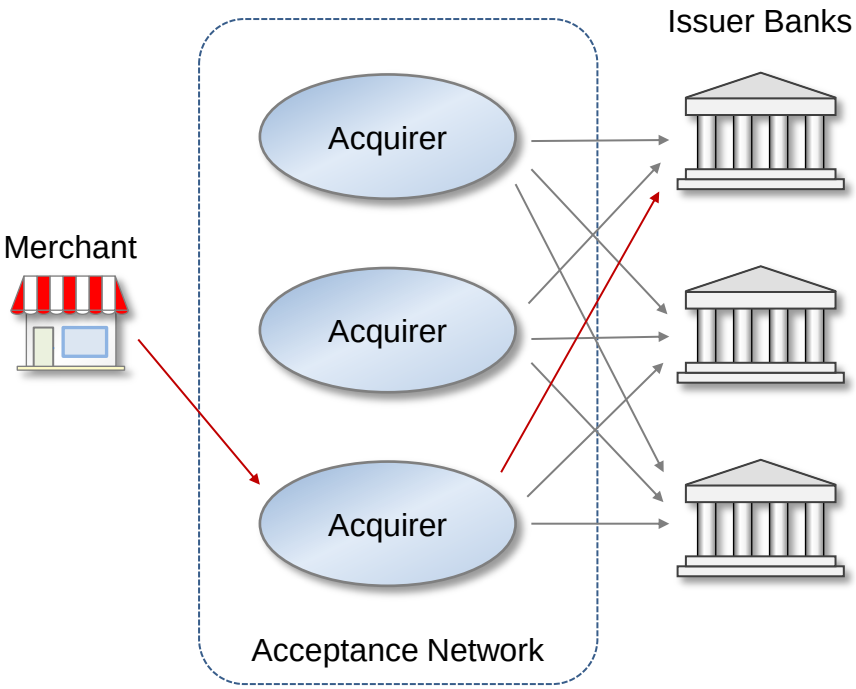
Presumed EPI “Front-end” Architecture

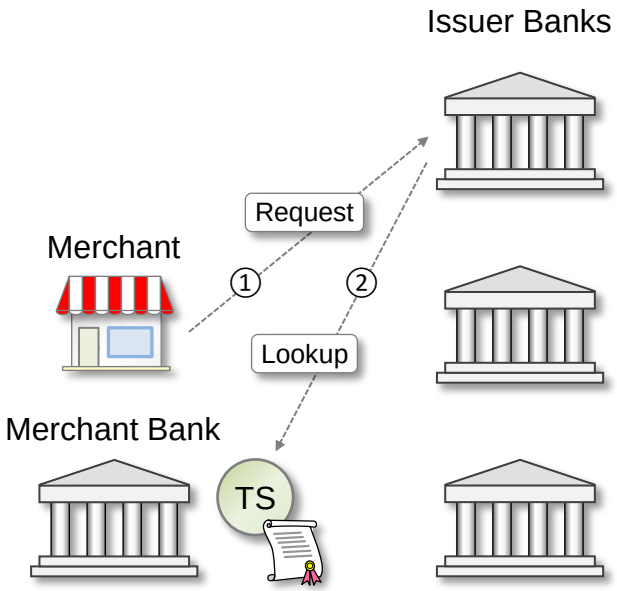


In the traditional architecture for card-based authorizations, a Merchant is connected an Acquirer which handles the communication with the Issuer Banks. The Acquirer is the entity that usually has the business agreement with a Merchant as well.

The traditional architecture depends on a *huge number of statically configured security parameters and paths*, illustrated by the arrows in the diagram.

The traditional architecture also depends on *databases* holding card-number to Issuer Bank “routing” tables.

Acquirer services are covered by additional fees on top of the fees required by the Banks running the payment scheme like SEPA Inst.



In the Saturn architecture a Merchant has a business agreement with their account-holding Bank which also provides a simple *public trust service* (TS). TS vouches for the Merchant’s validity including their claimed account number.

The data provided by a TS is *digitally signed* by the Merchant Bank and is thus to be trusted by all Banks sharing a specific payment schema like SEPA Inst.

Security with respect to requests (1) is maintained through *mutually signed digital contracts* resulting from the (not shown here) Merchant and User authorization step, combined with TS lookups (2).

The arrows in the diagram are *transient*; there is no need for externally configured security or path information.

The actual payment business is entirely in the hands of the associated, fully decentralized network of Banks running a specific payment scheme.