Please take note that this work is still ongoing. The documentation should grow in a near future. 😊

Internals

In this chapter, we will provide extensive information on what Sympa looks like "under the hood". We hope this documentation will be particularly helpful to developers.

Focus on the main Sympa modules

This chapter describes these modules (or a part of them):

- src/mail.pm: low level of email sending;
- src/List.pm: list processing and informations about structure and access to list configuration parameters;
- src/sympa.pl: the main script, for messages and mail commands processing;
- src/Commands.pm: mail commands processing;
- wwsympa/wwsympa.fcgi: web interface;
- src/report.pm: notification and error reports about requested services (email and web);
- src/tools.pm: various tools;
- src/Message.pm: message object used to encapsule a message received.
- wwsympa/SympaSession.pm: session object use to manage user context with a single cookie and a session table
- wwsympa/Auth.pm 🔧Fix Me! to be completed
- wwsympa/ajax: ajax ;

A graph of subrouroutines for messages process

Sympa modules sorted by directory

This section presents all the files used in the Sympa engine. The files described are those contained in the sources, consequently:

1. you will not find the files generated at compilation time,
2. the files are not located in the same directory as you will find them in the compiled application.

Failing a better alternative, we present them as they appear in the `src` directory from the source distribution.

''./'' : Sympas sources root directory

These scripts are run at installation time. They perform the operations necessary to the correct install and runtime of Sympa.

- check_perl_modules.pl : This script checks installed and required Perl modules. It also does the required installations.
- important_changes.pl : This script prints important changes in Sympa since last install. It is based on the NEWS ***** entries.
- set_symlinks.pl : This script sets symbolic links at installation time.
- subst.pl : This script replaces --VAR-- occurences at installation time.

''./doc/''

- Fix Me! parse_tex.pl

''./po/''

- Fix Me! check_locales.pl
- Fix Me! xgettext.pl

''./soap/''

- Fix Me! sympa_soap_client.pl
- Fix Me! sympasoap.pm
- Fix Me! sympa_soap_server.fcgi
- Fix Me! SympaTransport.pm

''./src/''

- Fix Me! admin.pm
- Fix Me! alias_manager.pl
- Fix Me! aliaswrapper.c
- Fix Me! Archive.pm
- Fix Me! bouncequeue.c
- Fix Me! CAS.pm
- Commands.pm
- Fix Me! Config_XML.pm
- Fix Me! Conf.pm
- Fix Me! Datasource.pm
- Fix Me! Family.pm
- Fix Me! familyqueue.c
- Fix Me! Fetch.pm
- Fix Me! Language.pm
- Fix Me! Ldap.pm
- List.pm
- Fix Me! Lock.pm
- Fix Me! Log.pm
- mail.pm
- Message.pm
- Fix Me! parser.pl
- Fix Me! PlainDigest.pm

- ⚒️Fix Me! queue.c
- report.pm
- ⚒️Fix Me! SQLSource.pm
- sympa.pl
- ⚒️Fix Me! sympa_wizard.pl
- ⚒️Fix Me! task_manager.pl
- ⚒️Fix Me! Task.pm
- ⚒️Fix Me! time_utils.pl
- tools.pl
- ⚒️Fix Me! tt2.pl
- ⚒️Fix Me! Upgrade.pm
- ⚒️Fix Me! Version.pm
- ⚒️Fix Me! virtualwrapper.c

''./src/etc/script/''

- ⚒️Fix Me! arc2webarc.pl
- ⚒️Fix Me! arcrepair.pl
- ⚒️Fix Me! crypt_passwd.pl
- ⚒️Fix Me! find_missing_messages.pl
- ⚒️Fix Me! init_comment.pl
- ⚒️Fix Me! ldap_alias_manager.pl
- ⚒️Fix Me! mod2html.pl
- ⚒️Fix Me! mysql_alias_manager.pl
- ⚒️Fix Me! p12topem.pl
- ⚒️Fix Me! testldap.pl
- ⚒️Fix Me! testlogs.pl
- ⚒️Fix Me! tpl2tt2.pl

''./wwsympa/''

- ⚒️Fix Me! archived.pl
- ⚒️Fix Me! Auth.pm
- ⚒️Fix Me! bounced.pl
- ⚒️Fix Me! bounce-lib.pl
- ⚒️Fix Me! cookielib.pm
- ⚒️Fix Me! Marc.pm
- ⚒️Fix Me! SharedDocument.pm
- ⚒️Fix Me! wwslib.pm
- wwsympa.fcgi
- ⚒️Fix Me! wwsympa_sudo_wrapper.pl

''./wwsympa/Marc/''

- ⚒️Fix Me! Search.pm

Database

Work in progress. All the tables are described already though.

This chapter describes the Sympa database.

subscriber_table This table store subscription, subscription option etc.

