Namespace chia.dotnet.wallet

Classes

AssetCoin

Represents an asset coin, which is a coin that carries an asset ID and lineage proof.

AssetToken<T>

Represents a CAT

AssetWallet

Represents an asset wallet that manages asset tokens.

KeyPair

Represents a key pair consisting of a public key and an optional private key.

KeyStore

Represents a key store that holds private and public keys.

<u>SpendableAssetCoin</u>

Represents a spendable asset coin.

StandardTransaction

Represents a standard transaction in the Chia.NET wallet.

StandardWallet

Represents a standard wallet in the Chia.NET Wallet library.

Tails

Represents a collection of static methods for creating puzzle programs.

WalletOptions

Represents the options for a wallet.

Wallet<T>

Represents an abstract wallet class that provides common functionality for different types of wallets.

Enums

CoinSelection

Represents the different strategies for selecting coins.

Class AssetCoin

Namespace: chia.dotnet.wallet. Assembly: chia.dotnet-wallet.dll

Represents an asset coin, which is a coin that carries an asset ID and lineage proof.

public class AssetCoin

Inheritance

<u>object</u>

✓ AssetCoin

Derived

<u>SpendableAssetCoin</u>

Inherited Members

Constructors

AssetCoin(CoinSpend, Coin, byte[]?)

Initializes a new instance of the AssetCoin class.

public AssetCoin(CoinSpend parentCoinSpend, Coin coin, byte[]? assetId = null)

Parameters

parentCoinSpend CoinSpend

The parent coin spend.

coin Coin

The coin.

assetId <u>byte</u>□[]

The asset ID.

Properties

AssetId

Gets the asset ID of this asset coin.

```
public byte[] AssetId { get; init; }
```

Property Value

<u>byte</u> []

Represents an asset coin, which is a coin that carries an asset ID and lineage proof.

Coin

Gets the underlying coin of this asset coin.

```
public Coin Coin { get; init; }
```

Property Value

Coin

Represents an asset coin, which is a coin that carries an asset ID and lineage proof.

LineageProof

Gets the lineage proof of this asset coin.

```
public Program LineageProof { get; init; }
```

Property Value

Program

Represents an asset coin, which is a coin that carries an asset ID and lineage proof.

ParentCoinSpend

Gets the parent coin spend associated with this asset coin.

```
public CoinSpend ParentCoinSpend { get; init; }
```

Property Value

CoinSpend

Represents an asset coin, which is a coin that carries an asset ID and lineage proof.

Class AssetToken<T>

```
Namespace: chia.dotnet.wallet
Assembly: chia-dotnet-wallet.dll
Represents a CAT
  public class AssetToken<T> : Program where T : Program
Type Parameters
T
  A Program
Inheritance
<u>object</u> ← Program ← AssetToken<T>
Inherited Members
Program.True, Program.False, Program.Nil, Program.FromCons(Program, Program),
Program.FromBytes(byte[]) / Program.FromJacobianPoint(JacobianPoint) ,
Program.FromPrivateKey(PrivateKey), <u>Program.FromHex(string)</u> ♂, <u>Program.FromBool(bool)</u> ♂,
<u>Program.FromInt(long)</u> ♂, <u>Program.FromBigInt(BigInteger)</u> ♂, <u>Program.FromText(string)</u> ♂,
<u>Program.FromSource(string)</u>  ♂, <u>Program.FromList(IEnumerable<Program>)</u> ♂,
Program.Deserialize(byte[]) . Program.DeserializeHex(string) . Program.At(Position),
Program.Curry(|Enumerable < Program >) / Program.Uncurry(), Program.Hash(), Program.HashHex(),
Program.Define(Program), <u>Program.DefineAll(IEnumerable<Program>)</u> ♂,
Program.Compile(CompileOptions), Program.Run(Program, RunOptions), Program.ToBytes(),
Program.ToJacobianPoint(), Program.ToPrivateKey(), Program.ToHex(), Program.ToBool(),
Program.ToInt(), Program.ToBigInt(), Program.ToText(), Program.ToSource(bool) ♂,
Program.ToList(bool) . Program.Serialize() , Program.SerializeHex() , Program.Equals(Program) ,
Program.ToString(), Program.Value, Program.IsAtom, Program.IsCons, Program.IsNull, Program.Atom,
Program.Cons, Program.First, Program.Rest, Program.PositionSuffix, Program.Position,
<u>object.Equals(object)</u> <u>d</u>, <u>object.Equals(object, object)</u> <u>d</u>, <u>object.GetHashCode()</u> <u>d</u>, <u>object.GetType()</u> <u>d</u>,
```

