

Certificates required

Last updated by | Alan Parsons | 4 Dec 2023 at 16:19 GMT

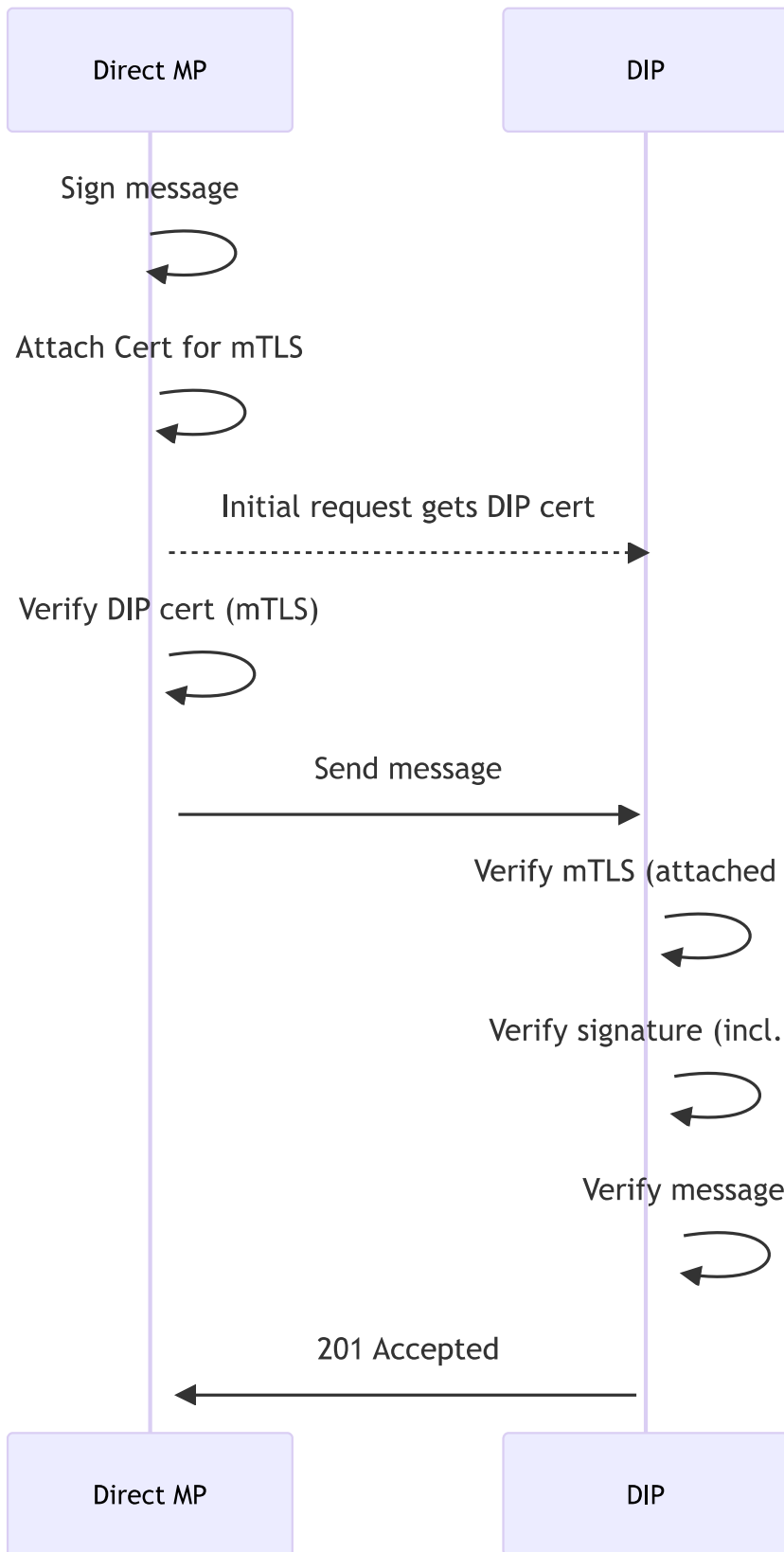
The certificates required for an Market Participant depend on how they operate:

- **Direct** - where they send messages directly to the DIP with no *DIP Connection Provider (DCP)* used.
- **Indirect** - where they use a DCP to send messages to the DIP

