

---

# **WikibaseIntegrator**

***Release 0.12.4***

**LeMyst and WikibaseIntegrator contributors**

**Jun 07, 2023**



# CONTENTS

<b>1</b>	<b>wikibaseintegrator</b>	<b>1</b>
1.1	Subpackages . . . . .	1
1.1.1	wikibaseintegrator.datatypes . . . . .	1
1.1.1.1	Subpackages . . . . .	1
1.1.1.1.1	wikibaseintegrator.datatypes.extra . . . . .	1
1.1.1.2	Submodules . . . . .	5
1.1.1.2.1	wikibaseintegrator.datatypes.basedatatype . . . . .	5
1.1.1.2.2	wikibaseintegrator.datatypes.commonsmedia . . . . .	7
1.1.1.2.3	wikibaseintegrator.datatypes.externalid . . . . .	9
1.1.1.2.4	wikibaseintegrator.datatypes.form . . . . .	11
1.1.1.2.5	wikibaseintegrator.datatypes.geoshape . . . . .	13
1.1.1.2.6	wikibaseintegrator.datatypes.globecoordinate . . . . .	15
1.1.1.2.7	wikibaseintegrator.datatypes.item . . . . .	17
1.1.1.2.8	wikibaseintegrator.datatypes.lexeme . . . . .	19
1.1.1.2.9	wikibaseintegrator.datatypes.math . . . . .	21
1.1.1.2.10	wikibaseintegrator.datatypes.monolingualtext . . . . .	23
1.1.1.2.11	wikibaseintegrator.datatypes.musicalnotation . . . . .	25
1.1.1.2.12	wikibaseintegrator.datatypes.property . . . . .	27
1.1.1.2.13	wikibaseintegrator.datatypes.quantity . . . . .	29
1.1.1.2.14	wikibaseintegrator.datatypes.sense . . . . .	32
1.1.1.2.15	wikibaseintegrator.datatypes.string . . . . .	34
1.1.1.2.16	wikibaseintegrator.datatypes.tabulardata . . . . .	36
1.1.1.2.17	wikibaseintegrator.datatypes.time . . . . .	38
1.1.1.2.18	wikibaseintegrator.datatypes.url . . . . .	41
1.1.2	wikibaseintegrator.entities . . . . .	43
1.1.2.1	wikibaseintegrator.entities.baseentity . . . . .	43
1.1.2.2	wikibaseintegrator.entities.item . . . . .	45
1.1.2.3	wikibaseintegrator.entities.lexeme . . . . .	48
1.1.2.4	wikibaseintegrator.entities.mediainfo . . . . .	52
1.1.2.5	wikibaseintegrator.entities.property . . . . .	55
1.1.3	wikibaseintegrator.models . . . . .	58
1.1.3.1	wikibaseintegrator.models.aliases . . . . .	58
1.1.3.2	wikibaseintegrator.models.basemodel . . . . .	60
1.1.3.3	wikibaseintegrator.models.claims . . . . .	60
1.1.3.4	wikibaseintegrator.models.descriptions . . . . .	63
1.1.3.5	wikibaseintegrator.models.forms . . . . .	64
1.1.3.6	wikibaseintegrator.models.labels . . . . .	67
1.1.3.7	wikibaseintegrator.models.language_values . . . . .	68
1.1.3.8	wikibaseintegrator.models.lemmas . . . . .	70
1.1.3.9	wikibaseintegrator.models.qualifiers . . . . .	72

1.1.3.10	wikibaseintegrator.models.references . . . . .	73
1.1.3.11	wikibaseintegrator.models.senses . . . . .	75
1.1.3.12	wikibaseintegrator.models.sitelinks . . . . .	77
1.1.3.13	wikibaseintegrator.models.snaks . . . . .	78
1.2	Submodules . . . . .	80
1.2.1	wikibaseintegrator.wbi_backoff . . . . .	80
1.2.2	wikibaseintegrator.wbi_config . . . . .	80
1.2.3	wikibaseintegrator.wbiEnums . . . . .	80
1.2.4	wikibaseintegrator.wbi_exceptions . . . . .	82
1.2.5	wikibaseintegrator.wbi_fastrun . . . . .	85
1.2.6	wikibaseintegrator.wbi_helpers . . . . .	89
1.2.7	wikibaseintegrator.wbi_login . . . . .	97
1.2.8	wikibaseintegrator.wikibaseintegrator . . . . .	102
<b>2</b>	<b>Changelog</b> . . . . .	<b>103</b>
2.1	Changelog . . . . .	103
2.1.1	v0.12.4 . . . . .	103
2.1.2	v0.12.3 . . . . .	103
2.1.3	v0.12.2 . . . . .	103
2.1.4	v0.12.1 . . . . .	103
2.1.5	v0.12.0 . . . . .	103
2.1.6	v0.11.3 . . . . .	103
2.1.7	v0.12.0rc5 . . . . .	104
2.1.8	v0.12.0rc4 . . . . .	104
2.1.9	v0.11.2 . . . . .	104
2.1.10	v0.12.0rc3 . . . . .	104
2.1.11	v0.12.0rc2 . . . . .	104
2.1.12	v0.12.0rc1 . . . . .	104
2.1.13	v0.12.0.dev7 . . . . .	104
2.1.14	v0.12.0.dev6 . . . . .	104
2.1.15	v0.11.1 . . . . .	104
2.1.16	v0.12.0.dev5 . . . . .	104
2.1.17	v0.12.0.dev4 . . . . .	105
2.1.18	v0.12.0.dev3 . . . . .	105
2.1.19	v0.12.0.dev2 . . . . .	105
2.1.20	v0.11.0 . . . . .	105
2.1.21	v0.10.1 . . . . .	105
2.1.22	v0.10.0 . . . . .	105
2.1.23	v0.9.0 . . . . .	105
2.1.24	v0.8.2 . . . . .	105
2.1.25	v0.8.1 . . . . .	105
<b>3</b>	<b>Indices and tables</b> . . . . .	<b>107</b>
	<b>Python Module Index</b> . . . . .	<b>109</b>
	<b>Index</b> . . . . .	<b>111</b>

# WIKIBASEINTEGRATOR

## 1.1 Subpackages

### 1.1.1 wikibaseintegrator.datatypes

#### 1.1.1.1 Subpackages

##### 1.1.1.1.1 wikibaseintegrator.datatypes.extra

###### wikibaseintegrator.datatypes.extra.edtf

```
class wikibaseintegrator.datatypes.extra.edtf.EDTF(value=None, **kwargs)
```

Bases: *String*

Implements the Wikibase data type for Wikibase Extended Date/Time Format extension. More info at [https://www.mediawiki.org/wiki/Extension:Wikibase\\_EDTF](https://www.mediawiki.org/wiki/Extension:Wikibase_EDTF)

###### Parameters

- **value** (*str* / *None*) –
- **kwargs** (*Any*) –

**DTYPE** = 'edtf'

**\_\_init\_\_**(*value=None, \*\*kwargs*)

Constructor, calls the superclass *BaseDataType*

###### Parameters

- **value** (*Optional[str]*) – The string to be used as the value
- **kwargs** (*Any*) –

**equals**(*that, include\_ref=False, fref=None*)

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

###### Return type

*bool*

###### Parameters

- **that** (*Claim*) –

- **include\_ref** (*bool*) –
- **fref** (*Callable* / *None*) –

**from\_json**(*json\_data*)

**Parameters**  
**json\_data** (*Dict[str, Any]*) – a JSON representation of a Claim

**Return type**  
*Claim*

**get\_json()**

**Return type**  
*Dict[str, Any]*

**get\_sparql\_value()**

**Return type**  
*str*

**has\_equal\_qualifiers**(*other*)

**Return type**  
*bool*

**Parameters**  
**other** (*Claim*) –

**property id:** *str* | *None*

**property mainsnak:** *Snak*

**parse\_sparql\_value**(*value*, *type='literal'*, *unit='I'*)

**Return type**  
*bool*

**property qualifiers:** *Qualifiers*

**property qualifiers\_order:** *List[str]*

**property rank:** *WikibaseRank*

**property references:** *References*

**static refs\_equal**(*olditem*, *newitem*)

tests for exactly identical references

**Return type**  
*bool*

**Parameters**

- **olditem** (*Claim*) –
- **newitem** (*Claim*) –

**remove**(*remove=True*)

**Return type**  
*None*

```
property removed: bool  
set_value(value=None)
```

**Parameters**  
    **value** (*str* / *None*) –

```
property type: str | Dict
```

```
update(claim)
```

**Return type**  
    *None*

**Parameters**  
    **claim** (*Claim*) –

## wikibaseintegrator.datatypes.extra.localmedia

```
class wikibaseintegrator.datatypes.extra.localmedia.LocalMedia(value=None, **kwargs)
```

Bases: *String*

Implements the Wikibase data type for Wikibase Local Media extension. More info at [https://www.mediawiki.org/wiki/Extension:Wikibase\\_Local\\_Media](https://www.mediawiki.org/wiki/Extension:Wikibase_Local_Media)

**Parameters**

- **value** (*str* / *None*) –
- **kwargs** (*Any*) –

```
DTYPE = 'localMedia'
```

```
__init__(value=None, **kwargs)
```

Constructor, calls the superclass *BaseDataType*

**Parameters**

- **value** (*Optional[str]*) – The string to be used as the value
- **kwargs** (*Any*) –

```
equals(that, include_ref=False, fref=None)
```

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

**Return type**  
    *bool*

**Parameters**

- **that** (*Claim*) –
- **include\_ref** (*bool*) –
- **fref** (*Callable* / *None*) –

```
from_json(json_data)

Parameters
    json_data (Dict[str, Any]) – a JSON representation of a Claim

Return type
    Claim

get_json()

Return type
    Dict[str, Any]

get_sparql_value()

Return type
    str

has_equal_qualifiers(other)

Return type
    bool

Parameters
    other (Claim) –

property id: str | None

property mainsnak: Snak

parse_sparql_value(value, type='literal', unit='I')

Return type
    bool

property qualifiers: Qualifiers

property qualifiers_order: List[str]

property rank: WikibaseRank

property references: References

static refs_equal(olditem, newitem)
    tests for exactly identical references

Return type
    bool

Parameters
    • olditem (Claim) –
    • newitem (Claim) –

remove(remove=True)

Return type
    None

property removed: bool
```

---

**set\_value**(*value=None*)

**Parameters**

- value** (*str* / *None*) –

**property type:** *str* | *Dict*

**update**(*claim*)

**Return type**

- None*

**Parameters**

- claim** (*Claim*) –

### 1.1.1.2 Submodules

#### 1.1.1.2.1 wikibaseintegrator.datatypes.basedatatype

**class** *wikibaseintegrator.datatypes.basedatatype*.**BaseDataType**(*prop\_nr=None*, *\*\*kwargs*)

Bases: *Claim*

The base class for all Wikibase data types, they inherit from it

**Parameters**

- **prop\_nr** (*Optional[Union[int, str]]*) –
- **kwargs** (*Any*) –

**DTYPE** = 'base-data-type'

**\_\_init\_\_**(*prop\_nr=None*, *\*\*kwargs*)

Constructor, will be called by all data types.

**Parameters**

- **prop\_nr** (*Union[str, int, None]*) – The property number a Wikibase snak belongs to
- **kwargs** (*Any*) –

**equals**(*that*, *include\_ref=False*, *fref=None*)

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

**Return type**

- bool*

**Parameters**

- **that** (*Claim*) –
- **include\_ref** (*bool*) –
- **fref** (*Callable* / *None*) –

`from_json(json_data)`

**Parameters**

`json_data` (`Dict[str, Any]`) – a JSON representation of a Claim

**Return type**

`Claim`

`get_json()`

**Return type**

`Dict[str, Any]`

`get_sparql_value()`

**Return type**

`str`

`has_equal_qualifiers(other)`

**Return type**

`bool`

**Parameters**

`other` (`Claim`) –

`property id: str | None`

`property mainsnak: Snak`

`parse_sparql_value(value, type='literal', unit='I')`

**Return type**

`bool`

`property qualifiers: Qualifiers`

`property qualifiers_order: List[str]`

`property rank: WikibaseRank`

`property references: References`

`static refs_equal(olditem, newitem)`

tests for exactly identical references

**Return type**

`bool`

**Parameters**

- `olditem` (`Claim`) –
- `newitem` (`Claim`) –

`remove(remove=True)`

**Return type**

`None`

`property removed: bool`

---

```
set_value(value=None)

Parameters
    value (Any / None) –
property type: str | Dict

update(claim)

Return type
    None

Parameters
    claim (Claim) –
```

### 1.1.1.2.2 wikibaseintegrator.datatypes.commonsmedia

```
class wikibaseintegrator.datatypes.commonsmedia.CommonsMedia(value=None, **kwargs)
```

Bases: *String*

Implements the Wikibase data type for Wikimedia commons media files

**Parameters**

- **value** (str / None) –
- **kwargs** (Any) –

**DTYPE** = 'commonsmedia'

```
__init__(value=None, **kwargs)
```

Constructor, calls the superclass BaseDataType

**Parameters**

- **value** (Optional[str]) – The string to be used as the value
- **kwargs** (Any) –

```
equals(that, include_ref=False, fref=None)
```

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

**Return type**

bool

**Parameters**

- **that** (Claim) –
- **include\_ref** (bool) –
- **fref** (Callable / None) –

```
from_json(json_data)
```

**Parameters**

**json\_data** (Dict[str, Any]) – a JSON representation of a Claim

**Return type**

*Claim*

```
get_json()

    Return type
        Dict[str, Any]

get_sparql_value()

    Return type
        str

has_equal_qualifiers(other)

    Return type
        bool

    Parameters
        other (Claim) –
property id: str | None

property mainsnak: Snak

parse_sparql_value(value, type='literal', unit='I')

    Return type
        bool

property qualifiers: Qualifiers

property qualifiers_order: List[str]

property rank: WikibaseRank

property references: References

static refs_equal(olditem, newitem)
    tests for exactly identical references

    Return type
        bool

    Parameters
        • olditem (Claim) –
        • newitem (Claim) –

remove(remove=True)

    Return type
        None

property removed: bool

set_value(value=None)

    Parameters
        value (str / None) –
property type: str | Dict
```

**update**(*claim*)

**Return type**

None

**Parameters**

**claim** ([Claim](#)) –

### 1.1.1.2.3 [wikibaseintegrator.datatypes.externalid](#)

**class** [wikibaseintegrator.datatypes.externalid.ExternalID](#)(*value=None, \*\*kwargs*)

Bases: *String*

Implements the Wikibase data type ‘external-id’

**Parameters**

- **value** (*str / None*) –
- **kwargs** (*Any*) –

**DTYPE = 'external-id'**

**\_\_init\_\_**(*value=None, \*\*kwargs*)

Constructor, calls the superclass *BaseDataType*

**Parameters**

- **value** (*Optional[str]*) – The string to be used as the value
- **kwargs** (*Any*) –

**equals**(*that, include\_ref=False, fref=None*)

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

**Return type**

bool

**Parameters**

- **that** ([Claim](#)) –
- **include\_ref** (*bool*) –
- **fref** (*Callable / None*) –

**from\_json**(*json\_data*)

**Parameters**

**json\_data** (*Dict[str, Any]*) – a JSON representation of a Claim

**Return type**

[Claim](#)

**get\_json()**

**Return type**

*Dict[str, Any]*

```
get_sparql_value()

    Return type
        str

has_equal_qualifiers(other)

    Return type
        bool

    Parameters
        other (Claim) –

property id: str | None

property mainsnak: Snak

parse_sparql_value(value, type='literal', unit='1')

    Return type
        bool

property qualifiers: Qualifiers

property qualifiers_order: List[str]

property rank: WikibaseRank

property references: References

static refs_equal(olditem, newitem)
    tests for exactly identical references

    Return type
        bool

    Parameters
        • olditem (Claim) –
        • newitem (Claim) –

remove(remove=True)

    Return type
        None

property removed: bool

set_value(value=None)

    Parameters
        value (str / None) –

property type: str | Dict

update(claim)

    Return type
        None

    Parameters
        claim (Claim) –
```

#### 1.1.1.2.4 wikibaseintegrator.datatypes.form

`class wikibaseintegrator.datatypes.form.Form(value=None, **kwargs)`

Bases: `BaseDataType`

Implements the Wikibase data type ‘wikibase-form’

##### Parameters

- `value (str / None)` –
- `kwargs (Any)` –

`DTYPE = 'wikibase-form'`

`__init__(value=None, **kwargs)`

Constructor, calls the superclass `BaseDataType`

##### Parameters

- `value (str with the format "L<Lexeme ID>-F<Form>")` – The form number to serve as a value using the format “L<Lexeme ID>-F<Form ID>” (example: L252248-F2)
- `prop_nr (str with a 'P' prefix followed by digits)` – The property number for this claim
- `snaktype (str)` – The snak type, either ‘value’, ‘somevalue’ or ‘novalue’
- `references (A data type with subclass of BaseDataType)` – List with reference objects
- `qualifiers (A data type with subclass of BaseDataType)` – List with qualifier objects
- `rank (str)` – rank of a snak with value ‘preferred’, ‘normal’ or ‘deprecated’
- `kwargs (Any)` –

`equals(that, include_ref=False, fref=None)`

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

##### Return type

`bool`

##### Parameters

- `that (Claim)` –
- `include_ref (bool)` –
- `fref (Callable / None)` –

`from_json(json_data)`

##### Parameters

`json_data (Dict[str, Any])` – a JSON representation of a Claim

##### Return type

`Claim`

```
get_json()

    Return type
        Dict[str, Any]

get_sparql_value()

    Return type
        str

has_equal_qualifiers(other)

    Return type
        bool

    Parameters
        other (Claim) –
property id: str | None

property mainsnak: Snak

parse_sparql_value(value, type='literal', unit='I')

    Return type
        bool

property qualifiers: Qualifiers

property qualifiers_order: List[str]

property rank: WikibaseRank

property references: References

static refs_equal(olditem, newitem)
    tests for exactly identical references

    Return type
        bool

    Parameters
        • olditem (Claim) –
        • newitem (Claim) –

remove(remove=True)

    Return type
        None

property removed: bool

set_value(value=None)

    Parameters
        value (str / None) –
property type: str | Dict
```

**update(*claim*)**

**Return type**

None

**Parameters**

**claim** ([Claim](#)) –

### 1.1.1.2.5 [wikibaseintegrator.datatypes.geoshape](#)

**class** [wikibaseintegrator.datatypes.geoshape.GeoShape](#)(*value=None*, *\*\*kwargs*)

Bases: [BaseDataType](#)

Implements the Wikibase data type ‘geo-shape’

**Parameters**

- **value** (*str* / *None*) –
- **kwargs** (*Any*) –

**DTYPE = 'geo-shape'**

**\_\_init\_\_(*value=None*, *\*\*kwargs*)**

Constructor, calls the superclass [BaseDataType](#)

**Parameters**

- **value** ([Optional\[str\]](#)) – The GeoShape map file name in Wikimedia Commons to be linked
- **kwargs** (*Any*) –

**Keyword Arguments**

- **prop\_nr** (*str*) – The item ID for this claim
- **snaktype** (*str*) – The snak type, either ‘value’, ‘somevalue’ or ‘novalue’
- **references** ([References](#) or list of [Claim](#)) – List with reference objects
- **qualifiers** ([Qualifiers](#)) – List with qualifier objects
- **rank** ([WikibaseRank](#)) – The snak type, either ‘value’, ‘somevalue’ or ‘novalue’

