

NamedItemRoutines

5.0

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Contents

1	Module Index	1
1.1	Modules	1
2	Namespace Index	3
2.1	Namespace List	3
3	Data Structure Index	5
3.1	Data Structures	5
4	File Index	7
4.1	File List	7
5	Module Documentation	9
5.1	Models	9
5.1.1	Detailed Description	9
5.2	Utils	10
5.2.1	Detailed Description	10
5.3	NamedItem	11
5.3.1	Detailed Description	11
5.3.2	Macro Definition Documentation	11
5.3.2.1	__has_include	11
5.3.2.2	MAX_NAME_ITEMS	12
5.3.2.3	PATH	12
5.3.3	Function Documentation	12
5.3.3.1	operator==() [1 / 2]	12
5.3.3.2	operator==() [2 / 2]	12

6	Namespace Documentation	13
6.1	jeod Namespace Reference	13
6.1.1	Detailed Description	13
7	Data Structure Documentation	15
7.1	jeod::NamedItem Class Reference	15
7.1.1	Detailed Description	17
7.1.2	Member Typedef Documentation	17
7.1.2.1	size_type	18
7.1.3	Constructor & Destructor Documentation	18
7.1.3.1	NamedItem() [1/3]	18
7.1.3.2	NamedItem() [2/3]	18
7.1.3.3	NamedItem() [3/3]	18
7.1.3.4	~NamedItem()	19
7.1.4	Member Function Documentation	19
7.1.4.1	c_str()	19
7.1.4.2	construct_name() [1/7]	19
7.1.4.3	construct_name() [2/7]	19
7.1.4.4	construct_name() [3/7]	20
7.1.4.5	construct_name() [4/7]	20
7.1.4.6	construct_name() [5/7]	21
7.1.4.7	construct_name() [6/7]	21
7.1.4.8	construct_name() [7/7]	22
7.1.4.9	construct_name_string() [1/2]	23
7.1.4.10	construct_name_string() [2/2]	23
7.1.4.11	demangle()	24
7.1.4.12	ends_with()	24
7.1.4.13	freeze_name()	25
7.1.4.14	get_is_frozen()	25
7.1.4.15	get_name()	25
7.1.4.16	operator=() [1/3]	26

7.1.4.17	<code>operator=()</code> [2/3]	26
7.1.4.18	<code>operator=()</code> [3/3]	26
7.1.4.19	<code>operator==()</code>	26
7.1.4.20	<code>set_name()</code> [1/2]	26
7.1.4.21	<code>set_name()</code> [2/2]	27
7.1.4.22	<code>size()</code>	27
7.1.4.23	<code>suffix()</code> [1/2]	28
7.1.4.24	<code>suffix()</code> [2/2]	28
7.1.4.25	<code>unfreeze_name()</code>	29
7.1.4.26	<code>va_construct_name()</code>	29
7.1.4.27	<code>validate_name()</code> [1/2]	29
7.1.4.28	<code>validate_name()</code> [2/2]	30
7.1.4.29	<code>vconstruct_name()</code>	30
7.1.4.30	<code>verify_unfrozen_name()</code>	31
7.1.5	Friends And Related Function Documentation	31
7.1.5.1	<code>init_attrjeod__NamedItem</code>	31
7.1.5.2	<code>InputProcessor</code>	31
7.1.6	Field Documentation	31
7.1.6.1	<code>is_frozen</code>	32
7.1.6.2	<code>name</code>	32
7.2	<code>jeod::NamedItemMessages</code> Class Reference	32
7.2.1	Detailed Description	33
7.2.2	Constructor & Destructor Documentation	33
7.2.2.1	<code>NamedItemMessages()</code> [1/2]	33
7.2.2.2	<code>NamedItemMessages()</code> [2/2]	33
7.2.3	Member Function Documentation	33
7.2.3.1	<code>operator=()</code>	33
7.2.4	Friends And Related Function Documentation	33
7.2.4.1	<code>init_attrjeod__NamedItemMessages</code>	34
7.2.4.2	<code>InputProcessor</code>	34
7.2.5	Field Documentation	34
7.2.5.1	<code>bad_args</code>	34
7.2.5.2	<code>frozen_name</code>	34
7.2.5.3	<code>invalid_name</code>	34

8 File Documentation	35
8.1 named_item.cc File Reference	35
8.1.1 Detailed Description	35
8.2 named_item.hh File Reference	36
8.2.1 Detailed Description	36
8.3 named_item_demangle.cc File Reference	36
8.3.1 Detailed Description	37
8.4 named_item_messages.cc File Reference	37
8.4.1 Detailed Description	37
8.5 named_item_messages.hh File Reference	37
8.5.1 Detailed Description	37
Index	39

Chapter 1

Module Index

1.1 Modules

Here is a list of all modules:

Models	9
Utils	10
NamedItem	11

Chapter 2

Namespace Index

2.1 Namespace List

Here is a list of all namespaces with brief descriptions:

jeod	Namespace jeod	13
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Chapter 3

Data Structure Index

3.1 Data Structures

Here are the data structures with brief descriptions:

