corda / net.corda.core.crypto / SignatureScheme

## SignatureScheme

data class SignatureScheme

This class is used to define a digital signature scheme.

## **Parameters**

schemeNumberID - we assign a number ID for more efficient on-wire serialisation. Please ensure uniqueness between schemes. schemeCodeName - code name for this signature scheme (e.g. RSA\_SHA256, ECDSA\_SECP256K1\_SHA256, ECDSA\_SECP256R1\_SHA256, EDDSA\_ED25519\_SHA512, SPHINCS-256\_SHA512). signature0ID - ASN.1 algorithm identifier of the signature algorithm (e.g. 1.3.101.112 for EdDSA) alternative0IDs - ASN.1 algorithm identifiers for keys of the signature, where we want to map multiple keys to the same signature scheme. providerName - the provider's name (e.g. "BC"). algorithmName - which signature algorithm is used (e.g. RSA, ECDSA. EdDSA, SPHINCS-256). signatureName - a signature-scheme name as required to create Signature objects (e.g. "SHA256withECDSA") algSpec - parameter specs for the underlying algorithm. Note that RSA is defined by the key size rather than algSpec. eg. ECGenParameterSpec("secp256k1"). keySize - the private key size (currently used for RSA only). desc - a human-readable description for this scheme.

## **Constructors**

<init>

SignatureScheme(schemeNumberID: Int, schemeCodeName: String, signatureOID: AlgorithmIdentifier, alternativeOIDs: List<AlgorithmIdentifier>, providerName: String, algorithmName: String, signatureName: String, algSpec: AlgorithmParameterSpec?, keySize: Int?, desc: String)

This class is used to define a digital signature scheme.

## **Properties**

val algSpec: AlgorithmParameterSpec? algSpec val algorithmName: String algorithmName val alternativeOIDs: List<AlgorithmIdentifier> alternativeOIDs val desc: String desc val keySize: Int? keySize val providerName: String providerName schemeCodeName val schemeCodeName: String val schemeNumberID: Int schemeNumberID val signatureName: String signatureName val signatureOID: AlgorithmIdentifier signatureOID