Constructors

AssetToken(byte[], T)

```
Represents a CAT
```

```
public AssetToken(byte[] assetId, T innerPuzzle)

Parameters
assetId byte□[]
  The asset id
innerPuzzle T
```

Properties

The inner puzzle program

AssetId

```
The Token's asset id

public byte[] AssetId { get; init; }

Property Value

byte@[]

Represents a CAT
```

InnerPuzzle

```
The tokens inner puzzle Program

public T InnerPuzzle { get; init; }
```

Property Value

Represents a CAT

Class AssetWallet

Namespace: chia.dotnet.wallet. dll Assembly: chia-dotnet-wallet.dll

Represents an asset wallet that manages asset tokens.

public class AssetWallet : Wallet<AssetToken<StandardTransaction>>

Inheritance

Inherited Members

Wallet < AssetToken < StandardTransaction >> . Node,

Wallet < AssetToken < StandardTransaction >> . KeyStore,

Wallet < AssetToken < StandardTransaction >> . Options ,

Wallet < AssetToken < StandardTransaction > > . CoinRecords ,

Wallet < AssetToken < StandardTransaction >> . ArtificialCoinRecords ,

Wallet < AssetToken < StandardTransaction > >.PuzzleCache,

Wallet < AssetToken < StandardTransaction >> . CoinRecordIndex(CoinRecord),

Wallet < AssetToken < StandardTransaction > > . Sync(WalletOptions, CancellationToken),

Wallet < AssetToken < StandardTransaction >> . FetchCoinRecords(CancellationToken),

Wallet < AssetToken < StandardTransaction > > . ClearUnconfirmedTransactions(CancellationToken),

Wallet < AssetToken < StandardTransaction >> . CreateSpend(),

Wallet < AssetToken < StandardTransaction >>. FindUnusedIndices(int, List < int >, bool, CancellationToken),

Wallet < AssetToken < StandardTransaction > > . GetBalance(),

Wallet < AssetToken < StandardTransaction >> . SelectCoinRecords(BigInteger, CoinSelection, int, bool),

Wallet < AssetToken < StandardTransaction >> . CompleteSpend(SpendBundle, CancellationToken),

object.Equals(object) ♂, object.Equals(object, object) ♂, object.GetHashCode() ♂, object.GetType() ♂,

Constructors

AssetWallet(FullNodeProxy, KeyStore, byte[], byte[]?, WalletOptions?)

Initializes a new instance of the AssetWallet class.

```
public AssetWallet(FullNodeProxy node, KeyStore keyStore, byte[] assetId, byte[]? hiddenPuzzleHash = null, WalletOptions? walletOptions = null)

Parameters

node FullNodeProxy

The full node proxy.

keyStore KeyStore

The key store.

assetId byte@[]

The asset ID.

hiddenPuzzleHash byte@[]

The hidden puzzle hash.

walletOptions WalletOptions

The wallet options.
```

Properties

AssetId

```
Gets the asset ID.

public byte[] AssetId { get; init; }

Property Value

byte□[]
```

Represents an asset wallet that manages asset tokens.

HiddenPuzzleHash

Gets the hidden puzzle hash.

```
public byte[] HiddenPuzzleHash { get; init; }
```

Property Value

<u>byte</u>[]

Represents an asset wallet that manages asset tokens.

Methods

CreatePuzzle(KeyPair)

Creates a puzzle for the specified key pair.

```
public override AssetToken<StandardTransaction> CreatePuzzle(KeyPair keyPair)
```

Parameters

keyPair <u>KeyPair</u>

The key pair.

Returns

AssetToken < StandardTransaction >

The created asset token puzzle.

FindTail(CancellationToken)

Finds the tail of the asset token.

```
public Task<Program?> FindTail(CancellationToken cancellationToken = default)
```

Parameters

The cancellation token.

Returns

The tail of the asset token.

GetParentCoinSpend(CoinRecord, CancellationToken)

Gets the parent coin spend for the specified coin record.

public Task<CoinSpend> GetParentCoinSpend(CoinRecord coinRecord, CancellationToken
cancellationToken = default)

Parameters

coinRecord CoinRecord

The coin record.

The cancellation token.

Returns

Task < CoinSpend>

The parent coin spend.

SignSpend(SpendBundle, byte[])

Signs the spend bundle with the private keys in the key store.

public override SpendBundle SignSpend(SpendBundle spendBundle, byte[] aggSigMeExtraData)

spendBundle SpendBundle

The spend bundle to sign.

aggSigMeExtraData <u>byte</u>♂[]

The aggregated signature me extra data.