[jeod::NamedItem](#)

Provides a set of static methods for constructing dot-conjoined names 15

[jeod::NamedItemMessages](#)

Specifies the message IDs used in the named_item model 32

Chapter 4

File Index

4.1 File List

Here is a list of all files with brief descriptions:

named_item.cc	Construct the name of a NamedItem object by conjoining the passed parameters with a dot . . .	35
named_item.hh	Define the NamedItem utility class	36
named_item_demangle.cc	Demangle a C++ name, isolated from other NamedItem methods because this has the potential to get big and ugly if JEOD is ported to a number of different systems	36
named_item_messages.cc	Implement the class NamedItemMessages	37
named_item_messages.hh	Define the class NamedItemMessages, the class that specifies the message IDs used in the named item model	37

Chapter 5

Module Documentation

5.1 Models

Modules

- [Utils](#)

5.1.1 Detailed Description

5.2 Utils

Modules

- [NamedItem](#)

5.2.1 Detailed Description

5.3 NamedItem

Files

- file [named_item.hh](#)
Define the NamedItem utility class.
- file [named_item_messages.hh](#)
Define the class NamedItemMessages, the class that specifies the message IDs used in the named item model.
- file [named_item.cc](#)
Construct the name of a NamedItem object by conjoining the passed parameters with a dot.
- file [named_item_demangle.cc](#)
Demangle a C++ name, isolated from other NamedItem methods because this has the potential to get big and ugly if JEOD is ported to a number of different systems.
- file [named_item_messages.cc](#)
Implement the class NamedItemMessages.

Namespaces

- [jeod](#)
Namespace jeod.

Macros

- `#define MAX_NAME_ITEMS 8`
- `#define __has_include(x) 0`
- `#define PATH "utils/named_item/"`

Functions

- `bool operator== (const jeod::NamedItem &lhs, const std::string &rhs)`
Comparison to string.
- `bool operator== (const std::string &lhs, const jeod::NamedItem &rhs)`

5.3.1 Detailed Description

5.3.2 Macro Definition Documentation

5.3.2.1 __has_include

```
#define __has_include(  
    x ) 0
```

Definition at line 33 of file [named_item_demangle.cc](#).

5.3.2.2 MAX_NAME_ITEMS

```
#define MAX_NAME_ITEMS 8
```

Definition at line 48 of file `named_item.cc`.

Referenced by `jeod::NamedItem::va_construct_name()`.

5.3.2.3 PATH

```
#define PATH "utils/named_item/"
```

Definition at line 37 of file `named_item_messages.cc`.

5.3.3 Function Documentation

5.3.3.1 operator==() [1/2]

```
bool operator== (
    const jeod::NamedItem & lhs,
    const std::string & rhs )
```

Comparison to string.

Definition at line 209 of file `named_item.cc`.

References `jeod::NamedItem::get_name()`.

5.3.3.2 operator==() [2/2]

```
bool operator== (
    const std::string & lhs,
    const jeod::NamedItem & rhs )
```

Definition at line 214 of file `named_item.cc`.

References `jeod::NamedItem::get_name()`.

Chapter 6

Namespace Documentation

6.1 jeod Namespace Reference

Namespace jeod.

Data Structures

- class [NamedItem](#)

Provides a set of static methods for constructing dot-conjoined names.

- class [NamedItemMessages](#)

Specifies the message IDs used in the `named_item` model.

6.1.1 Detailed Description

Namespace jeod.

Chapter 7

Data Structure Documentation

7.1 jeod::NamedItem Class Reference

Provides a set of static methods for constructing dot-conjoined names.

```
#include <named_item.hh>
```

Public Types

- using `size_type` = `std::string::size_type`
The size type used in `std::string`.

Public Member Functions

- `NamedItem` (`std::string` name_in=`std::string()`, `bool` frozen_in=`false`)
Default constructor.
- `NamedItem` (`const` `NamedItem` &)=`default`
Copy constructor.
- `NamedItem` (`NamedItem` &&)=`default`
Move constructor.
- `virtual` `~NamedItem` ()=`default`
Destructor.
- `NamedItem` & `operator=` (`const` `NamedItem` &src)
Copy assignment.
- `NamedItem` & `operator=` (`NamedItem` &&src)
Move assignment.
- `NamedItem` & `operator=` (`const` `std::string` &name_in)
Assignment from a string.
- `bool` `operator==` (`const` `NamedItem` &rhs)
Comparison of names.
- `const` `std::string` & `get_name` () `const`
Getter for name.
- `const` `char` * `c_str` () `const`

- Getter for name, as a C-style string.

 - `size_type size () const`

Getter for the length of the name.
- `bool get_is_frozen () const`

Getter for is_frozen.
- `bool ends_with (size_type pos1, const char *other) const`

Compare the end of this string to a C-style string.
- `const char * suffix (const char *test_name) const`

Given a dot-conjoined test name, find the part of the test name that follows this name, as a prefix.
- `template<typename Arg > void set_name (Arg &&arg)`

Set the name from the given input, as a string.
- `template<typename First , typename... Rest> void set_name (First &&first, Rest &&... rest)`

Set the name as a dot-conjoined string of the given inputs.
- `void verify_unfrozen_name () const`

Verify that the name is not frozen.
- `void validate_name (const char *file, unsigned int line, const char *variable_type, const char *variable_name)`

Checks whether a name is trivially invalid, failing if it is.
- `void freeze_name ()`

Freeze the name – i.e., denote that the name as no longer settable.