**equals(*that*, *include\_ref=False*, *fref=None*)**

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

**Return type**

bool

**Parameters**

- **that** ([Claim](#)) –
- **include\_ref** (*bool*) –
- **fref** ([Callable](#) / *None*) –

```
from_json(json_data)

Parameters
    json_data (Dict[str, Any]) – a JSON representation of a Claim

Return type
    Claim

get_json()

Return type
    Dict[str, Any]

get_sparql_value()

Return type
    str

has_equal_qualifiers(other)

Return type
    bool

Parameters
    other (Claim) –

property id: str | None

property mainsnak: Snak

parse_sparql_value(value, type='literal', unit='I')

Return type
    bool

property qualifiers: Qualifiers

property qualifiers_order: List[str]

property rank: WikibaseRank

property references: References

static refs_equal(olditem, newitem)
    tests for exactly identical references

Return type
    bool

Parameters
    • olditem (Claim) –
    • newitem (Claim) –

remove(remove=True)

Return type
    None

property removed: bool
```

---

```
set_value(value=None)

Parameters
    value (str / None) –
property type: str | Dict

update(claim)

Return type
    None

Parameters
    claim (Claim) –
```

#### 1.1.1.2.6 wikibaseintegrator.datatypes.globecoordinate

```
class wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate(latitude=None,
                                                               longitude=None,
                                                               altitude=None,
                                                               precision=None,
                                                               globe=None,
                                                               wikibase_url=None,
                                                               **kwargs)
```

Bases: *BaseDataType*

Implements the Wikibase data type for globe coordinates

**Parameters**

- **latitude** (float / None) –
- **longitude** (float / None) –
- **altitude** (float / None) –
- **precision** (float / None) –
- **globe** (str / None) –
- **wikibase\_url** (str / None) –
- **kwargs** (Any) –

**DTYPE** = 'globe-coordinate'

**\_\_init\_\_**(latitude=None, longitude=None, altitude=None, precision=None, globe=None, wikibase\_url=None, \*\*kwargs)

Constructor, calls the superclass *BaseDataType*

**Parameters**

- **latitude** (Optional[float]) – Latitude in decimal format
- **longitude** (Optional[float]) – Longitude in decimal format
- **altitude** (Optional[float]) – Altitude (in decimal format?) (Always None at this moment)
- **precision** (Optional[float]) – Precision of the position measurement, default 1 / 3600

- **globe** (Optional[str]) – The globe entity concept URI (ex: <http://www.wikidata.org/entity/Q2>) or ‘Q2’
- **wikibase\_url** (Optional[str]) – The default wikibase URL, used when the globe is only an ID like ‘Q2’. Use wbi\_config[‘WIKIBASE\_URL’] by default.
- **kwargs** (Any) –

**equals**(*that*, *include\_ref*=*False*, *fref*=*None*)

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

**Return type**

bool

**Parameters**

- **that** ([Claim](#)) –
- **include\_ref** (bool) –
- **fref** ([Callable](#) / None) –

**from\_json**(*json\_data*)**Parameters**

**json\_data** (Dict[str, Any]) – a JSON representation of a Claim

**Return type**

[Claim](#)

**get\_json()****Return type**

Dict[str, Any]

**get\_sparql\_value()****Return type**

str

**has\_equal\_qualifiers**(*other*)**Return type**

bool

**Parameters**

**other** ([Claim](#)) –

**property id:** str | None**property mainsnak:** [Snak](#)**parse\_sparql\_value**(*value*, *type*=‘literal’, *unit*=‘1’)**Return type**

bool

**property qualifiers:** [Qualifiers](#)**property qualifiers\_order:** List[str]

---

```

property rank: WikibaseRank
property references: References
static refs_equal(olditem, newitem)
    tests for exactly identical references

    Return type
        bool

    Parameters
        • olditem (Claim) –
        • newitem (Claim) –

remove(remove=True)

    Return type
        None

property removed: bool

set_value(latitude=None, longitude=None, altitude=None, precision=None, globe=None,
            wikibase_url=None)

    Parameters
        • latitude (float / None) –
        • longitude (float / None) –
        • altitude (float / None) –
        • precision (float / None) –
        • globe (str / None) –
        • wikibase_url (str / None) –

property type: str | Dict

update(claim)

    Return type
        None

    Parameters
        claim (Claim) –

```

### 1.1.1.2.7 wikibaseintegrator.datatypes.item

```
class wikibaseintegrator.datatypes.item.Item(value=None, **kwargs)
```

Bases: *BaseDataType*

Implements the Wikibase data type ‘wikibase-item’ with a value being another item ID

#### Parameters

- **value** (str / int / None) –
- **kwargs** (Any) –

```
DTYPE = 'wikibase-item'
```

```
__init__(value=None, **kwargs)
```

Constructor, calls the superclass BaseDataType

#### Parameters

- **value** (Union[str, int, None]) – The item ID to serve as the value
- **kwargs** (Any) –

```
equals(that, include_ref=False, fref=None)
```

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

#### Return type

bool

#### Parameters

- **that** ([Claim](#)) –
- **include\_ref** (bool) –
- **fref** (Callable | None) –

```
from_json(json_data)
```

#### Parameters

**json\_data** (Dict[str, Any]) – a JSON representation of a Claim

#### Return type

[Claim](#)

```
get_json()
```

#### Return type

Dict[str, Any]

```
get_sparql_value()
```

#### Return type

str

```
has_equal_qualifiers(other)
```

#### Return type

bool

#### Parameters

**other** ([Claim](#)) –

```
property id: str | None
```

```
property mainsnak: Snak
```

```
parse_sparql_value(value, type='literal', unit='I')
```

#### Return type

bool

---

```

property qualifiers: Qualifiers
property qualifiers_order: List[str]
property rank: WikibaseRank
property references: References
static refs_equal(olditem, newitem)
    tests for exactly identical references

    Return type
        bool

    Parameters
        • olditem (Claim) –
        • newitem (Claim) –

remove(remove=True)

    Return type
        None

property removed: bool
set_value(value=None)

    Parameters
        • value (str / int / None) –

property type: str | Dict
update(claim)

    Return type
        None

    Parameters
        • claim (Claim) –

```

### 1.1.1.2.8 wikibaseintegrator.datatypes.lexeme

```

class wikibaseintegrator.datatypes.lexeme.Lexeme(value=None, **kwargs)
Bases: BaseDataType
Implements the Wikibase data type ‘wikibase-lexeme’

Parameters
    • value (str / int / None) –
    • kwargs (Any) –

DTYPE = 'wikibase-lexeme'

__init__(value=None, **kwargs)
Constructor, calls the superclass BaseDataType

Parameters

```

- **value** (Union[str, int, None]) – The lexeme number to serve as a value
- **kargs** (Any) –

**equals**(*that*, *include\_ref*=*False*, *fref*=*None*)

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

**Return type**  
bool

**Parameters**

- **that** ([Claim](#)) –
- **include\_ref** (bool) –
- **fref** (Callable / None) –

**from\_json**(*json\_data*)

**Parameters**  
**json\_data** (Dict[str, Any]) – a JSON representation of a Claim

**Return type**  
[Claim](#)

**get\_json()**

**Return type**  
Dict[str, Any]

**get\_sparql\_value()**

**Return type**  
str

**has\_equal\_qualifiers**(*other*)

**Return type**  
bool

**Parameters**  
**other** ([Claim](#)) –

**property id:** str | None

**property mainsnak:** [Snak](#)

**parse\_sparql\_value**(*value*, *type*=‘literal’, *unit*=‘1’)

**Return type**  
bool

**property qualifiers:** [Qualifiers](#)

**property qualifiers\_order:** List[str]

**property rank:** [WikibaseRank](#)

**property references:** [References](#)

---

```
static refs_equal(olditem, newitem)
    tests for exactly identical references
```

**Return type**  
bool

**Parameters**

- **olditem** ([Claim](#)) –
- **newitem** ([Claim](#)) –

```
remove(remove=True)
```

**Return type**  
None

```
property removed: bool
```

```
set_value(value=None)
```

**Parameters**  
value (str / int / None) –

```
property type: str | Dict
```

```
update(claim)
```

**Return type**  
None

**Parameters**  
claim ([Claim](#)) –

### 1.1.1.2.9 wikibaseintegrator.datatypes.math

```
class wikibaseintegrator.datatypes.math.Math(value=None, **kwargs)
```

Bases: [String](#)

Implements the Wikibase data type ‘math’ for mathematical formula in TEX format

**Parameters**

- **value** (str / None) –
- **kwargs** (Any) –

```
DTYPE = 'math'
```

```
__init__(value=None, **kwargs)
```

Constructor, calls the superclass [BaseDataType](#)

**Parameters**

- **value** (Optional[str]) – The string to be used as the value
- **kwargs** (Any) –

**equals**(*that*, *include\_ref=False*, *fref=None*)

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

**Return type**

bool

**Parameters**

- **that** ([Claim](#)) –
- **include\_ref** (bool) –
- **fref** (Callable / None) –

**from\_json**(*json\_data*)**Parameters**

**json\_data** (Dict[str, Any]) – a JSON representation of a Claim

**Return type**

[Claim](#)

**get\_json()****Return type**

Dict[str, Any]

**get\_sparql\_value()****Return type**

str

**has\_equal\_qualifiers**(*other*)**Return type**

bool

**Parameters**

**other** ([Claim](#)) –

**property id:** str | None**property mainsnak:** [Snak](#)**parse\_sparql\_value**(*value*, *type='literal'*, *unit='I'*)**Return type**

bool

**property qualifiers:** [Qualifiers](#)**property qualifiers\_order:** List[str]**property rank:** [WikibaseRank](#)**property references:** [References](#)

---

```
static refs_equal(olditem, newitem)
    tests for exactly identical references
```

**Return type**  
bool

**Parameters**

- **olditem** ([Claim](#)) –
- **newitem** ([Claim](#)) –

```
remove(remove=True)
```

**Return type**  
None

```
property removed: bool
```

```
set_value(value=None)
```

**Parameters**  
**value** (str / None) –

```
property type: str | Dict
```

```
update(claim)
```

**Return type**  
None

**Parameters**  
**claim** ([Claim](#)) –

### 1.1.1.2.10 [wikibaseintegrator.datatypes.monolingualtext](#)

```
class wikibaseintegrator.datatypes.monolingualtext.MonolingualText(text=None, language=None,
                                                               **kwargs)
```

Bases: [BaseDataType](#)

Implements the Wikibase data type for Monolingual Text strings

**Parameters**

- **text** (str / None) –
- **language** (str / None) –
- **kwargs** (Any) –

```
DTYPE = 'monolingualtext'
```

```
__init__(text=None, language=None, **kwargs)
```

Constructor, calls the superclass [BaseDataType](#)

**Parameters**

- **text** (Optional[str]) – The language specific string to be used as the value.
- **language** (Optional[str]) – Specifies the language the value belongs to.
- **kwargs** (Any) –

**equals**(*that*, *include\_ref=False*, *fref=None*)

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

**Return type**

bool

**Parameters**

- **that** ([Claim](#)) –
- **include\_ref** (bool) –
- **fref** (Callable / None) –

**from\_json**(*json\_data*)**Parameters**

**json\_data** (Dict[str, Any]) – a JSON representation of a Claim

**Return type**

[Claim](#)

**get\_json()****Return type**

Dict[str, Any]

**get\_sparql\_value()****Return type**

str

**has\_equal\_qualifiers**(*other*)**Return type**

bool

**Parameters**

**other** ([Claim](#)) –

**property id:** str | None**property mainsnak:** [Snak](#)**parse\_sparql\_value**(*value*, *type='literal'*, *unit='I'*)**Return type**

bool

**property qualifiers:** [Qualifiers](#)**property qualifiers\_order:** List[str]**property rank:** [WikibaseRank](#)**property references:** [References](#)

**static refs\_equal**(olditem, newitem)  
tests for exactly identical references

**Return type**  
bool

**Parameters**

- **olditem** ([Claim](#)) –
- **newitem** ([Claim](#)) –

**remove**(remove=True)

**Return type**  
None

**property removed:** bool

**set\_value**(text=None, language=None)

**Parameters**

- **text** (str / None) –
- **language** (str / None) –

**property type:** str | Dict

**update**(claim)

**Return type**  
None

**Parameters**

**claim** ([Claim](#)) –

### 1.1.1.2.11 [wikibaseintegrator.datatypes.musicalnotation](#)

**class** [wikibaseintegrator.datatypes.musicalnotation.MusicalNotation](#)(value=None, \*\*kwargs)

Bases: *String*

Implements the Wikibase data type ‘musical-notation’

**Parameters**

- **value** (str / None) –
- **kwargs** (Any) –

**DTYPE** = ‘musical-notation’

**\_\_init\_\_**(value=None, \*\*kwargs)

Constructor, calls the superclass `BaseDataType`

**Parameters**

- **value** (Optional[str]) – The string to be used as the value
- **kwargs** (Any) –

**equals**(*that*, *include\_ref=False*, *fref=None*)

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

**Return type**

bool

**Parameters**

- **that** ([Claim](#)) –
- **include\_ref** (bool) –
- **fref** (Callable / None) –

**from\_json**(*json\_data*)**Parameters**

**json\_data** (Dict[str, Any]) – a JSON representation of a Claim

**Return type**

[Claim](#)

**get\_json()****Return type**

Dict[str, Any]

**get\_sparql\_value()****Return type**

str

**has\_equal\_qualifiers**(*other*)**Return type**

bool

**Parameters**

**other** ([Claim](#)) –

**property id:** str | None**property mainsnak:** [Snak](#)**parse\_sparql\_value**(*value*, *type='literal'*, *unit='I'*)**Return type**

bool

**property qualifiers:** [Qualifiers](#)**property qualifiers\_order:** List[str]**property rank:** [WikibaseRank](#)**property references:** [References](#)

---

```
static refs_equal(olditem, newitem)
    tests for exactly identical references
```

**Return type**  
bool

**Parameters**

- **olditem** ([Claim](#)) –
- **newitem** ([Claim](#)) –

```
remove(remove=True)
```

**Return type**  
None

```
property removed: bool
```

```
set_value(value=None)
```

**Parameters**  
**value** (str / None) –

```
property type: str | Dict
```

```
update(claim)
```

**Return type**  
None

**Parameters**  
**claim** ([Claim](#)) –

### 1.1.1.2.12 wikibaseintegrator.datatypes.property

```
class wikibaseintegrator.datatypes.property.Property(value=None, **kwargs)
```

Bases: [BaseDataType](#)

Implements the Wikibase data type ‘property’

**Parameters**

- **value** (str / int / None) –
- **kwargs** (Any) –

```
DTYPE = 'wikibase-property'
```

```
__init__(value=None, **kwargs)
```

Constructor, calls the superclass [BaseDataType](#)

**Parameters**

- **value** (str with a ‘P’ prefix, followed by several digits or only the digits without the ‘P’ prefix) – The property number to serve as a value
- **kwargs** (Any) –

**equals**(*that*, *include\_ref=False*, *fref=None*)

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

**Return type**

bool

**Parameters**

- **that** ([Claim](#)) –
- **include\_ref** (bool) –
- **fref** (Callable / None) –

**from\_json**(*json\_data*)**Parameters**

**json\_data** (Dict[str, Any]) – a JSON representation of a Claim

**Return type**

[Claim](#)

**get\_json()****Return type**

Dict[str, Any]

**get\_sparql\_value()****Return type**

str

**has\_equal\_qualifiers**(*other*)**Return type**

bool

**Parameters**

**other** ([Claim](#)) –

**property id:** str | None**property mainsnak:** [Snak](#)**parse\_sparql\_value**(*value*, *type='literal'*, *unit='I'*)**Return type**

bool

**property qualifiers:** [Qualifiers](#)**property qualifiers\_order:** List[str]**property rank:** [WikibaseRank](#)**property references:** [References](#)

---

```
static refs_equal(olditem, newitem)
    tests for exactly identical references
```

**Return type**  
bool

**Parameters**

- **olditem** ([Claim](#)) –
- **newitem** ([Claim](#)) –

```
remove(remove=True)
```

**Return type**  
None

```
property removed: bool
```

```
set_value(value=None)
```

**Parameters**  
**value** (str / int / None) –

```
property type: str | Dict
```

```
update(claim)
```

**Return type**  
None

**Parameters**  
**claim** ([Claim](#)) –

### 1.1.1.2.13 wikibaseintegrator.datatypes.quantity

```
class wikibaseintegrator.datatypes.quantity.Quantity(amount=None, upper_bound=None,
                                                       lower_bound=None, unit='I',
                                                       wikibase_url=None, **kwargs)
```

Bases: *BaseDataType*

Implements the Wikibase data type for quantities

**Parameters**

- **amount** (str / int / float / None) –
- **upper\_bound** (str / int / float / None) –
- **lower\_bound** (str / int / float / None) –
- **unit** (str / int) –
- **wikibase\_url** (str / None) –
- **kwargs** (Any) –

```
DTYPE = 'quantity'
```

**`__init__(amount=None, upper_bound=None, lower_bound=None, unit='1', wikibase_url=None, **kwargs)`**  
Constructor, calls the superclass BaseDataType

**Parameters**

- **amount** (Union[str, int, float, None]) – The amount value
- **upper\_bound** (Union[str, int, float, None]) – Upper bound of the value if it exists, e.g. for standard deviations
- **lower\_bound** (Union[str, int, float, None]) – Lower bound of the value if it exists, e.g. for standard deviations
- **unit** (Union[str, int]) – The unit item URL or the QID a certain amount has been measured in (<https://www.wikidata.org/wiki/Wikidata:Units>). The default is dimensionless, represented by a ‘1’
- **wikibase\_url** (Optional[str]) – The default wikibase URL, used when the unit is only an ID like ‘Q2’. Use wbi\_config[‘WIKIBASE\_URL’] by default.
- **kwargs** (Any) –

**`equals(that, include_ref=False, fref=None)`**

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

**Return type**

bool

**Parameters**

- **that** (Claim) –
- **include\_ref** (bool) –
- **fref** (Callable / None) –

**`from_json(json_data)`**

**Parameters**

**json\_data** (Dict[str, Any]) – a JSON representation of a Claim

**Return type**

Claim

**`get_json()`**

**Return type**

Dict[str, Any]

**`get_sparql_value()`**

**Return type**

str

**`has_equal_qualifiers(other)`**

**Return type**

bool

**Parameters**

**other** (Claim) –

```

property id: str | None
property mainsnak: Snak
parse_sparql_value(value, type='literal', unit='I')

    Return type
        bool

property qualifiers: Qualifiers
property qualifiers_order: List[str]
property rank: WikibaseRank
property references: References
static refs_equal(olditem, newitem)
    tests for exactly identical references

    Return type
        bool

    Parameters
        • olditem (Claim) –
        • newitem (Claim) –

remove(remove=True)

    Return type
        None

property removed: bool
set_value(amount=None, upper_bound=None, lower_bound=None, unit='I', wikibase_url=None)

    Parameters
        • amount (str | int | float | None) –
        • upper_bound (str | int | float | None) –
        • lower_bound (str | int | float | None) –
        • unit (str | int) –
        • wikibase_url (str | None) –

property type: str | Dict
update(claim)

    Return type
        None

    Parameters
        claim (Claim) –

```

### 1.1.1.2.14 wikibaseintegrator.datatypes.sense

```
class wikibaseintegrator.datatypes.sense.Sense(value=None, **kwargs)
```

Bases: *BaseDataType*

Implements the Wikibase data type ‘wikibase-sense’

#### Parameters

- **value** (*str* / *None*) –
- **kwargs** (*Any*) –

```
DTYPE = 'wikibase-sense'
```

```
__init__(value=None, **kwargs)
```

Constructor, calls the superclass *BaseDataType*

#### Parameters

- **value** (*Optional[str]*) – Value using the format “L<Lexeme ID>-S<Sense ID>” (example: L252248-S123)
- **kwargs** (*Any*) –

```
equals(that, include_ref=False, fref=None)
```

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

#### Return type

*bool*

#### Parameters

- **that** (*Claim*) –
- **include\_ref** (*bool*) –
- **fref** (*Callable* / *None*) –

```
from_json(json_data)
```

