



## San Joaquin Valley Unified Air Pollution Control District Information Technology Services

### X.509 Digital Signature Field Specification

A digital certificate is used to associate a public key to a uniquely identified owner. The standard for digital certificates is X.509, which identifies the fields and values to be used in the certificate. These fields include:

- **Version:** X.509 Version of the certificate
- **Serial Number:** Unique serial number associated with the certificate
- **Signature Algorithm:** Algorithm used to sign the certificate
- **Issuer**
  - **Common Name:** Name of the certificate authority
  - **Organization:** Name of the entity that issued the certificate
  - **Organization Unit:** Certificate services division
  - **Country:** Where entity resides
  - **State or Province:** Where entity resides
  - **Location:** City where entity resides
  - **Email:** Contact email address of the entity
- **Subject**
  - **Common Name:** Name of the person identified
  - **Organization:** Name of the entity that the person is associated
  - **Organization Unit:** Division of the entity where the person is assigned
  - **Country:** Where entity resides
  - **State or Province:** Where entity resides
  - **Location:** City where entity resides
  - **Email:** Contact email address of the person
- **Validity**
  - **Valid From:** The date the certificate is first valid from
  - **Valid To:** The expiration date of the certificate
- **Public Key:** The public key
- **MD5 hash:** A hash value of the certificate
- **SHA1 hash:** Another hash value of the certificate
- **Extensions**
  - **Authority Key Identifier:** ID of the issuing certificate authority
  - **Subject Key Identifier:** ID of the person identified
  - **CRL Distribution Points**
    - **Uniform Resource Identifier:** The uniform resource locator address of the CRL list.