

### tcpserver

**Command line parameters:**  
 [-qQvdDoOpPhrR1]  
 [-climit] [-bbacklog]  
 [-xrules.cdb] [-ggid] [-uid]  
 [-llocalname] [-timeout]  
 host port program [ arg ... ]

**Environment Variables:**  
 none

**Configuration files:**  
 rules.cdb

### qmail-smtpd

**Command line parameters:**  
 none

**Environment Variables:**  
 PROTO (TCP)  
 TCPLOCALHOST  
 TCPLOCALIP  
 TCPLOCALPORT  
 TCPREMOTEHOST  
 TCPREMOTEINFO  
 TCPREMOTEIP  
 TCPREMOTEPORT  
 RELAYCLIENT

**Configuration files:**  
 badmailfrom  
 databytes  
 localiphost (me)  
 rcpthosts  
 morercpthosts (cdb format)  
 smtpgreeting (me)  
 timeoutsmtpd (1200)

### qmail-queue

**Command line parameters:**  
 none

**Environment Variables:**  
 none

**Configuration files:**  
 none

**Exit codes:**  
 0 success  
 11 address too long  
 51 out of memory  
 52 timeout  
 53 write error  
 54 read error  
 61 problem with qmail homedir  
 62 problem with queuedir  
 63 problem with queue/pid  
 64 problem with queue/mess  
 65 problem with queue/intd  
 66 problem with todo  
 81 internal bug, eg. segfault  
 91 envelope format error

### qmail-rspawn

**Command line parameters:**  
 none

**Environment Variables:**  
 none

**Configuration files:**  
 none

**Exit codes:**  
 0 success  
 100 permanent error (bounce)  
 111 soft error (retry later)

### qmail-remote

**Command line parameters:**  
 host  
 sender  
 recip [ recip ... ]

**Environment Variables:**  
 none

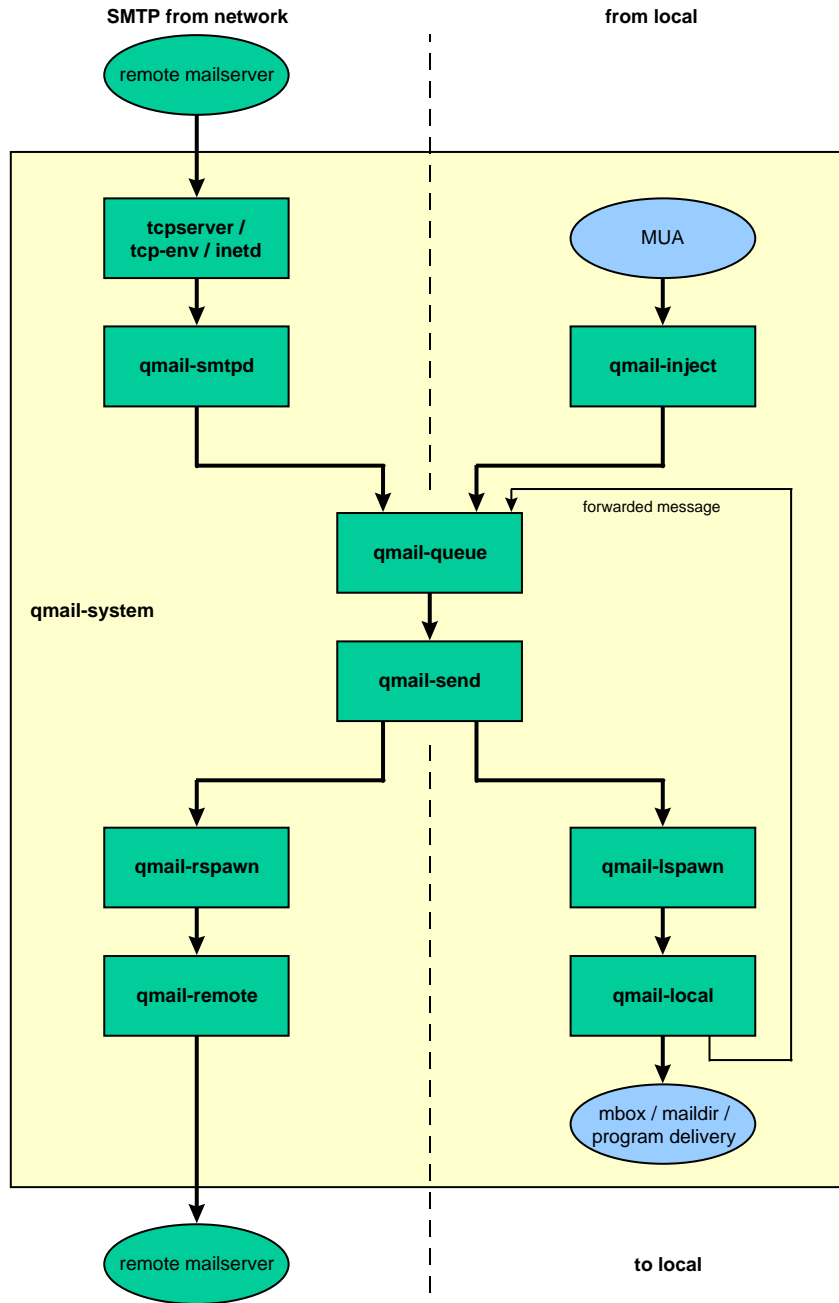
**Configuration files:**  
 helohost (me)  
 smtproutes  
 timeoutconnect (60)  
 timeoutremote (1200)

