fast_io

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Chapter 1

Hierarchical Index

1.1 Class Hierarchy

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

fast_io::basic_buf_handler< CharT, Allocator, buffer_size >
fast_io::basic_buf_handler< typename Ihandler::char_type >
fast_io::basic_buf_handler< typename Ohandler::char_type >
fast_io::basic_dynamic_input_stream < T >
fast_io::basic_dynamic_io_stream < T >
fast_io::basic_dynamic_output_stream< T >
fast_io::basic_dynamic_standard_input_stream< T >
$fast_io::basic_dynamic_standard_output_stream < T > \ \dots \$
fast_io::basic_ibuf < Ihandler, Buf >
$fast_io::basic_ibuf < fast_io::details::fake_basic_ihandler < native_handle_type, \ Buf >> \dots \dots \dots 9$
fast_io::basic_ibuf< fast_io::posix_io_handle >
fast_io::basic_iobuf< io_handler, Buf >
$fast_io::basic_iomutex < T > \dots \dots$
fast_io::basic_istring_view< T >
fast_io::basic_obuf< Ohandler, Buf >
fast_io::basic_obuf< fast_io::ierasure >
fast_io::basic_obuf< io_handler, Buf >
fast_io::details::fake_basic_ihandler< io_handler, Buf >
$fast_io::basic_ostring < T > \dots \dots$
$fast_io::basic_sync < output, ostr > \dots 12$
fast_io::basic_fsync< output, ostr >
fast_io::c_style_io_handle
fast_io::c_style_file
fast io::details::char view t <t></t>
fast_io::details::fixed < T >
fast_io::details::floating_point_default< T >
$fast_io::open::interface_t < om > \dots $
fast_io::open::mode
fast_io::native_interface_t
Ohandler
fast_io::char_flush< Ohandler, flush_character >
fast_io::immediately_flush< Ohandler >
fast_io::immediately_flush< decltype(out)>
fast_io::details::posix_file_openmode< om >

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fast_io::posix_io_handle
fast_io::posix_file
fast_io::posix_pipe
runtime_error
fast_io::win32_error
fast_io::details::scientific< T >
$fast_io::seek_type_t < T > \dots \dots$
$fast_io::details::setw_fill_t < T, char_type > \dots $
fast_io::details::setw_t< T >
$fast_io::details::signed_view_t < T > \dots \dots$
fast_io::system_io_collections
$fast_io::text_view < T > \dots \dots$
fast_io::details::text_view_interal_variable < typename >
fast_io::details::text_view_interal_variable < T >
fast_io::tie< T, out >
fast_io::tie< fast_io::basic_ibuf< fast_io::posix_io_handle >, decltype(out)>
fast_io::tie< fast_io::immediately_flush< decltype(out)>, decltype(out)>
$fast_io::details::unsigned_view_t < T > \dots \dots$
fast_io::win32_file
fast_io::details::win32_file_openmode < om >
fast_io::details::win32_open_mode
Ihandler
fast_io::nobuf_reader< lhandler >
io
fast_io::ierasure < io >
fast_io::oerasure < io >
fast_io::seekerasure < io >
T
fast_io::basic_file_wrapper< T, interface_mode >
fast io::basic wrapper< T. interface mode >

