

AlgorandUnitySDK

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Here are the packages with brief descriptions (if available):

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MHLab.Utilities6

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Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

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Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

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Namespace Documentation

MHLab Namespace Reference

MHLab.Utilities Namespace Reference

Classes

class `BackgroundTasksProcessor`

Class Documentation

AlgorandManager Class Reference

Inheritance diagram for AlgorandManager:



Public Member Functions

string **Version** ()

Get AlgorandSDK Version

string **GetPlayerName** ()

Get Actual Player Name

string **GenerateAccount** ()

Generate new Algorand Account but not saved in Playprefs

string **LoadAccountFromPassphrase** (string Passphrase)

Load Algorand Account from Mnemonic Passphrase

string **GenerateAccountAndSave** ()

Generate a new Algorand Account, save crypted in PlayerPrefs and in AlgorandManager instance

string **GenerateAccountAndSave** (string Password)

Generate a new Algorand Account, save crypted in PlayerPrefs and in AlgorandManager instance crypted with Password by User

Boolean **SaveAccountInPlayerPrefs** (string Passphrase)

Save Algorand Account in encrypted PlayPrefs

Boolean **SaveAccountInPlayerPrefs** (string Passphrase, string Password)

Save Algorand Account in encrypted PlayPrefs crypted with Password by User

string **LoadAccountFromPlayerPrefs** ()

Load Account from PlayPrefs and use in Algorand Manager instance

string **LoadAccountFromPlayerPrefs** (string Password)

Load Account from PlayPrefs and use in Algorand Manager instance decrypted with Password by User

bool **DeleteAccountFromPlayerPrefs** ()

Delete actual Algorand Account from PlayerPrefs WARNING: this method will irrevocably delete your account from PlayerPrefs!

string **GetAddressAccount** ()
*Get Actual Account Address initialized in **AlgorandManager***

string **GetMnemonicPassphrase** ()
*Get Actual Mnemonic Passphrase initialized in **AlgorandManager***

bool **AddressIsValid** (string AddressPassed)
Verify if Algorand Address is well formatted

void **ConnectToNode** (string AlgodURLEndpoint, string AlgodToken)
Connect to ALGOD / Purestack Node

long? **GetWalletAmount** (string AlgodURLEndpoint, string AlgodToken, string AccountAddress)
Get Wallet Amount in MicroAlgos

string **MakePaymentTransaction** (string AlgodURLEndpoint, string AlgodToken, string ToAccountAddress, double AlgoAmount, string Note)
Create and send a payment Algorand Transaction

string **GetHealth** (string AlgodURLEndpointIndexer, string AlgodToken)
Get
<https://developer.algorand.org/docs/reference/rest-apis/indexer/#get-health>

string **GetAccount** (string AlgodURLEndpointIndexer, string AlgodToken, string AlgorandAccount, bool JsonOrString=true)
Get
<https://developer.algorand.org/docs/reference/rest-apis/indexer/#get-v2accountsaccount-id>

string **GetAsset** (string AlgodURLEndpointIndexer, string AlgodToken, long? AssetID, bool JsonOrString=true)
Get
<https://developer.algorand.org/docs/reference/rest-apis/indexer/#get-v2assetsasset-id>

string **SearchTransactions** (string AlgodURLEndpointIndexer, string AlgodToken, string AlgorandAccount)
Get
<https://developer.algorand.org/docs/reference/rest-apis/indexer/#get-v2accountsaccount-idtransactions>

string **CreateAsset** (string AlgodURLEndpoint, string AlgodToken, string AssetName, string AssetUnitName, ulong? TotalAssetCount, long? AssetDecimals, string AssetURL, string AssetmetadataHash, string AssetTxMessage)
Create Asset <https://developer.algorand.org/docs/features/asa/>

string **ModifyAsset** (string AlgodURLEndpoint, string AlgodToken, string AddressManager, string AddressFreeze, string AddressClawback, string AddressReserve, string AssetTxMessage, long? AssetID)
Modify *Asset*
<https://developer.algorand.org/docs/features/asa/#modifying-an-asset>