**Exit codes:**  
 always 0 and all errors come  
 back as clear text

# THE BIG Qmail PICTURE

Version 1.03 for qmail 1.03

This picture is intended to give a broad overview of how all the small qmail programs fit together and to have a quick reference handy. The man pages of the programs give more information on how things are working in detail.



### qmail-inject

**Command line parameters:**  
 [-nNaAhH]  
 [-fsender]  
 recip

**Environment Variables:**  
 QMAILUSER  
 MAILUSER  
 USER  
 LOGNAME  
 QMAILHOST  
 MAILHOST  
 QMAILNAME  
 MAILNAME  
 NAME  
 QMAILINJECT  
 QMAILDEFAULTDOMAIN  
 QMAILDEFAULTHOST  
 QMAILIDHOST  
 QMAILPLUSDOMAIN

**Configuration files:**  
 defaultdomain (me)  
 defaulthost (me)  
 idhost (me)  
 plusdomain (me)

### qmail-send

**Command line parameters:**  
 none

**Environment Variables:**  
 none

**Configuration files:**  
 bouncefrom (mailer-daemon)  
 bouncehost (me)  
 concurrencylocal (10)  
 concurrencyremote (20)  
 doublebouncehost (me)  
 doublebounceto (postmaster)  
 envnoathost (me)  
 locals (me)  
 percentthack  
 queuelifetime (604800)  
 virtualdomains

**Remarks:**  
 virtualdomains are handled  
 after locals

### qmail-lspawn

**Command line parameters:**  
 aliasempty

**Environment Variables:**  
 none

**Configuration files:**  
 -users/cdb  
 -bin/qmail-getpw

**Exit codes:**  
 0 success  
 100 aliasempty missing  
 111 soft error (retry later)  
 Most errors come back as  
 clear text