Chapter 2

Class Index

2.1 Class List

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

fast_io::basic_buf_handler< CharT, Allocator, buffer_size >
fast_io::basic_dynamic_input_stream < T >
fast_io::basic_dynamic_io_stream < T >
fast_io::basic_dynamic_output_stream < T >
$fast_io::basic_dynamic_standard_input_stream < T > \dots $
fast_io::basic_dynamic_standard_output_stream< T >
fast_io::basic_file_wrapper< T, interface_mode >
fast_io::basic_fsync< output, ostr >
fast_io::basic_ibuf< Ihandler, Buf >
fast_io::basic_iobuf< io_handler, Buf >
$fast_io::basic_iomutex < T > \dots \dots$
fast_io::basic_istring_view< T >
fast_io::basic_obuf< Ohandler, Buf >
$fast_io::basic_ostring < T > \dots 12$
fast_io::basic_sync< output, ostr >
fast_io::basic_wrapper< T, interface_mode >
fast_io::c_style_file
fast_io::c_style_io_handle
fast_io::char_flush< Ohandler, flush_character >
$fast_io::details::char_view_t < T > \dots \dots$
$fast_io::details::fake_basic_ihandler < io_handler, \ Buf > \dots $
$fast_io::details::fixed < T > \dots \dots$
$fast_io::details::floating_point_default < T > \dots \dots$
fast_io::ierasure < io >
fast_io::immediately_flush< Ohandler >
fast_io::open::interface_t< om >
fast_io::open::mode
fast_io::native_interface_t
fast_io::nobuf_reader< lhandler >
fast_io::oerasure < io >
fast_io::posix_file
$fast_io::details::posix_file_openmode < om > \dots $
fast_io::posix_io_handle
fast_io::posix_pipe
fast_io::details::scientific< T >

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fast_io::details::setw_t < T >	23
fast_io::details::signed_view_t < T >	24
fast_io::system_io_collections	24
fast_io::text_view< T >	24
fast_io::details::text_view_interal_variable< typename >	25
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fast_io::tie< T, out >	25
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Chapter 3

Class Documentation

3.1 fast_io::basic_buf_handler< CharT, Allocator, buffer_size > Class Template Reference

Public Member Functions

- basic_buf_handler & operator= (basic_buf_handler const &)=delete
- basic_buf_handler (basic_buf_handler const &)=delete
- basic_buf_handler (basic_buf_handler &&m) noexcept
- basic_buf_handler & operator= (basic_buf_handler &&m) noexcept
- Allocator get_allocator () const

Static Public Member Functions

• static constexpr std::size_t size ()

Public Attributes

- CharT * beg
- CharT * curr
- CharT * end

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

• D:/hg/fast_io/include/impl/iobuf.h

3.2 fast_io::basic_dynamic_input_stream< T > Class Template Reference

Public Types

• using char_type = T

Public Member Functions

template<input_stream P, typename ... Args>
 basic_dynamic_input_stream (std::in_place_type_t< P >, Args &&...args)

template<typename Contiguous_iterator >
 Contiguous_iterator read (Contiguous_iterator b, Contiguous_iterator e)

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

· D:/hg/fast io/include/impl/dynamic.h

3.3 fast io::basic dynamic io stream< T > Class Template Reference

Public Types

using char_type = T

Public Member Functions

template<input_stream P, typename ... Args>
 basic_dynamic_io_stream (std::in_place_type_t< P >, Args &&...args)

- template<typename Contiguous_iterator > void write (Contiguous_iterator b, Contiguous_iterator e)
- · void flush ()
- template<typename Contiguous_iterator >
 Contiguous_iterator read (Contiguous_iterator b, Contiguous_iterator e)

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

• D:/hg/fast_io/include/impl/dynamic.h

3.4 fast_io::basic_dynamic_output_stream< T > Class Template Reference

Public Types

• using char_type = T

Public Member Functions

template<output_stream P, typename ... Args>
 basic_dynamic_output_stream (std::in_place_type_t< P >, Args &&...args)

template<typename Contiguous_iterator > void write (Contiguous_iterator b, Contiguous_iterator e)

· void flush ()

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

• D:/hg/fast_io/include/impl/dynamic.h

3.5 fast_io::basic_dynamic_standard_input_stream< T > Class Template Reference

Public Types

• using char_type = T

Public Member Functions

- template<standard_input_stream P, typename ... Args>
 basic dynamic standard input stream (std::in place type t< P>, Args &&...args)
- template<typename Contiguous_iterator >
 Contiguous_iterator read (Contiguous_iterator b, Contiguous_iterator e)
- · char_type get ()
- · auto try_get ()

