

Service Protocols

With a service protocol one machine is designated the client and it makes a request to a second machine which is designated as the server. The server exposes an API, known as service, which describes the limited set of actions a client can carry out. A web service is a service that communicates with clients over a HTTP connection. The two main web service methodologies are SOAP and REST.

SOAP is a complex XML-based protocol that requires tooling to use efficiently because the WSDL definition language is not human readable. Because SOAP is so crap it is becoming less used.

RPC

History is littered with technologies that tried to make remote calls look the same as in process function calls. This is a bad idea for the simple reason they are not the same thing. Technologies that we can consign to the scrap heap include DCOM, CORBA, EJB, Java RMI. They are all crap, and I will not talk any more about them.

REST is a lightweight protocol that uses HTTP features for caching, authentication and content negotiation. It does not require tooling and can be used with technologies such as OpenAPI to document its exposed endpoints. Going forward REST seems to be becoming the de facto standard for services APIs.