

# Share Serialization Module - tKey iOS SDK

The ShareSerializationModule is a Swift module that provides functionality for serializing and deserializing threshold key shares.

To use the ShareSerializationModule in your Swift project, you will need to import the module as follows:

import tkey\_pkg ShareSerializationModule is a class that provides the following methods:

Function	Description	Arguments	Async return
serialize_share	Serialize share	threshold_key: ThresholdKey, share: String, format: String?	No String
deserialize_share	Deserialize share	threshold_key: ThresholdKey, share: String, format: String?	No String

## serialize\_share()

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serialize\_share(threshold\_key: ThresholdKey, share: String, format: String?) throws -> String

This method serializes a threshold key share and returns it as a string.

### Parameters

Parameters	Type	Description
threshold_key	ThresholdKey	A ThresholdKey object that represents the threshold key to which the share belongs.
share	String	A string that represents the share to be serialized.
format	String?	An optional string that represents the serialization format. If it is not specified, the default format will be used.

Returns

- A string that represents the serialized share.

Throws

- RuntimeError: If the serialization operation fails, a RuntimeError will be thrown.

## deserialize\_share()

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deserialize\_share(threshold\_key: ThresholdKey, share: String, format: String?) throws -> String

This method deserializes a threshold key share and returns it as a string.

### Parameters

Parameters	Type	Description
threshold_key	ThresholdKey	A ThresholdKey object that represents the threshold key to which the share belongs.
share	String	A string that represents the share to be deserialized.
format	String?	An optional string that represents the serialization format. If it is not specified, the default format will be used.

Returns

- A string that represents the deserialized share.

Throws

- RuntimeError: If the deserialization operation fails, a RuntimeError will be thrown.[Edit this page](#) [Previous Seed Phrase](#) [Next Share Transfer](#)