Returns

SpendBundle

The signed spend bundle.

Enum CoinSelection

Namespace: chia.dotnet.wallet. Assembly: chia.dotnet.wallet. dll

Represents the different strategies for selecting coins.

public enum CoinSelection

Fields

Largest = 1

Select the largest coins first.

Newest = 2

Select the newest coins first.

Oldest = 3

Select the oldest coins first.

Smallest = 0

Select the smallest coins first.

Class KeyPair

Namespace: chia.dotnet.wallet. Assembly: chia.dotnet-wallet.dll

Represents a key pair consisting of a public key and an optional private key.

```
public record KeyPair : IEquatable<KeyPair>
```

Inheritance

<u>object</u>

← KeyPair

Implements

<u>IEquatable</u> < <u>KeyPair</u> >

Inherited Members

<u>object.Equals(object)</u> <u>object.Equals(object, object)</u> <u>object.GetHashCode()</u> <u>object.GetType()</u> <u>object.MemberwiseClone()</u> <u>object.ReferenceEquals(object, object)</u> <u>object.ToString()</u> <u>object.ToString() object.ToString() ob</u>

Constructors

KeyPair(JacobianPoint, PrivateKey?)

Initializes a new instance of the **KeyPair** class.

```
public KeyPair(JacobianPoint publicKey, PrivateKey? privateKey = null)
```

Parameters

publicKey JacobianPoint

The public key.

privateKey PrivateKey

The private key. Can be null.

Properties

PrivateKey

Gets or sets the private key. Can be null if the private key is not available.

```
public PrivateKey? PrivateKey { get; init; }
```

Property Value

PrivateKey

Represents a key pair consisting of a public key and an optional private key.

PublicKey

Gets or sets the public key.

```
public JacobianPoint PublicKey { get; init; }
```

Property Value

JacobianPoint

Represents a key pair consisting of a public key and an optional private key.

Class KeyStore

Namespace: chia.dotnet.wallet. Assembly: chia.dotnet-wallet.dll

Represents a key store that holds private and public keys.

```
public class KeyStore
```

Inheritance

<u>object</u>

✓ KeyStore

Inherited Members

<u>object.Equals(object)</u> <u>object.Equals(object, object)</u> <u>object.GetHashCode()</u> <u>object.GetType()</u> <u>object.MemberwiseClone()</u> <u>object.ReferenceEquals(object, object)</u> <u>object.ToString()</u> <u>object.ToString() object.ToString() ob</u>

Constructors

KeyStore(JacobianPoint, bool)

Initializes a new instance of the **KeyStore** class.

```
public KeyStore(JacobianPoint publicKey, bool hardened = false)
```

Parameters

publicKey JacobianPoint

The key to initialize the key store with.

hardened boold

A value indicating whether the key store is hardened.

Exceptions

<u>ArgumentException</u> □

Thrown when the key is neither a PrivateKey nor a JacobianPoint.

KeyStore(PrivateKey, bool)

Initializes a new instance of the KeyStore class.

```
public KeyStore(PrivateKey privateKey, bool hardened = false)
```

Parameters

privateKey PrivateKey

The key to initialize the key store with.

hardened <u>bool</u> □

A value indicating whether the key store is hardened.

Exceptions

Thrown when the key is neither a PrivateKey nor a JacobianPoint.

Properties

Hardened

Gets or sets a value indicating whether the key store is hardened.

```
public bool Hardened { get; init; }
```

Property Value

bool ♂

Represents a key store that holds private and public keys.

Keys

Gets or sets the list of key pairs.

```
public List<KeyPair> Keys { get; init; }
```

Property Value

```
<u>List</u> □ < <u>KeyPair</u>>
```

Represents a key store that holds private and public keys.

PrivateKey

Gets or sets the private key.

```
public PrivateKey? PrivateKey { get; init; }
```

Property Value

PrivateKey

Represents a key store that holds private and public keys.

PublicKey

Gets or sets the public key.

```
public JacobianPoint PublicKey { get; init; }
```

Property Value

JacobianPoint

Represents a key store that holds private and public keys.

Methods

CreateFrom(string)

Creates a new **KeyStore** instance from a mnemonic phrase.

```
public static KeyStore CreateFrom(string mnemonic)
```

Parameters

mnemonic <u>string</u> ♂

The mnemonic phrase.

Returns

KeyStore

A new **KeyStore** instance.