Static Public Member Functions

- `static char * construct_name (const char *name_item1)`

Create a copy of the provided name.
- `static char * construct_name (const char *name_item1, const char *name_item2)`

Construct a name as a dot-conjoined string.
- `static char * construct_name (const char *name_item1, const char *name_item2, const char *name_item3)`

Construct a name as a dot-conjoined string.
- `static char * construct_name (const char *name_item1, const char *name_item2, const char *name_item3, const char *name_item4)`

Construct a name as a dot-conjoined string.
- `static char * construct_name (const char *name_item1, const char *name_item2, const char *name_item3, const char *name_item4, const char *name_item5)`

Construct a name as a dot-conjoined string.
- `static char * construct_name (const char *name_item1, const char *name_item2, const char *name_item3, const char *name_item4, const char *name_item5, const char *name_item6)`

Construct a name as a dot-conjoined string.
- `static char * construct_name (const char *name_item1, const char *name_item2, const char *name_item3, const char *name_item4, const char *name_item5, const char *name_item6, const char *name_item7)`

Construct a name as a dot-conjoined string.
- `static char * vconstruct_name (const char *name_item,...)`

Construct a name as a dot-conjoined string.
- `static char * va_construct_name (const char *name_item, va_list args)`

Construct a name as a dot-conjoined string.
- `static const char * suffix (const char *prefix, const char *name)`

Given a prefix and a dot-conjoined name, find the part of the name that follows the prefix.
- `static const std::string demangle (const std::type_info &info)`

Demangle a C++ name.

- static void [validate_name](#) (const char *file, unsigned int line, const char *variable_value, const char *variable_type, const char *variable_name)
Checks whether a name is trivially invalid, failing if it is.
- template<typename Arg >
static std::string [construct_name_string](#) (Arg &&arg)
Construct a name from the given input, as a string.
- template<typename First, typename... Rest>
static std::string [construct_name_string](#) (First &&first, Rest &&... rest)
Construct a name as a dot-conjoined string of the given inputs.

Protected Member Functions

- void [unfreeze_name](#) ()
Unfreeze the name – i.e., denote that the name is now settable.

Private Attributes

- std::string [name](#)
The item's name.
- bool [is_frozen](#)
Indicates whether the name is frozen.

Friends

- class [InputProcessor](#)
- void [init_attrjeod__NamedItem](#) ()

7.1.1 Detailed Description

Provides a set of static methods for constructing dot-conjoined names.

The methods defined in this class allocate memory and do not release it. Releasing that memory is the responsibility of the calling function. Use the macro `JEOD_DELETE_ARRAY` to release this memory.

Prior to JEOD 4.0, the [NamedItem](#) class was not instantiable. It is in JEOD 4.0. The [NamedItem](#) class forms the basis of a thing with a name, with the name being a `std::string`. The `construct_name` functions and & related functions that allocate a C-style string are deprecated.

Definition at line 90 of file `named_item.hh`.

7.1.2 Member Typedef Documentation

7.1.2.1 size_type

```
using jeod::NamedItem::size_type = std::string::size_type
```

The size type used in std::string.

Definition at line 99 of file named_item.hh.

7.1.3 Constructor & Destructor Documentation

7.1.3.1 NamedItem() [1/3]

```
jeod::NamedItem::NamedItem (
    std::string name_in = std::string(),
    bool frozen_in = false ) [inline]
```

Default constructor.

This is the default constructor by virtue of the defaults.

Parameters

<i>name_in</i>	Initial value of the name, defaults to the empty string.
<i>frozen_in</i>	Initial value of is_frozen, defaults to false.

Definition at line 361 of file named_item.hh.

7.1.3.2 NamedItem() [2/3]

```
jeod::NamedItem::NamedItem (
    const NamedItem & ) [default]
```

Copy constructor.

The default implementation works fine.

7.1.3.3 NamedItem() [3/3]

```
jeod::NamedItem::NamedItem (
    NamedItem && ) [default]
```

Move constructor.

The default implementation works fine.

7.1.3.4 ~NamedItem()

```
virtual jeod::NamedItem::~~NamedItem ( ) [virtual], [default]
```

Destructor.

The default implementation virtually works fine.

7.1.4 Member Function Documentation

7.1.4.1 c_str()

```
const char* jeod::NamedItem::c_str ( ) const [inline]
```

Getter for name, as a C-style string.

Definition at line 439 of file named_item.hh.

References name.

7.1.4.2 construct_name() [1/7]

```
static char* jeod::NamedItem::construct_name (
    const char * name_item1 ) [inline], [static]
```

Create a copy of the provided name.