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

· D:/hg/fast io/include/impl/dynamic.h

3.6 fast_io::basic_dynamic_standard_output_stream< T > Class Template Reference

Public Types

• using char_type = T

Public Member Functions

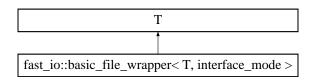
- template<standard_output_stream P, typename ... Args>
 basic_dynamic_standard_output_stream (std::in_place_type_t< P >, Args &&...args)
- template<typename Contiguous_iterator > void **write** (Contiguous_iterator b, Contiguous_iterator e)
- · void flush ()
- void put (char_type ch)

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

• D:/hg/fast_io/include/impl/dynamic.h

3.7 fast_io::basic_file_wrapper< T, interface_mode > Class Template Reference

Inheritance diagram for fast_io::basic_file_wrapper< T, interface_mode >:



Public Types

- using **char_type** = typename T::char_type
- using **native handle type** = typename T::native handle type

Public Member Functions

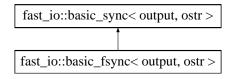
- template<typename ... Args>
 constexpr basic_file_wrapper (native_interface_t, Args &&...args)
- template<std::size_t om>
 constexpr basic_file_wrapper (std::string_view file, open::interface_t< om >)
- constexpr basic_file_wrapper (std::string_view file)
- constexpr basic file wrapper (std::string view file, open::mode const &m)
- constexpr basic_file_wrapper (std::string_view file, std::string_view mode)

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

· D:/hg/fast io/include/impl/wrapper.h

3.8 fast_io::basic_fsync< output, ostr > Class Template Reference

Inheritance diagram for fast_io::basic_fsync< output, ostr >:



Public Types

- using native_handle_type = output
- using **char_type** = typename native_handle_type::char_type
- using buffer_type = ostr

Public Member Functions

- template<typename... Args>
 constexpr basic fsync (Args &&...args)
- basic_fsync (basic_fsync const &)=delete
- basic_fsync & operator= (basic_fsync const &)=delete
- basic_fsync (basic_fsync &&other) noexcept
- basic_fsync & operator= (basic_fsync &&other) noexcept

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

· D:/hg/fast io/include/impl/sync.h

3.9 fast_io::basic_ibuf< Ihandler, Buf > Class Template Reference

Public Types

- using native handle type = Ihandler
- using **char_type** = typename native_handle_type::char_type

Public Member Functions

- template<typename... Args>basic_ibuf (Args &&... args)
- template<typename Contiguous_Iterator >
 auto read (Contiguous_Iterator begin, Contiguous_Iterator end)
- std::pair< char_type, bool > try_get ()
- · char_type get ()
- · auto & native_handle ()
- template<typename... Args>
 void seek (Args &&...args) requires(random_access_stream< lhandler >)

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

· D:/hg/fast_io/include/impl/iobuf.h

3.10 fast io::basic iobuf< io handler, Buf > Class Template Reference

Public Types

- using native_handle_type = io_handler
- using **char_type** = typename native_handle_type::char_type

Public Member Functions

```
    template<typename ... Args>
    basic_iobuf (Args &&...args)
```

- auto & native_handle ()
- · void flush ()
- void put (char_type ch)
- template<typename ... Args> void write (Args &&...args)
- template<typename ... Args> auto read (Args &&...args)
- auto get ()
- · auto try_get ()
- template<typename... Args>
 void seek (Args &&...args) requires(random_access_stream< io_handler >)

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

· D:/hg/fast io/include/impl/iobuf.h

3.11 fast_io::basic_iomutex< T > Class Template Reference

Public Types

- using native_handle_type = T
- using **char_type** = typename native_handle_type::char_type

Public Member Functions

- template<typename ... Args>basic_iomutex (Args &&...args)
- native_handle_type & native_handle ()
- std::mutex & mutex ()
- template<typename ... Args>

void ${\it write}$ (Args &&...args) requires output_stream< native_handle_type >

- void put (char_type ch) requires standard_output_stream< native_handle_type >
- void flush () requires output_stream< native_handle_type >
- template<typename Contiguous iterator >

Contiguous_iterator **read** (Contiguous_iterator begin, Contiguous_iterator end) requires input_stream< native_handle_type >

