

GNU SASL Reference Manual

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Chapter 1

GNU SASL Reference Manual

GNU SASL is an implementation of the Simple Authentication and Security Layer (SASL) framework and a few common SASL mechanisms. SASL is used by network servers (e.g., IMAP, SMTP, XMPP) to request authentication from clients, and in clients to authenticate against servers.

GNU SASL consists of a C library (libgsasl), a command-line application (gsasl), and a manual. The library supports the ANONYMOUS, CRAM-MD5, DIGEST-MD5, EXTERNAL, GS2-KRB5, GSSAPI, LOGIN, NTLM, OPENID20, PLAIN, SCRAM-SHA-1, SCRAM-SHA-1-PLUS, SCRAM-SHA-256, SCRAM-SHA-256-PLUS, SAML20, and SECURID mechanisms.

The design of the library and the intended interaction between applications and the library through the official API is shown in Figure 1.1.

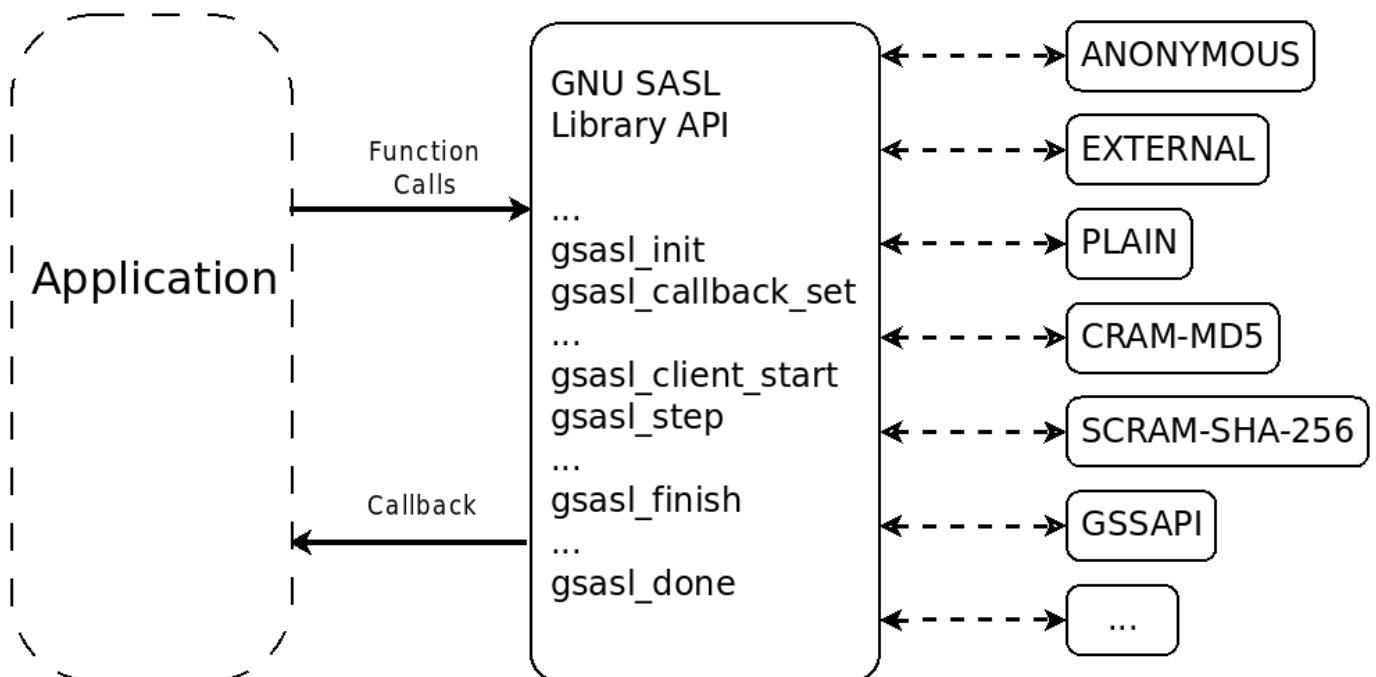


Figure 1.1: Illustration of separation between application and individual mechanism

The operation of an application using the library can best be understood in terms of a flow chart diagram, as shown in Figure 1.2. The details on how the actual negotiation are carried out are illustrated in Figure 1.3.