CreateFrom(WalletProxy, CancellationToken)

Creates a new KeyStore instance from a chia.dotnet.WalletProxy.

```
public static Task<KeyStore> CreateFrom(WalletProxy walletProxy, CancellationToken
cancellationToken = default)
```

Parameters

walletProxy WalletProxy

The wallet proxy to create the key store from.

cancellationToken <u>CancellationToken</u> ☑

The cancellation token.

Returns

<u>Task</u> < <u>KeyStore</u> >

A new **KeyStore** instance.

Remarks

Uses the currently logged in fingerprint

CreateFrom(WalletProxy, uint, CancellationToken)

Creates a new KeyStore instance from a chia.dotnet.WalletProxy and a fingerprint.

public static Task<KeyStore> CreateFrom(WalletProxy walletProxy, uint fingerprint, CancellationToken cancellationToken = default)

Parameters

walletProxy WalletProxy

The wallet proxy to create the key store from.

fingerprint <u>uint</u>♂

The fingerprint to use.

The cancellation token.

Returns

<u>Task</u> < <u>KeyStore</u> >

A new **KeyStore** instance.

Remarks

The logged in fingerprint is not changed.

Generate(int)

Generates the specified number of key pairs and adds them to the key store.

```
public void Generate(int amount)
```

Parameters

The number of key pairs to generate.

GenerateUntil(int)

Generates key pairs until the specified number of key pairs is reached.

```
public void GenerateUntil(int amount)
```

Parameters

amount <u>int</u>♂

The number of key pairs to generate.

Class SpendableAssetCoin

Namespace: chia.dotnet.wallet. Assembly: chia.dotnet-wallet.dll

Represents a spendable asset coin.

```
public class SpendableAssetCoin : AssetCoin
```

Inheritance

<u>object</u>

✓

✓

AssetCoin ← SpendableAssetCoin

Inherited Members

AssetCoin.ParentCoinSpend, AssetCoin.AssetId, AssetCoin.LineageProof, AssetCoin.Coin, object.Equals(object), object.Equals(object, object.GetHashCode(), object.GetType(), object.MemberwiseClone(), object.ReferenceEquals(object, object, object.ToString(), object.ToString()

Constructors

SpendableAssetCoin(CoinSpend, Coin, Program, Program, int, byte[]?)

Initializes a new instance of the SpendableAssetCoin class.

```
public SpendableAssetCoin(CoinSpend parentCoinSpend, Coin coin, Program innerPuzzle, Program
innerSolution, int extraDelta = 0, byte[]? assetId = null)
```

Parameters

parentCoinSpend CoinSpend

The parent coin spend.

coin Coin

The coin.

innerPuzzle Program

The inner puzzle program.

```
innerSolution Program
```

The inner solution program.

```
extraDelta <u>int</u>♂
```

The extra delta value.

```
assetId <u>byte</u>□[]
```

The asset ID.

Properties

ExtraDelta

Gets or sets the extra delta value.

```
public int ExtraDelta { get; init; }
```

Property Value

<u>int</u>♂

Represents a spendable asset coin.

InnerPuzzle

Gets or sets the inner puzzle program.

```
public Program InnerPuzzle { get; init; }
```

Property Value

Program

Represents a spendable asset coin.

InnerSolution

Gets or sets the inner solution program.

```
public Program InnerSolution { get; init; }
```

Property Value

Program

Represents a spendable asset coin.

Puzzle

Gets or sets the puzzle program.

```
public Program Puzzle { get; init; }
```

Property Value

Program

Represents a spendable asset coin.

Methods

CalculateDeltas(List < SpendableAssetCoin >)

Calculates the deltas based on the given spendable asset coins.

```
public static long[] CalculateDeltas(List<SpendableAssetCoin> spendableAssetCoins)
```

Parameters

spendableAssetCoins <u>List</u>♂<<u>SpendableAssetCoin</u>>

The spendable asset coins.

Returns

<u>long</u> ☑[]

An array of deltas.

CalculateSubtotals(long[])

Calculates the subtotals based on the given deltas.

```
public static long[] CalculateSubtotals(long[] deltas)
```

Parameters

deltas <u>long</u>♂[]

The deltas.

Returns

<u>long</u> []

An array of subtotals.

