
SpiNNStorageHandlers Documentation

Aug 14, 2020

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These pages document the python code for the [SpiNNStorageHandlers](#) module which is part of the [SpiNNaker](#) Project. This code depends on [SpiNNUtils](#). ([Combined_documentation](#)).

Contents:

1.1 spinn_storage_handlers package

1.1.1 Subpackages

1.1.1.1 spinn_storage_handlers.abstract_classes package

Module contents

class spinn_storage_handlers.abstract_classes.**AbstractContextManager**

Bases: object

Closeable class that supports being used as a simple context manager.

close()

How to actually close the underlying resources.

class spinn_storage_handlers.abstract_classes.**AbstractDataReader**

Bases: object

Abstract reader used to read data from somewhere.

read (*n_bytes=None*)

Read some bytes of data from the underlying storage. Will block until some bytes are available, but might not return the full *n_bytes*. The size of the returned array indicates how many bytes were read.

Parameters *n_bytes* (*int*) – The number of bytes to read; if unspecified, read all remaining bytes

Returns The data that was read

Return type bytearray

Raises **IOError** – If an error occurs reading from the underlying storage

tell()

Returns the position of the file cursor.

Returns Position of the file cursor

Return type int

class spinn_storage_handlers.abstract_classes.**AbstractDataWriter**

Bases: object

Abstract writer used to write data somewhere.

write(data)

Write some bytes of data to the underlying storage. Does not return until all the bytes have been written.

Parameters **data** (*bytearray or bytes*) – The data to write

Returns Nothing is returned

Return type None

Raises **IOError** – If an error occurs writing to the underlying storage

1.1.2 Submodules

1.1.3 spinn_storage_handlers.exceptions module

exception spinn_storage_handlers.exceptions.**DataReadException**

Bases: exceptions.Exception

An exception that indicates that there was an error reading from the underlying medium

exception spinn_storage_handlers.exceptions.**DataWriteException**

Bases: exceptions.Exception

An exception that indicates that there was an error writing to the underlying medium

1.1.4 Module contents

class spinn_storage_handlers.**FileDataReader** (*filename*)

Bases: spinn_storage_handlers.abstract_classes.abstract_data_reader.
AbstractDataReader, spinn_storage_handlers.abstract_classes.
abstract_context_manager.AbstractContextManager

A reader that can read data from a file.

Parameters **filename** (*str*) – The file to read

Raises **DataReadException** – If the file cannot found or opened for reading

close()

Closes the file.

Return type None

Raises **DataReadException** – If the file cannot be closed

read(n_bytes=None)

Read some bytes of data from the underlying storage. Will block until some bytes are available, but might not return the full *n_bytes*. The size of the returned array indicates how many bytes were read.

Parameters `n_bytes` (*int*) – The number of bytes to read; if unspecified, read all remaining bytes

Returns The data that was read

Return type bytearray

Raises `IOError` – If an error occurs reading from the underlying storage

readinto (*data*)

Read some bytes of data from the underlying storage into a predefined array. Will block until some bytes are available, but may not fill the array completely.

Parameters `data` (*bytearray*) – The place where the data is to be stored

Returns The number of bytes stored in data

Return type int

Raises `IOError` – If an error occurs reading from the underlying storage

tell ()

Returns the position of the file cursor.

Returns Position of the file cursor

Return type int

class `spinn_storage_handlers.FileDataWriter` (*filename*)

Bases: `spinn_storage_handlers.abstract_classes.abstract_data_writer.AbstractDataWriter`, `spinn_storage_handlers.abstract_classes.abstract_context_manager.AbstractContextManager`

Parameters `filename` (*str*) – The file to write to

Raises `DataWriteException` – If the file cannot found or opened for writing

close ()

Closes the file.

Return type None

Raises `DataWriteException` – If the file cannot be closed

filename

The name of the file that is being written to.

flush ()

Ensure that any buffers we have are written to disk.

tell ()

Returns the position of the file cursor.

Returns Position of the file cursor

Return type int

write (*data*)

Write some bytes of data to the underlying storage. Does not return until all the bytes have been written.

Parameters `data` (*bytearray or bytes*) – The data to write

Returns Nothing is returned

Return type None

Raises `IOError` – If an error occurs writing to the underlying storage

CHAPTER 2

Indices and tables

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