- auto get () requires standard_input_stream< native_handle_type >
- auto try_get () requires standard_input_stream< native_handle_type >
- template<typename... Args>
 void seek (Args &&...args) requires random access stream< native handle type >

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

• D:/hg/fast_io/include/impl/iomutex.h

3.12 fast io::basic istring view< T > Class Template Reference

Public Types

- using value type = T
- using char_type = std::make_unsigned_t< typename T::value_type >

Public Member Functions

- template<typename ... Args>
 constexpr basic_istring_view (Args &&...args)
- constexpr auto & str ()
- template<typename contiguous_iterator >
 constexpr contiguous_iterator read (contiguous_iterator begin, contiguous_iterator end)
- constexpr char_type get ()
- constexpr std::pair< char_type, bool > try_get ()

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

· D:/hg/fast_io/include/impl/stringbuf.h

3.13 fast_io::basic_obuf< Ohandler, Buf > Class Template Reference

Public Types

- using native_handle_type = Ohandler
- using **char_type** = typename native_handle_type::char_type

Public Member Functions

- template<typename... Args>basic_obuf (Args &&... args)
- void flush ()
- basic_obuf & operator= (basic_obuf const &)=delete
- basic_obuf (basic_obuf const &)=delete
- basic_obuf (basic_obuf &&bmv) noexcept=default
- basic obuf & operator= (basic obuf &&b) noexcept
- template<typename Contiguous_Iterator >
 void write (Contiguous_Iterator cbegin, Contiguous_Iterator cend)
- void put (char_type ch)
- auto & native_handle ()
- template<typename... Args>
 void seek (Args &&...args) requires(random_access_stream< Ohandler >)

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

D:/hg/fast_io/include/impl/iobuf.h

3.14 fast_io::basic_ostring< T > Class Template Reference

Public Types

- using value_type = T
- using char_type = typename T::value_type

Public Member Functions

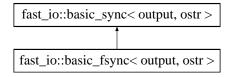
- template<typename... Args>
 constexpr basic_ostring (Args &&...args)
- constexpr auto & str ()
- template<typename contiguous_iterator >
 constexpr void write (contiguous_iterator cbegin, contiguous_iterator cend)
- constexpr void **put** (char_type ch)
- · constexpr void flush () const
- · constexpr void clear ()
- · constexpr auto empty () const

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

• D:/hg/fast_io/include/impl/stringbuf.h

3.15 fast_io::basic_sync< output, ostr > Class Template Reference

Inheritance diagram for fast_io::basic_sync< output, ostr >:



Public Types

- using native_handle_type = output
- using **char_type** = typename native_handle_type::char_type
- using **buffer_type** = ostr

Public Member Functions

- · auto & buffer ()
- auto & native_handle ()
- template<typename ... Args>basic_sync (Args &&...args)
- basic_sylle (Algs &&...alg.
- · void flush ()
- template<typename ... Args>
 void write (Args &&...args)
- void put (char_type ch)
- $\bullet \quad template {<} typename... \; Args {>} \\$

void **seek** (Args &&...args) requires random_access_stream< native_handle_type >

template<typename Contiguous_iterator >
 Contiguous_iterator read (Contiguous_iterator begin, Contiguous_iterator end) requires input_stream
 native_handle_type >

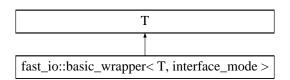
- auto get () requires standard_input_stream< native_handle_type >
- auto try_get () requires standard_input_stream< native_handle_type >

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

D:/hg/fast io/include/impl/sync.h

3.16 fast_io::basic_wrapper< T, interface_mode > Class Template Reference

Inheritance diagram for fast_io::basic_wrapper< T, interface_mode >:



Public Types

- using **char_type** = typename T::char_type
- using **native_handle_type** = typename T::native_handle_type

Public Member Functions

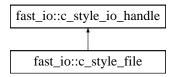
- template<std::size_t om>
 constexpr basic_wrapper (open::interface_t< om >)
- constexpr basic_wrapper (open::mode const &m)
- constexpr basic_wrapper (std::string_view mode)