string **OptinAsset** (string AlgodURLEndpoint, string AlgodToken, long? AssetID, string Note="")
Opt-in *Asset*
<https://developer.algorand.org/docs/features/asa/#receiving-an-asset>

string **AssetTransfer** (string AlgodURLEndpoint, string AlgodToken, string ToAccountAddress, ulong AssetAmount, long? AssetID, string Note="")
Create *a* *transaction* *ASA*
<https://developer.algorand.org/docs/features/asa/#transferring-an-asset>

string **FreezeAsset** (string AlgodURLEndpoint, string AlgodToken, string AddressFreeze, long? AssetID, string Note="")
Freeze *Asset*
<https://developer.algorand.org/docs/features/asa/#freezing-an-asset>

string **RevokeAsset** (string AlgodURLEndpoint, string AlgodToken, string AddressRevoke, ulong AssetAmount, long? AssetID, string Note="")
Revoke *Asset*
<https://developer.algorand.org/docs/features/asa/#revoking-an-asset>

string **DestroyAsset** (string AlgodURLEndpoint, string AlgodToken, long? AssetID, string Note="")
Destroy *Asset*
<https://developer.algorand.org/docs/features/asa/#destroying-an-asset>

string **MakeReKeyTransaction** (string AlgodURLEndpoint, string AlgodToken, string ToReKeyAccountAddress, string Note)
Rekey-to *Transaction¶*
<https://developer.algorand.org/docs/features/accounts/rekey/>

Public Attributes

string **ALGOD_URL_ENDPOINT** = string.Empty
string **ALGOD_TOKEN** = string.Empty
string **ALGOD_URL_ENDPOINT_INDEXER** = string.Empty

Protected Member Functions

virtual void **OnEnable** ()
virtual void **OnApplicationQuit** ()

Protected Attributes

```
string m_PlayerName  
string _Version = "0.15 Alfa"  
Account _AMAccount = null
```

Additional Inherited Members

Member Function Documentation

bool AlgorandManager.AddressIsValid (string *AddressPassed*)

Verify if Algorand Address is well formatted

Parameters

<i>AddressPassed</i>	
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Returns

Simple Boolean: True or False

string AlgorandManager.AssetTransfer (string *AlgodURLEndpoint*, string *AlgodToken*, string *ToAccountAddress*, ulong *AssetAmount*, long? *AssetID*, string *Note* = "")

Create a transaction ASA
<https://developer.algorand.org/docs/features/asa/#transferring-an-asset>

Parameters

<i>AlgodURLEndpoint</i>	URL/Endpoint Algod
<i>AlgodToken</i>	API Key token
<i>ToAccountAddress</i>	Algorand Address Received ASA
<i>AssetAmount</i>	Amount ASA to send
<i>AssetID</i>	Asset ID to transfer
<i>Note</i>	Trnsfert Transaction Note

Returns

Transaction ID (TxID)

void AlgorandManager.ConnectToNode (string *AlgodURLEndpoint*, string *AlgodToken*)

Connect to ALGOD / Purestack Node

string AlgorandManager.CreateAsset (string *AlgodURLEndpoint*, string *AlgodToken*, string *AssetName*, string *AssetUnitName*, ulong? *TotalAssetCount*, long? *AssetDecimals*, string *AssetURL*, string *AssetmetadataHash*, string *AssetTxMessage*)

Create Asset <https://developer.algorand.org/docs/features/asa/>

Parameters

<i>AlgodURLEndpoint</i>	URL/Endpoint Algod
<i>AlgodToken</i>	API Key token
<i>AssetName</i>	The name of the asset. Supplied on creation. Example: Tether
<i>AssetUnitName</i>	The name of a unit of this asset. Supplied on creation. Example: USDT
<i>TotalAssetCount</i>	The total number of base units of the asset to create. This number cannot be changed.
<i>AssetDecimals</i>	The number of digits to use after the decimal point when displaying the asset. If 0, the asset is not divisible. If 1, the base unit of the asset is in tenths. If 2, the base unit of the asset is in hundredths
<i>AssetURL</i>	Specifies a URL where more information about the asset can be retrieved. Max size is 32 bytes.
<i>AssetmetadataHash</i>	This field is intended to be a 32-byte hash of some metadata that is relevant to your asset and/or asset holders. The format of this metadata is up to the application. This field can only be specified upon creation. An example might be the hash of some certificate that acknowledges the digitized asset as the official representation of a particular real-world asset.
<i>AssetTxMessage</i>	Message to insert in creation transaction. Max size is 1000 bytes.