#### Parameters

**json\_data** (*Dict[str, Any]*) – a JSON representation of a Claim

#### Return type

*Claim*

```
get_json()
```

#### Return type

*Dict[str, Any]*

```
get_sparql_value()
```

#### Return type

*str*

```
has_equal_qualifiers(other)
```

#### Return type

*bool*

**Parameters**  
    **other** ([Claim](#)) –

**property id:** str | None

**property mainsnak:** [Snak](#)

**parse\_sparql\_value**(*value*, *type='literal'*, *unit='I'*)

**Return type**  
    bool

**property qualifiers:** [Qualifiers](#)

**property qualifiers\_order:** List[str]

**property rank:** [WikibaseRank](#)

**property references:** [References](#)

**static refs\_equal**(*olditem*, *newitem*)

    tests for exactly identical references

**Return type**  
    bool

**Parameters**

- **olditem** ([Claim](#)) –
- **newitem** ([Claim](#)) –

**remove**(*remove=True*)

**Return type**  
    None

**property removed:** bool

**set\_value**(*value=None*)

**Parameters**  
    **value** (str / None) –

**property type:** str | Dict

**update**(*claim*)

**Return type**  
    None

**Parameters**  
    **claim** ([Claim](#)) –

### 1.1.1.2.15 wikibaseintegrator.datatypes.string

`class wikibaseintegrator.datatypes.String(value=None, **kwargs)`

Bases: `BaseDataType`

Implements the Wikibase data type ‘string’

#### Parameters

- `value (str / None)` –
- `kwargs (Any)` –

`DTYPE = 'string'`

`__init__(value=None, **kwargs)`

Constructor, calls the superclass `BaseDataType`

#### Parameters

- `value (Optional[str])` – The string to be used as the value
- `kwargs (Any)` –

`equals(that, include_ref=False, fref=None)`

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

#### Return type

`bool`

#### Parameters

- `that (Claim)` –
- `include_ref (bool)` –
- `fref (Callable / None)` –

`from_json(json_data)`

#### Parameters

`json_data (Dict[str, Any])` – a JSON representation of a Claim

#### Return type

`Claim`

`get_json()`

#### Return type

`Dict[str, Any]`

`get_sparql_value()`

#### Return type

`str`

`has_equal_qualifiers(other)`

#### Return type

`bool`

**Parameters**  
    other ([Claim](#)) –

**property id:** str | None

**property mainsnak:** [Snak](#)

**parse\_sparql\_value**(value, type='literal', unit='I')

**Return type**  
    bool

**property qualifiers:** [Qualifiers](#)

**property qualifiers\_order:** List[str]

**property rank:** [WikibaseRank](#)

**property references:** [References](#)

**static refs\_equal**(olditem, newitem)  
tests for exactly identical references

**Return type**  
    bool

**Parameters**

- olditem ([Claim](#)) –
- newitem ([Claim](#)) –

**remove**(remove=True)

**Return type**  
    None

**property removed:** bool

**set\_value**(value=None)

**Parameters**  
    value (str / None) –

**property type:** str | Dict

**update**(claim)

**Return type**  
    None

**Parameters**  
    claim ([Claim](#)) –

### 1.1.1.2.16 wikibaseintegrator.datatypes.tabulardata

`class wikibaseintegrator.datatypes.tabulardata.TabularData(value=None, **kwargs)`

Bases: `BaseDataType`

Implements the Wikibase data type ‘tabular-data’

#### Parameters

- `value (str / None)` –
- `kwargs (Any)` –

`DTYPE = 'tabular-data'`

`__init__(value=None, **kwargs)`

Constructor, calls the superclass `BaseDataType`

#### Parameters

- `value (Optional[str])` – Reference to tabular data file on Wikimedia Commons.
- `kwargs (Any)` –

`equals(that, include_ref=False, fref=None)`

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

#### Return type

`bool`

#### Parameters

- `that (Claim)` –
- `include_ref (bool)` –
- `fref (Callable / None)` –

`from_json(json_data)`

#### Parameters

`json_data (Dict[str, Any])` – a JSON representation of a Claim

#### Return type

`Claim`

`get_json()`

#### Return type

`Dict[str, Any]`

`get_sparql_value()`

#### Return type

`str`

`has_equal_qualifiers(other)`

#### Return type

`bool`

**Parameters**  
    other ([Claim](#)) –

**property id:** str | None

**property mainsnak:** [Snak](#)

**parse\_sparql\_value**(value, type='literal', unit='I')

**Return type**  
    bool

**property qualifiers:** [Qualifiers](#)

**property qualifiers\_order:** List[str]

**property rank:** [WikibaseRank](#)

**property references:** [References](#)

**static refs\_equal**(olditem, newitem)  
tests for exactly identical references

**Return type**  
    bool

**Parameters**

- olditem ([Claim](#)) –
- newitem ([Claim](#)) –

**remove**(remove=True)

**Return type**  
    None

**property removed:** bool

**set\_value**(value=None)

**Parameters**  
    value (str / None) –

**property type:** str | Dict

**update**(claim)

**Return type**  
    None

**Parameters**  
    claim ([Claim](#)) –

### 1.1.1.2.17 wikibaseintegrator.datatypes.time

```
class wikibaseintegrator.datatypes.time.Time(time=None, before=0, after=0, precision=None,
                                              timezone=0, calendarmodel=None, wikibase_url=None,
                                              **kwargs)
```

Bases: *BaseDataType*

Implements the Wikibase data type with date and time values

#### Parameters

- **time** (*str* / *None*) –
- **before** (*int*) –
- **after** (*int*) –
- **precision** (*int* / *WikibaseDatePrecision* / *None*) –
- **timezone** (*int*) –
- **calendarmodel** (*str* / *None*) –
- **wikibase\_url** (*str* / *None*) –
- **kwargs** (*Any*) –

**DTYPE** = 'time'

```
__init__(time=None, before=0, after=0, precision=None, timezone=0, calendarmodel=None,
        wikibase_url=None, **kwargs)
```

Constructor, calls the superclass *BaseDataType*

#### Parameters

- **time** (*Optional[str]*) – Explicit value for point in time, represented as a timestamp resembling ISO 8601. You can use the keyword ‘now’ to get the current UTC date.
- **prop\_nr** – The property number for this claim
- **before** (*int*) – explicit integer value for how many units after the given time it could be. The unit is given by the precision.
- **after** (*int*) – explicit integer value for how many units before the given time it could be. The unit is given by the precision.
- **precision** (*Union[int, WikibaseDatePrecision, None]*) – Precision value for dates and time as specified in the Wikibase data model (<https://www.wikidata.org/wiki/Special>ListDatatypes#time>)
- **timezone** (*int*) – The timezone which applies to the date and time as specified in the Wikibase data model
- **calendarmodel** (*Optional[str]*) – The calendar model used for the date. URL to the Wikibase calendar model item or the QID.
- **wikibase\_url** (*str* / *None*) –
- **kwargs** (*Any*) –

**equals**(*that*, *include\_ref=False*, *fref=None*)

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to

compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

**Return type**  
bool

**Parameters**

- **that** ([Claim](#)) –
- **include\_ref** (bool) –
- **fref** (Callable | None) –

**from\_json**(*json\_data*)

**Parameters**

**json\_data** (Dict[str, Any]) – a JSON representation of a Claim

**Return type**  
[Claim](#)

**get\_day**()

**Return type**  
int

**get\_json**()

**Return type**  
Dict[str, Any]

**get\_month**()

**Return type**  
int

**get\_sparql\_value**()

**Return type**  
str

**get\_year**()

**Return type**  
int

**has\_equal\_qualifiers**(*other*)

**Return type**  
bool

**Parameters**

**other** ([Claim](#)) –

**property id:** str | None

**property mainsnak:** [Snak](#)

**parse\_sparql\_value**(*value*, *type*=‘literal’, *unit*=‘1’)

**Return type**  
bool

```
property qualifiers: Qualifiers
property qualifiers_order: List[str]
property rank: WikibaseRank
property references: References
static refs_equal(olditem, newitem)
    tests for exactly identical references
```

**Return type**  
bool

**Parameters**

- **olditem** (Claim) –
- **newitem** (Claim) –

```
remove(remove=True)
```

**Return type**  
None

```
property removed: bool
```

```
set_value(time=None, before=0, after=0, precision=None, timezone=0, calendarmodel=None,
          wikibase_url=None)
```

**Parameters**

- **time** (str / None) –
- **before** (int) –
- **after** (int) –
- **precision** (int / WikibaseDatePrecision / None) –
- **timezone** (int) –
- **calendarmodel** (str / None) –
- **wikibase\_url** (str / None) –

```
property type: str | Dict
```

```
update(claim)
```

**Return type**  
None

**Parameters**

- **claim** (Claim) –

### 1.1.1.2.18 wikibaseintegrator.datatypes.url

`class wikibaseintegrator.datatypes.url.URL(value=None, **kwargs)`

Bases: `BaseDataType`

Implements the Wikibase data type for URL strings

#### Parameters

- `value (str / None)` –
- `kwargs (Any)` –

`DTYPE = 'url'`

`__init__(value=None, **kwargs)`

Constructor, calls the superclass `BaseDataType`

#### Parameters

- `value (Optional[str])` – The URL to be used as the value
- `kwargs (Any)` –

`equals(that, include_ref=False, fref=None)`

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

#### Return type

`bool`

#### Parameters

- `that (Claim)` –
- `include_ref (bool)` –
- `fref (Callable / None)` –

`from_json(json_data)`

#### Parameters

`json_data (Dict[str, Any])` – a JSON representation of a Claim

#### Return type

`Claim`

`get_json()`

#### Return type

`Dict[str, Any]`

`get_sparql_value()`

#### Return type

`str`

`has_equal_qualifiers(other)`

#### Return type

`bool`

**Parameters**  
    **other** ([Claim](#)) –

**property id:** str | None

**property mainsnak:** [Snak](#)

**parse\_sparql\_value**(*value*, *type='literal'*, *unit='I'*)

**Return type**  
    bool

**property qualifiers:** [Qualifiers](#)

**property qualifiers\_order:** List[str]

**property rank:** [WikibaseRank](#)

**property references:** [References](#)

**static refs\_equal**(*olditem*, *newitem*)

    tests for exactly identical references

**Return type**  
    bool

**Parameters**

- **olditem** ([Claim](#)) –
- **newitem** ([Claim](#)) –

**remove**(*remove=True*)

**Return type**  
    None

**property removed:** bool

**set\_value**(*value=None*)

**Parameters**  
    **value** (str / None) –

**property type:** str | Dict

**update**(*claim*)

**Return type**  
    None

**Parameters**  
    **claim** ([Claim](#)) –

## 1.1.2 wikibaseintegrator.entities

### 1.1.2.1 wikibaseintegrator.entities.baseentity

```
class wikibaseintegrator.entities.baseentity.BaseEntity(api=None, title=None, pageid=None,
                                                       lastrevid=None, type=None, id=None,
                                                       claims=None, is_bot=None, login=None)
```

Bases: object

#### Parameters

- **api** (*Optional['WikibaseIntegrator']*) –
- **title** (*Optional[str]*) –
- **pageid** (*Optional[int]*) –
- **lastrevid** (*Optional[int]*) –
- **type** (*Optional[str]*) –
- **id** (*Optional[str]*) –
- **claims** (*Optional[Claims]*) –
- **is\_bot** (*Optional[bool]*) –
- **login** (*Optional[\_Login]*) –

**ETYPE** = 'base-entity'

```
__init__(api=None, title=None, pageid=None, lastrevid=None, type=None, id=None, claims=None,
        is_bot=None, login=None)
```

#### Parameters

- **api** (*WikibaseIntegrator* / *None*) –
- **title** (*str* / *None*) –
- **pageid** (*int* / *None*) –
- **lastrevid** (*int* / *None*) –
- **type** (*str* / *None*) –
- **id** (*str* / *None*) –
- **claims** (*Claims* / *None*) –
- **is\_bot** (*bool* / *None*) –
- **login** (*\_Login* / *None*) –

**add\_claims**(*claims*, *action\_if\_exists*=*ActionIfExists.APPEND\_OR\_REPLACE*)

#### Parameters

- **claims** (*Union[Claim, List[Claim], Claims]*) – A Claim, list of Claim or just a Claims object to add to this Claims object.
- **action\_if\_exists** (*ActionIfExists*) – Replace or append the statement. You can force an addition if the declaration already exists. KEEP: The original claim will be kept and the new one will not be added (because there is already one with this property number)  
**APPEND\_OR\_REPLACE**: The new claim will be added only if the new one is different

(by comparing values) FORCE\_APPEND: The new claim will be added even if already exists  
REPLACE\_ALL: The new claim will replace the old one

**Return type**

*BaseEntity*

**Returns**

Return the updated entity object.

**property api:** *WikibaseIntegrator*

**property claims:** *Claims*

**clear(\*\*kwargs)**

Use the *clear* parameter of *wbeditentity* API call to clear the content of the entity. The entity will be updated with an empty dictionary.

**Parameters**

**kwargs** (Any) – More arguments for *\_write()* and Python requests

**Return type**

*Dict[str, Any]*

**Returns**

A dictionary representation of the edited Entity

**delete(login=None, allow\_anonymous=False, is\_bot=None, \*\*kwargs)**

Delete the current entity. Use the pageid first if available and fallback to the page title.

**Parameters**

- **login** (Optional[\_Login]) – A *wbi\_login.Login* instance
- **allow\_anonymous** (bool) – Allow an unidentified edit to the MediaWiki API (default False)
- **is\_bot** (Optional[bool]) – Flag the edit as a bot
- **reason** – Reason for the deletion. If not set, an automatically generated reason will be used.
- **deletetalk** – Delete the talk page, if it exists.
- **kwargs** (Any) – Any additional keyword arguments to pass to *mediawiki\_api\_call\_helper* and *requests.request*

**Returns**

The data returned by the API as a dictionary

**from\_json(json\_data)**

Import a dictionary into  *BaseEntity* attributes.

**Parameters**

**json\_data** (*Dict[str, Any]*) – A specific dictionary from MediaWiki API

**Return type**

*BaseEntity*

**Returns**

**get\_entity\_url(wikibase\_url=None)**

**Return type**

*str*

---

**Parameters**

`wikibase_url (str / None) –`

**get\_json()**

To get the dict equivalent of the JSON representation of the entity.

**Return type**

`Dict[str, Union[str, Dict[str, List]]]`

**Returns**

`property id: str | None`

`property lastrevid: int | None`

`property pageid: str | int | None`

`property title: str | None`

`property type: str`

`write_required(base_filter=None, action_if_exists=ActionIfExists.REPLACE_ALL, **kwargs)`

**Return type**

`bool`

**Parameters**

- `base_filter (Optional[List[BaseDataType] / List[BaseDataType]]) –`
- `action_if_exists (ActionIfExists) –`
- `kwargs (Any) –`

### 1.1.2.2 wikibaseintegrator.entities.item

```
class wikibaseintegrator.entities.item.ItemEntity(labels=None, descriptions=None, aliases=None,
                                                sitelinks=None, **kwargs)
```

Bases:  `BaseEntity`

**Parameters**

- `labels (Optional[Labels]) –`
- `descriptions (Optional[Descriptions]) –`
- `aliases (Optional[Aliases]) –`
- `sitelinks (Optional[Sitelinks]) –`
- `kwargs (Any) –`

`ETYPE = 'item'`

```
__init__(labels=None, descriptions=None, aliases=None, sitelinks=None, **kwargs)
```

**Parameters**

- `api –`
- `labels (Optional[Labels]) –`
- `descriptions (Optional[Descriptions]) –`

- **aliases** (Optional[*Aliases*]) –
- **sitelinks** (Optional[*Sitelinks*]) –
- **kwargs** (Any) –

**Return type**

None

**add\_claims**(*claims*, *action\_if\_exists*=*ActionIfExists.APPEND\_OR\_REPLACE*)

**Parameters**

- **claims** (Union[*Claim*, List[*Claim*], *Claims*]) – A Claim, list of Claim or just a Claims object to add to this Claims object.
- **action\_if\_exists** (*ActionIfExists*) – Replace or append the statement. You can force an addition if the declaration already exists. KEEP: The original claim will be kept and the new one will not be added (because there is already one with this property number)  
APPEND\_OR\_REPLACE: The new claim will be added only if the new one is different (by comparing values)  
FORCE\_APPEND: The new claim will be added even if already exists  
REPLACE\_ALL: The new claim will replace the old one

**Return type**

*BaseEntity*

**Returns**

Return the updated entity object.

**property aliases:** *Aliases*

**property api:** *WikibaseIntegrator*

**property claims:** *Claims*

**clear(\*\*kwargs)**

Use the *clear* parameter of *wbeditentity* API call to clear the content of the entity. The entity will be updated with an empty dictionary.

**Parameters**

**kwargs** (Any) – More arguments for *\_write()* and Python requests

**Return type**

*Dict[str, Any]*

**Returns**

A dictionary representation of the edited Entity

**delete**(*login=None*, *allow\_anonymous=False*, *is\_bot=None*, *\*\*kwargs*)

Delete the current entity. Use the pageid first if available and fallback to the page title.

**Parameters**

- **login** (Optional[\_Login]) – A *wbi\_login.Login* instance
- **allow\_anonymous** (bool) – Allow an unidentified edit to the MediaWiki API (default False)
- **is\_bot** (Optional[bool]) – Flag the edit as a bot
- **reason** – Reason for the deletion. If not set, an automatically generated reason will be used.
- **deletetalk** – Delete the talk page, if it exists.

- **kwargs** (Any) – Any additional keyword arguments to pass to mediawiki\_api\_call\_helper and requests.request

**Returns**

The data returned by the API as a dictionary

**property descriptions:** *Descriptions*

**from\_json(json\_data)**

Import a dictionary into BaseEntity attributes.

**Parameters**

**json\_data** (Dict[str, Any]) – A specific dictionary from MediaWiki API

**Return type**

*ItemEntity*

**Returns**

**get(entity\_id=None, \*\*kwargs)**

Request the MediaWiki API to get data for the entity specified in argument.

**Parameters**

- **entity\_id** (Union[str, int, None]) – The entity\_id of the Item entity you want. Must start with a ‘Q’.
- **kwargs** (Any) –

**Return type**

*ItemEntity*

**Returns**

an ItemEntity instance

**get\_entity\_url(wikibase\_url=None)**

**Return type**

str

**Parameters**

**wikibase\_url** (str / None) –

**get\_json()**

To get the dict equivalent of the JSON representation of the Item.

**Return type**

Dict[str, Union[str, Dict]]

**Returns**

A dict representation of the Item.

**property id: str | None**

**property labels: Labels**

**property lastrevid: int | None**

**new(\*\*kwargs)**

**Return type**

*ItemEntity*

**Parameters**

**kwargs** (Any) –

**property pageid:** str | int | None

**property sitelinks:** Sitelinks

**property title:** str | None

**property type:** str

**write(\*\*kwargs)**

Write the ItemEntity data to the Wikibase instance and return the ItemEntity object returned by the instance.  
extend \_write()

**Parameters**

- **data** – The serialized object that is used as the data source. A newly created entity will be assigned an ‘id’.
- **summary** – A summary of the edit
- **login** – A login instance
- **allow\_anonymous** – Force a check if the query can be anonymous or not
- **clear** – Clear the existing entity before updating
- **is\_bot** – Add the bot flag to the query
- **kwargs** (Any) – More arguments for Python requests

**Return type**

ItemEntity

**Returns**

an ItemEntity of the response from the instance

**write\_required(base\_filter=None, action\_if\_exists=ActionIfExists.REPLACE\_ALL, \*\*kwargs)**

**Return type**

bool

**Parameters**

- **base\_filter** (Optional[List[BaseDataType] / List[BaseDataType]]) –
- **action\_if\_exists** (ActionIfExists) –
- **kwargs** (Any) –

### 1.1.2.3 wikibaseintegrator.entities.lexeme

**class wikibaseintegrator.entities.lexeme.LexemeEntity(lemmas=None, lexical\_category=None, language=None, forms=None, senses=None, \*\*kwargs)**

Bases: BaseEntity

**Parameters**

- **lemmas** (Optional[Lemmas]) –
- **lexical\_category** (Optional[str]) –

```

    • language (Optional[str]) –
    • forms (Optional[Forms]) –
    • senses (Optional[Senses]) –
    • kwargs (Any) –

ETYPE = 'lexeme'

__init__(lemmas=None, lexical_category=None, language=None, forms=None, senses=None, **kwargs)

```

**Parameters**

- **lemmas** (*Lemmas / None*) –
- **lexical\_category** (*str / None*) –
- **language** (*str / None*) –
- **forms** (*Forms / None*) –
- **senses** (*Senses / None*) –
- **kwargs** (*Any*) –

```
add_claims(claims, action_if_exists=ActionIfExists.APPEND_OR_REPLACE)
```

**Parameters**

- **claims** (*Union[Claim, List[Claim], Claims]*) – A Claim, list of Claim or just a Claims object to add to this Claims object.
- **action\_if\_exists** (*ActionIfExists*) – Replace or append the statement. You can force an addition if the declaration already exists. KEEP: The original claim will be kept and the new one will not be added (because there is already one with this property number) APPEND\_OR\_REPLACE: The new claim will be added only if the new one is different (by comparing values) FORCE\_APPEND: The new claim will be added even if already exists REPLACE\_ALL: The new claim will replace the old one

**Return type**

*BaseEntity*

**Returns**

Return the updated entity object.

```
property api: WikibaseIntegrator
```

```
property claims: Claims
```

```
clear(**kwargs)
```

Use the *clear* parameter of *wbeditentity* API call to clear the content of the entity. The entity will be updated with an empty dictionary.