Returns

The constructed name

Parameters

in	<i>name_item1</i>	First part of the name
----	-------------------	------------------------

Definition at line 107 of file named_item.hh.

References vconstruct_name().

7.1.4.3 construct_name() [2/7]

```
static char* jeod::NamedItem::construct_name (
    const char * name_item1,
    const char * name_item2 ) [inline], [static]
```

Construct a name as a dot-conjoined string.

Returns

The constructed name

Parameters

in	<i>name_item1</i>	First part of the name
in	<i>name_item2</i>	Second part of the name

Definition at line 119 of file `named_item.hh`.

References `vconstruct_name()`.

7.1.4.4 `construct_name()` [3/7]

```
static char* jeod::NamedItem::construct_name (
    const char * name_item1,
    const char * name_item2,
    const char * name_item3 ) [inline], [static]
```

Construct a name as a dot-conjoined string.

Returns

The constructed name

Parameters

in	<i>name_item1</i>	First part of the name
in	<i>name_item2</i>	Second part of the name
in	<i>name_item3</i>	Third part of the name

Definition at line 135 of file `named_item.hh`.

References `vconstruct_name()`.

7.1.4.5 `construct_name()` [4/7]

```
static char* jeod::NamedItem::construct_name (
    const char * name_item1,
    const char * name_item2,
    const char * name_item3,
    const char * name_item4 ) [inline], [static]
```

Construct a name as a dot-conjoined string.

Returns

The constructed name

Parameters

in	<i>name_item1</i>	First part of the name
in	<i>name_item2</i>	Second part of the name
in	<i>name_item3</i>	Third part of the name
in	<i>name_item4</i>	Fourth part of the name

Definition at line 154 of file `named_item.hh`.

References `vconstruct_name()`.

7.1.4.6 construct_name() [5/7]

```
static char* jeod::NamedItem::construct_name (
    const char * name_item1,
    const char * name_item2,
    const char * name_item3,
    const char * name_item4,
    const char * name_item5 ) [inline], [static]
```

Construct a name as a dot-conjoined string.

Returns

The constructed name

Parameters

in	<i>name_item1</i>	First part of the name
in	<i>name_item2</i>	Second part of the name
in	<i>name_item3</i>	Third part of the name
in	<i>name_item4</i>	Fourth part of the name
in	<i>name_item5</i>	Fifth part of the name

Definition at line 176 of file `named_item.hh`.

References `vconstruct_name()`.

7.1.4.7 construct_name() [6/7]

```
static char* jeod::NamedItem::construct_name (
    const char * name_item1,
```

```

    const char * name_item2,
    const char * name_item3,
    const char * name_item4,
    const char * name_item5,
    const char * name_item6 ) [inline], [static]

```

Construct a name as a dot-conjoined string.

Returns

The constructed name

Parameters

in	<i>name_item1</i>	First part of the name
in	<i>name_item2</i>	Second part of the name
in	<i>name_item3</i>	Third part of the name
in	<i>name_item4</i>	Fourth part of the name
in	<i>name_item5</i>	Fifth part of the name
in	<i>name_item6</i>	Sixth part of the name

Definition at line 201 of file named_item.hh.

References `vconstruct_name()`.

7.1.4.8 `construct_name()` [7/7]

```

static char* jeod::NamedItem::construct_name (
    const char * name_item1,
    const char * name_item2,
    const char * name_item3,
    const char * name_item4,
    const char * name_item5,
    const char * name_item6,
    const char * name_item7 ) [inline], [static]

```

Construct a name as a dot-conjoined string.

Returns

The constructed name

Parameters

in	<i>name_item1</i>	First part of the name
in	<i>name_item2</i>	Second part of the name
in	<i>name_item3</i>	Third part of the name
in	<i>name_item4</i>	Fourth part of the name
in	<i>name_item5</i>	Fifth part of the name
in	<i>name_item6</i>	Sixth part of the name
in	<i>name_item7</i>	Seventh part of the name

Definition at line 229 of file named_item.hh.

References `vconstruct_name()`.

7.1.4.9 `construct_name_string()` [1/2]

```
template<typename Arg >
static std::string jeod::NamedItem::construct_name_string (
    Arg && arg ) [inline], [static]
```

Construct a name from the given input, as a string.

The input must not be the empty string or the null pointer.

Template Parameters

<i>Arg</i>	Type of the argument to <code>construct_name_string</code> .
------------	--

Parameters

<i>arg</i>	Argument to <code>construct_name_string</code> .
------------	--

Returns

`std::string` that is conceptually equal to `(==) arg`.

Definition at line 323 of file named_item.hh.

References `validate_name()`.

Referenced by `set_name()`.

7.1.4.10 `construct_name_string()` [2/2]

```
template<typename First , typename... Rest>
static std::string jeod::NamedItem::construct_name_string (
    First && first,
    Rest &&... rest ) [inline], [static]
```

Construct a name as a dot-conjoined string of the given inputs.

Each input must not be the empty string or the null pointer.

Template Parameters

<i>First</i>	Type of the first argument to <code>construct_name_string</code> .
<i>Rest</i>	Types of the remaining arguments to <code>construct_name_string</code> .