Returns

AssetID created

bool AlgorandManager.DeleteAccountFromPlayerPrefs ()

Delete actual Algorand Account from PlayerPrefs WARNING: this method will irrevocably delete your account from PlayerPrefs!

Returns

Boolean true if procedure went ok

string AlgorandManager.DestroyAsset (string *AlgodURLEndpoint*, string *AlgodToken*, long? *AssetID*, string *Note* = "")

Destroy Asset
<https://developer.algorand.org/docs/features/asa/#destroying-an-asset>

Parameters

<i>AlgodURLEndpoint</i>	URL/Endpoint Algod
<i>AlgodToken</i>	API Key token
<i>AssetID</i>	Asset ID to Opt-in
<i>Note</i>	Opt-In Transaction Note

Returns

Transaction ID (TxID)

string AlgorandManager.FreezeAsset (string *AlgodURLEndpoint*, string *AlgodToken*, string *AddressFreeze*, long? *AssetID*, string *Note* = "")

Freeze Asset
<https://developer.algorand.org/docs/features/asa/#freezing-an-asset>

Parameters

<i>AlgodURLEndpoint</i>	URL/Endpoint Algod
<i>AlgodToken</i>	API Key token
<i>AddressFreeze</i>	Algorand Address Freeze Target
<i>AssetID</i>	Asset ID to transfer
<i>Note</i>	Trnasfert Transaction Note

Returns

Transaction ID (TxID)

string AlgorandManager.GenerateAccount ()

Generate new Algorand Account but not saved in Playprefs

Returns

Algorand Account Mnemonic Passphrase

string AlgorandManager.GenerateAccountAndSave ()

Generate a new Algorand Account, save crypted in PlayerPrefs and in **AlgorandManager** instance

Returns

Algorand Account Address generated

string AlgorandManager.GenerateAccountAndSave (string *Password*)

Generate a new Algorand Account, save crypted in PlayerPrefs and in **AlgorandManager** instance crypted with Password by User

Parameters

<i>Password</i>	Password passed from UI by User
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Returns

Algorand Account Address generated

string AlgorandManager.GetAccount (string *AlgodURLEndpointIndexer*, string *AlgodToken*, string *AlgorandAccount*, bool *JsonOrString* = true)

Get

<https://developer.algorand.org/docs/reference/rest-apis/indexer/#get-v2accountsaccount-id>

Parameters

<i>AlgodURLEndpointIndexer</i>	URL/Endpoint Algod Indexer
<i>AlgodToken</i>	API Key token
<i>AlgorandAccount</i>	Valid Algorand Account Address
<i>JsonOrString</i>	Booleand to return Json (True, default) Or String (False)

Returns

Amount Account or JSON Account Info

string AlgorandManager.GetAddressAccount ()

Get Actual Account Address initialized in **AlgorandManager**

Returns

Algorand Account Address

string AlgorandManager.GetAsset (string *AlgodURLEndpointIndexer*, string *AlgodToken*, long? *AssetID*, bool *JsonOrString* = true)

Get

<https://developer.algorand.org/docs/reference/rest-apis/indexer/#get-v2assetsasset-id>

Parameters

<i>AlgodURLEndpointIndexer</i>	URL/Endpoint Algod Indexer
<i>AlgodToken</i>	API Key token
<i>AssetID</i>	Algorand Asset ID
<i>JsonOrString</i>	Booleand to return Json (True, default) Or String (False)