**Parameters**

**kwargs** (*Any*) – More arguments for *\_write()* and Python requests

**Return type**

*Dict[str, Any]*

**Returns**

A dictionary representation of the edited Entity

**delete**(*login=None*, *allow\_anonymous=False*, *is\_bot=None*, *\*\*kwargs*)

Delete the current entity. Use the pageid first if available and fallback to the page title.

**Parameters**

- **login** (`Optional[_Login]`) – A `wbi_login.Login` instance
- **allow\_anonymous** (`bool`) – Allow an unidentified edit to the MediaWiki API (default `False`)
- **is\_bot** (`Optional[bool]`) – Flag the edit as a bot
- **reason** – Reason for the deletion. If not set, an automatically generated reason will be used.
- **deletetalk** – Delete the talk page, if it exists.
- **kwargs** (`Any`) – Any additional keyword arguments to pass to `mediawiki_api_call_helper` and `requests.request`

**Returns**

The data returned by the API as a dictionary

**property forms:** *Forms*

**from\_json**(*json\_data*)

Import a dictionary into BaseEntity attributes.

**Parameters**

**json\_data** (`Dict[str, Any]`) – A specific dictionary from MediaWiki API

**Return type**

*LexemeEntity*

**Returns**

**get**(*entity\_id*, *\*\*kwargs*)

**Return type**

*LexemeEntity*

**Parameters**

- **entity\_id** (`str` / `int`) –
- **kwargs** (`Any`) –

**get\_entity\_url**(*wikibase\_url=None*)

**Return type**

`str`

**Parameters**

**wikibase\_url** (`str` / `None`) –

**get\_json()**

To get the dict equivalent of the JSON representation of the entity.

**Return type**

`Dict[str, Union[str, Dict]]`

**Returns**

**property id:** `str` | `None`

```

property language: str
property lastrevid: int | None
property lemmas: Lemmas
property lexical_category: str | None
new(**kwargs)

```

**Return type**  
*LexemeEntity*

**Parameters**  
**kwargs** (Any) –

```

property pageid: str | int | None
property senses: Senses
property title: str | None
property type: str
write(**kwargs)

```

Write the LexemeEntity data to the Wikibase instance and return the LexemeEntity object returned by the instance.

**Parameters**

- **data** – The serialized object that is used as the data source. A newly created entity will be assigned an ‘id’.
- **summary** – A summary of the edit
- **login** – A login instance
- **allow\_anonymous** – Force a check if the query can be anonymous or not
- **clear** – Clear the existing entity before updating
- **is\_bot** – Add the bot flag to the query
- **kwargs** (Any) – More arguments for Python requests

**Return type**  
*LexemeEntity*

**Returns**  
an LexemeEntity of the response from the instance

```
write_required(base_filter=None, action_if_exists=ActionIfExists.REPLACE_ALL, **kwargs)
```

**Return type**  
bool

**Parameters**

- **base\_filter** (*Optional[List[BaseDataType] / List[BaseDataType]]*) –
- **action\_if\_exists** (*ActionIfExists*) –
- **kwargs** (Any) –

### 1.1.2.4 wikibaseintegrator.entities.mediainfo

```
class wikibaseintegrator.entities.mediainfo.MediaInfoEntity(labels=None, descriptions=None,  
                           aliases=None, **kwargs)
```

Bases:  *BaseEntity*

#### Parameters

- **labels** (*Optional[Labels]*) –
- **descriptions** (*Optional[Descriptions]*) –
- **aliases** (*Optional[Aliases]*) –
- **kwargs** (*Any*) –

**ETYPE** = 'mediainfo'

```
__init__(labels=None, descriptions=None, aliases=None, **kwargs)
```

#### Parameters

- **api** –
- **labels** (*Optional[Labels]*) –
- **descriptions** (*Optional[Descriptions]*) –
- **aliases** (*Optional[Aliases]*) –
- **sitelinks** –
- **kwargs** (*Any*) –

#### Return type

*None*

```
add_claims(claims, action_if_exists=ActionIfExists.APPEND_OR_REPLACE)
```

#### Parameters

- **claims** (*Union[Claim, List[Claim], Claims]*) – A Claim, list of Claim or just a Claims object to add to this Claims object.
- **action\_if\_exists** (*ActionIfExists*) – Replace or append the statement. You can force an addition if the declaration already exists. KEEP: The original claim will be kept and the new one will not be added (because there is already one with this property number) APPEND\_OR\_REPLACE: The new claim will be added only if the new one is different (by comparing values) FORCE\_APPEND: The new claim will be added even if already exists REPLACE\_ALL: The new claim will replace the old one

#### Return type

*BaseEntity*

#### Returns

Return the updated entity object.

**property aliases:** *Aliases*

**property api:** *WikibaseIntegrator*

**property claims:** *Claims*

**clear(\*\*kwargs)**

Use the *clear* parameter of *wbeditentity* API call to clear the content of the entity. The entity will be updated with an empty dictionary.

**Parameters**

**kwargs** (Any) – More arguments for *\_write()* and Python requests

**Return type**

*Dict[str, Any]*

**Returns**

A dictionary representation of the edited Entity

**delete(login=None, allow\_anonymous=False, is\_bot=None, \*\*kwargs)**

Delete the current entity. Use the pageid first if available and fallback to the page title.

**Parameters**

- **login** (Optional[\_Login]) – A *wbi\_login.Login* instance
- **allow\_anonymous** (bool) – Allow an unidentified edit to the MediaWiki API (default False)
- **is\_bot** (Optional[bool]) – Flag the edit as a bot
- **reason** – Reason for the deletion. If not set, an automatically generated reason will be used.
- **deletetalk** – Delete the talk page, if it exists.
- **kwargs** (Any) – Any additional keyword arguments to pass to *mediawiki\_api\_call\_helper* and *requests.request*

**Returns**

The data returned by the API as a dictionary

**property descriptions: *Descriptions*****from\_json(json\_data)**

Import a dictionary into BaseEntity attributes.

**Parameters**

**json\_data** (*Dict[str, Any]*) – A specific dictionary from MediaWiki API

**Return type**

*MediaInfoEntity*

**Returns****get(entity\_id, \*\*kwargs)****Return type**

*MediaInfoEntity*

**Parameters**

- **entity\_id** (str / int) –
- **kwargs** (Any) –

**get\_by\_title(titles, sites='commonswiki', \*\*kwargs)****Return type**

*MediaInfoEntity*

**Parameters**

- **titles** (*List[str] / str*) –
- **sites** (*str*) –
- **kargs** (*Any*) –

**get\_entity\_url**(*wikibase\_url=None*)

**Return type**

*str*

**Parameters**

**wikibase\_url** (*str / None*) –

**get\_json()**

To get the dict equivalent of the JSON representation of the entity.

**Return type**

*Dict[str, Union[str, Dict]]*

**Returns**

**property id:** *str | None*

**property labels:** *Labels*

**property lastrevid:** *int | None*

**new(\*\*kwargs)**

**Return type**

*MediaInfoEntity*

**Parameters**

**kargs** (*Any*) –

**property pageid:** *str | int | None*

**property title:** *str | None*

**property type:** *str*

**write(\*\*kwargs)**

Write the MediaInfoEntity data to the Wikibase instance and return the MediaInfoEntity object returned by the instance.

**Parameters**

- **data** – The serialized object that is used as the data source. A newly created entity will be assigned an ‘id’.
- **summary** – A summary of the edit
- **login** – A login instance
- **allow\_anonymous** – Force a check if the query can be anonymous or not
- **clear** – Clear the existing entity before updating
- **is\_bot** – Add the bot flag to the query
- **kargs** (*Any*) – More arguments for Python requests

**Return type**`MediaInfoEntity`**Returns**

an MediaInfoEntity of the response from the instance

`write_required(base_filter=None, action_if_exists=ActionIfExists.REPLACE_ALL, **kwargs)`**Return type**`bool`**Parameters**

- **base\_filter** (`Optional[List[BaseDataType] / List[BaseDataType]]`) –
- **action\_if\_exists** (`ActionIfExists`) –
- **kwargs** (`Any`) –

### 1.1.2.5 `wikibaseintegrator.entities.property`

```
class wikibaseintegrator.entities.property.PropertyEntity(datatype=None, labels=None,
                                                         descriptions=None, aliases=None,
                                                         **kwargs)
```

Bases:  `BaseEntity`

**Parameters**

- **datatype** (`Union[str, WikibaseDatatype, None]`) –
- **labels** (`Optional[Labels]`) –
- **descriptions** (`Optional[Descriptions]`) –
- **aliases** (`Optional[Aliases]`) –
- **kwargs** (`Any`) –

`ETYPE = 'property'``__init__(datatype=None, labels=None, descriptions=None, aliases=None, **kwargs)`**Parameters**

- **datatype** (`str / WikibaseDatatype / None`) –
- **labels** (`Labels / None`) –
- **descriptions** (`Descriptions / None`) –
- **aliases** (`Aliases / None`) –
- **kwargs** (`Any`) –

`add_claims(claims, action_if_exists=ActionIfExists.APPEND_OR_REPLACE)`**Parameters**

- **claims** (`Union[Claim, List[Claim], Claims]`) – A Claim, list of Claim or just a Claims object to add to this Claims object.
- **action\_if\_exists** (`ActionIfExists`) – Replace or append the statement. You can force an addition if the declaration already exists. KEEP: The original claim will be kept and the new one will not be added (because there is already one with this property number)

APPEND\_OR\_REPLACE: The new claim will be added only if the new one is different  
(by comparing values)  
FORCE\_APPEND: The new claim will be added even if already exists  
REPLACE\_ALL: The new claim will replace the old one

**Return type**

*BaseEntity*

**Returns**

Return the updated entity object.

**property aliases:** *Aliases*

**property api:** *WikibaseIntegrator*

**property claims:** *Claims*

**clear(\*\*kwargs)**

Use the *clear* parameter of *wbeditentity* API call to clear the content of the entity. The entity will be updated with an empty dictionary.

**Parameters**

**kwargs** (Any) – More arguments for *\_write()* and Python requests

**Return type**

*Dict[str, Any]*

**Returns**

A dictionary representation of the edited Entity

**property datatype:** str | *WikibaseDatatype* | None

**delete(login=None, allow\_anonymous=False, is\_bot=None, \*\*kwargs)**

Delete the current entity. Use the pageid first if available and fallback to the page title.

**Parameters**

- **login** (Optional[\_Login]) – A *wbi\_login.Login* instance
- **allow\_anonymous** (bool) – Allow an unidentified edit to the MediaWiki API (default False)
- **is\_bot** (Optional[bool]) – Flag the edit as a bot
- **reason** – Reason for the deletion. If not set, an automatically generated reason will be used.
- **deletetalk** – Delete the talk page, if it exists.
- **kwargs** (Any) – Any additional keyword arguments to pass to *mediawiki\_api\_call\_helper* and *requests.request*

**Returns**

The data returned by the API as a dictionary

**property descriptions:** *Descriptions*

**from\_json(json\_data)**

Import a dictionary into BaseEntity attributes.

**Parameters**

**json\_data** (*Dict[str, Any]*) – A specific dictionary from MediaWiki API

**Return type**

*PropertyEntity*

**Returns****get**(*entity\_id*, *\*\*kwargs*)**Return type***PropertyEntity***Parameters**

- **entity\_id** (*str* / *int*) –
- **kwargs** (*Any*) –

**get\_entity\_url**(*wikibase\_url=None*)**Return type***str***Parameters***wikibase\_url* (*str* / *None*) –**get\_json()**

To get the dict equivalent of the JSON representation of the entity.

**Return type***Dict*[*str*, *Union*[*str*, *Any*]]**Returns****property id:** *str* | *None***property labels:** *Labels***property lastrevid:** *int* | *None***new**(*\*\*kwargs*)**Return type***PropertyEntity***Parameters****kwargs** (*Any*) –**property pageid:** *str* | *int* | *None***property title:** *str* | *None***property type:** *str***write**(*\*\*kwargs*)

Write the PropertyEntity data to the Wikibase instance and return the PropertyEntity object returned by the instance.

**Parameters**

- **data** – The serialized object that is used as the data source. A newly created entity will be assigned an ‘id’.
- **summary** – A summary of the edit
- **login** – A login instance
- **allow\_anonymous** – Force a check if the query can be anonymous or not
- **clear** – Clear the existing entity before updating

- **is\_bot** – Add the bot flag to the query
- **kwargs** (Any) – More arguments for Python requests

**Return type**

*PropertyEntity*

**Returns**

an *PropertyEntity* of the response from the instance

**write\_required**(*base\_filter*=None, *action\_if\_exists*=ActionIfExists.REPLACE\_ALL, \*\**kwargs*)

**Return type**

bool

**Parameters**

- **base\_filter** (*Optional[List[BaseDataType] / List[BaseDataType]]*) –
- **action\_if\_exists** (ActionIfExists) –
- **kwargs** (Any) –

## 1.1.3 wikibaseintegrator.models

### 1.1.3.1 wikibaseintegrator.models.aliases

**class** `wikibaseintegrator.models.aliases.Alias`(*language*, *value*=None)

Bases: *LanguageValue*

**Parameters**

- **language** (str) –
- **value** (*Optional[str]*) –

**\_\_init\_\_**(*language*, *value*=None)

**Parameters**

- **language** (str) –
- **value** (str / None) –

**from\_json**(*json\_data*)

**Return type**

*LanguageValue*

**Parameters**

**json\_data** (*Dict[str, str]*) –

**get\_json()**

**Return type**

*Dict[str, Optional[str]]*

**property language:** str

**remove()**

**Return type**

*LanguageValue*

```
property removed: bool
property value: str | None
    The value of the LanguageValue instance. :return: A string with the value of the LanguageValue instance.
class wikibaseintegrator.models.aliases.Aliases(language=None, value=None)
    Bases: BaseModel

    Parameters
        • language (Optional[str]) –
        • value (Optional[str]) –

__init__(language=None, value=None)

    Parameters
        • language (str | None) –
        • value (str | None) –

property aliases: Dict[str, List[Alias]]
from_json(json_data)

    Return type
        Aliases

    Parameters
        json_data (Dict[str, List]) –

get(language=None)

    Return type
        Optional[List[Alias]]

    Parameters
        language (str | None) –

get_json()

    Return type
        Dict[str, List]

set(language=None, values=None, action_if_exists=ActionIfExists.APPEND_OR_REPLACE)

    Return type
        Aliases

    Parameters
        • language (str | None) –
        • values (str | List | None) –
        • action_if_exists (ActionIfExists) –
```

### 1.1.3.2 `wikibaseintegrator.models.basemodel`

```
class wikibaseintegrator.models.basemodel.BaseModel  
    Bases: object  
    __init__()
```

### 1.1.3.3 `wikibaseintegrator.models.claims`

```
class wikibaseintegrator.models.claims.Claim(qualifiers=None, rank=None, references=None,  
                                             snaktype=WikibaseSnakType.KNOWN_VALUE)
```

Bases: `BaseModel`

#### Parameters

- `qualifiers` (`Optional[Qualifiers]`) –
- `rank` (`Optional[WikibaseRank]`) –
- `references` (`Optional[Union[References, List[Union[Claim, List[Claim]]]]]`) –
- `snaktype` (`WikibaseSnakType`) –

`DTYPE = 'claim'`

```
__init__(qualifiers=None, rank=None, references=None, snaktype=WikibaseSnakType.KNOWN_VALUE)
```

#### Parameters

- `qualifiers` (`Optional[Qualifiers]`) –
- `rank` (`Optional[WikibaseRank]`) –
- `references` (`Union[References, List[Union[Claim, List[Claim]]], None]`) – A References object, a list of Claim object or a list of list of Claim object
- `snaktype` (`WikibaseSnakType`) –

#### Return type

`None`

`equals(that, include_ref=False, fref=None)`

Tests for equality of two statements. If comparing references, the order of the arguments matters!!! self is the current statement, the next argument is the new statement. Allows passing in a function to use to compare the references ‘fref’. Default is equality. fref accepts two arguments ‘oldrefs’ and ‘newrefs’, each of which are a list of references, where each reference is a list of statements

#### Return type

`bool`

#### Parameters

- `that` (`Claim`) –
- `include_ref` (`bool`) –
- `fref` (`Callable` / `None`) –

```
from_json(json_data)

Parameters
    json_data (Dict[str, Any]) – a JSON representation of a Claim

Return type
    Claim

get_json()

Return type
    Dict[str, Any]

abstract get_sparql_value()

Return type
    str

has_equal_qualifiers(other)

Return type
    bool

Parameters
    other (Claim) –

property id: str | None

property mainsnak: Snak

property qualifiers: Qualifiers

property qualifiers_order: List[str]

property rank: WikibaseRank

property references: References

static refs_equal(olditem, newitem)
    tests for exactly identical references

Return type
    bool

Parameters
    • olditem (Claim) –
    • newitem (Claim) –

remove(remove=True)

Return type
    None

property removed: bool

property type: str | Dict
```

**update**(*claim*)

**Return type**

None

**Parameters**

**claim** (*Claim*) –

**class** `wikibaseintegrator.models.claims.Claims`

Bases: *BaseModel*

**\_\_init\_\_**()

**Return type**

None

**add**(*claims*, *action\_if\_exists*=*ActionIfExists.REPLACE\_ALL*)

**Parameters**

- **claims** (`Union[Claims, List[Claim], Claim]`) – A Claim, list of Claim or just a Claims object to add to this Claims object.
- **action\_if\_exists** (*ActionIfExists*) – Replace or append the statement. You can force an addition if the declaration already exists. Defaults to REPLACE\_ALL. KEEP: The original claim will be kept and the new one will not be added (because there is already one with this property number) APPEND\_OR\_REPLACE: The new claim will be added only if the new one is different (by comparing values) FORCE\_APPEND: The new claim will be added even if already exists REPLACE\_ALL: The new claim will replace the old one

**Return type**

*Claims*

**Returns**

Return the updated Claims object.

**property** `claims: Dict[str, List[Claim]]`

**from\_json**(*json\_data*)

**Return type**

*Claims*

**Parameters**

**json\_data** (`Dict[str, Any]`) –

**get**(*property*)

**Return type**

`List[Claim]`

**Parameters**

**property** (*str*) –

**get\_json**()

**Return type**

`Dict[str, List]`

---

**remove**(*property=None*)

**Return type**

None

**Parameters**

**property** (*str* / *None*) –

#### 1.1.3.4 `wikibaseintegrator.models.descriptions`

**class** `wikibaseintegrator.models.descriptions.Descriptions`

Bases: *LanguageValues*

**\_\_init\_\_()**

**Return type**

None

**add**(*language\_value*)

Add a *LanguageValue* object to the list

**Parameters**

**language\_value** (*LanguageValue*) – A *LanguageValue* object

**Return type**

*LanguageValues*

**Returns**

The current *LanguageValues* object

**from\_json**(*json\_data*)

Create a new *Descriptions* object from a JSON/dict object.