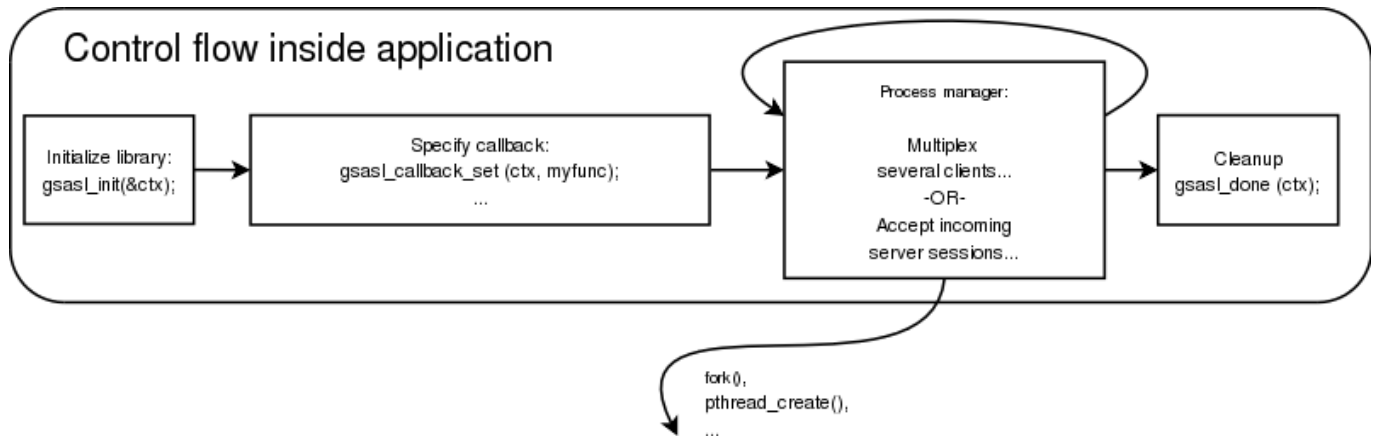


Figure 1.2: High-level control flow of SASL application

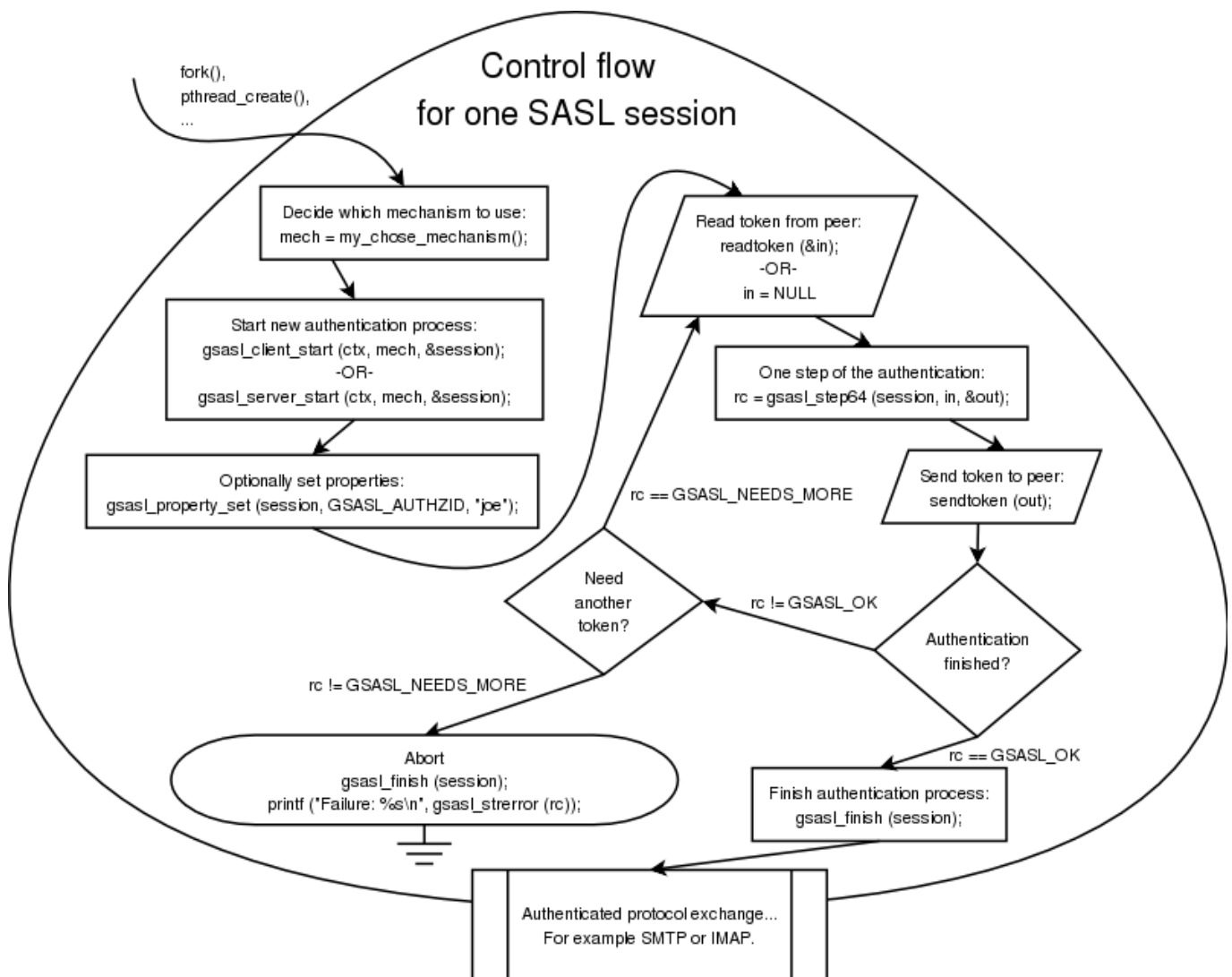


Figure 1.3: Low-level control flow of SASL application