Class StandardTransaction

Namespace: chia.dotnet.wallet. Assembly: chia.dotnet-wallet.dll

Represents a standard transaction in the Chia.NET wallet.

public class StandardTransaction : Program

Inheritance

<u>object</u> ∠ ← Program ← StandardTransaction

Inherited Members

Program.True, Program.False, Program.Nil, Program.FromCons(Program, Program), Program.FromPrivateKey(PrivateKey), <u>Program.FromHex(string)</u> ♂, <u>Program.FromBool(bool)</u> ♂, <u>Program.FromSource(string)</u> ♂, <u>Program.FromList(IEnumerable < Program >)</u> ♂, Program.Deserialize(byte[]) . Program.DeserializeHex(string) . Program.At(Position), Program.Define(Program), <u>Program.DefineAll(IEnumerable<Program>)</u> ♂, Program.Compile(CompileOptions), Program.Run(Program, RunOptions), Program.ToBytes(), Program.ToJacobianPoint(), Program.ToPrivateKey(), Program.ToHex(), Program.ToBool(), Program.ToInt(), Program.ToBigInt(), Program.ToText(), Program.ToSource(bool), <u>Program.ToList(bool)</u> ✓, Program.Serialize(), Program.SerializeHex(), Program.Equals(Program), Program.ToString(), Program.Value, Program.IsAtom, Program.IsCons, Program.IsNull, Program.Atom, Program.Cons, Program.First, Program.Rest, Program.PositionSuffix, Program.Position, object.Equals(object) ♂, object.Equals(object, object) ♂, object.GetHashCode() ♂, object.GetType() ♂, object.MemberwiseClone() □ , object.ReferenceEquals(object, object) □

Constructors

StandardTransaction(JacobianPoint)

Initializes a new instance of the <u>StandardTransaction</u> class with the specified synthetic public key.

public StandardTransaction(JacobianPoint syntheticPublicKey)

Parameters

syntheticPublicKey JacobianPoint

The synthetic public key to use.

Properties

SyntheticPublicKey

Gets or sets the synthetic public key associated with the transaction.

```
public JacobianPoint SyntheticPublicKey { get; init; }
```

Property Value

JacobianPoint

Represents a standard transaction in the Chia.NET wallet.

Methods

GetSolution(List<Program>)

Gets the solution program for the specified conditions.

```
public static Program GetSolution(List<Program> conditions)
```

Parameters

```
conditions <u>List</u>♂<Program>
```

The conditions to use in the solution.

Returns

Program

The solution program.

Spend(Coin, Program)

Creates a coin spend using the specified coin and solution program.

public CoinSpend Spend(Coin coin, Program solution)

Parameters

coin Coin

The coin to spend.

solution Program

The solution program to use.

Returns

CoinSpend

The created coin spend.

Class StandardWallet

Namespace: chia.dotnet.wallet. dll Assembly: chia-dotnet-wallet.dll

Represents a standard wallet in the Chia.NET Wallet library.

```
public class StandardWallet : Wallet<StandardTransaction>
```

Inheritance

 $\underline{object} \boxtimes \leftarrow \underline{Wallet} < \underline{StandardTransaction} > \leftarrow \underline{StandardWallet}$

Inherited Members

Wallet < Standard Transaction > . Node , Wallet < Standard Transaction > . KeyStore ,

Wallet < Standard Transaction > . Options , Wallet < Standard Transaction > . CoinRecords ,

Wallet < Standard Transaction > . Artificial Coin Records , Wallet < Standard Transaction > . Puzzle Cache ,

<u>Wallet<StandardTransaction>.CoinRecordIndex(CoinRecord)</u>,

Wallet < Standard Transaction > . Sync (Wallet Options, Cancellation Token),

Wallet < Standard Transaction > . Fetch Coin Records (Cancellation Token),

Wallet < Standard Transaction > . Clear Unconfirmed Transactions (Cancellation Token),

Wallet < Standard Transaction > . Create Spend(),

Wallet < StandardTransaction > . FindUnusedIndices(int, List < int > , bool, CancellationToken) ,

Wallet < Standard Transaction > . GetBalance(),

Wallet < Standard Transaction > . Select Coin Records (BigInteger, Coin Selection, int, bool),

Wallet < Standard Transaction > . Complete Spend (Spend Bundle, Cancellation Token),

<u>object.Equals(object)</u> <u>'</u> , <u>object.Equals(object, object)</u> , <u>object.GetHashCode()</u> , <u>object.GetType()</u> ,

Constructors

StandardWallet(FullNodeProxy, KeyStore, byte[]?, WalletOptions?)

