnecting from networks. Use the NET.BROWSE command to allow the user to easily manage network connections.

NET.BROWSE(connect_logical, drive_logical, browse_only_logical)

Connect_logical is a logical value specifying whether to display the connect or disconnect dialog box provided by the network driver. Note that some network drivers, such as Microsoft Windows for Workgroups, allow both connection and disconnection from the same dialog box.

- If *connect_logical* is TRUE or omitted, the connect dialog box is displayed.
- If *connect_logical* is FALSE, the disconnect dialog box is displayed. *Drive_logical* is a logical value specifying whether to display the disk drive version or the printer version of the network connection dialog boxes.
- If *drive_logical* is TRUE or omitted, the disk drive version of the dialog box is displayed.
- If *drive_logical* is FALSE, the printer version of the dialog box is displayed.

Browse_only_logical is a logical value specifying whether you want to only return the name of a selected network resource or actually make the network connection.

- If browse_only_logical is TRUE and connect_logical is TRUE or omitted, NET.BROWSE returns the network resource name without making the connection. This provides a useful technique for detecting what connection the user wants, and then making it with the NET.CONNECT function, since the NET.CONNECT function does not return the name of the connection just made.
- If *browse_only_logical* is FALSE or omitted and *connect_logical* is TRUE or omitted, the network connection is made.

The following example allows the user to identify a desired printer and returns

Related	Syntax	Examples
Functions		

the resource name as text:

NET.BROWSE(TRUE,FALSE,TRUE)

Function Description

GET.NET Returns information about the network

NET.CONNECT Connects to a network resource

NET.DISCONNECT Disconnects from a network resource

NET.CONNECT

Macro Sheets Only

Connects to a network resource. Use NET.CONNECT to redirect a local drive letter to a network server or a port to a network printer.

NET.CONNECT(*net_path_text*, password_text, local_name_text)

Net_path_text is the name of the network resource to which you want to connect, as text in the form "\server\share".

Password_text is the password for the resource, if required. Otherwise *password_text* is omitted.

Local_name_text is the name of the local device to be connected to the network resource, of the form and range "A:" through "Z:" or "LPT1:" through "LPT9:". The local device, a disk drive letter or printer port, must be appropriate to the network resource. If local_name_text is omitted and the network resource is a file server, the next available disk drive letter is used. Local_name_text must be specified for printer connections. Attempts to connect to a local device already in use will cause an error.

The following example connects the public file server $\FINANCE\PUBLIC$ to the local disk drive G:

Related Functions

Syntax

Examples

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 $NET.CONNECT("\\\FINANCE\\\PUBLIC",,"G:")$

Function Description

GET.NET Returns information about the network

NET.BROWSE Displays dialog boxes for browsing, connecting to, or

disconnecting from networks

NET.DISCONNECT Disconnects from a network resource

NET.DISCONNECT

Macro Sheets Only

Disconnects a network resource, freeing the local device for a new connection. Use NET.DISCONNECT to remove a connection from a local drive letter to a network server or a from a port to a network printer.

NET.DISCONNECT(*device_name*, *force_disconnect_logical*)

Device_name is the name of the local device you want to disconnect, as text of the form and range "A:" through "Z:" or "LPT1:" through "LPT9:".

Force_disconnect_logical is a logical value specifying whether you want to force a disconnection from a network resource that has open files or pending printer jobs, for example.

- If *force_disconnect_logical* is TRUE, any open resources are forced closed and the device connection is removed.
- If force_disconnect_logical is FALSE or omitted and the device has open resources, then NET.DISCONNECT returns FALSE and the device connection is retained.

The following example disconnects LPT1: from the network printer \\FINANCE\ LASERJET and cancels any current print jobs:

Related	Syntax
Functions	

NET.DISCONNECT("LPT1:",TRUE)

Function	Description
GET.NET	Returns information about the network
NET.BROWSE	Displays dialog boxes for browsing, connecting to, or disconnecting from networks
NET.CONNECT	Connects to a network resource

SET.MAIL.ATTACHMENT

Macro Sheets Only

Sets individual attachments to the current message. This functions uses attachment arrays. For information on attachment arrays, see "Understanding Recipient and Attachment Arrays" earlier in this document.

SET.MAIL.ATTACHMENT(index_num, pathname_text, label_text, position_num)

Index_num is the number of the attachment you want to set. If the attachment already exists in the attachment list, *index_num* must be in the range 1 to GET.MAIL.MESSAGE(10). To append a new attachment to the end of the attachment list, *index_num* must be GET.MAIL.MESSAGE(10) + 1.

Pathname_text specifies the MS-DOS pathname of the attachment file, as a text string. This can be a relative pathname, although full-qualified pathnames are recommended. The file named by *pathname_text* must exist when the attachment is specified and when the message is sent; otherwise, an error occurs.

Label_text specifies the label used when the attachment icon is displayed in the message. Defaults to filename of the attachment if *label_text* is not specified. Use a label when the attachment is stored in a temporary file that has a meaningless name.