- user_subscriber : email of subscriber Primary key.
- list_subscriber : list name of a subscription Primary key.
- robot_subscriber : robot (domain) of the list Primary key.
- reception_subscriber : reception format option of subscriber (digest, summary, etc
- suspend_subscriber : boolean set to 1 if subscription is suspended
- suspend_start_date_subscriber : The date (epoch) when message reception is suspended
- suspend_end_date_subscriber : The date (epoch) when message reception should be restored
- bounce_subscriber : FIXE
- bounce_score_subscriber : 🔧 Fix Me!
- custom_attribute_subscriber : 🔧 Fix Me!
- bounce_address_subscriber : 🔧 Fix Me!
- date_subscriber : date of subscription
- update_subscriber : the latest date where subscription is confirmed by subscriber
- comment_subscriber : Free form name
- number_messages_subscriber : the number of message the subscriber sent
- visibility_subscriber : 🔧 Fix Me!
- topics_subscriber : topic subscription specification
- subscribed_subscriber : boolean set to 1 if subscriber comes from ADD or SUB
- included_subscriber : boolean, set to 1 is subscriber comes from an external datasource. Note that included_subscriber and subscribed_subscriber can both value 1
- include_sources_subscriber : comma seperated list of datasource that contain this subscriber

user_table The user_table is mainly used to manage login from web interface. A subscriber may not appear in the user_table if he never log through the web interface.

- email_user : email user is the key Primary key.
- attributes_user : 🔧 Fix Me!
- data_user : 🔧 Fix Me!
- cookie_delay_user : 🔧 Fix Me!
- lang_user : user langage preference
- password_user : password are stored as fringer print
- gecos_user :
- last_login_date_user : date epoch from last login, printed in login result for security purpose
- last_login_host_user : host of last login, printed in login result for security purpose
- wrong_login_count_user : login attempt count, used to prevent brut force attack

spool_table This table is created in version 6.3. It replace most of spools on file system forclustering purpose

- messagekey_spool : autoincrement key Primary key.
- spoolname_spool : the spool name
- list_spool :
- robot_spool :

- priority_spool : priority (list priority, owner pririty etc)
- date_spool : the date a message is copied in spool table
- message_spool : message as string b64 encoded
- messagelock_spool : a unique string for each process : $$@hostname
- lockdate_spool : the date a lock is set. Used in order detect old locks
- message_status_spool : if problem when processed entries have bad status
- message_diag_spool : the reason why a message is moved to bad
- type_spool : list | list-request | sympa robot | other rcp
- authkey_spool : authentication key for email chalenge
- headerdate_spool : the message header date
- create_list_if_needed_spool : set to 1 if message is related to a dynamic list, set to 0 if list as been created or if list is static
- subject_spool : subject of the message stored to list spool content faster
- sender_spool : this info is stored to browse spool content faster
- messageid_spool : stored to list spool content faster
- spam_status_spool : spamstatus scenario result
- size_spool : info stored in order to browse spool content faster
- task_date_spool : date for a task
- task_label_spool : label for a task
- task_model_spool : model of related task
- task_object_spool : object of related task
- dkim_privatekey_spool : DKIM parameter stored for bulk daemon because bulk ignore list parameters, private key to sign message
- dkim_selector_spool : DKIM parameter stored for bulk daemon because bulk ignore list parameters, DKIM selector to sign message
- dkim_d_spool : DKIM parameter stored for bulk daemon because bulk ignore list parameters, the d DKIM parameter
- dkim_i_spool : DKIM parameter stored for bulk daemon because bulk ignore list parameters, DKIM i signature parameter
- dkim_header_list_spool : DKIM parameter stored for bulk daemon because bulk ignore list parameters, the list of headers included in signature

bulkmailer_table storage of receipients with a ref to a message in spool_table. So a very simple process can distribute them

- messagekey_bulkmailer : A pointer to a message in spool_table.It must be a value of a line in table spool_table with same value as messagekey_spool Primary key.
- packetid_bulkmailer : An id for the packet Primary key.
- messageid_bulkmailer : The message Id
- receipients_bulkmailer : the comma separated list of receipient email for this message
- returnpath_bulkmailer : the return path value that must be set when sending the message
- robot_bulkmailer :
- listname_bulkmailer :
- verp_bulkmailer : A boolean to specify if VERP is requiered, in this cas return_path will be formated using verp form
- tracking_bulkmailer : Is DSN or MDM requiered when sending this message?
- merge_bulkmailer : Boolean, if true, the message is to be parsed as a TT2 template foreach receipient
- priority_message_bulkmailer : 🔧Fix Me!
- priority_packet_bulkmailer : 🔧Fix Me!
- reception_date_bulkmailer : The date where the message was received