Returns

Complete JSON response or single string Index

string AlgorandManager.GetHealth (string *AlgodURLEndpointIndexer*, string *AlgodToken*)

Get

<https://developer.algorand.org/docs/reference/rest-apis/indexer/#get-health>

Parameters

<i>AlgodURLEndpointIndexer</i>	URL/Endpoint Algod Indexer
<i>AlgodToken</i>	API Key token

Returns

Message from Aldgorand Indexer

string AlgorandManager.GetMnemonicPassphrase ()

Get Actual Mnemonic Passphrase initialized in **AlgorandManager**

Returns

Algorand Account Mnemonic Passphrase

string AlgorandManager.GetPlayerName ()

Get Actual Player Name

Returns

Player Name

long? AlgorandManager.GetWalletAmount (string *AlgodURLEndpoint*, string *AlgodToken*, string *AccountAddress*)

Get Wallet Amount in MicroAlgos

Parameters

<i>AlgodURLEndpoint</i>	URL/Endpoint Algod
<i>AlgodToken</i>	API Key token
<i>AccountAddress</i>	Algorand Address

Returns

MicroAlgos of Algorand Account

string AlgorandManager.LoadAccountFromPassphrase (string *Passphrase*)

Load Algorand Account from Mnemonic Passphrase

Parameters

<i>Passphrase</i>	
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Returns

Algorand Account Address

string AlgorandManager.LoadAccountFromPlayerPrefs ()

Load Account from PlayPrefs and use in Algorand Manager instance

Returns

Algorand Account Address saved in PlayPrefs

string AlgorandManager.LoadAccountFromPlayerPrefs (string Password)

Load Account from PlayPrefs and use in Algorand Manager instance decrypted with Password by User

Parameters

<i>Password</i>	Password passed from UI by User
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Returns

Algorand Account Address saved in PlayPrefs

string AlgorandManager.MakePaymentTransaction (string AlgodURLEndpoint, string AlgodToken, string ToAccountAddress, double AlgoAmount, string Note)

Create and send a payment Algorand Transaction

Parameters

<i>AlgodURLEndpoint</i>	URL/Endpoint Algod
<i>AlgodToken</i>	API Key token
<i>ToAccountAddress</i>	Algorand Address Received Algos
<i>AlgoAmount</i>	Amount Algo to send
<i>Note</i>	Note to insert in transaction max 1000 Bytes

Returns

TxID: Transaction ID

string AlgorandManager.MakeReKeyTransaction (string AlgodURLEndpoint, string AlgodToken, string ToReKeyAccountAddress, string Note)

Rekey-to Transaction¶
<https://developer.algorand.org/docs/features/accounts/rekey/>

Parameters

<i>AlgodURLEndpoint</i>	URL/Endpoint Algod
<i>AlgodToken</i>	API Key token
<i>ToReKeyAccountAddress</i>	Algorand valid Address to rekey
<i>Note</i>	Rekey Transaction note

Returns

Transaction ID (TxID)

string AlgorandManager.ModifyAsset (string AlgodURLEndpoint, string AlgodToken, string AddressManager, string AddressFreeze, string AddressClawback, string AddressReserve, string AssetTxMessage, long? AssetID)

Modify Asset
<https://developer.algorand.org/docs/features/asa/#modifying-an-asset>

Parameters

<i>AlgodURLEndpoint</i>	URL/Endpoint Algod
<i>AlgodToken</i>	API Key token
<i>AddressManager</i>	Modified Algorand Manager Address
<i>AddressFreeze</i>	Modified Algorand Freeze Address
<i>AddressClawback</i>	Modified Algorand Clawback Address
<i>AddressReserve</i>	Modified Algorand Reserve Address
<i>AssetTxMessage</i>	Message to insert in creation transaction. Max size is 1000 bytes.
<i>AssetID</i>	AssetID on which to make changes

Returns

Transaction ID (TxID)

string AlgorandManager.OptinAsset (string *AlgodURLEndpoint*, string *AlgodToken*, long? *AssetID*, string *Note* = "")