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

• D:/hg/fast_io/include/impl/wrapper.h

3.17 fast io::c style file Class Reference

Inheritance diagram for fast_io::c_style_file:



Public Types

- using **char_type** = c_style_io_handle::char_type
- using **native_handle_type** = c_style_io_handle::native_handle_type

Public Member Functions

- template<typename ... Args>
 - c_style_file (native_interface_t, Args &&...args)
- c_style_file (std::string_view name, std::string_view mode)
- c_style_file (std::string_view file, open::mode const &m)
- template<std::size_t om>
 - c_style_file (std::string_view name, open::interface_t< om >)
- c_style_file (c_style_file const &)=delete
- c_style_file & operator= (c_style_file const &)=delete
- c_style_file (c_style_file &&b) noexcept
- c_style_file & operator= (c_style_file &&b) noexcept

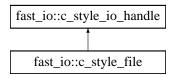
Additional Inherited Members

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

• D:/hg/fast_io/include/impl/handlers/c_style.h

3.18 fast_io::c_style_io_handle Class Reference

Inheritance diagram for fast_io::c_style_io_handle:



Public Types

- using char_type = char
- using native_handle_type = std::FILE *

Public Member Functions

- c_style_io_handle (std::FILE *fpp)
- · native_handle_type native_handle () const
- · bool eof () const
- template<typename ContiguousIterator >

ContiguousIterator read (ContiguousIterator begin, ContiguousIterator end)

template < typename ContiguousIterator > void write (ContiguousIterator begin, ContiguousIterator end)

- std::pair< char_type, bool > try_get ()
- char type get ()
- void put (char type ch)
- · void flush ()
- template<typename T >
 void seek (seek type t< T >, Integral i, seekdir s=seekdir::beg)
- void seek (Integral i, seekdir s=seekdir::beg)

Protected Member Functions

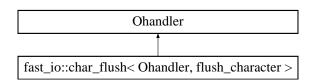
• auto & protected_native_handle ()

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

• D:/hg/fast_io/include/impl/handlers/c_style.h

3.19 fast_io::char_flush< Ohandler, flush_character > Class Template Reference

Inheritance diagram for fast_io::char_flush< Ohandler, flush_character >:



Public Types

using char_type = typename Ohandler::char_type

Public Member Functions

- template < typename... Args >
 constexpr char_flush (Args &&... args)
- template<typename Contiguous_Iterator > constexpr void **write** (Contiguous_Iterator b, Contiguous_Iterator e)
- constexpr void put (char_type ch) requires standard_output_stream
 Ohandler >
- constexpr void **put** (char_type ch)
- · constexpr auto & native handle ()

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

D:/hg/fast_io/include/impl/flush.h

3.20 fast_io::details::char_view_t < T > Struct Template Reference

Public Attributes

• T & reference

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

• D:/hg/fast_io/include/impl/manip.h

3.21 fast_io::details::fake_basic_ihandler< io_handler, Buf > Struct Template Reference

Inheritance diagram for fast_io::details::fake_basic_ihandler< io_handler, Buf >:

```
fast_io::basic_obuf< io_handler, Buf >

fast_io::details::fake_basic_ihandler< io_handler, Buf >
```

Public Member Functions

- template<typename ... Args>
 fake_basic_ihandler (Args &&...args)
- template<typename ... Args> auto read (Args &&...args)

Additional Inherited Members

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

• D:/hg/fast_io/include/impl/iobuf.h

3.22 fast_io::details::fixed< T > Struct Template Reference

Public Attributes

- · T & reference
- std::size_t precision

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

D:/hg/fast_io/include/impl/manip.h

3.23 fast_io::details::floating_point_default< T > Struct Template Reference

Public Attributes

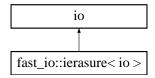
- T & reference
- · std::size_t precision

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

• D:/hg/fast_io/include/impl/manip.h

3.24 fast io::ierasure < io > Class Template Reference

Inheritance diagram for fast io::ierasure< io >:



Public Types

using char_type = typename io::char_type

Public Member Functions

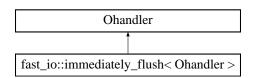
- template<typename ... Args> ierasure (Args &&...args)
- template<typename Contiguous_iterator > Contiguous_iterator read (Contiguous_iterator begin, Contiguous_iterator end)=delete
- auto **get** () requires standard_input_stream< io >=delete
- auto **try_get** () requires standard_input_stream< io >=delete

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

· D:/hg/fast io/include/impl/erasure.h

3.25 fast_io::immediately_flush< Ohandler > Class Template Reference

Inheritance diagram for fast_io::immediately_flush< Ohandler >:



Public Types

• using char_type = typename Ohandler::char_type

Public Member Functions

- template<typename... Args>
 constexpr immediately_flush (Args &&... args)
- template<typename Contiguous_Iterator >
 constexpr void write (Contiguous_Iterator cbegin, Contiguous_Iterator cend) requires output_stream
 Ohandler >
- constexpr void put (char_type ch) requires standard_output_stream< Ohandler >
- constexpr void put (char_type ch) requires output_stream< Ohandler >

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

• D:/hg/fast_io/include/impl/flush.h

3.26 fast_io::open::interface_t< om > Struct Template Reference

Static Public Attributes

- static constexpr fast_io::open::mode mode = {om}
- static constexpr auto **c_style** = fast_io::open::c_style(mode)

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

· D:/hg/fast_io/include/impl/mode.h

3.27 fast_io::open::mode Struct Reference

Public Member Functions

- constexpr operator std::size_t () const
- constexpr mode & operator = (mode const &b)
- constexpr mode (std::size_t val=0)

Public Attributes

std::size_t value

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

• D:/hg/fast_io/include/impl/mode.h

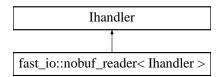
3.28 fast io::native interface t Struct Reference

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

• D:/hg/fast_io/include/impl/mode.h

3.29 fast_io::nobuf_reader< lhandler > Class Template Reference

Inheritance diagram for fast_io::nobuf_reader< Ihandler >:



Public Types

• using char_type = typename lhandler::char_type

Public Member Functions

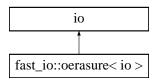
- char_type get () requires !standard_input_stream< Ihandler >
- std::pair< char_type, bool > try_get () requires !standard_input_stream< lhandler >

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

· D:/hg/fast io/include/impl/flush.h

3.30 fast_io::oerasure< io > Class Template Reference

Inheritance diagram for fast_io::oerasure< io >:



Public Types

• using **char_type** = typename io::char_type

Public Member Functions

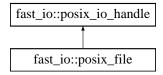
- template<typename ... Args>oerasure (Args &&...args)
- template<typename Contiguous_iterator >
 void write (Contiguous_iterator begin, Contiguous_iterator end)=delete
- auto **put** () requires standard_output_stream< io >=delete
- auto **flush** () requires standard_output_stream< io >=delete

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

• D:/hg/fast_io/include/impl/erasure.h

3.31 fast_io::posix_file Class Reference

Inheritance diagram for fast_io::posix_file:



Public Types

- using char_type = posix_io_handle::char_type
- using native_handle_type = posix_io_handle::native_handle_type

Public Member Functions

```
    template<typename ... Args>
        posix_file (native_interface_t, Args &&...args)
```

- template<std::size_t om>
 posix_file (std::string_view file, open::interface_t< om >)
- posix_file (std::string_view file, open::mode const &m)
- posix_file (std::string_view file, std::string_view mode)

Additional Inherited Members

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

D:/hg/fast_io/include/impl/handlers/posix.h

3.32 fast_io::details::posix_file_openmode< om > Struct Template Reference

Static Public Attributes

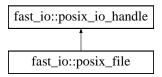
static constexpr int mode = calculate_posix_open_mode(om)

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

· D:/hg/fast io/include/impl/handlers/posix.h

3.33 fast io::posix io handle Class Reference

Inheritance diagram for fast io::posix io handle:



Public Types

- using char_type = char
- using native_handle_type = int

Public Member Functions

- native_handle_type native_handle () const
- posix_io_handle (int fdd)
- $\bullet \quad {\sf template}{<} {\sf typename \ Contiguous \ Iterator} >$

