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

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Represents an asset wallet that manages asset tokens.

KeyPair

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

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Represents a key store that holds private and public keys.

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Represents a spendable asset coin.

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Represents a standard transaction in the Chia.NET wallet.

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Chia condition codes.

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

object ← AssetCoin

Derived

SpendableAssetCoin

Inherited Members

object.Equals(object) , object.Equals(object, object) , object.GetHashCode() , object.GetType() , object.MemberwiseClone() , object.ReferenceEquals(object, object) , object.ToString()

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` byte[]

The asset ID.

Properties

AssetId

Gets the asset ID of this asset coin.

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

Property Value

byte[]

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

object ← Program ← AssetToken<T>

Inherited Members

Program.True , Program.False , Program.Nil , Program.FromCons(Program, Program) , Program.FromBytes(byte[]) , Program.FromJacobianPoint(JacobianPoint) , Program.FromPrivateKey(PrivateKey) , Program.FromHex(string) , Program.FromBool(bool) , Program.FromInt(long) , Program.FromBigInt(BigInteger) , Program.FromText(string) , Program.FromSource(string) , Program.FromList(IEnumerable<Program>) , Program.Deserialize(byte[]) , Program.DeserializeHex(string) , Program.At(Position) , Program.Curry(IEnumerable<Program>) , Program.Uncurry() , Program.Hash() , Program.HashHex() , Program.Define(Program) , Program.DefineAll(IEnumerable<Program>) , 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 , object.Equals(object) , object.Equals(object, object) , object.GetHashCode() , object.GetType() , object.MemberwiseClone() , object.ReferenceEquals(object, object)

Constructors

AssetToken(byte[], T)

Represents a CAT

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

Parameters

`assetId` byte[]

The asset id

`innerPuzzle` T

The inner puzzle program

Properties

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

T

Represents a CAT

Class AssetWallet

Namespace: chia.dotnet.wallet

Assembly: chia-dotnet-wallet.dll

Represents an asset wallet that manages asset tokens.

```
public class AssetWallet : Wallet<AssetToken<StandardTransaction>>
```

Inheritance

object ← Wallet<AssetToken<StandardTransaction>> ← AssetWallet

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() ,
object.MemberwiseClone() , object.ReferenceEquals(object, object) , object.ToString()

Remarks

Initializes a new instance of the AssetWallet class.

Constructors

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

Represents an asset wallet that manages asset tokens.

```
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.

Remarks

Initializes a new instance of the AssetWallet class.

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

byte[]

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` KeyPair

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

`cancellationToken` CancellationToken

The cancellation token.

Returns

Task<Program>

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.

`cancellationToken` CancellationToken

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)
```

Parameters

`spendBundle` SpendBundle

The spend bundle to sign.

`aggSigMeExtraData` byte[]

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.

Enum ConditionCodes

Namespace: chia.dotnet.wallet

Assembly: chia-dotnet-wallet.dll

Chia condition codes.

```
public enum ConditionCodes
```

Fields

AGG_SIG_AMOUNT = 45

AGG_SIG_ME = 50

AGG_SIG_PARENT = 43

AGG_SIG_PARENT_AMOUNT = 47

AGG_SIG_PARENT_PUZZLE = 48

AGG_SIG_PUZZLE = 44

AGG_SIG_PUZZLE_AMOUNT = 46

AGG_SIG_UNSAFE = 49

ASSERT_BEFORE_HEIGHT_ABSOLUTE = 87

ASSERT_BEFORE_HEIGHT_RELATIVE = 86

ASSERT_BEFORE_SECONDS_ABSOLUTE = 85

ASSERT_BEFORE_SECONDS_RELATIVE = 84

ASSERT_COIN_ANNOUNCEMENT = 61

ASSERT_CONCURRENT_PUZZLE = 65

ASSERT_CONCURRENT_SPEND = 64

ASSERT_EPHEMERAL = 76

```
ASSERT_HEIGHT_ABSOLUTE = 83

ASSERT_HEIGHT_RELATIVE = 82

ASSERT_MY_AMOUNT = 73

ASSERT_MY_BIRTH_HEIGHT = 75

ASSERT_MY_BIRTH_SECONDS = 74

ASSERT_MY_COIN_ID = 70

ASSERT_MY_PARENT_ID = 71

ASSERT_MY_PUZZLE_HASH = 72

ASSERT_PUZZLE_ANNOUNCEMENT = 63

ASSERT_SECONDS_ABSOLUTE = 81

ASSERT_SECONDS_RELATIVE = 80

CREATE_COIN = 51

CREATE_COIN_ANNOUNCEMENT = 60

CREATE_PUZZLE_ANNOUNCEMENT = 62

REMARK = 1

RESERVE_FEE = 52

SOFTFORK = 90
```

