`swpt` URI scheme for Swaptacular

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Overview

This document specifies a new `swpt` URI scheme.

Swaptacular uses the `swpt` URI scheme to refer either to a concrete Swaptacular debtor (currency), or to a concrete account with a given debtor (currency). For example:

- `swpt:1234` refers to the Swaptacular debtor with debtor ID 1234.
- `swpt:1234/example-account` refers to the account "example-account" with debtor 1234.

Note: The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119.

References to Swaptacular debtors

The general form is `swpt:<debtor-id-2c>`, where `<debtor-id-2c>` is an integer (Base-10) between 0 and 18446744073709551615 (an unsigned 64-bits integer). For negative debtor IDs `<debtor-id-2c>` MUST be the debtor ID's two's complement. For example, the URI for the currency with debtor ID 0 is `swpt:0`, and the URI for the currency with debtor ID -1 is `swpt:18446744073709551615`.

References to Swaptacular accounts

The general form is `swpt:<debtor-id-2c>/<account-id-enc>`. Here, the meaning of `<debtor-id-2c>` is the same as before, and the `<account-id-enc>` string encodes the account identifier for the account, defined by the Swaptacular Messaging Protocol.

The `<account-id-enc>` string uses a very simple encoding:

- If the first symbol in the string **is not "!"**, then the string contains the account identifier. In this case, the account identifier MUST contain only

a limited set of symbols: ASCII letters, numbers, underscore, equal sign, minus sign (regular expression: `^[A-Za-z0-9_=-]*$`).

- If the first symbol in the string **is `"!"`**, then the rest of the string contains the account identifier, Base64URL encoded.

Important note: When the account identifier contains only a limited set of symbols (regular expression: `^[A-Za-z0-9_=-]*$`), the `<account-id-enc>` string MUST be equal to the account identifier, and Base64URL encoding MUST NOT be used. This guarantees that every Swaptacular account has a unique URI.