### qmail-local

**Command line parameters:**  
 [-nN]  
 user  
 homedir  
 local  
 dash  
 ext  
 domain  
 sender  
 aliasempty

**Environment Variables:**  
 none

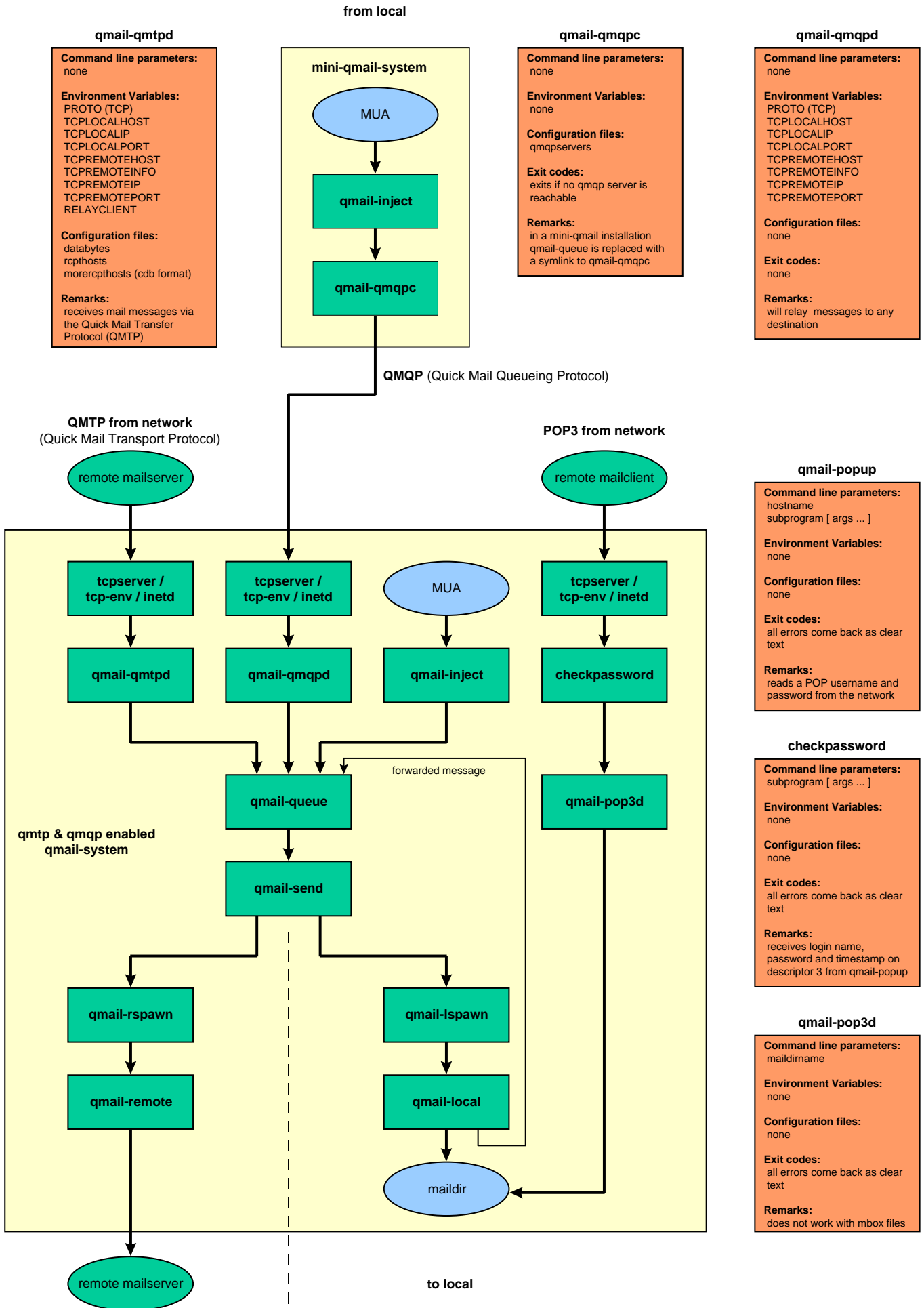
**Configuration files:**  
 -home/.qmail  
 -alias/.qmail

**Exit codes:**  
 0 success  
 1 fatal error  
 2 chdir error  
 3 SIGALRM  
 4 tryunlinktmp() error  
 100 permanent error (bounce)  
 111 soft error (retry later)  
 Most errors come back as  
 clear text

**.qmail**

**Content:**  
 #comment  
 |program to execute  
 &forwarding email address  
 .mailbox deliver to Mbox  
 .maildir/ deliver to Maildir

**Exit codes of program:**  
 0 success  
 99 success and abort .qmail  
 100 permanent error (bounce)  
 111 soft error (retry later)