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Excel Workgroup Extensions

specifies the character position of the attachment within the Position num message body. Using -1 as the position places the attachment before any body text in the message. Using -2 places the attachment after any body text. If omitted or larger than the length of the message, defaults to -2.

Returns TRUE on success and #VALUE! on failure.

To set the current attachment list using an array, use SET.MAIL.MESSAGE(7).

To append the Finance Department's January report to the list of attachments, use the following function:

SET.MAIL.ATTACHMENT(GET.MAIL.MESSAGE(10) + 1,"C:\FINANCE\REPORTS\ JAN.DOC","January Report",-2)

Function	Description

GET.MAIL.MESSAGE Returns information about the current message

SET.MAIL.MESSAGE Sets the contents of the current message

GET.MAIL.ATTACHM Returns information about attachments **ENT**

SET.MAIL.MESSAGE

Macro Sheets Only

Sets fields of the current message. This function uses attachment and recipient arrays. For information on these, see "Understanding Recipient and Attachment Arrays" earlier in this document.

SET.MAIL.MESSAGE(type_num, value)

is the field that you want to set. Type_num

is the contents you want to set for the field type_num. The contents of Value

value varies depending on type_num:		
Type_num	Returns	
1	Message subject as text. If <i>value</i> is omitted, the message subject is cleared.	
2	Message text as text, truncated to 255 characters. To set more than 255 characters, use <i>type_num</i> 3. If <i>value</i> is omitted, the message text is cleared. Setting the message body text causes all attachments with out-of-range body-positions to be moved to the end of the message body text.	
3	The name of a text file containing the message body. Use this code to set the body of messages when the body is longer than 255 characters. You can delete the file after the function completes successfully, since the file contents are immediately copied to the message. <i>Value</i> is required for <i>type_num</i> =3. #VALUE! is returned if <i>value</i> is missing, if the named file cannot be read, or if not enough free memory exists to hold the text.	
4	Message type as text, for example "IPM". The message type defaults to "IPM" if value is omitted. By convention, all message types should begin with "IPM." or "IPC." followed by application and vendor-specific information, such as "IPM.Microsoft Excel.Document Routing". IPM causes the mail to appear in the mail client's inbox list. IPC messages do not appear in the mail client's display. Periods and spaces are allowed in type names. Message type names are limited to a length of 235 characters. Type strings longer than 235 characters are silently truncated. Refer to the <i>Microsoft Mail Technical Reference</i> for more information on message types.	
5	Message Conversation ID as text. Use the empty string to clear conversation ID. The conversation ID string format is determined by MAPI and may be ignored unless the transport supports conversation ID tracking.	
6	The Return Receipt option. TRUE turns on receipt. Defaults	

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	to FALSE if value is omitted.
7	Sets the recipients to the recipient array given by <i>value</i> . If <i>value</i> is omitted, the recipients list is cleared
8	Sets the attachments to the attachment array given by <i>value</i> . The temporary files generated by MAPI in the current attachment list are deleted. To clear all attachments, omit <i>value</i> . All attachment files named in the array must exist, or #VALUE! is returned.

To set the Return Receipt option on the current message, use the following function:

SET.MAIL.MESSAGE(5, TRUE)

To set the recipient list of the current message to the recipient array stored in the name BenefitsDepartmentManagers, use the following functionSET.MAIL.MESSAGE(7, BenefitsDepartmentManagers)

Function	Description
SET.MAIL.ATTACHM ENT	Sets individual attachments to the current message
SET.MAIL.RECIPIEN T	Sets individual recipients to the current message
GET.MAIL.MESSAGE	Returns information about the current message

SET.MAIL.RECIPIENT

Macro Sheets Only

Sets the name, address, and class of the recipient of the current message, or adds a recipient to the recipients array. This function uses recipient arrays. For more information on these, see "Understanding Recipient and Attachment Arrays" earlier in this document.

SET.MAIL.RECIPIENT(*index_num*, *name_text*, *address_text*, *class_num*)

Index_num is the number of the recipient you want to set. To set information for an existing recipient, index_num must be in the range 1 to GET.MAIL.MESSAGE(9). To append a new entry to the recipient list, index_num must be GET.MAIL.MESSAGE(9) + 1.

Name_text is the name of the recipient you want set, as text. If *name_text* is omitted, the recipient must be specified by *address_text*.

Address_text is the address text, if needed, of the recipient you want set, as text. If *address_text* is omitted, the recipient must be specified by *name_text*.

Class_num specifies the type of the recipient as a number: 1 = To, 2 = Cc (carbon copy), 3 = Bcc (blind carbon copy). Specifying an invalid class value results in a failure, and #VALUE! is returned.

Returns TRUE on success, or #VALUE! on failure.

You cannot omit both the *name_text* and *address_text* arguments.

Setting a recipient's information marks the recipient as unresolved. To set the current recipient list using an array, use SET.MAIL.MESSAGE(7).

To add Dan Williams to the CC line of your message, use the following function:

SET.MAIL.RECIPIENT(GET.MAIL.MESSAGE(9) + 1, "Dan Williams",,2)

Function Description

GET.MAIL.MESSAGE Returns information about the current message

SET.MAIL.MESSAGE Sets contents for the current mail message