Represents a standard wallet in the Chia.NET Wallet library.

```
public StandardWallet(FullNodeProxy node, KeyStore keyStore, byte[]? hiddenPuzzleHash =
null, WalletOptions? walletOptions = null)
```

Parameters

node FullNodeProxy

Represents a standard wallet in the Chia.NET Wallet library.

keyStore KeyStore

Represents a standard wallet in the Chia.NET Wallet library.

hiddenPuzzleHash <u>byte</u> []

Represents a standard wallet in the Chia.NET Wallet library.

walletOptions WalletOptions

Represents a standard wallet in the Chia.NET Wallet library.

Properties

HiddenPuzzleHash

Gets the hidden puzzle hash.

```
public byte[] HiddenPuzzleHash { get; }
```

Property Value

<u>byte</u> []

Represents a standard wallet in the Chia.NET Wallet library.

Methods

CreatePuzzle(KeyPair)

Creates a puzzle for the specified key pair.

```
public override StandardTransaction CreatePuzzle(KeyPair keyPair)
```

Parameters

keyPair <u>KeyPair</u>

The key pair.

Returns

StandardTransaction

A new instance of the **StandardTransaction** class.

Send(byte[], long, long, CancellationToken)

Sends a transaction.

```
public Task<List<CoinSpend>> Send(byte[] puzzleHash, long amount, long fee,
CancellationToken cancellationToken = default)
```

Parameters

puzzleHash <u>byte</u> []

The puzzle hash.

amount <u>long</u> ☑

The amount to send.

fee <u>long</u> ♂

The fee amount.

The cancellation token.

Returns

<u>Task</u>♂ <<u>List</u>♂ <CoinSpend>>

A list of coin spends.

SendFee(long, CancellationToken)

Sends a fee transaction.

```
public Task<List<CoinSpend>> SendFee(long amount, CancellationToken cancellationToken
= default)
```

Parameters

amount <u>long</u> ☑

The amount to send as a fee.

cancellationToken CancellationToken ☑

The cancellation token.

Returns

<u>Task</u> d' < <u>List</u> d' < CoinSpend>>

A list of coin spends.

SignSpend(SpendBundle, byte[])

Signs a spend bundle with the specified aggregated signature me extra data.

```
public override SpendBundle SignSpend(SpendBundle spendBundle, byte[] aggSigMeExtraData)
```

Parameters

spendBundle SpendBundle

The spend bundle to sign.

aggSigMeExtraData <u>byte</u> []

The aggregated signature me extra data.

Returns

SpendBundle

The signed spend bundle.

Class Tails

Namespace: chia.dotnet.wallet. Assembly: chia.dotnet-wallet.dll

Represents a collection of static methods for creating puzzle programs.

```
public static class Tails
```

Inheritance

<u>object</u> d ← Tails

Inherited Members

 $\underline{object.Equals(object)} \ \ \ \ \ \underline{object.Equals(object, object)} \ \ \ \ \ \underline{object.GetHashCode()} \ \ \ \ \ \underline{object.GetType()} \ \ \ \ \ \underline{object.MemberwiseClone()} \ \ \ \ \underline{object.ReferenceEquals(object, object)} \ \ \ \ \underline{object.ToString()} \ \ \ \ \underline{object.ToString()} \ \ \ \ \underline{object.ToString()} \ \ \ \underline{object.ToString()} \ \ \ \underline{object.ToString()} \ \ \ \underline{object.ToString()} \ \ \underline{$

Methods

Delegated(JacobianPoint)

Creates a puzzle program using the "delegated" puzzle with the specified public key.

```
public static Program Delegated(JacobianPoint publicKey)
```

Parameters

publicKey JacobianPoint

The public key to be used in the puzzle program.

Returns

Program

A puzzle program.

EverythingWithSignature(JacobianPoint)

Creates a puzzle program using the "everythingWithSignature" puzzle with the specified public key.

```
public static Program EverythingWithSignature(JacobianPoint publicKey)
```

Parameters

publicKey JacobianPoint

The public key to be used in the puzzle program.

Returns

Program

A puzzle program.

GenesisByCoinId(byte[])

Creates a puzzle program using the "genesisByCoinId" puzzle with the specified coin ID.

```
public static Program GenesisByCoinId(byte[] coinId)
```

Parameters

coinId <u>byte</u> []

The coin ID to be used in the puzzle program.

Returns

Program

A puzzle program.

IndexedWithSignature(JacobianPoint, int)

Creates a puzzle program using the "indexedWithSignature" puzzle with the specified public key and index.

```
public static Program IndexedWithSignature(JacobianPoint publicKey, int index)
```

Parameters

publicKey JacobianPoint

The public key to be used in the puzzle program.

index <u>int</u>♂

The index to be used in the puzzle program.