ContiguousIterator read (ContiguousIterator begin, ContiguousIterator end)

- $\bullet \quad {\sf template}{<} {\sf typename~Contiguous Iterator} >$
 - Contiguous Iterator write (Contiguous Iterator begin, Contiguous Iterator end)
- template<typename T >
 - void **seek** (seek_type_t < T >, Integral i, seekdir s=seekdir::beg)
- void seek (Integral i, seekdir s=seekdir::beg)
- · void flush ()
- posix_io_handle (posix_io_handle const &dp)
- posix_io_handle & operator= (posix_io_handle const &dp)
- posix_io_handle (posix_io_handle &&b) noexcept
- posix_io_handle & operator= (posix_io_handle &&b) noexcept

Protected Member Functions

void close_impl () noexcept

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

D:/hg/fast_io/include/impl/handlers/posix.h

3.34 fast io::posix pipe Class Reference

Public Types

- using char_type = char
- using native_handle_type = std::array< int, 2 >

Public Member Functions

- posix_pipe (posix_pipe &&other) noexcept
- posix_pipe & operator= (posix_pipe &&other) noexcept
- template<std::size_t om>

```
posix_pipe (open::interface_t< om >)
```

- posix_pipe (posix_pipe const &b)
- posix_pipe & operator= (posix_pipe const &m)
- auto & native_handle ()
- · void flush ()
- · void close_in()
- · void close_out ()
- template<typename ContiguousIterator >
 ContiguousIterator **read** (ContiguousIterator begin, ContiguousIterator end)
- template<typename ContiguousIterator >
 ContiguousIterator write (ContiguousIterator begin, ContiguousIterator end)

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

· D:/hg/fast io/include/impl/handlers/posix.h

3.35 fast io::details::scientific < T > Struct Template Reference

Public Attributes

- · T & reference
- std::size_t precision

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

• D:/hg/fast_io/include/impl/manip.h

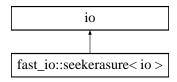
3.36 fast_io::seek_type_t < T > Struct Template Reference

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

• D:/hg/fast_io/include/impl/seek.h

3.37 fast_io::seekerasure < io > Class Template Reference

Inheritance diagram for fast_io::seekerasure < io >:



Public Types

• using char_type = typename io::char_type

Public Member Functions

- template<typename ... Args>seekerasure (Args &&...args)
- void seek (Integral, seekdir)=delete
- template<typename T >
 void seek (seek_type_t< T >, Integral, seekdir)=delete

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

• D:/hg/fast_io/include/impl/erasure.h

3.38 fast_io::details::setw_fill_t< T, char_type > Struct Template Reference

Public Attributes

- · std::size t width
- T & reference
- char_type ch

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

• D:/hg/fast_io/include/impl/manip.h

3.39 fast_io::details::setw_t < T > Struct Template Reference

Public Attributes

- std::size_t width
- T & reference

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

D:/hg/fast_io/include/impl/manip.h

3.40 fast io::details::signed view t < T > Struct Template Reference

Public Attributes

T & reference

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

• D:/hg/fast_io/include/impl/manip.h

3.41 fast io::system io collections Struct Reference

Public Attributes

- basic_obuf< system_ohandle > out
- tie < basic_ibuf < posix_io_handle >, decltype(out) > in
- tie< immediately_flush< decltype(out)>, decltype(out)> err

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

• D:/hg/fast_io/include/fast_io.h

3.42 fast_io::text_view< T > Class Template Reference

Public Types

- using **native** interface **t** = T
- using **char_type** = typename native_interface_t::char_type

Public Member Functions

- constexpr text_view (T &ibv)
- constexpr auto & native_handle ()
- constexpr char_type get () requires standard_input_stream< T >
- constexpr std::pair< char_type, bool > try_get () requires standard_input_stream< T >
- template<typename Contiguous_iterator >
 constexpr Contiguous_iterator read (Contiguous_iterator b, Contiguous_iterator e) requires standard_input
 _stream< T >
- constexpr void put (char_type ch) requires standard_output_stream< T >
- template<typename Contiguous_iterator >
 constexpr void write (Contiguous_iterator b, Contiguous_iterator e) requires standard_output_stream< T >
- constexpr void flush () requires standard_output_stream< T >