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

object ← KeyPair

Implements

IEquatable<KeyPair>

Inherited Members

object.Equals(object) , object.Equals(object, object) , object.GetHashCode() , object.GetType() , object.MemberwiseClone() , object.ReferenceEquals(object, object) , object.ToString()

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

object ← KeyStore

Inherited Members

object.Equals(object) , object.Equals(object, object) , object.GetHashCode() , object.GetType() , object.MemberwiseClone() , object.ReferenceEquals(object, object) , object.ToString()

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` bool

A value indicating whether the key store is hardened.

Exceptions

ArgumentException

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` bool

A value indicating whether the key store is hardened.

Exceptions

ArgumentException

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

List <KeyPair>

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` string

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` CancellationToken

The cancellation token.

Returns

Task<KeyStore>

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` uint

The fingerprint to use.

`cancellationToken` CancellationToken

The cancellation token.

Returns

Task<KeyStore>

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

`amount` int

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` int

The number of key pairs to generate.

Class Puzzles

Namespace: chia.dotnet.wallet

Assembly: chia-dotnet-wallet.dll

Represents a collection of methods for creating puzzle programs.

```
public static class Puzzles
```

Inheritance

object ← Puzzles

Inherited Members

object.Equals(object) , object.Equals(object, object) , object.GetHashCode() , object.GetType() , object.MemberwiseClone() , object.ReferenceEquals(object, object) , object.ToString()

Properties

Cat

Gets the Cat puzzle program.

```
public static Program Cat { get; }
```

Property Value

Program

Represents a collection of methods for creating puzzle programs.

PayToConditions

Gets the payToConditions puzzle program.

```
public static Program PayToConditions { get; }
```

Property Value

Program

Represents a collection of methods for creating puzzle programs.

PayToDelegatedOrHidden

Gets the payToDelegatedOrHidden puzzle program.

```
public static Program PayToDelegatedOrHidden { get; }
```

Property Value

Program

Represents a collection of methods for creating puzzle programs.

SyntheticPublicKey

Gets the syntheticPublicKey puzzle program.

```
public static Program SyntheticPublicKey { get; }
```

Property Value

Program

Represents a collection of methods for creating puzzle programs.

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` byte[]

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` int

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` byte[]

The coin ID to be used in the puzzle program.

Returns

Program

A puzzle program.

Class SpendableAssetCoin

Namespace: chia.dotnet.wallet

Assembly: chia-dotnet-wallet.dll

Represents a spendable asset coin.

```
public class SpendableAssetCoin : AssetCoin
```

Inheritance

object ← AssetCoin ← SpendableAssetCoin

Inherited Members

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

The extra delta value.

`assetId` byte[]

The asset ID.

Properties

ExtraDelta

Gets or sets the extra delta value.

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

Property Value

int

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` List<SpendableAssetCoin>

The spendable asset coins.

Returns

long[]

An array of deltas.

CalculateSubtotals(long[])

Calculates the subtotals based on the given deltas.

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

Parameters

`deltas` long[]

The deltas.

Returns

long[]

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

object ← Program ← StandardTransaction

Inherited Members

Program.True , Program.False , Program.Nil , Program.FromCons(Program, Program) , Program.FromBytes(byte[]) , Program.FromJacobianPoint(JacobianPoint) , Program.FromPrivateKey(PrivateKey) , Program.FromHex(string) , Program.FromBool(bool) , Program.FromInt(long) , Program.FromBigInt(BigInteger) , Program.FromText(string) , Program.FromSource(string) , Program.FromList(IEnumerable<Program>) , Program.Deserialize(byte[]) , Program.DeserializeHex(string) , Program.At(Position) , Program.Curry(IEnumerable<Program>) , Program.Uncurry() , Program.Hash() , Program.HashHex() , Program.Define(Program) , Program.DefineAll(IEnumerable<Program>) , 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 , object.Equals(object) , object.Equals(object, object) , object.GetHashCode() , object.GetType() , object.MemberwiseClone() , object.ReferenceEquals(object, object)

Remarks

Initializes a new instance of the StandardTransaction class with the specified synthetic public key.

