```
# Implementation Considerations # {#implementation-considerations}
## Security Considerations ## {#security-considerations}
### Attestation Certificate and Attestation Certificate CA Compromise ###
{#attestation-certificate-compromise}
### credentialld Unsigned ###
### Security Considerations for Authenticators ###
#### Attestation Certificate Hierarchy ####
### Security Considerations for Clients ###
#### Browser Permissions Framework and Extensions ####
### Security Considerations for Relying Parties ###
#### Cryptographic Challenges ####
#### Security Benefits for WebAuthn Relying Parties ####
##### Considerations for Self and None Attestation Types and Ignoring Attestation #####
## Privacy Considerations ## {#privacy-considerations}
### De-anonymization prevention measures ###
### Anonymous, scoped, non-correlatable public key credentials ###
```

Authenticator-local biometric recognition

Privacy Considerations for Authenticators

Attestation Privacy

Privacy Considerations for Clients

Registration Ceremony Privacy

Authentication Ceremony Privacy

Privacy between operating system accounts