Returns

Program

A puzzle program.

MeltableGenesisByCoinId(byte[])

Creates a puzzle program using the "meltableGenesisByCoinId" puzzle with the specified coin ID.

```
public static Program MeltableGenesisByCoinId(byte[] coinId)
```

Parameters

coinId <u>byte</u> []

The coin ID to be used in the puzzle program.

Returns

Program

A puzzle program.

Class WalletOptions

Namespace: chia.dotnet.wallet. Assembly: chia.dotnet-wallet.dll

Represents the options for a wallet.

public class WalletOptions

Inheritance

<u>object</u> < WalletOptions

Inherited Members

 $\underline{object.Equals(object)} \ \ \ \ \ \underline{object.Equals(object, object)} \ \ \ \ \ \underline{object.MemberwiseClone()} \ \ \ \ \underline{object.ReferenceEquals(object, object)} \ \ \ \ \underline{object.ToString()} \ \ \ \ \underline{object.ToString()} \ \ \ \ \underline{object.ToString()} \ \ \underline{object.ToStr$

Fields

DefaultWalletOptions

Gets the default wallet options.

public static readonly WalletOptions DefaultWalletOptions

Field Value

WalletOptions

Represents the options for a wallet.

Properties

InstantCoinRecords

Gets or sets a value indicating whether instant coin records are enabled.

```
public bool InstantCoinRecords { get; init; }
```

Property Value

Represents the options for a wallet.

MaxAddressCount

Gets or sets the maximum address count.

```
public int MaxAddressCount { get; init; }
```

Property Value

<u>int</u>♂

Represents the options for a wallet.

MinAddressCount

Gets or sets the minimum address count.

```
public int MinAddressCount { get; init; }
```

Property Value

<u>int</u>♂

Represents the options for a wallet.

UnusedAddressCount

Gets or sets the count of unused addresses.

```
public int UnusedAddressCount { get; init; }
```

Property Value

<u>int</u>♂

Represents the options for a wallet.

Class Wallet<T>

Namespace: chia.dotnet.wallet. Assembly: chia.dotnet-wallet.dll

Represents an abstract wallet class that provides common functionality for different types of wallets.

```
public abstract class Wallet<T> where T : Program
```

Type Parameters

T

The type of program associated with the wallet.

Inheritance

object d ← Wallet<T>

Derived

AssetWallet, StandardWallet

Inherited Members

 $\underline{object.Equals(object)} \ \ \ \ \ \underline{object.Equals(object, object)} \ \ \ \ \ \ \underline{object.GetHashCode()} \ \ \ \ \ \underline{object.GetType()} \ \ \ \ \ \ \underline{object.MemberwiseClone()} \ \ \ \ \ \underline{object.ReferenceEquals(object, object)} \ \ \ \ \ \underline{object.ToString()} \ \ \ \ \ \underline{object.ToString()} \ \ \ \ \ \underline{object.ToString()} \ \ \ \ \ \ \underline{object.ToString()} \ \ \ \ \underline{object.ToString()} \ \ \ \ \ \underline{object.ToString()} \ \ \ \underline{object.ToString()} \ \ \ \ \underline{object.ToString()} \ \ \ \underline{object.ToString()} \ \ \ \underline{object.ToString()} \ \ \underline{object.ToString($

Constructors

Wallet(FullNodeProxy, KeyStore, WalletOptions?)

Represents an abstract wallet class that provides common functionality for different types of wallets.

```
protected Wallet(FullNodeProxy node, KeyStore keyStore, WalletOptions? walletOptions = null)
```

Parameters

node FullNodeProxy

Represents an abstract wallet class that provides common functionality for different types of wallets.

keyStore KeyStore

Represents an abstract wallet class that provides common functionality for different types of wallets.

walletOptions WalletOptions

Represents an abstract wallet class that provides common functionality for different types of wallets.

Properties

ArtificialCoinRecords

Gets the list of chia.dotnet.CoinRecord instances representing the artificial coin records associated with the wallet.

```
public List<CoinRecord> ArtificialCoinRecords { get; }
```

Property Value

<u>List</u> < CoinRecord >

Represents an abstract wallet class that provides common functionality for different types of wallets.

CoinRecords

Gets or sets the list of lists of chia.dotnet.CoinRecord instances representing the coin records associated with the wallet.

```
public List<List<CoinRecord>> CoinRecords { get; }
```

Property Value

```
<u>List</u> ♂ < <u>List</u> ♂ < CoinRecord > >
```

Represents an abstract wallet class that provides common functionality for different types of wallets.