**Parameters**

**json\_data** (*Dict[str, Dict]*) – A dict object who use the same format as Wikibase.

**Return type**

*Descriptions*

**Returns**

The newly created or updated object.

**get**(*language=None*)

Get a *LanguageValue* object with the specified language. Use the default language in *wbi\_config* if none specified.

**Parameters**

**language** (*Optional[str]*) – The requested language.

**Return type**

*Optional[LanguageValue]*

**Returns**

The related *LanguageValue* object or None if none found.

**get\_json()**

Get a formatted dict who respect the Wikibase format.

**Return type**`Dict[str, Dict]`**Returns**

A dict using Wikibase format.

`set(language=None, value=None, action_if_exists=ActionIfExists.REPLACE_ALL)`

Create or update the specified language with the valued passed in arguments.

**Parameters**

- **language** (`Optional[str]`) – The desired language.
- **value** (`Optional[str]`) – The desired value of the `LanguageValue` object. Use `None` to delete an existing `LanguageValue` object from the list.
- **action\_if\_exists** (`ActionIfExists`) – The action if the `LanguageValue` object is already defined. Can be `ActionIfExists.REPLACE_ALL` (default) or `ActionIfExists.KEEP`.

**Return type**`Optional[LanguageValue]`**Returns**

The created or updated `LanguageValue`. `None` if there's no `LanguageValue` object with this language.

`property values: Dict[str, LanguageValue]`

A dict of `LanguageValue` with the language as key.

### 1.1.3.5 wikibaseintegrator.models.forms

`class wikibaseintegrator.models.forms.Form(form_id=None, representations=None, grammatical_features=None, claims=None)`

Bases: `BaseModel`

**Parameters**

- **form\_id** (`Optional[str]`) –
- **representations** (`Optional[Representations]`) –
- **grammatical\_features** (`Optional[Union[str, int, List[str]]]`) –
- **claims** (`Optional[Claims]`) –

`__init__(form_id=None, representations=None, grammatical_features=None, claims=None)`**Parameters**

- **form\_id** (`str / None`) –
- **representations** (`Representations / None`) –
- **grammatical\_features** (`str / int / List[str] / None`) –
- **claims** (`Claims / None`) –

`property claims``from_json(json_data)`**Return type**`Form`

```
Parameters
    json_data (Dict[str, Any]) –

get_json()

Return type
    Dict[str, Union[str, Dict, List]]

property grammatical_features

property id

property representations

class wikibaseintegrator.models.forms.Forms
    Bases: BaseModel

__init__()

Return type
    None

add(form)

Return type
    Forms

Parameters
    form (Form) –

property forms: Dict

from_json(json_data)

Return type
    Forms

Parameters
    json_data (List[Dict]) –

get(id)

Return type
    Form

Parameters
    id (str) –

get_json()

Return type
    List[Dict]

class wikibaseintegrator.models.forms.Representations
    Bases: LanguageValues
```

**\_\_init\_\_()**

**Return type**

None

**add(*language\_value*)**

Add a LanguageValue object to the list

**Parameters**

**language\_value** (*LanguageValue*) – A LanguageValue object

**Return type**

*LanguageValues*

**Returns**

The current LanguageValues object

**from\_json(*json\_data*)**

Create a new LanguageValues object from a JSON/dict object.

**Parameters**

**json\_data** (Dict[str, Dict]) – A dict object who use the same format as Wikibase.

**Return type**

*LanguageValues*

**Returns**

The newly created or updated object.

**get(*language=None*)**

Get a LanguageValue object with the specified language. Use the default language in wbi\_config if none specified.

**Parameters**

**language** (Optional[str]) – The requested language.

**Return type**

Optional[*LanguageValue*]

**Returns**

The related LanguageValue object or None if none found.

**get\_json()**

Get a formatted dict who respect the Wikibase format.

**Return type**

Dict[str, Dict]

**Returns**

A dict using Wikibase format.

**set(*language=None, value=None, action\_if\_exists=ActionIfExists.REPLACE\_ALL*)**

Create or update the specified language with the valued passed in arguments.

**Parameters**

- **language** (Optional[str]) – The desired language.
- **value** (Optional[str]) – The desired value of the LanguageValue object. Use None to delete an existing LanguageValue object from the list.
- **action\_if\_exists** (*ActionIfExists*) – The action if the LanguageValue object is already defined. Can be ActionIfExists.REPLACE\_ALL (default) or ActionIfExists.KEEP.

**Return type**

`Optional[LanguageValue]`

**Returns**

The created or updated LanguageValue. None if there's no LanguageValue object with this language.

**property values: Dict[str, LanguageValue]**

A dict of LanguageValue with the language as key.

### 1.1.3.6 wikibaseintegrator.models.labels

**class wikibaseintegrator.models.labels.Labels**

Bases: `LanguageValues`

**\_\_init\_\_()****Return type**

`None`

**add(language\_value)**

Add a LanguageValue object to the list

**Parameters**

`language_value (LanguageValue)` – A LanguageValue object

**Return type**

`LanguageValues`

**Returns**

The current LanguageValues object

**from\_json(json\_data)**

Create a new Labels object from a JSON/dict object.

**Parameters**

`json_data (Dict[str, Dict])` – A dict object who use the same format as Wikibase.

**Return type**

`Labels`

**Returns**

The newly created or updated object.

**get(language=None)**

Get a LanguageValue object with the specified language. Use the default language in wbi\_config if none specified.

**Parameters**

`language (Optional[str])` – The requested language.

**Return type**

`Optional[LanguageValue]`

**Returns**

The related LanguageValue object or None if none found.

**get\_json()**

Get a formatted dict who respect the Wikibase format.

**Return type**

`Dict[str, Dict]`

**Returns**

A dict using Wikibase format.

**set(*language=None, value=None, action\_if\_exists=ActionIfExists.REPLACE\_ALL*)**

Create or update the specified language with the valued passed in arguments.

**Parameters**

- **language** (`Optional[str]`) – The desired language.
- **value** (`Optional[str]`) – The desired value of the `LanguageValue` object. Use `None` to delete an existing `LanguageValue` object from the list.
- **action\_if\_exists** (`ActionIfExists`) – The action if the `LanguageValue` object is already defined. Can be `ActionIfExists.REPLACE_ALL` (default) or `ActionIfExists.KEEP`.

**Return type**

`Optional[LanguageValue]`

**Returns**

The created or updated `LanguageValue`. `None` if there's no `LanguageValue` object with this language.

**property values: `Dict[str, LanguageValue]`**

A dict of `LanguageValue` with the language as key.

### 1.1.3.7 `wikibaseintegrator.models.language_values`

**class `wikibaseintegrator.models.language_values.LanguageValue(language, value=None)`**

Bases: `BaseModel`

**Parameters**

- **language** (`str`) –
- **value** (`Optional[str]`) –

**`__init__(language, value=None)`**

**Parameters**

- **language** (`str`) –
- **value** (`str / None`) –

**`from_json(json_data)`**

**Return type**

`LanguageValue`

**Parameters**

- **json\_data** (`Dict[str, str]`) –

`get_json()`

**Return type**

`Dict[str, Optional[str]]`

`property language: str`

`remove()`

**Return type**

`LanguageValue`

`property removed: bool`

`property value: str | None`

The value of the `LanguageValue` instance. :return: A string with the value of the `LanguageValue` instance.

`class wikibaseintegrator.models.language_values.LanguageValues`

Bases: `BaseModel`

`__init__()`

**Return type**

`None`

`add(language_value)`

Add a `LanguageValue` object to the list

**Parameters**

`language_value` (`LanguageValue`) – A `LanguageValue` object

**Return type**

`LanguageValues`

**Returns**

The current `LanguageValues` object

`from_json(json_data)`

Create a new `LanguageValues` object from a JSON/dict object.

**Parameters**

`json_data` (`Dict[str, Dict]`) – A dict object who use the same format as Wikibase.

**Return type**

`LanguageValues`

**Returns**

The newly created or updated object.

`get(language=None)`

Get a `LanguageValue` object with the specified language. Use the default language in `wbi_config` if none specified.

**Parameters**

`language` (`Optional[str]`) – The requested language.

**Return type**

`Optional[LanguageValue]`

**Returns**

The related `LanguageValue` object or `None` if none found.

**get\_json()**

Get a formatted dict who respect the Wikibase format.

**Return type**

`Dict[str, Dict]`

**Returns**

A dict using Wikibase format.

**set(*language=None, value=None, action\_if\_exists=ActionIfExists.REPLACE\_ALL*)**

Create or update the specified language with the valued passed in arguments.

**Parameters**

- **language** (`Optional[str]`) – The desired language.
- **value** (`Optional[str]`) – The desired value of the `LanguageValue` object. Use `None` to delete an existing `LanguageValue` object from the list.
- **action\_if\_exists** (`ActionIfExists`) – The action if the `LanguageValue` object is already defined. Can be `ActionIfExists.REPLACE_ALL` (default) or `ActionIfExists.KEEP`.

**Return type**

`Optional[LanguageValue]`

**Returns**

The created or updated `LanguageValue`. `None` if there's no `LanguageValue` object with this language.

**property values: `Dict[str, LanguageValue]`**

A dict of `LanguageValue` with the language as key.

### 1.1.3.8 `wikibaseintegrator.models.lemmas`

**class `wikibaseintegrator.models.lemmas.Lemmas`**

Bases: `LanguageValues`

**\_\_init\_\_()**

**Return type**

`None`

**add(*language\_value*)**

Add a `LanguageValue` object to the list

**Parameters**

`language_value` (`LanguageValue`) – A `LanguageValue` object

**Return type**

`LanguageValues`

**Returns**

The current `LanguageValues` object

**from\_json(*json\_data*)**

Create a new `Lemmas` object from a JSON/dict object.

**Parameters**

`json_data` (`Dict[str, Dict]`) – A dict object who use the same format as Wikibase.

**Return type***Lemmas***Returns**

The newly created or updated object.

**get(*language=None*)**

Get a LanguageValue object with the specified language. Use the default language in wbi\_config if none specified.

**Parameters**

**language** (Optional[str]) – The requested language.

**Return type***Optional[LanguageValue]***Returns**

The related LanguageValue object or None if none found.

**get\_json()**

Get a formatted dict who respect the Wikibase format.

**Return type***Dict[str, Dict]***Returns**

A dict using Wikibase format.

**set(*language=None, value=None, action\_if\_exists=ActionIfExists.REPLACE\_ALL*)**

Create or update the specified language with the valued passed in arguments.

**Parameters**

- **language** (Optional[str]) – The desired language.
- **value** (Optional[str]) – The desired value of the LanguageValue object. Use None to delete an existing LanguageValue object from the list.
- **action\_if\_exists** (*ActionIfExists*) – The action if the LanguageValue object is already defined. Can be ActionIfExists.REPLACE\_ALL (default) or ActionIfExists.KEEP.

**Return type***Optional[LanguageValue]***Returns**

The created or updated LanguageValue. None if there's no LanguageValue object with this language.

**property values: Dict[str, LanguageValue]**

A dict of LanguageValue with the language as key.

### 1.1.3.9 wikibaseintegrator.models.qualifiers

**class** `wikibaseintegrator.models.qualifiers.Qualifiers`

Bases: `BaseModel1`

`__init__()`

**Return type**

`None`

`add(qualifier, action_if_exists=ActionIfExists.REPLACE_ALL)`

**Return type**

`Qualifiers`

**Parameters**

- `qualifier` (`Snak` / `Claim`) –
- `action_if_exists` (`ActionIfExists`) –

`clear(property=None)`

**Return type**

`Qualifiers`

**Parameters**

`property(str / int / None)` –

`from_json(json_data)`

**Return type**

`Qualifiers`

**Parameters**

`json_data(Dict[str, List])` –

`get(property)`

**Return type**

`List[Snak]`

**Parameters**

`property(str / int)` –

`get_json()`

**Return type**

`Dict[str, List]`

`property_qualifiers`

`remove(qualifier)`

**Return type**

`Qualifiers`

**Parameters**

`qualifier(Snak / Claim)` –

`set(qualifiers)`

**Return type**

*Qualifiers*

**Parameters**

`qualifiers (Qualifiers | List[Snak | Claim] | None) –`

### 1.1.3.10 wikibaseintegrator.models.references

`class wikibaseintegrator.models.references.Reference(snaks=None, snaks_order=None)`

Bases: *BaseModel*

**Parameters**

- `snaks (Optional[Snaks]) –`
- `snaks_order (Optional[List]) –`

`__init__(snaks=None, snaks_order=None)`

**Parameters**

- `snaks (Snaks | None) –`
- `snaks_order (List | None) –`

`add(snak=None, action_if_exists=ActionIfExists.REPLACE_ALL)`

**Return type**

*Reference*

**Parameters**

- `snak (Snak | Claim | None) –`
- `action_if_exists (ActionIfExists) –`

`from_json(json_data)`

**Return type**

*Reference*

**Parameters**

`json_data (Dict[str, Any]) –`

`get_json()`

**Return type**

`Dict[str, Union[Dict, List]]`

`property hash`

`property snaks`

`property snaks_order`

`class wikibaseintegrator.models.references.References`

Bases: *BaseModel*

**`__init__()`**

**Return type**  
`None`

**`add(reference=None, action_if_exists=ActionIfExists.REPLACE_ALL)`**

**Return type**  
`References`

**Parameters**

- `reference (Reference / Claim / None) –`
- `action_if_exists (ActionIfExists) –`

**`clear()`**

**Return type**  
`References`

**`from_json(json_data)`**

**Return type**  
`References`

**Parameters**

- `json_data (List[Dict]) –`

**`get(hash=None)`**

**Return type**  
`Optional[Reference]`

**Parameters**

- `hash (str / None) –`

**`get_json()`**

**Return type**  
`List[Dict]`

**`property references: List[Reference]`**

**`remove(reference_to_remove)`**

**Return type**  
`bool`

**Parameters**

- `reference_to_remove (Claim / Reference) –`

### 1.1.3.11 wikibaseintegrator.models.senses

**class** `wikibaseintegrator.models.senses.Glosses`

Bases: `LanguageValues`

**\_\_init\_\_()**

**Return type**

`None`

**add(*language\_value*)**

Add a `LanguageValue` object to the list

**Parameters**

`language_value` (`LanguageValue`) – A `LanguageValue` object

**Return type**

`LanguageValues`

**Returns**

The current `LanguageValues` object

**from\_json(*json\_data*)**

Create a new `LanguageValues` object from a JSON/dict object.

**Parameters**

`json_data` (`Dict[str, Dict]`) – A dict object who use the same format as Wikibase.

**Return type**

`LanguageValues`

**Returns**

The newly created or updated object.

**get(*language=None*)**

Get a `LanguageValue` object with the specified language. Use the default language in `wbi_config` if none specified.

**Parameters**

`language` (`Optional[str]`) – The requested language.

**Return type**

`Optional[LanguageValue]`

**Returns**

The related `LanguageValue` object or `None` if none found.

**get\_json()**

Get a formattted dict who respect the Wikibase format.

**Return type**

`Dict[str, Dict]`

**Returns**

A dict using Wikibase format.

**set(*language=None*, *value=None*, *action\_if\_exists=ActionIfExists.REPLACE\_ALL*)**

Create or update the specified language with the valued passed in arguments.

**Parameters**

- **language** (`Optional[str]`) – The desired language.
- **value** (`Optional[str]`) – The desired value of the `LanguageValue` object. Use `None` to delete an existing `LanguageValue` object from the list.
- **action\_if\_exists** (`ActionIfExists`) – The action if the `LanguageValue` object is already defined. Can be `ActionIfExists.REPLACE_ALL` (default) or `ActionIfExists.KEEP`.

**Return type**

`Optional[LanguageValue]`

**Returns**

The created or updated `LanguageValue`. `None` if there's no `LanguageValue` object with this language.

**property values: Dict[str, LanguageValue]**

A dict of `LanguageValue` with the language as key.

**class** `wikibaseintegrator.models.senses.Sense(sense_id=None, glosses=None, claims=None)`

Bases: `BaseModel`

**Parameters**

- **sense\_id** (`Optional[str]`) –
- **glosses** (`Optional[Glosses]`) –
- **claims** (`Optional[Claims]`) –

**\_\_init\_\_(sense\_id=None, glosses=None, claims=None)**

**Parameters**

- **sense\_id** (`str / None`) –
- **glosses** (`Glosses / None`) –
- **claims** (`Claims / None`) –

**from\_json(json\_data)**

**Return type**

`Sense`

**Parameters**

`json_data (Dict[str, Any])` –

**get\_json()**

**Return type**

`Dict[str, Union[str, Dict]]`

**remove()**

**Return type**

`Sense`

**class** `wikibaseintegrator.models.senses.Senses`

Bases: `BaseModel`

```
__init__(self)
    Return type
        None
    add(self, sense, action_if_exists=ActionIfExists.REPLACE_ALL)
        Return type
            Senses
        Parameters
            • sense (Sense) –
            • action_if_exists (ActionIfExists) –
    from_json(self, json_data)
        Return type
            Senses
        Parameters
            json_data (List[Dict]) –
    get(self, id)
        Return type
            Optional[Sense]
        Parameters
            id (str) –
    get_json(self)
        Return type
            List[Dict]
```

### 1.1.3.12 wikibaseintegrator.models.sitelinks

```
class wikibaseintegrator.models.sitelinks.Sitelink(site=None, title=None, badges=None)
    Bases: BaseModel
```

**Parameters**

- **site** (Optional[str]) –
- **title** (Optional[str]) –
- **badges** (Optional[List[str]]) –

```
__init__(self, site=None, title=None, badges=None)
```

**Parameters**

- **site** (str / None) –
- **title** (str / None) –
- **badges** (List[str] / None) –

```
class wikibaseintegrator.models.sitelinks.Sitelinks
    Bases: BaseModel
```

```
__init__(self)
    Return type
        None
from_json(self, json_data)
    Return type
        Sitelinks
    Parameters
        json_data (Dict[str, Dict]) -
get(self, site=None)
    Return type
        Optional[Sitelink]
    Parameters
        site (str | None) -
set(self, site, title=None, badges=None)
    Return type
        Sitelink
    Parameters
        • site (str) -
        • title (str | None) -
        • badges (List[str] | None) -
```

### 1.1.3.13 wikibaseintegrator.models.snaks

```
class wikibaseintegrator.models.snaks.Snak(snaktype=WikibaseSnakType.KNOWN_VALUE,
                                             property_number=None, hash=None, datavalue=None,
                                             datatype=None)
```

Bases: *BaseModel*

**Parameters**

- **snaktype** ([WikibaseSnakType](#)) –
- **property\_number** ([Optional](#)[str]) –
- **hash** ([Optional](#)[str]) –
- **datavalue** ([Optional](#)[Dict]) –
- **datatype** ([Optional](#)[str]) –

```
__init__(self, snaktype=WikibaseSnakType.KNOWN_VALUE, property_number=None, hash=None,
         datavalue=None, datatype=None)
```

**Parameters**

- **snaktype** ([WikibaseSnakType](#)) –
- **property\_number** (str | None) –
- **hash** (str | None) –

- **datavalue** (*Dict* / *None*) –
- **datatype** (*str* / *None*) –

**property datatype**

**property datavalue**

**from\_json**(*json\_data*)

**Return type**  
        *Snak*

**Parameters**  
        *json\_data* (*Dict*[*str*, *Any*]) –

**get\_json()**

**Return type**  
        *Dict*[*str*, *str*]

**property hash**

**property property\_number**

**property snaktype**

**class** `wikibaseintegrator.models.snaks.Snaks`

Bases: *BaseModel*

**\_\_init\_\_()**

**Return type**  
        *None*

**add**(*snak*)

**Return type**  
        *Snaks*

**Parameters**  
        *snak* (*Snak*) –

**from\_json**(*json\_data*)

**Return type**  
        *Snaks*

**Parameters**  
        *json\_data* (*Dict*[*str*, *List*]) –

**get**(*property*)

**Return type**  
        *List*[*Snak*]

**Parameters**  
        *property* (*str*) –

**get\_json()**

**Return type**  
        *Dict*[*str*, *List*]

## 1.2 Submodules

### 1.2.1 wikibaseintegrator.wbi\_backoff

WikibaseIntegrator implementation of backoff python library.