- delivery_date_bulkmailer : The date the message was sent
- lock_bulkmailer : A lock. It is set as process-number @ hostname so multiple bulkmailer can handle this spool

exclusion_table exclusion table is used in order to manage unsubscription for subsceriber inclued from an external data source

- user_exclusion : Primary key.
- date_exclusion :
- list_exclusion : Primary key.

session_table managment of http session

- id_session : the identifier of the database record Primary key.
- start_date_session : the date when the session was created
- date_session : date epoch of the last use of this session. It is used in order to expire old sessions
- remote_addr_session : The IP address of the computer from which the session was created
- robot_session : The virtual host in which the session was created
- email_session : the email associated to this session
- hit_session : the number of hit performed during this session. Used to detect crawlers
- data_session : parameters attached to this session that don't have a dedicated column in the database

one_time_ticket_table One time ticket are random value use for authentication chalenge. A ticket is associated with a context which look like a session

- data_one_time_ticket :
- status_one_time_ticket :
- remote_addr_one_time_ticket :
- ticket_one_time_ticket : Primary key.
- date_one_time_ticket :
- robot_one_time_ticket :
- email_one_time_ticket :

notification_table used for message tracking feature. If the list is configured for tracking, outgoing messages include a delivery status notification request and optionnaly a return receipt request.When DSN MDN are received by Syamp, they are store in this table in relation with the related list and message_id

- date_notification : 🔧Fix Me!
- pk_notification : Autoincrement key Primary key.
- message_id_notification : initial message-id. This feild is used to search DSN and MDN related to a particular message
- recipient_notification : email adresse of receeipient for which a DSN or MDM was received
- reception_option_notification : The subscription option of the subscriber when the related message was sent to the list. Ussefull because some receeipient may have option such as *digest* or *nomail*
- status_notification : Value of notification
- arrival_date_notification : reception date of latest DSN or MDM
- type_notification : Type of the notification (DSN or MDM)
- message_notification : The DSN or the MDN itself
- list_notification : The listname the messaage was issued for

  - robot_notification : The robot the message is related to

logs_table Each important event is stored in this table. List owners and listmaster can search entries in this table using web interface.

  - id_logs : Unique log's identifier Primary key.
  - user_email_logs : e-mail address of the message sender or email of identified web interface user (or soap user)
  - date_logs : date when the action was executed
  - robot_logs : name of the robot in which context the action was executed
  - list_logs : name of the mailing-list in which context the action was executed
  - action_logs : name of the Sympa subroutine which initiated the log
  - parameters_logs : List of commas-separated parameters. The amount and type of parameters can differ from an action to another
  - target_email_logs : e-mail address (if any) targeted by the message
  - msg_id_logs : identifier of the message which triggered the action
  - status_logs : exit status of the action. If it was an error, it is likely that the error_type_logs field will contain a description of this error
  - error_type_logs : name of the error string – if any – issued by the subroutine
  - client_logs : IP address of the client machine from which the message was sent
  - daemon_logs : name of the Sympa daemon which ran the action

stat_table Statistic item are store in this table, Sum average etc are stored in Stat_counter_table

  - daemon_stat :
  - parameter_stat :
  - list_stat :
  - id_stat : Primary key.
  - operation_stat :
  - email_stat :
  - user_ip_stat :
  - read_stat :
  - date_stat :
  - robot_stat :

stat_counter_table Use in conjunction with stat_table for users statistics

  - list_counter :
  - end_date_counter :
  - robot_counter :
  - id_counter : Primary key.
  - beginning_date_counter :
  - data_counter :
  - variation_counter :
  - total_counter :

admin_table This table is a internal cash where list admin roles are stored. It is just a cash and and it does not need to saved. You may remove its content if needed. It will just make next Sympa start slower.

  - user_admin : List admin email Primary key.
  - list_admin : Listname Primary key.

- robot_admin : List domain Primary key.
- role_admin : A role of this user for this list (editor, owner or listmaster which a kind of list owner too) Primary key.
- profile_admin : privilege level for this owner, value *normal* or *privileged*. The related privilege are listed in editlist.conf.
- date_admin : date this user become a list admin
- update_admin : last update timestamp
- reception_admin : email reception option for list managment messages
- visibility_admin : admin user email can be hidden in the list web page description
- comment_admin :
- subscribed_admin : Set to 1 if user is list admin by definition in list config file
- included_admin : Set to 1 if user is admin by an external data source
- include_sources_admin : name of external datasource
- info_admin : private information usually dedicated to listmasters who needs some additional information about list owners

netidmap_table ⚒Fix Me!

- netid_netidmap : Primary key.
- email_netidmap :
- robot_netidmap : Primary key.
- serviceid_netidmap : Primary key.

conf_tables ⚒Fix Me!

- value_conf : the value of parameter *label_conf* of robot *robot_conf*.
- robot_conf : Primary key.
- label_conf : Primary key.