Parameters

<i>first</i>	First argument to construct_name_string.
<i>rest</i>	Remaining arguments to construct_name_string.

Returns

The given inputs as a dot-conjoined string.

Definition at line 340 of file named_item.hh.

References validate_name().

7.1.4.11 demangle()

```
const std::string jeod::NamedItem::demangle (
    const std::type_info & info ) [static]
```

Demangle a C++ name.

Returns

Demangled name

Parameters

<i>in</i>	<i>info</i>	Typeinfo to be demangled
-----------	-------------	--------------------------

Definition at line 60 of file named_item_demangle.cc.

7.1.4.12 ends_with()

```
bool jeod::NamedItem::ends_with (
    size_type pos1,
    const char * other ) const [inline]
```

Compare the end of this string to a C-style string.

See std::string::compare.

Parameters

<i>pos1</i>	The start index in the name.
<i>other</i>	The C-style null-terminated string.

Returns

True if the end part of the name equals the given C-style string.

Definition at line 467 of file named_item.hh.

References name.

7.1.4.13 freeze_name()

```
void jeod::NamedItem::freeze_name ( ) [inline]
```

Freeze the name – i.e., denote that the name as no longer settable.

Definition at line 538 of file named_item.hh.

References is_frozen.

7.1.4.14 get_is_frozen()

```
bool jeod::NamedItem::get_is_frozen ( ) const [inline]
```

Getter for is_frozen.

Definition at line 455 of file named_item.hh.

References is_frozen.

7.1.4.15 get_name()

```
const std::string& jeod::NamedItem::get_name ( ) const [inline]
```

Getter for name.

Definition at line 431 of file named_item.hh.

References name.

Referenced by operator==(), and operator==().

7.1.4.16 operator=() [1/3]

```
NamedItem& jeod::NamedItem::operator= (
    const NamedItem & src ) [inline]
```

Copy assignment.

Only the name is copied, and only if the name isn't frozen.

Definition at line 392 of file named_item.hh.

References name, and verify_unfrozen_name().

7.1.4.17 operator=() [2/3]

```
NamedItem& jeod::NamedItem::operator= (
    NamedItem && src ) [inline]
```

Move assignment.

The default implementation works fine.

Definition at line 402 of file named_item.hh.

References name, and verify_unfrozen_name().

7.1.4.18 operator=() [3/3]

```
NamedItem& jeod::NamedItem::operator= (
    const std::string & name_in ) [inline]
```

Assignment from a string.

Definition at line 413 of file named_item.hh.

References name, and verify_unfrozen_name().

7.1.4.19 operator==()

```
bool jeod::NamedItem::operator== (
    const NamedItem & rhs ) [inline]
```

Comparison of names.

Definition at line 423 of file named_item.hh.

References get_name(), and name.

7.1.4.20 set_name() [1/2]

```
template<typename Arg >
void jeod::NamedItem::set_name (
    Arg && arg ) [inline]
```

Set the name from the given input, as a string.

The input must not be the empty string or the null pointer.

Template Parameters

<i>Arg</i>	Type of the argument to construct_name_string.
------------	--

Parameters

<i>arg</i>	Argument to construct_name_string.
------------	------------------------------------

Definition at line 492 of file named_item.hh.

References construct_name_string(), name, and verify_unfrozen_name().

7.1.4.21 set_name() [2/2]

```
template<typename First , typename... Rest>
void jeod::NamedItem::set_name (
    First && first,
    Rest &&... rest ) [inline]
```

Set the name as a dot-conjoined string of the given inputs.

Each input must not be the empty string or the null pointer.

Template Parameters

<i>First</i>	Type of the first argument to construct_name_string.
<i>Rest</i>	Types of the remaining arguments to construct_name_string.

Parameters

<i>first</i>	First argument to construct_name_string.
<i>rest</i>	Remaining arguments to construct_name_string.

Definition at line 507 of file named_item.hh.

References construct_name_string(), name, and verify_unfrozen_name().

7.1.4.22 size()

```
size_type jeod::NamedItem::size ( ) const [inline]
```

Getter for the length of the name.

Definition at line 447 of file named_item.hh.

References name.

7.1.4.23 `suffix()` [1/2]

```
const char * jeod::NamedItem::suffix (
    const char * prefix,
    const char * name ) [static]
```

Given a prefix and a dot-conjoined name, find the part of the name that follows the prefix.

For names of the form "prefix.suffix", this function returns a pointer to "suffix". The function returns the input name if the name does not start with "prefix.".

Returns

Suffix

Parameters

in	<i>prefix</i>	Prefix
in	<i>name</i>	Name, possibly prefixed

Definition at line 144 of file `named_item.cc`.

References `name`.

Referenced by `suffix()`.

7.1.4.24 `suffix()` [2/2]

```
const char* jeod::NamedItem::suffix (
    const char * test_name ) const [inline]
```

Given a dot-conjoined test name, find the part of the test name that follows this name, as a prefix.