`wikibaseintegrator.wbi_backoff.wbi_backoff_backoff_hdlr(details)`

`wikibaseintegrator.wbi_backoff.wbi_backoff_check_json_decode_error(e)`

Check if the error message is “Expecting value: line 1 column 1 (char 0)” if not, its a real error and we shouldn’t retry

**Return type**

`bool`

### 1.2.2 wikibaseintegrator.wbi\_config

Config global options Options can be changed at run time. See tests/test\_backoff.py for usage example

Options: BACKOFF\_MAXTRIES: maximum number of times to retry failed request to wikidata endpoint.

Default: None (retry indefinitely) To disable retry, set value to 1

**BACKOFF\_MAX\_VALUE: maximum number of seconds to wait before retrying. wait time will increase to this number**

Default: 3600 (one hour)

**USER\_AGENT: Complementary user agent string used for http requests. Both to Wikibase api, query service and others.**

See: [https://meta.wikimedia.org/wiki/User-Agent\\_policy](https://meta.wikimedia.org/wiki/User-Agent_policy)

### 1.2.3 wikibaseintegrator.wbiEnums

`class wikibaseintegrator.wbiEnums.ActionIfExists(value)`

Bases: `Enum`

Action to take if a statement with a property already exists on the entity.

`APPEND_OR_REPLACE`: Add the new element to the property if it does not exist, otherwise replace the existing element.

`FORCE_APPEND`: Forces the addition of the new element to the property, even if it already exists.

`KEEP`: Does nothing if the property already has elements stated.

`REPLACE_ALL`: Replace all elements with the same property number.

`APPEND_OR_REPLACE = 1`

`FORCE_APPEND = 2`

`KEEP = 3`

`REPLACE_ALL = 4`

`class wikibaseintegrator.wbiEnums.WikibaseDatatype(value)`

Bases: `Enum`

An enumeration.

`COMMONSMEDIA = 'commonsMedia'`

```
EXTERNALID = 'external-id'
FORM = 'wikibase-form'
GEOSHAPE = 'geo-shape'
GLOBECOORDINATE = 'globe-coordinate'
ITEM = 'wikibase-item'
LEXEME = 'wikibase-lexeme'
MATH = 'math'
MONOLINGUALTEXT = 'monolingualtext'
MUSICALNOTATION = 'musical-notation'
PROPERTY = 'wikibase-property'
QUANTITY = 'quantity'
SENSE = 'wikibase-sense'
STRING = 'string'
TABULARDATA = 'tabular-data'
TIME = 'time'
URL = 'url'

class wikibaseintegrator.wbi_enums.WikibaseDatePrecision(value)
Bases: Enum
An enumeration.

BILLION_YEARS = 0
CENTURY = 7
DAY = 11
DECADE = 8
HUNDRED_THOUSAND_YEARS = 4
MILLENNIUM = 6
MILLION_YEARS = 3
MONTH = 10
YEAR = 9

class wikibaseintegrator.wbi_enums.WikibaseRank(value)
Bases: Enum
An enumeration.

DEPRECATED = 'deprecated'
```

```
NORMAL = 'normal'

PREFERRED = 'preferred'

class wikibaseintegrator.wbi_enums.WikibaseSnakType(value)

Bases: Enum

The snak type of the Wikibase data snak, three values possible, depending if the value is a known (value), not existent (novalue) or unknown (somevalue). See Wikibase documentation.

KNOWN_VALUE = 'value'

NO_VALUE = 'novalue'

UNKNOWN_VALUE = 'somevalue'
```

## 1.2.4 wikibaseintegrator.wbi\_exceptions

```
exception wikibaseintegrator.wbi_exceptions.MWApiError(error_dict)
```

Bases: Exception

Base class for MediaWiki API error handling

**Parameters**

`error_dict (Dict[str, Any]) –`

`__init__(error_dict)`

**Parameters**

`error_dict (Dict[str, Any]) –`

`args`

`code: str`

`error_dict: Dict[str, Any]`

`property get_conflicting_entity_ids: List[str]`

Compute the list of conflicting entities from the error messages.

**Returns**

A list of conflicting entities or an empty list

`property get_languages: List[str]`

Compute a list of language identifiers from the error messages. Indicating the language which triggered the error.

**Returns**

A list of language identifiers or an empty list

`info: str`

`messages: List[Dict[str, Any]]`

`messages_names: List[str]`

`with_traceback()`

`Exception.with_traceback(tb) – set self.__traceback__ to tb and return self.`

---

```
exception wikibaseintegrator.wbi_exceptions.MaxRetriesReachedException
```

Bases: `Exception`

```
__init__(*args, **kwargs)
```

`args`

```
with_traceback()
```

`Exception.with_traceback(tb) – set self.__traceback__ to tb and return self.`

```
exception wikibaseintegrator.wbi_exceptions.MissingEntityException
```

Bases: `Exception`

```
__init__(*args, **kwargs)
```

`args`

```
with_traceback()
```

`Exception.with_traceback(tb) – set self.__traceback__ to tb and return self.`

```
exception wikibaseintegrator.wbi_exceptions.ModificationFailed(error_dict)
```

Bases: `MWApiError`

When the API return a ‘modification-failed’ error

**Parameters**

`error_dict (Dict[str, Any]) –`

```
__init__(error_dict)
```

**Parameters**

`error_dict (Dict[str, Any]) –`

`args`

`code: str`

`error_dict: Dict[str, Any]`

```
property get_conflicting_entity_ids: List[str]
```

Compute the list of conflicting entities from the error messages.

**Returns**

A list of conflicting entities or an empty list

```
property get_languages: List[str]
```

Compute a list of language identifiers from the error messages. Indicating the language which triggered the error.

**Returns**

A list of language identifiers or an empty list

`info: str`

`messages: List[Dict[str, Any]]`

`messages_names: List[str]`

```
with_traceback()
```

`Exception.with_traceback(tb) – set self.__traceback__ to tb and return self.`

```
exception wikibaseintegrator.wbi_exceptions.NonExistentEntityError(error_dict)
```

Bases: *MWAPIError*

**Parameters**

**error\_dict** (*Dict[str, Any]*) –

**\_\_init\_\_(error\_dict)**

**Parameters**

**error\_dict** (*Dict[str, Any]*) –

**args**

**code:** *str*

**error\_dict:** *Dict[str, Any]*

**property get\_conflicting\_entity\_ids: List[str]**

Compute the list of conflicting entities from the error messages.

**Returns**

A list of conflicting entities or an empty list

**property get\_languages: List[str]**

Compute a list of language identifiers from the error messages. Indicating the language which triggered the error.

**Returns**

A list of language identifiers or an empty list

**info:** *str*

**messages:** *List[Dict[str, Any]]*

**messages\_names:** *List[str]*

**with\_traceback()**

Exception.with\_traceback(tb) – set self.\_\_traceback\_\_ to tb and return self.

```
exception wikibaseintegrator.wbi_exceptions.SaveFailed(error_dict)
```

Bases: *MWAPIError*

When the API return a ‘save-failed’ error

**Parameters**

**error\_dict** (*Dict[str, Any]*) –

**\_\_init\_\_(error\_dict)**

**Parameters**

**error\_dict** (*Dict[str, Any]*) –

**args**

**code:** *str*

**error\_dict:** *Dict[str, Any]*

---

```
property get_conflicting_entity_ids: List[str]
```

Compute the list of conflicting entities from the error messages.

**Returns**

A list of conflicting entities or an empty list

```
property get_languages: List[str]
```

Compute a list of language identifiers from the error messages. Indicating the language which triggered the error.

**Returns**

A list of language identifiers or an empty list

```
info: str
```

```
messages: List[Dict[str, Any]]
```

```
messages_names: List[str]
```

```
with_traceback()
```

Exception.with\_traceback(tb) – set self.\_\_traceback\_\_ to tb and return self.

```
exception wikibaseintegrator.wbi_exceptions.SearchError
```

Bases: Exception

```
__init__(*args, **kwargs)
```

```
args
```

```
with_traceback()
```

Exception.with\_traceback(tb) – set self.\_\_traceback\_\_ to tb and return self.

## 1.2.5 wikibaseintegrator.wbi\_fastrun

```
class wikibaseintegrator.wbi_fastrun.FastRunContainer(base_data_type, mediawiki_api_url=None,
                                     sparql_endpoint_url=None,
                                     wikibase_url=None, base_filter=None,
                                     use_refs=False, case_insensitive=False)
```

Bases: object

**Parameters**

- **base\_data\_type** (*Type[BaseDataType]*) –
- **mediawiki\_api\_url** (*Optional[str]*) –
- **sparql\_endpoint\_url** (*Optional[str]*) –
- **wikibase\_url** (*Optional[str]*) –
- **base\_filter** (*Optional[List[BaseDataType] / List[BaseDataType]]*) –
- **use\_refs** (*bool*) –
- **case\_insensitive** (*bool*) –

```
__init__(base_data_type, mediawiki_api_url=None, sparql_endpoint_url=None, wikibase_url=None,
        base_filter=None, use_refs=False, case_insensitive=False)
```

**Parameters**

- **base\_data\_type** (*Type*[[BaseDataType](#)]) –
- **mediawiki\_api\_url** (*Optional*[[str](#)]) –
- **sparql\_endpoint\_url** (*Optional*[[str](#)]) –
- **wikibase\_url** (*Optional*[[str](#)]) –
- **base\_filter** (*Optional*[[List](#)[[BaseDataType](#) / [List](#)[[BaseDataType](#)]]) –
- **use\_refs** (*bool*) –
- **case\_insensitive** (*bool*) –

**check\_language\_data**(*qid*, *lang\_data*, *lang*, *lang\_data\_type*,  
*action\_if\_exists*=[ActionIfExists.APPEND\\_OR\\_REPLACE](#))

Method to check if certain language data exists as a label, description or aliases :type *qid*: [str](#) :param *qid*: Wikibase item id :type *lang\_data*: [List](#) :param *lang\_data*: list of string values to check :type *lang*: [str](#) :param *lang*: language code :type *lang\_data\_type*: [str](#) :param *lang\_data\_type*: What kind of data is it? ‘label’, ‘description’ or ‘aliases’? :type *action\_if\_exists*: [ActionIfExists](#) :param *action\_if\_exists*: If aliases already exist, APPEND\_OR\_REPLACE or REPLACE\_ALL :rtype: [bool](#) :return: boolean

#### Parameters

- **qid** ([str](#)) –
- **lang\_data** ([List](#)) –
- **lang** ([str](#)) –
- **lang\_data\_type** ([str](#)) –
- **action\_if\_exists** ([ActionIfExists](#)) –

#### Return type

[bool](#)

**clear()**

convenience function to empty this fastrun container

#### Return type

[None](#)

**format\_query\_results**(*r*, *prop\_nr*)

*r* is the results of the sparql query in \_query\_data and is modified in place *prop\_nr* is needed to get the property datatype to determine how to format the value

#### Return type

[None](#)

#### Parameters

- **r** ([List](#)) –
- **prop\_nr** ([str](#)) –

***r* is a list of dicts. The keys are:**

sid: statement ID item: the subject. the item this statement is on v: the object. The value for this statement unit: property unit pq: qualifier property qval: qualifier value qunit: qualifier unit ref: reference ID pr: reference property rval: reference value

---

`get_all_data()`

**Return type**

`Dict[str, Dict]`

`get_item(claims, cqid=None)`

**Parameters**

- `claims` (`Union[List[Claim], Claims, Claim]`) – A list of claims the entity should have
- `cqid` (`Optional[str]`) –

**Return type**

`Optional[str]`

**Returns**

An entity ID, None if there is more than one.

`get_items(claims, cqid=None)`

Get items ID from a SPARQL endpoint

**Parameters**

- `claims` (`Union[List[Claim], Claims, Claim]`) – A list of claims the entities should have
- `cqid` (`Optional[str]`) –

**Return type**

`Optional[Set[str]]`

**Returns**

a list of entity ID or None

**Exception**

if there is more than one claim

`get_language_data(qid, lang, lang_data_type)`

get language data for specified qid

**Parameters**

- `qid` (`str`) – Wikibase item id
- `lang` (`str`) – language code
- `lang_data_type` (`str`) – ‘label’, ‘description’ or ‘aliases’

**Return type**

`List[str]`

**Returns**

list of strings

**If nothing is found:**

If `lang_data_type == label`: returns [] If `lang_data_type == description`: returns [] If `lang_data_type == aliases`: returns []

`get_prop_datatype(prop_nr)`

**Return type**

`Optional[str]`

**Parameters**

**prop\_nr** (str) –

**init\_language\_data**(*lang*, *lang\_data\_type*)

Initialize language data store

**Parameters**

- **lang** (str) – language code
- **lang\_data\_type** (str) – ‘label’, ‘description’ or ‘aliases’

**Return type**

None

**Returns**

None

**reconstruct\_statements**(*qid*)

**Return type**

List[*BaseDataType*]

**Parameters**

**qid** (str) –

**update\_frc\_from\_query**(*r*, *prop\_nr*)

**Return type**

None

**Parameters**

- **r** (List) –
- **prop\_nr** (str) –

**write\_required**(*data*, *action\_if\_exists*=ActionIfExists.REPLACE\_ALL, *cqid*=None)

Check if a write is required

**Parameters**

- **data** (List[*Claim*]) –
- **action\_if\_exists** (ActionIfExists) –
- **cqid** (Optional[str]) –

**Return type**

bool

**Returns**

Return True if the write is required

wikibaseintegrator.wbi\_fastrun.get\_fastrun\_container(*base\_filter*=None, *use\_refs*=False, *case\_insensitive*=False)

**Return type**

*FastRunContainer*

**Parameters**

- **base\_filter** (Optional[List[*BaseDataType*] / List[*BaseDataType*]]) –
- **use\_refs** (bool) –

- **case\_insensitive (bool)** –

## 1.2.6 wikibaseintegrator.wbi\_helpers

Multiple functions or classes that can be used to interact with the Wikibase instance.

```
class wikibaseintegrator.wbi_helpers.BColors
```

Bases: object

Default colors for pretty outputs.

```
BOLD = '\x1b[1m'
ENDC = '\x1b[0m'
FAIL = '\x1b[91m'
HEADER = '\x1b[95m'
OKBLUE = '\x1b[94m'
OKCYAN = '\x1b[96m'
OKGREEN = '\x1b[92m'
UNDERLINE = '\x1b[4m'
WARNING = '\x1b[93m'

__init__()
```

```
wikibaseintegrator.wbi_helpers.delete_page(title=None, pageid=None, reason=None, deletetalk=False,
                                             watchlist='preferences', watchlistexpiry=None, login=None,
                                             **kwargs)
```

Delete a page

### Parameters

- **title** (Optional[str]) – Title of the page to delete. Cannot be used together with pageid.
- **pageid** (Optional[int]) – Page ID of the page to delete. Cannot be used together with title.
- **reason** (Optional[str]) – Reason for the deletion. If not set, an automatically generated reason will be used.
- **deletetalk** (bool) – Delete the talk page, if it exists.
- **watchlist** (str) – Unconditionally add or remove the page from the current user's watchlist, use preferences (ignored for bot users) or do not change watch. One of the following values: nochange, preferences, unwatch, watch
- **watchlistexpiry** (Optional[str]) – Watchlist expiry timestamp. Omit this parameter entirely to leave the current expiry unchanged.
- **login** (Optional[\_Login]) – A wbi\_login.Login instance
- **kwargs** (Any) –

### Return type

Dict

**Returns**

```
wikibaseintegrator.wbi_helpers.edit_entity(data, id=None, type=None, baserevid=None,  
summary=None, clear=False, is_bot=False, tags=None,  
site=None, title=None, **kwargs)
```

Creates a single new Wikibase entity and modifies it with serialised information.

**Parameters**

- **data** (Dict) – The serialized object that is used as the data source. A newly created entity will be assigned an ‘id’.
- **id** (Optional[str]) – The identifier for the entity, including the prefix. Use either id or site and title together.
- **type** (Optional[str]) – Set this to the type of the entity to be created. One of the following values: form, item, lexeme, property, sense
- **baserevid** (Optional[int]) – The numeric identifier for the revision to base the modification on. This is used for detecting conflicts during save.
- **summary** (Optional[str]) – Summary for the edit. Will be prepended by an automatically generated comment.
- **clear** (bool) – If set, the complete entity is emptied before proceeding. The entity will not be saved before it is filled with the “data”, possibly with parts excluded.
- **is\_bot** (bool) – Mark this edit as bot.
- **login** – A login instance
- **tags** (Optional[List[str]]) – Change tags to apply to the revision.
- **site** (Optional[str]) – An identifier for the site on which the page resides. Use together with title to make a complete sitelink.
- **title** (Optional[str]) – Title of the page to associate. Use together with site to make a complete sitelink.
- **kwargs** (Any) – More arguments for Python requests

**Return type**

Dict

**Returns**

The answer from the Wikibase API

```
wikibaseintegrator.wbi_helpers.execute_sparkql_query(query, prefix=None, endpoint=None,  
user_agent=None, max_retries=1000,  
retry_after=60)
```

Static method which can be used to execute any SPARQL query

**Parameters**

- **prefix** (Optional[str]) – The URI prefixes required for an endpoint, default is the Wikidata specific prefixes
- **query** (str) – The actual SPARQL query string
- **endpoint** (Optional[str]) – The URL string for the SPARQL endpoint. Default is the URL for the Wikidata SPARQL endpoint
- **user\_agent** (Optional[str]) – Set a user agent string for the HTTP header to let the Query Service know who you are.

- **max\_retries** (int) – The number time this function should retry in case of header reports.
- **retry\_after** (int) – the number of seconds should wait upon receiving either an error code or the Query Service is not reachable.

**Return type**

Dict[str, Dict]

**Returns**

The results of the query are returned in JSON format

```
wikibaseintegrator.wbi_helpers.format2wbi(entitytype, json_raw, allow_anonymous=True,
                                            wikibase_url=None, **kwargs)
```

**Return type**

BaseEntity

**Parameters**

- **entitytype** (str) –
- **json\_raw** (str) –
- **allow\_anonymous** (bool) –
- **wikibase\_url** (str / None) –

```
wikibaseintegrator.wbi_helpers.format_amount(amount)
```

A formatting function mostly used for Quantity datatype. :type amount: Union[int, str, float] :param amount: A int, float or str you want to pass to Quantity value. :rtype: str :return: A correctly formatted string amount by Wikibase standard.

**Parameters**

amount (int / str / float) –

**Return type**

str

```
wikibaseintegrator.wbi_helpers.fulltext_search(search, max_results=50, allow_anonymous=True,
                                                **kwargs)
```

Perform a fulltext search on the mediawiki instance. It's an exception to the "only wikibase related function" rule! WikibaseIntegrator is focused on wikibase-only functions to avoid spreading out and covering all functions of MediaWiki.

**Parameters**

- **search** (str) – Search for page titles or content matching this value. You can use the search string to invoke special search features, depending on what the wiki's search backend implements.
- **max\_results** (int) – How many total pages to return. The value must be between 1 and 500.
- **allow\_anonymous** (bool) – Allow anonymous interaction with the MediaWiki API. 'True' by default.
- **kwargs** (Any) – Extra parameters for mediawiki\_api\_call\_helper()

**Return type**

List[Dict[str, Any]]

**Returns**

```
wikibaseintegrator.wbi_helpers.generate_entity_instances(entities, allow_anonymous=True,  
**kwargs)
```

A method which allows for retrieval of a list of Wikidata entities. The method generates a list of tuples where the first value in the tuple is the entity's ID, whereas the second is the new instance of a subclass of BaseEntity containing all the data of the entity. This is most useful for mass retrieval of entities.