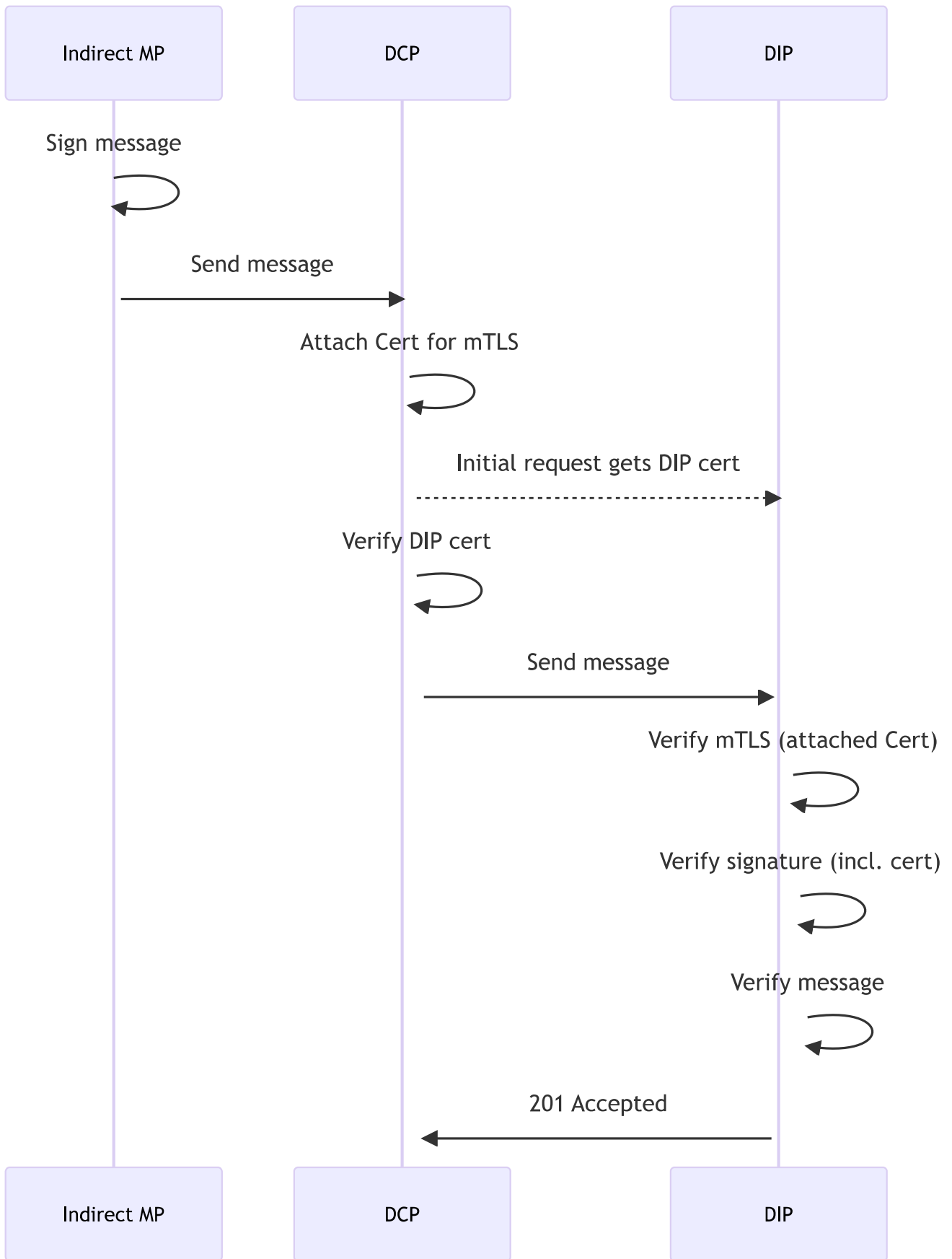
Certificates can have one of three purposes:

- **mTLS** - used to secure the channel when sending or receiving to/from the DIP. **Created and used by a DCP, can be used for all connections to the DIP**
- **Signing** - where the private key is used to sign messages prior to them being sent to/from the DIP. Messages are sent with the certificate, which is used to verify the signature. **Created and used by an indirect DCP, single signing cert required for the MP.** Can be shared by the MP to their DCP, however, this would involve sharing the Private Key and is between the MP and their DCP.
- **mTLS & Signing** - used for both purposes above. **Created and used for both purposes by an direct MP**

Direct flow



Indirect flow



Indirect flow - alternative