Opt-in Asset
<https://developer.algorand.org/docs/features/asa/#receiving-an-asset>

Parameters

<i>AlgodURLEndpoint</i>	URL/Endpoint Algod
<i>AlgodToken</i>	API Key token
<i>AssetID</i>	Asset ID to Opt-in
<i>Note</i>	Opt-In Transaction Note

Returns

Transaction ID (TxID)

string AlgorandManager.RevokeAsset (string *AlgodURLEndpoint*, string *AlgodToken*, string *AddressRevoke*, ulong *AssetAmount*, long? *AssetID*, string *Note* = "")

Revoke Asset
<https://developer.algorand.org/docs/features/asa/#revoking-an-asset>

Parameters

<i>AlgodURLEndpoint</i>	URL/Endpoint Algod
<i>AlgodToken</i>	API Key token
<i>AddressRevoke</i>	Algorand Address to revoke target
<i>AssetAmount</i>	Amount ASA to revoke
<i>AssetID</i>	Asset ID to transfer
<i>Note</i>	Trnasfert Transaction Note

Returns

Transaction ID (TxID)

Boolean AlgorandManager.SaveAccountInPlayerPrefs (string *Passphrase*)

Save Algorand Account in encrypted PlayerPrefs

Parameters

<i>Passphrase</i>	Mnemonic Algorand Account
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Returns

True if saved

Boolean AlgorandManager.SaveAccountInPlayerPrefs (string *Passphrase*, string *Password*)

Save Algorand Account in encrypted PlayerPrefs crypted with Password by User

Parameters

<i>Passphrase</i>	Mnemonic Algorand Account
<i>Password</i>	Password passed from UI by User

Returns

True if saved

string AlgorandManager.SearchTransactions (string *AlgodURLEndpointIndexer*, string *AlgodToken*, string *AlgorandAccount*)

Get

<https://developer.algorand.org/docs/reference/rest-apis/indexer/#get-v2accountsaccount-idtransactions>

Parameters

<i>AlgodURLEndpointIndexer</i>	URL/Endpoint Algod Indexer
<i>AlgodToken</i>	API Key token
<i>AlgorandAccount</i>	

Returns

Structured result in JSON format

string AlgorandManager.Version ()

Get AlgorandSDK Version

Returns

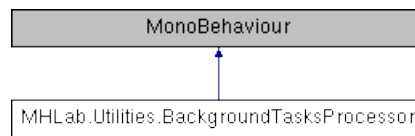
AlgorandDSK Version

The documentation for this class was generated from the following file:

C:/Users/enric/Desktop/UnityAlgorandSDK/UnityAlgorandSDK/Assets/AlgorandUnitySDK/Scripts/AlgorandManager.cs

MHLab.Utilities.BackgroundTasksProcessor Class Reference

Inheritance diagram for MHLab.Utilities.BackgroundTasksProcessor:



Public Member Functions

void **Process** (Func< object > task, Action< object > onComplete)

Public Attributes

int **FrequencyInHz** = 10

Properties

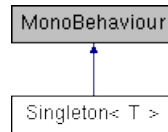
bool **IsReady** [get]

The documentation for this class was generated from the following file:

C:/Users/enric/Desktop/UnityAlgorandSDK/UnityAlgorandSDK/Assets/AlgorandUnitySDK/
Scripts/BackgroundTasksProcessor.cs

Singleton< T > Class Template Reference

Inheritance diagram for Singleton< T >:



Protected Member Functions

virtual void **Awake** ()

Use this for initialization.

Properties

static T **Instance** [get]

Gets the instance.

Member Function Documentation

virtual void Singleton< T >.Awake () [protected], [virtual]

Use this for initialization.

Property Documentation

T Singleton< T >.Instance [static], [get]

Gets the instance.

The instance.

The documentation for this class was generated from the following file:

C:/Users/enric/Desktop/UnityAlgorandSDK/UnityAlgorandSDK/Assets/AlgorandUnitySDK/
Scripts/Singleton.cs

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