**Parameters**

- **entities** (Union[str, List[str]]) – A list of IDs. Item, Property or Lexeme.
- **allow\_anonymous** (bool) – Allow anonymous edit to the MediaWiki API. Disabled by default.
- **kwargs** (Any) –

**Return type**

List[Tuple[str, BaseEntity]]

**Returns**

A list of tuples, first value in the tuple is the entity's ID, second value is the instance of a subclass of BaseEntity with the corresponding entity data.

```
wikibaseintegrator.wbi_helpers.get_user_agent(user_agent)
```

Return a user agent string suitable for interacting with the Wikibase instance.

**Parameters**

- **user\_agent** (Optional[str]) – An optional user-agent. If not provided, will generate a default user-agent.

**Return type**

str

**Returns**

A correctly formatted user agent.

```
wikibaseintegrator.wbi_helpers.lexeme_add_form(lexeme_id, data, baserevid=None, tags=None,  
is_bot=False, **kwargs)
```

Adds Form to Lexeme

**Parameters**

- **lexeme\_id** – ID of the Lexeme, e.g. L10
- **data** – The serialized object that is used as the data source.
- **baserevid** (Optional[int]) – Base Revision ID of the Lexeme, if edit conflict check is wanted.
- **tags** (Optional[List[str]]) – Change tags to apply to the revision.
- **is\_bot** (bool) – Mark this edit as bot.
- **kwargs** (Any) –

**Return type**

Dict

**Returns**

```
wikibaseintegrator.wbi_helpers.lexeme_add_sense(lexeme_id, data, baserevid=None, tags=None,  
is_bot=False, **kwargs)
```

Adds a Sense to a Lexeme

**Parameters**

- **lexeme\_id** – ID of the Lexeme, e.g. L10
- **data** – JSON-encoded data for the Sense, i.e. its glosses
- **baserevid** (Optional[int]) – Base Revision ID of the Lexeme, if edit conflict check is wanted.
- **tags** (Optional[List[str]]) – Change tags to apply to the revision.
- **is\_bot** (bool) – Mark this edit as bot.
- **kwargs** (Any) –

**Return type**

Dict

**Returns**

```
wikibaseintegrator.wbi_helpers.lexeme_edit_form(form_id, data, baserevid=None, tags=None,  
                                                is_bot=False, **kwargs)
```

Edits representations and grammatical features of a Form

**Parameters**

- **form\_id** (str) – ID of the Form or the concept URI, e.g. L10-F2
- **data** – The serialized object that is used as the data source.
- **baserevid** (Optional[int]) – Base Revision ID of the Lexeme, if edit conflict check is wanted.
- **tags** (Optional[List[str]]) – Change tags to apply to the revision.
- **is\_bot** (bool) – Mark this edit as bot.
- **kwargs** (Any) –

**Return type**

Dict

**Returns**

```
wikibaseintegrator.wbi_helpers.lexeme_edit_sense(sense_id, data, baserevid=None, tags=None,  
                                                 is_bot=False, **kwargs)
```

Edits glosses of a Sense

**Parameters**

- **sense\_id** (str) – ID of the Sense or the concept URI, e.g. L10-S2
- **data** – The serialized object that is used as the data source.
- **baserevid** (Optional[int]) – Base Revision ID of the Lexeme, if edit conflict check is wanted.
- **tags** (Optional[List[str]]) – Change tags to apply to the revision.
- **is\_bot** (bool) – Mark this edit as bot.
- **kwargs** (Any) –

**Return type**

Dict

**Returns**

```
wikibaseintegrator.wbi_helpers.lexeme_remove_form(form_id, baserevid=None, tags=None,  
is_bot=False, **kwargs)
```

Removes Form from Lexeme

#### Parameters

- **form\_id** (str) – ID of the Form or the concept URI, e.g. L10-F2
- **baserevid** (Optional[int]) – Base Revision ID of the Lexeme, if edit conflict check is wanted.
- **tags** (Optional[List[str]]) – Change tags to apply to the revision.
- **is\_bot** (bool) – Mark this edit as bot.
- **kwargs** (Any) –

#### Return type

Dict

#### Returns

```
wikibaseintegrator.wbi_helpers.lexeme_remove_sense(sense_id, baserevid=None, tags=None,  
is_bot=False, **kwargs)
```

Adds Form to Lexeme

#### Parameters

- **sense\_id** (str) – ID of the Sense, e.g. L10-S20
- **baserevid** (Optional[int]) – Base Revision ID of the Lexeme, if edit conflict check is wanted.
- **tags** (Optional[List[str]]) – Change tags to apply to the revision.
- **is\_bot** (bool) – Mark this edit as bot.
- **kwargs** (Any) –

#### Return type

Dict

#### Returns

```
wikibaseintegrator.wbi_helpers.mediawiki_api_call(method, mediawiki_api_url=None, session=None,  
max_retries=100, retry_after=60, **kwargs)
```

A function to call the MediaWiki API.

#### Parameters

- **method** (str) – ‘GET’ or ‘POST’
- **mediawiki\_api\_url** (Optional[str]) –
- **session** (Optional[Session]) – If a session is passed, it will be used. Otherwise, a new requests session is created
- **max\_retries** (int) – If api request fails due to rate limiting, maxlag, or readonly mode, retry up to *max\_retries* times
- **retry\_after** (int) – Number of seconds to wait before retrying request (see max\_retries)
- **kwargs** (Any) – Any additional keyword arguments to pass to requests.request

#### Return type

Dict

**Returns**

The data returned by the API as a dictionary

```
wikibaseintegrator.wbi_helpers.mediawiki_api_call_helper(data, login=None,  
mediawiki_api_url=None,  
user_agent=None,  
allow_anonymous=False,  
max_retries=1000, retry_after=60,  
maxlag=5, is_bot=False, **kwargs)
```

A simplified function to call the MediaWiki API. Pass the data, as a dictionary, related to the action you want to call, all commons options will be automatically managed.

**Parameters**

- **data** (Dict[str, Any]) – A dictionary containing the JSON data to send to the API
- **login** (Optional[\_Login]) – A wbi\_login.\_Login instance
- **mediawiki\_api\_url** (Optional[str]) – The URL to the MediaWiki API (default Wikidata)
- **user\_agent** (Optional[str]) – The user agent (Recommended for Wikimedia Foundation instances)
- **allow\_anonymous** (bool) – Allow an unidentified edit to the MediaWiki API (default False)
- **max\_retries** (int) – The maximum number of retries
- **retry\_after** (int) – The timeout between each retry
- **maxlag** (int) – If applicable, the maximum lag allowed for the replication (A lower number reduce the load on the replicated database)
- **is\_bot** (bool) – Flag the edit as a bot
- **kwargs** (Any) – Any additional keyword arguments to pass to requests.request

**Return type**

Dict

**Returns**

The data returned by the API as a dictionary

```
wikibaseintegrator.wbi_helpers.merge_items(from_id, to_id, login=None, ignore_conflicts=None,  
is_bot=False, **kwargs)
```

A static method to merge two items

**Parameters**

- **from\_id** (str) – The ID to merge from. This parameter is required.
- **to\_id** (str) – The ID to merge to. This parameter is required.
- **login** (Optional[\_Login]) – A wbi\_login.Login instance
- **ignore\_conflicts** (Optional[List[str]]) – List of elements of the item to ignore conflicts for. Can only contain values of “description”, “sitelink” and “statement”
- **is\_bot** (bool) – Mark this edit as bot.
- **kwargs** (Any) –

**Return type**

Dict

```
wikibaseintegrator.wbi_helpers.merge_lexemes(source, target, login=None, summary=None,  
                                              is_bot=False, **kwargs)
```

A static method to merge two lexemes

**Parameters**

- **source** (str) – The ID to merge from. This parameter is required.
- **target** (str) – The ID to merge to. This parameter is required.
- **login** (Optional[\_Login]) – A wbi\_login.Login instance
- **summary** (Optional[str]) – Summary for the edit.
- **is\_bot** (bool) – Mark this edit as bot.
- **kwargs** (Any) –

**Return type**

Dict

```
wikibaseintegrator.wbi_helpers.remove_claims(claim_id, summary=None, baserevid=None,  
                                              is_bot=False, **kwargs)
```

Delete a claim from an entity

**Parameters**

- **claim\_id** (str) – One GUID or several (pipe-separated) GUIDs identifying the claims to be removed. All claims must belong to the same entity.
- **summary** (Optional[str]) – Summary for the edit. Will be prepended by an automatically generated comment.
- **baserevid** (Optional[int]) – The numeric identifier for the revision to base the modification on. This is used for detecting conflicts during save.
- **is\_bot** (bool) – Mark this edit as bot.
- **kwargs** (Any) –

**Return type**

Dict

```
wikibaseintegrator.wbi_helpers.search_entities(search_string, language=None, strict_language=False,  
                                                search_type='item', max_results=50,  
                                                dict_result=False, allow_anonymous=True, **kwargs)
```

Performs a search for entities in the Wikibase instance using labels and aliases. You can have more information on the parameters in the MediaWiki API help (<https://www.wikidata.org/w/api.php?action=help&modules=wbsearchentities>)

**Parameters**

- **search\_string** (str) – A string which should be searched for in the Wikibase instance (labels and aliases)
- **language** (Optional[str]) – The language in which to perform the search. This only affects how entities are selected. Default is ‘en’ from wbi\_config. You can see the list of languages for Wikidata at [https://www.wikidata.org/wiki/Help:Wikimedia\\_language\\_codes/lists/all](https://www.wikidata.org/wiki/Help:Wikimedia_language_codes/lists/all) (Use the WMF code)
- **strict\_language** (bool) – Whether to disable language fallback. Default is ‘False’.
- **search\_type** (str) – Search for this type of entity. One of the following values: form, item, lexeme, property, sense, mediainfo

- **max\_results** (int) – The maximum number of search results returned. The value must be between 0 and 50. Default is 50
- **dict\_result** (bool) – Return the results as a detailed dictionary instead of a list of IDs.
- **allow\_anonymous** (bool) – Allow anonymous interaction with the MediaWiki API. ‘True’ by default.
- **kwargs** (Any) –

**Return type**

List[Dict[str, Any]]

## 1.2.7 wikibaseintegrator.wbi\_login

Login class for Wikidata. Takes authentication parameters and stores the session cookies and edit tokens.

```
class wikibaseintegrator.wbi_login.Clientlogin(user=None, password=None,
                                                mediawiki_api_url=None, token_renew_period=1800,
                                                user_agent=None)
```

Bases: `_Login`

**Parameters**

- **user** (str / None) –
- **password** (str / None) –
- **mediawiki\_api\_url** (str / None) –
- **token\_renew\_period** (int) –
- **user\_agent** (str / None) –

```
__init__(user=None, password=None, mediawiki_api_url=None, token_renew_period=1800,
        user_agent=None)
```

This class is used to log in with a user account

**Parameters**

- **user** (Optional[str]) – The username
- **password** (Optional[str]) – The password
- **mediawiki\_api\_url** (Optional[str]) – The URL to the MediaWiki API (default Wikidata)
- **token\_renew\_period** (int) – Seconds after which a new token should be requested from the Wikidata server
- **user\_agent** (Optional[str]) – UA string to use for API requests.

**generate\_edit\_credentials()**

Request an edit token and update the cookie\_jar in order to add the session cookie

**Return type**

RequestsCookieJar

**Returns**

Returns a json with all relevant cookies, aka cookie jar

**get\_edit\_cookie()**

Can be called in order to retrieve the cookies from an instance of wbi\_login.Login

**Return type**

RequestsCookieJar

**Returns**

Returns a json with all relevant cookies, aka cookie jar

**get\_edit\_token()**

Can be called in order to retrieve the edit token from an instance of wbi\_login.Login

**Return type**

Optional[str]

**Returns**

returns the edit token

**get\_session()**

Returns the requests.Session object used for the login.

**Return type**

Session

**Returns**

Object of type requests.Session()

**class** wikibaseintegrator.wbi\_login.Login(*user=None, password=None, mediawiki\_api\_url=None, token\_renew\_period=1800, user\_agent=None*)

Bases: \_Login

**Parameters**

- **user** (str / None) –
- **password** (str / None) –
- **mediawiki\_api\_url** (str / None) –
- **token\_renew\_period** (int) –
- **user\_agent** (str / None) –

**\_\_init\_\_**(*user=None, password=None, mediawiki\_api\_url=None, token\_renew\_period=1800, user\_agent=None*)

This class is used to log in with a bot password

**Parameters**

- **user** (Optional[str]) – The user of the bot password (format <User>@<BotUser>)
- **password** (Optional[str]) – The password generated by the MediaWiki
- **mediawiki\_api\_url** (Optional[str]) – The URL to the MediaWiki API (default Wikidata)
- **token\_renew\_period** (int) – Seconds after which a new token should be requested from the Wikidata server
- **user\_agent** (Optional[str]) – UA string to use for API requests.

**generate\_edit\_credentials()**

Request an edit token and update the cookie\_jar in order to add the session cookie

**Return type**

RequestsCookieJar

**Returns**

Returns a json with all relevant cookies, aka cookie jar

**get\_edit\_cookie()**

Can be called in order to retrieve the cookies from an instance of wbi\_login.Login

**Return type**

RequestsCookieJar

**Returns**

Returns a json with all relevant cookies, aka cookie jar

**get\_edit\_token()**

Can be called in order to retrieve the edit token from an instance of wbi\_login.Login

**Return type**

Optional[str]

**Returns**

returns the edit token

**get\_session()**

Returns the requests.Session object used for the login.

**Return type**

Session

**Returns**

Object of type requests.Session()

**exception wikibaseintegrator.wbi\_login.LoginError**

Bases: Exception

Raised when there is an issue with the login

**\_\_init\_\_(\*args, \*\*kwargs)****args****with\_traceback()**

Exception.with\_traceback(tb) – set self.\_\_traceback\_\_ to tb and return self.

**class wikibaseintegrator.wbi\_login.OAuth1(consumer\_token=None, consumer\_secret=None, access\_token=None, access\_secret=None, callback\_url='oob', mediawiki\_api\_url=None, mediawiki\_index\_url=None, token\_renew\_period=1800, user\_agent=None)**

Bases: \_Login

**Parameters**

- **consumer\_token** (str / None) –
- **consumer\_secret** (str / None) –
- **access\_token** (str / None) –

- **access\_secret** (str / None) –
- **callback\_url** (str) –
- **mediawiki\_api\_url** (str / None) –
- **mediawiki\_index\_url** (str / None) –
- **token\_renew\_period** (int) –
- **user\_agent** (str / None) –

**\_\_init\_\_(**consumer\_token=None, consumer\_secret=None, access\_token=None, access\_secret=None, callback\_url='oob', mediawiki\_api\_url=None, mediawiki\_index\_url=None, token\_renew\_period=1800, user\_agent=None)**)**

This class is used to interact with the OAuth1 API.

#### Parameters

- **consumer\_token** (Optional[str]) – The consumer token
- **consumer\_secret** (Optional[str]) – The consumer secret
- **access\_token** (Optional[str]) – The access token (optional)
- **access\_secret** (Optional[str]) – The access secret (optional)
- **callback\_url** (str) – The callback URL used to finalize the handshake
- **mediawiki\_api\_url** (Optional[str]) – The URL to the MediaWiki API (default Wikidata)
- **mediawiki\_index\_url** (Optional[str]) – The URL to the MediaWiki index (default Wikidata)
- **token\_renew\_period** (int) – Seconds after which a new token should be requested from the Wikidata server
- **user\_agent** (Optional[str]) – UA string to use for API requests.

**continue\_oauth(oauth\_callback\_data=None)**

Continuation of OAuth procedure. Method must be explicitly called in order to complete OAuth. This allows external entities, e.g. websites, to provide tokens through callback URLs directly.

#### Parameters

**oauth\_callback\_data** (Optional[str]) – The callback URL received to a Web app

#### Return type

None

#### Returns

**generate\_edit\_credentials()**

Request an edit token and update the cookie\_jar in order to add the session cookie

#### Return type

RequestsCookieJar

#### Returns

Returns a json with all relevant cookies, aka cookie jar

**get\_edit\_cookie()**

Can be called in order to retrieve the cookies from an instance of wbi\_login.Login

**Return type**  
RequestsCookieJar

**Returns**  
Returns a json with all relevant cookies, aka cookie jar

**get\_edit\_token()**  
Can be called in order to retrieve the edit token from an instance of wbi\_login.Login

**Return type**  
Optional[str]

**Returns**  
returns the edit token

**get\_session()**  
Returns the requests.Session object used for the login.

**Return type**  
Session

**Returns**  
Object of type requests.Session()

```
class wikibaseintegrator.wbi_login.OAuth2(consumer_token=None, consumer_secret=None,
                                            mediawiki_api_url=None, mediawiki_rest_url=None,
                                            token_renew_period=1800, user_agent=None)
```

Bases: \_Login

**Parameters**

- **consumer\_token** (str / None) –
- **consumer\_secret** (str / None) –
- **mediawiki\_api\_url** (str / None) –
- **mediawiki\_rest\_url** (str / None) –
- **token\_renew\_period** (int) –
- **user\_agent** (str / None) –

```
__init__(consumer_token=None, consumer_secret=None, mediawiki_api_url=None,
         mediawiki_rest_url=None, token_renew_period=1800, user_agent=None)
```

This class is used to interact with the OAuth2 API.

**Parameters**

- **consumer\_token** (Optional[str]) – The consumer token
- **consumer\_secret** (Optional[str]) – The consumer secret
- **mediawiki\_api\_url** (Optional[str]) – The URL to the MediaWiki API (default Wikidata)
- **mediawiki\_rest\_url** (Optional[str]) – The URL to the MediaWiki REST API (default Wikidata)
- **token\_renew\_period** (int) – Seconds after which a new token should be requested from the Wikidata server
- **user\_agent** (Optional[str]) – UA string to use for API requests.

**generate\_edit\_credentials()**

Request an edit token and update the cookie\_jar in order to add the session cookie

**Return type**

RequestsCookieJar

**Returns**

Returns a json with all relevant cookies, aka cookie jar

**get\_edit\_cookie()**

Can be called in order to retrieve the cookies from an instance of wbi\_login.Login

**Return type**

RequestsCookieJar

**Returns**

Returns a json with all relevant cookies, aka cookie jar

**get\_edit\_token()**

Can be called in order to retrieve the edit token from an instance of wbi\_login.Login

**Return type**

Optional[str]

**Returns**

returns the edit token

**get\_session()**

Returns the requests.Session object used for the login.

**Return type**

Session

**Returns**

Object of type requests.Session()

## 1.2.8 wikibaseintegrator.wikibaseintegrator

Main class of the Library.

**class** wikibaseintegrator.wikibaseintegrator.WikibaseIntegrator(*is\_bot=False, login=None*)

Bases: object

**Parameters**

- **is\_bot** (bool) –
- **login** (Optional[\_Login]) –

**\_\_init\_\_(*is\_bot=False, login=None*)**

This function initializes a WikibaseIntegrator instance to quickly access different entity type instances.

**Parameters**

- **is\_bot** (bool) – declare if the bot flag must be set when you interact with the MediaWiki API.
- **login** (Optional[\_Login]) – a wbi\_login instance needed when you try to access a restricted MediaWiki instance.