KeyStore

Gets or sets the **KeyStore** instance used for managing keys.

```
public KeyStore KeyStore { get; init; }
```

Property Value

KeyStore

Represents an abstract wallet class that provides common functionality for different types of wallets.

Node

Gets or sets the chia.dotnet.FullNodeProxy instance used for interacting with the Chia full node.

```
public FullNodeProxy Node { get; init; }
```

Property Value

FullNodeProxy

Represents an abstract wallet class that provides common functionality for different types of wallets.

Options

Gets or sets the WalletOptions instance used for configuring wallet options.

```
public WalletOptions Options { get; init; }
```

Property Value

WalletOptions

Represents an abstract wallet class that provides common functionality for different types of wallets.

PuzzleCache

Gets the list of T instances representing the puzzle cache associated with the wallet.

```
public List<T> PuzzleCache { get; }
```

Property Value

<u>List</u> ♂ < T >

Represents an abstract wallet class that provides common functionality for different types of wallets.

Methods

ClearUnconfirmedTransactions(CancellationToken)

Clears the unconfirmed transactions associated with the wallet.

public Task ClearUnconfirmedTransactions(CancellationToken cancellationToken = default)

Parameters

cancellationToken CancellationToken ☑

Returns

Task ☑

CoinRecordIndex(CoinRecord)

Gets the index of the given coin record in the puzzle cache.

public int CoinRecordIndex(CoinRecord coinRecord)

Parameters

coinRecord CoinRecord

The coin record to find the index of.

Returns

<u>int</u>♂

The index of the coin record in the puzzle cache.

CompleteSpend(SpendBundle, CancellationToken)

Completes the spend of the given spend bundle.

public Task CompleteSpend(SpendBundle spendBundle, CancellationToken cancellationToken
= default)

Parameters

spendBundle SpendBundle

Returns

<u>Task</u> ☑

Exceptions

Exception □

CreatePuzzle(KeyPair)

Creates a new instance of the program associated with the wallet using the given key pair.

```
public abstract T CreatePuzzle(KeyPair keyPair)
```

Parameters

keyPair <u>KeyPair</u>

The key pair to use for creating the program.

Returns

The created program instance.

CreateSpend()

Creates a new spend bundle.

```
public SpendBundle CreateSpend()
```

Returns

SpendBundle

SpendBundle

FetchCoinRecords(CancellationToken)

Fetches the coin records associated with the wallet from the Chia network.

```
public Task FetchCoinRecords(CancellationToken cancellationToken = default)
```

Parameters

cancellationToken CancellationToken ☑

Returns

<u>Task</u> ☑

An awaitable Task

FindUnusedIndices(int, List<int>, bool, CancellationToken)

Finds the unused indices for the wallet.

```
public Task<List<int>> FindUnusedIndices(int amount, List<int> used, bool presynced = false,
```

Parameters

amount <u>int</u>♂

used <u>List</u>♂<<u>int</u>♂>

presynced <u>bool</u> ♂

Returns

Task♂ < List♂ < int♂ > >

The list of indices

Exceptions

Exception ☑

GetBalance()

Gets the balance of the wallet.

public BigInteger GetBalance()

Returns

<u>BigInteger</u> ☑

The balance

SelectCoinRecords(BigInteger, CoinSelection, int, bool)

Selects coin records for spending.

public List<CoinRecord> SelectCoinRecords(BigInteger amount, CoinSelection coinSelection,

```
int minimumCoinRecords = 0, bool required = true)
Parameters
amount <u>BigInteger</u> □
coinSelection CoinSelection
minimumCoinRecords int♂
required <u>bool</u>♂
Returns
<u>List</u> < CoinRecord >
Exceptions
Exception □
SignSpend(SpendBundle, byte[])
Signs the given spend bundle with the wallet's private key and returns the signed spend bundle.
 public abstract SpendBundle SignSpend(SpendBundle spendBundle, byte[] aggSigMeExtraData)
Parameters
spendBundle SpendBundle
  The spend bundle to sign.
aggSigMeExtraData <u>byte</u> []
  The extra data to include in the aggregated signature.
```

Returns

SpendBundle

The signed spend bundle.

Sync(WalletOptions?, CancellationToken)

Synchronizes the wallet with the Chia network, fetching new coin records and updating the puzzle cache.

Parameters

overrideOptions WalletOptions

The wallet options to use for synchronization. If null, the default wallet options will be used.

The cancellation token.

Returns

<u>Task</u> ☑

A task representing the asynchronous synchronization operation.