EiffelRSS

FETCH: Developer Guide

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Abstract

FETCH is a class which has features that can fetch data from a source address to a local STRING using various services.

 ${\tt FETCH}\ provides\ a\ simple\ interface\ for\ the\ {\tt DATA_RESOURCE}\ class\ in\ Eiffel Net.$

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Chapter 1

Introduction

1.1 Overview

FETCH is a class which has features that can fetch data from a source address to a local STRING using various services.

FETCH provides a simple interface for the DATA_RESOURCE class in EiffelNet.

A valid source address has the following format: service://address.

Supported services are: file, http, ftp.

See figure 1.1 for an overview of the class.

```
### FETCH

+data: STRING
+source_address: STRING
+error: INTEGER
+None, Invalid_address, Transfer_faild: INTEGER unique
+make()
+make_source(an_address:STRING)
+set_address(an_address:STRING)
+fetch()
```

Figure 1.1: UML diagram of FETCH

1.2 Usage

class USAGE EXAMPLE

```
create
 make
feature - Initialization
 make is
      -- Creation procedure.
    local
      fetch: FETCH
      address: STRING
      create fetch.make
      io.put_string ("Please enter an address to fetch: \searrow
      ⊸%N'' )
      io.read_line
      address := io.last_string.twin
      fetch.set_address (address)
      fetch.fetch
      io.put_new_line
      if (fetch.error = fetch.Invalid_address) then
        io.put_string ("Error: Invalid address")
      elseif (fetch.error = fetch.Transfer_failed) then
        io.put_string ("Error: Transfer failed")
        io.put_string (fetch.data)
      end
      io.put_new_line
  end
end — class USAGE_EXAMPLE
```

Chapter 2

Features

2.1 Initialization

2.1.1 make

```
make ()
— Create the object without a source address
```

2.1.2 make_source

```
make_source (an_address: STRING) is
-- Create the object with a predefined source
```

2.2 Access

2.2.1 data

```
data: STRING
— The data fetched
```

This can be void if there was an error.

2.2.2 source_address

```
source_address: STRING
— The source address
```

This can be void.

2.2.3 error

```
error: INTEGER
— An error number
```

error can be one of the following constants: None, Invalid_address, Transfer_failed.

None means that there was no error and data is avaiable. Invalid_address means that the given source address was either empty or not valid. If the error is Transfer_failed, there was a problem when trying to load the data, i.e. there was no connection to the internet.

2.3 Basic Operations

2.3.1 set_address

```
set_address (an_address: STRING)

-- Sets the address to an_address
```

This sets the source address to an_address. After calling this feature, error can be Invalid_address.

2.3.2 fetch

```
fetch
— Try to fetch the data from source_address
```

If error is not Invalid_address, fetch tries to open it and load the data. If there is a problem while loading the data, error is set to Transfer_failed.