**qmail-qmqtd**

**Command line parameters:**  
none

**Environment Variables:**  
PROTO (TCP)  
TCPLOCALHOST  
TCPLOCALIP  
TCPLOCALPORT  
TCPREMOTEHOST  
TCPREMOTEINFO  
TCPREMOTEIP  
TCPREMOTEPORT  
RELAYCLIENT

**Configuration files:**  
databytes  
rcpthosts  
morercpthosts (cdb format)

**Remarks:**  
receives mail messages via the Quick Mail Transfer Protocol (QMTF)

**qmail-qmqpc**

**Command line parameters:**  
none

**Environment Variables:**  
none

**Configuration files:**  
qmqpservers

**Exit codes:**  
exits if no qmqc server is reachable

**Remarks:**  
in a mini-qmail installation qmail-queue is replaced with a symlink to qmail-qmqpc

**qmail-qmqpd**

**Command line parameters:**  
none

**Environment Variables:**  
PROTO (TCP)  
TCPLOCALHOST  
TCPLOCALIP  
TCPLOCALPORT  
TCPREMOTEHOST  
TCPREMOTEINFO  
TCPREMOTEIP  
TCPREMOTEPORT

**Configuration files:**  
none

**Exit codes:**  
none

**Remarks:**  
will relay messages to any destination

**qmail-popup**

**Command line parameters:**  
hostname  
subprogram [ args ... ]

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes:**  
all errors come back as clear text

**Remarks:**  
reads a POP username and password from the network

**checkpassword**

**Command line parameters:**  
subprogram [ args ... ]

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes:**  
all errors come back as clear text

**Remarks:**  
receives login name, password and timestamp on descriptor 3 from qmail-popup

**qmail-pop3d**

**Command line parameters:**  
maildirname

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes:**  
all errors come back as clear text

**Remarks:**  
does not work with mbox files

## dot-qmail programs

### bouncesaying

**Description:**  
bounce each incoming message (according to the exit value of [ program ])

**Command line parameters:**  
in .qmail:  
|bouncesaying  
error  
[ program [ arg ... ] ]

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes of program:**  
0 bounce and say error  
111 soft error (retry later)  
all other errors are ignored and the rest of .qmail will be processed as usual

### condredirect

**Description:**  
redirect message to another address according to the exit value of program

**Command line parameters:**  
in .qmail:  
|condredirect  
newaddress  
program [ arg ... ]

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes of program:**  
0 forward to newaddress  
111 soft error (retry later)  
all other errors are ignored and the rest of .qmail will be processed as usual

### except

**Description:**  
reverse the exit code of a program

**Command line parameters:**  
in .qmail:  
|except  
program [ arg ... ]

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes of program:**  
0 except exits 100  
111 soft error (retry later)  
all other errors are ignored and the rest of .qmail will be processed as usual

### forward

**Description:**  
forward message to one or more addresses

**Command line parameters:**  
in .qmail:  
|forward  
address ...

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes of program:**  
none

### preline

**Description:**  
prepend UUCP-style lines

**Command line parameters:**  
in .qmail:  
|preline  
command  
[ -d ] (no Delivered-To line)  
[ -f ] (no From\_ line)  
[ -r ] (no Return-Path line)