Constructors

StandardTransaction(JacobianPoint)

Represents a standard transaction in the Chia.NET wallet.

```
public StandardTransaction(JacobianPoint syntheticPublicKey)
```

Parameters

`syntheticPublicKey` JacobianPoint

The synthetic public key to use.

Remarks

Initializes a new instance of the StandardTransaction class with the specified synthetic public key.

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` List<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

Assembly: chia-dotnet-wallet.dll

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

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

Inheritance

object ← Wallet<StandardTransaction> ← StandardWallet

Inherited Members

Wallet<StandardTransaction>.Node , Wallet<StandardTransaction>.KeyStore ,
Wallet<StandardTransaction>.Options , Wallet<StandardTransaction>.CoinRecords ,
Wallet<StandardTransaction>.ArtificialCoinRecords , Wallet<StandardTransaction>.PuzzleCache ,
Wallet<StandardTransaction>.CoinRecordIndex(CoinRecord) ,
Wallet<StandardTransaction>.Sync(WalletOptions, CancellationToken) ,
Wallet<StandardTransaction>.FetchCoinRecords(CancellationToken) ,
Wallet<StandardTransaction>.ClearUnconfirmedTransactions(CancellationToken) ,
Wallet<StandardTransaction>.CreateSpend() ,
Wallet<StandardTransaction>.FindUnusedIndices(int, List<int>, bool, CancellationToken) ,
Wallet<StandardTransaction>.GetBalance() ,
Wallet<StandardTransaction>.SelectCoinRecords(BigInteger, CoinSelection, int, bool) ,
Wallet<StandardTransaction>.CompleteSpend(SpendBundle, CancellationToken) ,
object.Equals(object) , object.Equals(object, object) , object.GetHashCode() , object.GetType() ,
object.MemberwiseClone() , object.ReferenceEquals(object, object) , object.ToString()

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` byte[]

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

byte[]

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` KeyPair

The key pair.

Returns

StandardTransaction

A new instance of the StandardTransaction class.

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

Sends a transaction.

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

Parameters

`puzzleHash` byte[]

The puzzle hash.

`amount` long

The amount to send.

`fee` long

The fee amount.

`cancellationToken` CancellationToken

The cancellation token.

Returns

Task<IEnumerable<CoinSpend>>

A list of coin spends.

SendFee(long, CancellationToken)

Sends a fee transaction.

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

Parameters

`amount` long

The amount to send as a fee.

`cancellationToken` CancellationToken

The cancellation token.

Returns

Task<IEnumerable<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` byte[]

The aggregated signature me extra data.

Returns

SpendBundle

The signed spend bundle.

Class WalletOptions

Namespace: chia.dotnet.wallet

Assembly: chia-dotnet-wallet.dll

Represents the options for a wallet.

```
public class WalletOptions
```

Inheritance

object ← WalletOptions

Inherited Members

object.Equals(object) , object.Equals(object, object) , object.GetHashCode() , object.GetType() , object.MemberwiseClone() , object.ReferenceEquals(object, object) , object.ToString()

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

bool

Represents the options for a wallet.

MaxAddressCount

Gets or sets the maximum address count.

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

Property Value

int

Represents the options for a wallet.

MinAddressCount

Gets or sets the minimum address count.

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

Property Value

int

Represents the options for a wallet.

UnusedAddressCount

Gets or sets the count of unused addresses.

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

Property Value

int

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 ← Wallet<T>

Derived

AssetWallet, StandardWallet

Inherited Members

object.Equals(object) , object.Equals(object, object) , object.GetHashCode() , object.GetType() , object.MemberwiseClone() , object.ReferenceEquals(object, object) , 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

List<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

List<List<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

List<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

int

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

`cancellationToken` CancellationToken

Returns

Task

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` KeyPair

The key pair to use for creating the program.

Returns

T

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

Task

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,
```

```
CancellationToken cancellationToken = default)
```

Parameters

`amount` int

`used` List<int>

`presynced` bool

`cancellationToken` CancellationToken

Returns

Task<List<int>>

The list of indices

Exceptions

Exception

GetBalance()

Gets the balance of the wallet.

```
public BigInteger GetBalance()
```

Returns

BigInteger

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` BigInteger

`coinSelection` CoinSelection

`minimumCoinRecords` int

`required` bool

Returns

List<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` byte[]

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.

```
public Task Sync(WalletOptions? overrideOptions = null, CancellationToken cancellationToken
= default)
```

Parameters

`overrideOptions` WalletOptions

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

`cancellationToken` CancellationToken

The cancellation token.

Returns

Task

A task representing the asynchronous synchronization operation.