For names of the form "prefix.suffix", this function returns a pointer to "suffix". The function returns the input name if the name does not start with "prefix.".

Returns

Suffix

Parameters

in	<i>test_name</i>	Test name, possibly prefixed
----	------------------	------------------------------

Definition at line 480 of file `named_item.hh`.

References `name`, and `suffix()`.

7.1.4.25 unfreeze_name()

```
void jeod::NamedItem::unfreeze_name ( ) [inline], [protected]
```

Unfreeze the name – i.e., denote that the name is now settable.

This exists solely to parallel [freeze_name\(\)](#).

Definition at line 550 of file `named_item.hh`.

References `is_frozen`.

7.1.4.26 va_construct_name()

```
char * jeod::NamedItem::va_construct_name (
    const char * name_item,
    va_list args ) [static]
```

Construct a name as a dot-conjoined string.

Notes –

- This function takes a `va_list` argument that contains any additional strings to be appended.
- The calling function must form the `args` argument by invoking `va_start()`.
- The calling function should not invoke `va_end()`; this is done inside [va_construct_name\(\)](#).
- The last argument embodied in the `args` argument must be a NULL to signal the end of the argument list.

Returns

The constructed name

Parameters

in	<i>name_item</i>	First part of the name
in	<i>args</i>	Rest of the name

Definition at line 75 of file `named_item.cc`.

References `jeod::NamedItemMessages::bad_args`, `MAX_NAME_ITEMS`, and `name`.

Referenced by `vconstruct_name()`.

7.1.4.27 validate_name() [1/2]

```
void jeod::NamedItem::validate_name (
    const char * file,
```

```

unsigned int line,
const char * variable_value,
const char * variable_type,
const char * variable_name ) [static]

```

Checks whether a name is trivially invalid, failing if it is.

Parameters

in	<i>file</i>	Usually FILE
in	<i>line</i>	Usually LINE
in	<i>variable_value</i>	Value to check
in	<i>variable_type</i>	Variable description
in	<i>variable_name</i>	Variable name

Definition at line 170 of file named_item.cc.

References jeod::NamedItemMessages::invalid_name.

Referenced by construct_name_string(), and validate_name().

7.1.4.28 validate_name() [2/2]

```

void jeod::NamedItem::validate_name (
    const char * file,
    unsigned int line,
    const char * variable_type,
    const char * variable_name ) [inline]

```

Checks whether a name is trivially invalid, failing if it is.

Parameters

in	<i>file</i>	Usually FILE
in	<i>line</i>	Usually LINE
in	<i>variable_type</i>	Variable description
in	<i>variable_name</i>	Variable name

Definition at line 526 of file named_item.hh.

References name, and validate_name().

7.1.4.29 vconstruct_name()

```

char * jeod::NamedItem::vconstruct_name (
    const char * name_item,
    ... ) [static]

```

Construct a name as a dot-conjoined string.

Note that this is a varargs function. The last argument must be NULL to signal the end of the argument list.

Returns

The constructed name

Parameters

in	<i>name_item</i>	First part of the name
in	...	Rest of the name

Definition at line 55 of file `named_item.cc`.

References `name`, and `va_construct_name()`.

Referenced by `construct_name()`.

7.1.4.30 verify_unfrozen_name()

```
void jeod::NamedItem::verify_unfrozen_name ( ) const
```

Verify that the name is not frozen.

Definition at line 197 of file `named_item.cc`.

References `jeod::NamedItemMessages::frozen_name`, `is_frozen`, and `name`.

Referenced by `operator=()`, and `set_name()`.

7.1.5 Friends And Related Function Documentation**7.1.5.1 init_attrjeod_NamedItem**

```
void init_attrjeod_NamedItem ( ) [friend]
```

7.1.5.2 InputProcessor

```
friend class InputProcessor [friend]
```

Definition at line 92 of file `named_item.hh`.

7.1.6 Field Documentation

7.1.6.1 is_frozen

```
bool jeod::NamedItem::is_frozen [private]
```

Indicates whether the name is frozen.

```
trick_units(-)
```

Definition at line 566 of file named_item.hh.

Referenced by freeze_name(), get_is_frozen(), unfreeze_name(), and verify_unfrozen_name().

7.1.6.2 name

```
std::string jeod::NamedItem::name [private]
```

The item's name.

```
trick_units(-)
```

Definition at line 561 of file named_item.hh.

Referenced by c_str(), ends_with(), get_name(), operator=(), operator==(), set_name(), size(), suffix(), va_↔construct_name(), validate_name(), vconstruct_name(), and verify_unfrozen_name().

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

- [named_item.hh](#)
- [named_item.cc](#)
- [named_item_demangle.cc](#)

7.2 jeod::NamedItemMessages Class Reference

Specifies the message IDs used in the named_item model.

```
#include <named_item_messages.hh>
```

Static Public Attributes

- static char const * [bad_args](#) = "utils/named_item/" "bad_args"
Error issued when the arguments to named item are invalid.
- static char const * [invalid_name](#) = "utils/named_item/" "invalid_name"
Error issued when a name is the null pointer or an empty string.
- static char const * [frozen_name](#) = "utils/named_item/" "frozen_name"
Error issued when set_name is called with the name marked as frozen.