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

• D:/hg/fast_io/include/impl/text.h

3.43 fast_io::details::text_view_interal_variable< typename > Struct Template Reference

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

· D:/hg/fast io/include/impl/text.h

3.44 fast_io::details::text_view_interal_variable < T > Struct Template Reference

Public Attributes

- · bool state =false
- T::char_type internal_character = 0

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

• D:/hg/fast_io/include/impl/text.h

3.45 fast_io::tie< T, out > Class Template Reference

Public Types

- using native_interface_t = T
- using char_type = typename native_interface_t::char_type

Public Member Functions

- template<typename ... Args>
 constexpr tie (out &oo, Args &&...args)
- constexpr auto & to ()
- constexpr auto & native handle ()
- constexpr auto get () requires standard_input_stream< T >
- constexpr auto try_get () requires standard_input_stream< T >
- constexpr void put (char_type ch) requires standard_output_stream< T >
- constexpr void flush () requires output_stream< T >
- template<typename Contiguous_iterator >
 constexpr Contiguous_iterator read (Contiguous_iterator begin, Contiguous_iterator end) requires input_
 stream< T >
- template<typename Contiguous_iterator >
 constexpr void write (Contiguous_iterator begin, Contiguous_iterator end) requires output_stream< T >

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

• D:/hg/fast_io/include/impl/tie.h

3.46 fast_io::details::unsigned_view_t< T > Struct Template Reference

Public Attributes

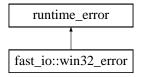
T & reference

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

· D:/hg/fast io/include/impl/manip.h

3.47 fast_io::win32_error Class Reference

Inheritance diagram for fast_io::win32_error:



Public Member Functions

win32_error (DWORD const &error=GetLastError())

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

• D:/hg/fast_io/include/impl/handlers/win32_error.h

3.48 fast_io::win32_file Class Reference

Public Types

- using char_type = char
- using native_handle_type = HANDLE

Public Member Functions

```
    template<typename ... Args>
        win32_file (fast_io::native_interface_t, Args &&...args)
    template<typename T >
        void seek (seek_type_t< T >, Integral i, seekdir s=seekdir::beg)
```

- void seek (Integral i, seekdir s=seekdir::beg)
- template<std::size t om>

```
win32 file (std::string view filename, open::interface t < om >)
```

- win32_file (std::string_view filename, open::mode const &m)
- win32_file (std::string_view file, std::string_view mode)
- win32 file (win32 file const &)=delete
- win32_file & operator= (win32_file const &)=delete
- win32 file (win32 file &&b) noexcept
- win32_file & operator= (win32_file &&b) noexcept
- native_handle_type native_handle () const
- template<typename Contiguous_iterator >
 Contiguous_iterator read (Contiguous_iterator begin, Contiguous_iterator end)
- template<typename Contiguous_iterator > void **write** (Contiguous_iterator cbegin, Contiguous_iterator cend)
- · void flush ()

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

• D:/hg/fast_io/include/impl/handlers/win32.h

3.49 fast_io::details::win32_file_openmode< om > Struct Template Reference

Static Public Attributes

• static constexpr win32_open_mode mode = calculate_win32_open_mode(om)

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

• D:/hg/fast_io/include/impl/handlers/win32.h

3.50 fast_io::details::win32_open_mode Struct Reference

Public Attributes

- DWORD dwDesiredAccess =0
- DWORD dwShareMode =FILE_SHARE_READ|FILE_SHARE_WRITE
- LPSECURITY ATTRIBUTES IpSecurityAttributes =nullptr
- DWORD dwCreationDisposition =0
- DWORD dwFlagsAndAttributes =FILE ATTRIBUTE NORMAL|FILE FLAG RANDOM ACCESS

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

• D:/hg/fast_io/include/impl/handlers/win32.h

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