# **Java CertPath**

The *Java CertPath* class (java.security.cert.CertPath represents a chain of cryptographic identity certificates ([**Java Certificate**](http://tutorials.jenkov.com/java-cryptography/certificate.html) objects), where each certificate is the digital signer of the next certificate in the chain. The Java CertPath class is typically used to verify an identity certificate along with the certificates of the Certificate Authorities (CAs) that signed the certificate.

**Obtaining a CertPath Instance**

You will typically obtain a Java CertPath instance from a CertificateFactory or a CertPathBuilder. See the [**Java CertificateFactory tutorial**](http://tutorials.jenkov.com/java-cryptography/certificatefactory.html) for information about obtaining a CertPath instance.

**getCertificates()**

Once you have a Java CertPath instance you can obtain the Certificate instances the CertPath consists of by calling the CertPath getCertificates() method. Here is an example of obtaining the certificates from a CertPath instance:

List<Certificate> certificates = certPath.getCertificates();

**getType()**

The CertPath getType() method returns a string telling what type of certificates (e.g. X.509) this CertPathinstance contains. Here is an example of obtaining the CertPath type via getType():

String type = certPath.getType();

### Generating CertPath Objects

The certificate path builder and validator for PKIX is defined by the Internet X.509 Public Key Infrastructure Certificate and CRL Profile, [RFC 3280](http://www.ietf.org/rfc/rfc3280.txt).

A certificate store implementation for retrieving certificates and CRLs from Collection and LDAP directories, using the PKIX LDAP V2 Schema is also available from the IETF as [RFC 2587](http://www.ietf.org/rfc/rfc2587.txt).

To generate a CertPath object and initialize it with data read from an input stream, use one of the following generateCertPath methods (with or without specifying the encoding to be used for the data):

final CertPath generateCertPath(InputStream inStream)

final CertPath generateCertPath(InputStream inStream,

String encoding)

To generate a CertPath object and initialize it with a list of certificates, use the following method:

final CertPath generateCertPath(List certificates)

To retrieve a list of the CertPath encodings supported by this certificate factory, you can call the getCertPathEncodings method:

final Iterator getCertPathEncodings()