Private Member Functions

- [NamedItemMessages](#) (void)
- [NamedItemMessages](#) (const [NamedItemMessages](#) &)
- [NamedItemMessages](#) & [operator=](#) (const [NamedItemMessages](#) &)

Friends

- class [InputProcessor](#)
- void [init_attrjeod__NamedItemMessages](#) ()

7.2.1 Detailed Description

Specifies the message IDs used in the named_item model.

Definition at line 79 of file named_item_messages.hh.

7.2.2 Constructor & Destructor Documentation

7.2.2.1 [NamedItemMessages\(\)](#) [1/2]

```
jeod::NamedItemMessages::NamedItemMessages (
    void ) [private]
```

7.2.2.2 [NamedItemMessages\(\)](#) [2/2]

```
jeod::NamedItemMessages::NamedItemMessages (
    const NamedItemMessages & ) [private]
```

7.2.3 Member Function Documentation

7.2.3.1 [operator=\(\)](#)

```
NamedItemMessages& jeod::NamedItemMessages::operator= (
    const NamedItemMessages & ) [private]
```

7.2.4 Friends And Related Function Documentation

7.2.4.1 `init_attrjeod__NamedItemMessages`

```
void init_attrjeod__NamedItemMessages ( ) [friend]
```

7.2.4.2 `InputProcessor`

```
friend class InputProcessor [friend]
```

Definition at line 82 of file `named_item_messages.hh`.

7.2.5 Field Documentation

7.2.5.1 `bad_args`

```
char const * jeod::NamedItemMessages::bad_args = "utils/named_item/" "bad_args" [static]
```

Error issued when the arguments to named item are invalid.

`trick_units(-)`

Definition at line 92 of file `named_item_messages.hh`.

Referenced by `jeod::NamedItem::va_construct_name()`.

7.2.5.2 `frozen_name`

```
char const * jeod::NamedItemMessages::frozen_name = "utils/named_item/" "frozen_name" [static]
```

Error issued when `set_name` is called with the name marked as frozen.

`trick_units(-)`

Definition at line 102 of file `named_item_messages.hh`.

Referenced by `jeod::NamedItem::verify_unfrozen_name()`.

7.2.5.3 `invalid_name`

```
char const * jeod::NamedItemMessages::invalid_name = "utils/named_item/" "invalid_name" [static]
```

Error issued when a name is the null pointer or an empty string.

`trick_units(-)`

Definition at line 97 of file `named_item_messages.hh`.

Referenced by `jeod::NamedItem::validate_name()`.

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

- [named_item_messages.hh](#)
- [named_item_messages.cc](#)

Chapter 8

File Documentation

8.1 `named_item.cc` File Reference

Construct the name of a `NamedItem` object by conjoining the passed parameters with a dot.

```
#include <cstdlib>
#include <cstdio>
#include <cstring>
#include "utils/memory/include/jeod_alloc.hh"
#include "utils/message/include/message_handler.hh"
#include "../include/named_item.hh"
#include "../include/named_item_messages.hh"
```

Namespaces

- `jeod`
Namespace `jeod`.

Macros

- `#define MAX_NAME_ITEMS 8`

Functions

- `bool operator== (const jeod::NamedItem &lhs, const std::string &rhs)`
Comparison to string.
- `bool operator== (const std::string &lhs, const jeod::NamedItem &rhs)`

8.1.1 Detailed Description

Construct the name of a `NamedItem` object by conjoining the passed parameters with a dot.

8.2 `named_item.hh` File Reference

Define the NamedItem utility class.

```
#include "utils/sim_interface/include/jeod_class.hh"
#include <cstdlib>
#include <string>
#include <typeinfo>
#include <utility>
#include <vector>
```

Data Structures

- class `jeod::NamedItem`

Provides a set of static methods for constructing dot-conjoined names.

Namespaces

- `jeod`

Namespace jeod.

Functions

- bool `operator==` (const `jeod::NamedItem` &lhs, const std::string &rhs)
Comparison to string.
- bool `operator==` (const std::string &lhs, const `jeod::NamedItem` &rhs)

8.2.1 Detailed Description

Define the NamedItem utility class.

8.3 `named_item_demangle.cc` File Reference

Demangle a C++ name, isolated from other NamedItem methods because this has the potential to get big and ugly if JEOD is ported to a number of different systems.

```
#include <cstdlib>
#include <string>
#include <typeinfo>
#include "../include/named_item.hh"
#include "../include/named_item_messages.hh"
```

Namespaces

- [jeod](#)
Namespace jeod.

Macros

- `#define __has_include(x) 0`

8.3.1 Detailed Description

Demangle a C++ name, isolated from other NamedItem methods because this has the potential to get big and ugly if JEOD is ported to a number of different systems.

8.4 named_item_messages.cc File Reference

Implement the class NamedItemMessages.

```
#include "../include/named_item_messages.hh"
```

Namespaces

- [jeod](#)
Namespace jeod.