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes of program:**  
none

**Remarks:**  
is useful for procmail and ELM's filter

### qbiff

**Description:**  
announce new message the moment it arrives

**Command line parameters:**  
in .qmail:  
|qbiff

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes:**  
none

**Remarks:**  
writes a message to your screen whenever a new message is delivered

### qlist

**Description:**  
handle mailing list subscription requests

**Command line parameters:**  
in .qmail-list-request:  
|qlist  
read man page for details

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes:**  
none

**Remarks:**  
read man page for details

### qreceipt

**Description:**  
respond to delivery notice requests

**Command line parameters:**  
in .qmail:  
|qreceipt  
youraddress

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes:**  
none

**Remarks:**  
sends a success notice back to the envelope sender

## userland programs

### maildirmake

**Description:**  
creates a maildir structure

**Command line parameters:**  
directory

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes:**  
none

### maildirwatch

**Description:**  
watch for new messages in a maildir

**Command line parameters:**  
you have to set the environment

**Environment Variables:**  
MAILDIR

**Configuration files:**  
none

**Exit codes:**  
none

**Remarks:**  
prints a new mail summary twice per minute

### maildir2mbox

**Description:**  
moves messages from maildir to mbox format

**Command line parameters:**  
you have to set the environment

**Environment Variables:**  
MAILDIR  
MAIL  
MAILTMP

**Configuration files:**  
none

**Exit codes:**  
none

**Remarks:**  
you should run only one maildir2mbox at a time

### mailsubj

**Description:**  
send a mail message with a subject line

**Command line parameters:**  
subject  
recip ...

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes:**  
none

**Remarks:**  
reads the body of the message from its standard input

## queue management

### qmail-qstat

**Description:**  
summarize status of mail queue

**Command line parameters:**  
none

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes:**  
complains if there is a problem

**Remarks:**  
must be run either as root or with gid qmail

### qmail-qread

**Description:**  
list outgoing messages and recipients

**Command line parameters:**  
none

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes:**  
complains if there is a problem

**Remarks:**  
must be run either as root or with uid qmails and gid qmail

### qmail-tcpto

**Description:**  
prints qmail-remote's current list of timeouts

**Command line parameters:**  
none

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes:**  
complains if there is a problem

**Remarks:**  
must be run either as root or with uid qmailr and gid qmail

### qmail-tcpok

**Description:**  
erases qmail-remote's current list of timeouts

**Command line parameters:**  
none

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes:**  
complains if there is a problem

**Remarks:**  
must be run either as root or with uid qmailr and gid qmail

**Hint:** to reschedule every message in the queue for immediate delivery, do a "kill -ALRM *pid*" on the qmail-send *pid*

## user and system management

### qmail-pw2u

**Description:**  
build address assignments from a passwd file

**Command line parameters:**  
[ -/ohHuUC ] [ -cchar ]

**Environment Variables:**  
none

**Configuration files:**  
~users/include  
~users/exclude  
~users/mailnames  
~users/subusers  
~users/append

**Exit codes:**  
complains if there is a problem

**Remarks:**  
generates ~users/assign

### qmail-newu

**Description:**  
prepare address assignments for qmail-lspawn

**Command line parameters:**  
none

**Environment Variables:**  
none

**Configuration files:**  
~users/assign

**Exit codes:**  
complains if there is a problem with ~users/assign qmail-newu

**Remarks:**  
generates ~users/cdb

### qmail-newmrh

**Description:**  
prepare morercpsthos for qmail-smtpd

**Command line parameters:**  
none

**Environment Variables:**  
none

**Configuration files:**  
~control/morercpsthos

**Exit codes:**  
complains if there is a problem with control/morercpsthos qmail-newmrh complains

**Remarks:**  
generates ~control/morercpsthos.cdb

### qmail-showctl

**Description:**  
analyze the qmail config files

**Command line parameters:**  
none

**Environment Variables:**  
none

**Configuration files:**  
all

**Exit codes:**  
complains if there is a problem

**Remarks:**  
explains the current qmail configuration

## other qmail daemons

### qmail-start

**Description:**  
turn on mail delivery

**Command line parameters:**  
defaultdelivery  
logger [ args ... ]

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes:**  
does not print anything, even on failure

**Remarks:**  
make sure to clean up the environment before starting qmail

### qmail-clean

**Description:**  
clean up the queue directory

**Command line parameters:**  
none

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes:**  
none

**Remarks:**  
can only be started by qmail-start

### splogger

**Description:**  
reads a series of messages and feeds them to syslog

**Command line parameters:**  
[ tag [ facility ] ]

**Environment Variables:**  
none

**Configuration files:**  
none

**Exit codes:**  
complains if there is a problem

**Remarks:**  
converts unprintable characters to question marks