Macros

- `#define PATH "utils/named_item/"`

8.4.1 Detailed Description

Implement the class NamedItemMessages.

8.5 named_item_messages.hh File Reference

Define the class NamedItemMessages, the class that specifies the message IDs used in the named item model.

```
#include "utils/sim_interface/include/jeod_class.hh"
```

Data Structures

- class [jeod::NamedItemMessages](#)
Specifies the message IDs used in the named_item model.

Namespaces

- [jeod](#)
Namespace jeod.

8.5.1 Detailed Description

Define the class NamedItemMessages, the class that specifies the message IDs used in the named item model.

Index

- `__has_include`
 - `NamedItem`, [11](#)
 - `~NamedItem`
 - `jeod::NamedItem`, [18](#)
- `bad_args`
 - `jeod::NamedItemMessages`, [34](#)
- `c_str`
 - `jeod::NamedItem`, [19](#)
- `construct_name`
 - `jeod::NamedItem`, [19–22](#)
- `construct_name_string`
 - `jeod::NamedItem`, [23](#)
- `demangle`
 - `jeod::NamedItem`, [24](#)
- `ends_with`
 - `jeod::NamedItem`, [24](#)
- `freeze_name`
 - `jeod::NamedItem`, [25](#)
- `frozen_name`
 - `jeod::NamedItemMessages`, [34](#)
- `get_is_frozen`
 - `jeod::NamedItem`, [25](#)
- `get_name`
 - `jeod::NamedItem`, [25](#)
- `init_attrjeod__NamedItem`
 - `jeod::NamedItem`, [31](#)
- `init_attrjeod__NamedItemMessages`
 - `jeod::NamedItemMessages`, [33](#)
- `InputProcessor`
 - `jeod::NamedItem`, [31](#)
 - `jeod::NamedItemMessages`, [34](#)
- `invalid_name`
 - `jeod::NamedItemMessages`, [34](#)
- `is_frozen`
 - `jeod::NamedItem`, [31](#)

`jeod`, [13](#)

- `jeod::NamedItem`, [15](#)
 - `~NamedItem`, [18](#)
 - `c_str`, [19](#)
 - `construct_name`, [19–22](#)
 - `construct_name_string`, [23](#)
 - `demangle`, [24](#)
 - `ends_with`, [24](#)
 - `freeze_name`, [25](#)
 - `get_is_frozen`, [25](#)
 - `get_name`, [25](#)
 - `init_attrjeod__NamedItem`, [31](#)
 - `InputProcessor`, [31](#)
 - `is_frozen`, [31](#)
 - `name`, [32](#)
 - `NamedItem`, [18](#)
 - `operator=`, [25, 26](#)
 - `operator==`, [26](#)
 - `set_name`, [26, 27](#)
 - `size`, [27](#)
 - `size_type`, [17](#)
 - `suffix`, [27, 28](#)
 - `unfreeze_name`, [28](#)
 - `va_construct_name`, [29](#)
 - `validate_name`, [29, 30](#)
 - `vconstruct_name`, [30](#)
 - `verify_unfrozen_name`, [31](#)
- `jeod::NamedItemMessages`, [32](#)
 - `bad_args`, [34](#)
 - `frozen_name`, [34](#)
 - `init_attrjeod__NamedItemMessages`, [33](#)
 - `InputProcessor`, [34](#)
 - `invalid_name`, [34](#)
 - `NamedItemMessages`, [33](#)
 - `operator=`, [33](#)

`MAX_NAME_ITEMS`

- `NamedItem`, [11](#)

`Models`, [9](#)

`name`

- `jeod::NamedItem`, [32](#)

- `named_item.cc`, [35](#)
- `named_item.hh`, [36](#)
- `named_item_demangle.cc`, [36](#)
- `named_item_messages.cc`, [37](#)
- `named_item_messages.hh`, [37](#)

`NamedItem`, [11](#)

- `__has_include`, [11](#)
- `jeod::NamedItem`, [18](#)
- `MAX_NAME_ITEMS`, [11](#)
- `operator==`, [12](#)
- `PATH`, [12](#)

`NamedItemMessages`

- `jeod::NamedItemMessages`, [33](#)

`operator=`

- `jeod::NamedItem`, [25, 26](#)

- jeod::NamedItemMessages, [33](#)
- operator==
 - jeod::NamedItem, [26](#)
 - NamedItem, [12](#)
- PATH
 - NamedItem, [12](#)
- set_name
 - jeod::NamedItem, [26](#), [27](#)
- size
 - jeod::NamedItem, [27](#)
- size_type
 - jeod::NamedItem, [17](#)
- suffix
 - jeod::NamedItem, [27](#), [28](#)
- unfreeze_name
 - jeod::NamedItem, [28](#)
- Utils, [10](#)
- va_construct_name
 - jeod::NamedItem, [29](#)
- validate_name
 - jeod::NamedItem, [29](#), [30](#)
- vconstruct_name
 - jeod::NamedItem, [30](#)
- verify_unfrozen_name
 - jeod::NamedItem, [31](#)