## CHANGELOG

### 2.1 Changelog

#### 2.1.1 v0.12.4

*Released on 2023-06-07 - [GitHub](#) - [PyPI](#)*

#### 2.1.2 v0.12.3

*Released on 2023-01-09 - [GitHub](#) - [PyPI](#)*

#### 2.1.3 v0.12.2

*Released on 2022-11-13 - [GitHub](#) - [PyPI](#)*

#### 2.1.4 v0.12.1

*Released on 2022-09-04 - [GitHub](#) - [PyPI](#)*

#### 2.1.5 v0.12.0

*Released on 2022-07-14 - [GitHub](#) - [PyPI](#)*

#### 2.1.6 v0.11.3

*Released on 2022-07-07 - [GitHub](#) - [PyPI](#)*

## **2.1.7 v0.12.0rc5**

*Released on 2022-07-03 - [GitHub](#) - [PyPI](#)*

## **2.1.8 v0.12.0rc4**

*Released on 2022-06-02 - [GitHub](#) - [PyPI](#)*

## **2.1.9 v0.11.2**

*Released on 2022-04-25 - [GitHub](#) - [PyPI](#)*

## **2.1.10 v0.12.0rc3**

*Released on 2022-03-24 - [GitHub](#) - [PyPI](#)*

## **2.1.11 v0.12.0rc2**

*Released on 2022-02-18 - [GitHub](#) - [PyPI](#)*

## **2.1.12 v0.12.0rc1**

*Released on 2022-01-28 - [GitHub](#) - [PyPI](#)*

## **2.1.13 v0.12.0.dev7**

*Released on 2022-01-10 - [GitHub](#) - [PyPI](#)*

## **2.1.14 v0.12.0.dev6**

*Released on 2021-11-17 - [GitHub](#) - [PyPI](#)*

## **2.1.15 v0.11.1**

*Released on 2021-10-23 - [GitHub](#) - [PyPI](#)*

## **2.1.16 v0.12.0.dev5**

*Released on 2021-09-27 - [GitHub](#) - [PyPI](#)*

## 2.1.17 v0.12.0.dev4

*Released on 2021-09-13 - GitHub - PyPI*

## 2.1.18 v0.12.0.dev3

*Released on 2021-09-09 - GitHub - PyPI*

## 2.1.19 v0.12.0.dev2

*Released on 2021-08-26 - GitHub - PyPI*

## 2.1.20 v0.11.0

*Released on 2021-06-06 - GitHub - PyPI*

## 2.1.21 v0.10.1

*Released on 2021-05-01 - GitHub - PyPI*

## 2.1.22 v0.10.0

*Released on 2021-02-11 - GitHub - PyPI*

## 2.1.23 v0.9.0

*Released on 2020-10-09 - GitHub - PyPI*

## 2.1.24 v0.8.2

*Released on 2020-08-07 - GitHub - PyPI*

## 2.1.25 v0.8.1

*Released on 2020-08-05 - GitHub - PyPI*



---

CHAPTER  
**THREE**

---

## **INDICES AND TABLES**

- genindex
- modindex
- search



## PYTHON MODULE INDEX

### W

wikibaseintegrator.datatypes.basedatatype, 5  
wikibaseintegrator.datatypes.commonsmedia, 7  
wikibaseintegrator.datatypes.externalid, 9  
wikibaseintegrator.datatypes.extra.edtf, 1  
wikibaseintegrator.datatypes.extra.localmedia,  
    3  
wikibaseintegrator.datatypes.form, 11  
wikibaseintegrator.datatypes.geoshape, 13  
wikibaseintegrator.datatypes.globecoordinate,  
    15  
wikibaseintegrator.datatypes.item, 17  
wikibaseintegrator.datatypes.lexeme, 19  
wikibaseintegrator.datatypes.math, 21  
wikibaseintegrator.datatypes.monolingualtext,  
    23  
wikibaseintegrator.datatypes.musicalnotation,  
    25  
wikibaseintegrator.datatypes.property, 27  
wikibaseintegrator.datatypes.quantity, 29  
wikibaseintegrator.datatypes.sense, 32  
wikibaseintegrator.datatypes.string, 34  
wikibaseintegrator.datatypes.tabulardata, 36  
wikibaseintegrator.datatypes.time, 38  
wikibaseintegrator.datatypes.url, 41  
wikibaseintegrator.entities.baseentity, 43  
wikibaseintegrator.entities.item, 45  
wikibaseintegrator.entities.lexeme, 48  
wikibaseintegrator.entities.mediainfo, 52  
wikibaseintegrator.entities.property, 55  
wikibaseintegrator.models.aliases, 58  
wikibaseintegrator.models.basemodel, 60  
wikibaseintegrator.models.claims, 60  
wikibaseintegrator.models.descriptions, 63  
wikibaseintegrator.models.forms, 64  
wikibaseintegrator.models.labels, 67  
wikibaseintegrator.models.language\_values, 68  
wikibaseintegrator.models.lemmas, 70  
wikibaseintegrator.models.qualifiers, 72  
wikibaseintegrator.models.references, 73  
wikibaseintegrator.models.senses, 75  
wikibaseintegrator.models.sitelinks, 77  
wikibaseintegrator.models.snaks, 78  
wikibaseintegrator.wbi\_backoff, 80  
wikibaseintegrator.wbi\_config, 80  
wikibaseintegrator.wbiEnums, 80  
wikibaseintegrator.wbi\_exceptions, 82  
wikibaseintegrator.wbi\_fastrun, 85  
wikibaseintegrator.wbi\_helpers, 89  
wikibaseintegrator.wbi\_login, 97  
wikibaseintegrator.wikibaseintegrator, 102



# INDEX

## Symbols

- `__init__()` (wikibaseintegrator.datatypes.basedatatype.BaseDataType method), 5
- `__init__()` (wikibaseintegrator.datatypes.commonsmedia.CommonsMedia method), 7
- `__init__()` (wikibaseintegrator.datatypes.externalid.ExternalID method), 9
- `__init__()` (wikibaseintegrator.datatypes.extra.edtf.EDTF method), 1
- `__init__()` (wikibaseintegrator.datatypes.extra.localmedia.LocalMedia method), 3
- `__init__()` (wikibaseintegrator.datatypes.form.Form method), 11
- `__init__()` (wikibaseintegrator.datatypes.geoshape.GeoShape method), 13
- `__init__()` (wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate method), 15
- `__init__()` (wikibaseintegrator.datatypes.item.Item method), 18
- `__init__()` (wikibaseintegrator.datatypes.lexeme.Lexeme method), 19
- `__init__()` (wikibaseintegrator.datatypes.math.Math method), 21
- `__init__()` (wikibaseintegrator.datatypes.monolingualtext.MonolingualText method), 23
- `__init__()` (wikibaseintegrator.datatypes.musicalnotation.MusicalNotation method), 25
- `__init__()` (wikibaseintegrator.datatypes.property.Property method), 27
- `__init__()` (wikibaseintegrator.datatypes.quantity.Quantity method), 29
- `__init__()` (wikibaseintegrator.datatypes.sense.Sense method), 32
- `__init__()` (wikibaseintegrator.datatypes.string.String method), 34
- `__init__()` (wikibaseintegrator.datatypes.tabulardata.TabularData method), 36
- `__init__()` (wikibaseintegrator.datatypes.time.Time method), 38
- `__init__()` (wikibaseintegrator.datatypes.url.URL method), 41
- `__init__()` (wikibaseintegrator.entities.baseentity BaseEntity method), 43
- `__init__()` (wikibaseintegrator.entities.item.ItemEntity method), 45
- `__init__()` (wikibaseintegrator.entities.lexeme.LexemeEntity method), 49
- `__init__()` (wikibaseintegrator.entities.mediainfo.MediaInfoEntity method), 52
- `__init__()` (wikibaseintegrator.entities.property.PropertyEntity method), 55
- `__init__()` (wikibaseintegrator.models.aliases.Alias method), 58
- `__init__()` (wikibaseintegrator.models.aliases.Aliases method), 59
- `__init__()` (wikibaseintegrator.models.basemodel.BaseModel method), 60
- `__init__()` (wikibaseintegrator.models.claims.Claim method), 60
- `__init__()` (wikibaseintegrator.models.claims.Claims method), 62
- `__init__()` (wikibaseintegrator.models.descriptions.Descriptions method), 63
- `__init__()` (wikibaseintegrator.models.forms.Form method), 64
- `__init__()` (wikibaseintegrator.models.forms.Forms method), 65

```
__init__()                               (wikibaseintegrator.models.forms.Representations      method),  
                                         65  
__init__()                               (wikibaseintegrator.models.labels.Labels      method), 67  
__init__()                               (wikibaseintegrator.models.language_values.LanguageValue      method), 68  
__init__()                               (wikibaseintegrator.models.language_values.LanguageValues      method), 69  
__init__()                               (wikibaseintegrator.models.lemmas.Lemmas      method), 70  
__init__()                               (wikibaseintegrator.models.qualifiers.Qualifiers      method),  
                                         72  
__init__()                               (wikibaseintegrator.models.references.Reference      method),  
                                         73  
__init__()                               (wikibaseintegrator.models.references.References      method),  
                                         73  
__init__()                               (wikibaseintegrator.models.senses.Glosses      method), 75  
__init__()                               (wikibaseintegrator.models.senses.Sense      method), 76  
__init__()                               (wikibaseintegrator.models.senses.Senses      method), 76  
__init__()                               (wikibaseintegrator.models.sitelinks.Sitelink      method), 77  
__init__()                               (wikibaseintegrator.models.sitelinks.Sitelinks      method), 77  
__init__()                               (wikibaseintegrator.models.snaks.Snak      method), 78  
__init__()                               (wikibaseintegrator.models.snaks.Snaks      method), 79  
__init__()                               (wikibaseintegrator.wbi_exceptions.MWApiError      method),  
                                         82  
__init__()                               (wikibaseintegrator.wbi_exceptions.MaxRetriesReachedException      method), 83  
__init__()                               (wikibaseintegrator.wbi_exceptions.MissingEntityException      method), 83  
__init__()                               (wikibaseintegrator.wbi_exceptions.ModificationFailed      method), 83  
__init__()                               (wikibaseintegrator.wbi_exceptions.NonExistentEntityError      method), 84  
__init__()                               (wikibaseintegrator.wbi_exceptions.SaveFailed      method),  
                                         84  
  
__init__()                               (wikibaseintegrator.wbi_exceptions.SearchError      method),  
                                         85  
__init__()                               (wikibaseintegrator.wbi_fastrun.FastRunContainer      method),  
                                         85  
__init__()                               (wikibaseintegrator.wbi_helpers.BColors      method), 89  
__init__()                               (wikibaseintegrator.wbi_login.Clientlogin      method), 97  
__init__()                               (wikibaseintegrator.wbi_login.Login      method), 98  
__init__()                               (wikibaseintegrator.wbi_login.LoginError      method), 99  
__init__()                               (wikibaseintegrator.wbi_login.OAuth1      method), 100  
__init__()                               (wikibaseintegrator.wbi_login.OAuth2      method), 101  
__init__()                               (wikibaseintegrator.WikibaseIntegrator      method), 102
```

## A

```
ActionIfExists   (class      in      wikibaseintegrator.wbi_enums), 80  
add()          (wikibaseintegrator.models.claims.Claims      method), 62  
add()          (wikibaseintegrator.models.descriptions.Descriptions      method),  
                                         63  
add()          (wikibaseintegrator.models.forms.Forms      method),  
                                         65  
add()          (wikibaseintegrator.models.forms.Representations      method), 66  
add()          (wikibaseintegrator.models.labels.Labels      method),  
                                         67  
add()          (wikibaseintegrator.models.language_values.LanguageValues      method), 69  
add()          (wikibaseintegrator.models.lemmas.Lemmas      method), 70  
add()          (wikibaseintegrator.models.qualifiers.Qualifiers      method), 72  
add()          (wikibaseintegrator.models.references.Reference      method), 73  
add()          (wikibaseintegrator.models.references.References      method), 74  
add()          (wikibaseintegrator.models.senses.Glosses      method), 75  
add()          (wikibaseintegrator.models.senses.Senses      method), 77  
add()          (wikibaseintegrator.models.snaks.Snaks      method), 79
```

**A**  
 add\_claims() (wikibaseintegrator.entities.baseentity.BaseEntity method), 43  
 add\_claims() (wikibaseintegrator.entities.item.ItemEntity method), 46  
 add\_claims() (wikibaseintegrator.entities.lexeme.LexemeEntity method), 49  
 add\_claims() (wikibaseintegrator.entities.mediainfo.MediaInfoEntity method), 52  
 add\_claims() (wikibaseintegrator.entities.property.PropertyEntity method), 55  
 Alias (class in wikibaseintegrator.models.aliases), 58  
 Aliases (class in wikibaseintegrator.models.aliases), 59  
 aliases (wikibaseintegrator.entities.item.ItemEntity property), 46  
 aliases (wikibaseintegrator.entities.mediainfo.MediaInfoEntity property), 52  
 aliases (wikibaseintegrator.entities.property.PropertyEntity property), 56  
 aliases (wikibaseintegrator.models.aliases.Aliases property), 59  
 api (wikibaseintegrator.entities.baseentity.BaseEntity property), 44  
 api (wikibaseintegrator.entities.item.ItemEntity property), 46  
 api (wikibaseintegrator.entities.lexeme.LexemeEntity property), 49  
 api (wikibaseintegrator.entities.mediainfo.MediaInfoEntity property), 52  
 api (wikibaseintegrator.entities.property.PropertyEntity property), 56  
 APPEND\_OR\_REPLACE (wikibaseintegrator.wbi\_enums.ActionIfExists attribute), 80  
 args (wikibaseintegrator.wbi\_exceptions.MaxRetriesReachedException attribute), 83  
 args (wikibaseintegrator.wbi\_exceptions.MissingEntityException attribute), 83  
 args (wikibaseintegrator.wbi\_exceptions.ModificationFailed attribute), 83  
 args (wikibaseintegrator.wbi\_exceptions.MWApiError attribute), 82  
 args (wikibaseintegrator.wbi\_exceptions.NonExistentEntityError attribute), 84  
 args (wikibaseintegrator.wbi\_exceptions.SaveFailed attribute), 84  
 args (wikibaseintegrator.wbi\_exceptions.SearchError attribute), 85  
 args (wikibaseintegrator.wbi\_login.LoginError at-

tribute), 99

**B**  
 BaseDataType (class in wikibaseintegrator.datatypes.basedatatype), 5  
 BaseEntity (class in wikibaseintegrator.entities.baseentity), 43  
 BaseModel (class in wikibaseintegrator.models.basemodel), 60  
 BColors (class in wikibaseintegrator.wbi\_helpers), 89  
 BILLION\_YEARS (wikibaseintegrator.wbiEnums.WikibaseDatePrecision attribute), 81  
 BOLD (wikibaseintegrator.wbi\_helpers.BColors attribute), 89

**C**  
 CENTURY (wikibaseintegrator.wbiEnums.WikibaseDatePrecision attribute), 81  
 check\_language\_data() (wikibaseintegrator.wbi\_fastrun.FastRunContainer method), 86  
 Claim (class in wikibaseintegrator.models.claims), 60  
 Claims (class in wikibaseintegrator.models.claims), 62  
 claims (wikibaseintegrator.entities.baseentity.BaseEntity property), 44  
 claims (wikibaseintegrator.entities.item.ItemEntity property), 46  
 claims (wikibaseintegrator.entities.lexeme.LexemeEntity property), 49  
 claims (wikibaseintegrator.entities.mediainfo.MediaInfoEntity property), 52  
 claims (wikibaseintegrator.entities.property.PropertyEntity property), 56  
 claims (wikibaseintegrator.models.claims.Claims property), 62  
 claims (wikibaseintegrator.models.forms.Form property), 64  
 clear() (wikibaseintegrator.entities.baseentity.BaseEntity method), 44  
 clear() (wikibaseintegrator.entities.item.ItemEntity method), 46  
 clear() (wikibaseintegrator.entities.lexeme.LexemeEntity method), 49  
 clear() (wikibaseintegrator.entities.mediainfo.MediaInfoEntity method), 52

clear()	(wikibaseintegrator.entities.property.PropertyEntity method),	56	delete_page()	(in module wikibaseintegrator.wbi_helpers),	89
clear()	(wikibaseintegrator.models.qualifiers.Qualifiers method),	72	DEPRECATED	(wikibaseintegrator.wbiEnums.WikibaseRank attribute),	81
clear()	(wikibaseintegrator.models.references.References method),	74	Descriptions	(class in wikibaseintegrator.models.descriptions),	63
clear()	(wikibaseintegrator.wbi_fastrun.FastRunContainer method),	86	descriptions	(wikibaseintegrator.entities.item.ItemEntity property),	47
Clientlogin	(class in wikibaseintegrator.wbi_login),	97	descriptions	(wikibaseintegrator.entities.mediainfo.MediaInfoEntity property),	53
code	(wikibaseintegrator.wbi_exceptions.ModificationFailed attribute),	83	descriptions	(wikibaseintegrator.entities.property.PropertyEntity property),	56
code	(wikibaseintegrator.wbi_exceptions.MWApiError attribute),	82		(wikibaseintegrator.datatypes.basedatatype.BaseDataType attribute),	5
code	(wikibaseintegrator.wbi_exceptions.NonExistentEntity attribute),	84	DTYPE	(wikibaseintegrator.datatypes.commonsmedia.CommonsMedia attribute),	7
code	(wikibaseintegrator.wbi_exceptions.SaveFailed attribute),	84	DTYPE	(wikibaseintegrator.datatypes.externalid.ExternalID attribute),	9
CommonsMedia	(class in wikibaseintegrator.datatypes.commonsmedia),	7	DTYPE	(wikibaseintegrator.datatypes.extra.edtf.EDTF attribute),	1
COMMONSMEDIA	(wikibaseintegrator.wbiEnums.WikibaseDatatype attribute),	80	DTYPE	(wikibaseintegrator.datatypes.extra.localmedia.LocalMedia attribute),	3
continue_oauth()	(wikibaseintegrator.wbi_login OAuth1 method),	100	DTYPE	(wikibaseintegrator.datatypes.form.Form attribute),	11
<b>D</b>					
datatype	(wikibaseintegrator.entities.property.PropertyEntity property),	56	DTYPE	(wikibaseintegrator.datatypes.geoshape.GeoShape attribute),	13
datatype	(wikibaseintegrator.models.snaks.Snak property),	79	DTYPE	(wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate attribute),	15
datavalue	(wikibaseintegrator.models.snaks.Snak property),	79	DTYPE	(wikibaseintegrator.datatypes.item.Item attribute),	17
DAY	(wikibaseintegrator.wbiEnums.WikibaseDatePrecision attribute),	81	DTYPE	(wikibaseintegrator.datatypes.lexeme.Lexeme attribute),	19
DECADE	(wikibaseintegrator.wbiEnums.WikibaseDatePrecision attribute),	81	DTYPE	(wikibaseintegrator.datatypes.math.Math attribute),	21
delete()	(wikibaseintegrator.entities.baseentity BaseEntity method),	44	DTYPE	(wikibaseintegrator.datatypes.monolingualtext.MonolingualText attribute),	23
delete()	(wikibaseintegrator.entities.item.ItemEntity method),	46	DTYPE	(wikibaseintegrator.datatypes.musicalnotation.MusicalNotation attribute),	25
delete()	(wikibaseintegrator.entities.lexeme.LexemeEntity method),	49	DTYPE	(wikibaseintegrator.datatypes.property.Property attribute),	27
delete()	(wikibaseintegrator.entities.mediainfo.MediaInfoEntity method),	53	DTYPE	(wikibaseintegrator.datatypes.quantity.Quantity attribute),	29
delete()	(wikibaseintegrator.entities.property.PropertyEntity method),		DTYPE	(wikibaseintegrator.datatypes.sense.Sense attribute),	

DTYPE	<code>tribute), 32 (wikibaseintegrator.datatypes.string.String attribute), 34</code>	<code>equals()</code> <code>(wikibaseintegrator.datatypes.property.Property method), 27</code>
DTYPE	<code>(wikibaseintegrator.datatypes.tabulardata.TabularData attribute), 36</code>	<code>equals()</code> <code>(wikibaseintegrator.datatypes.quantity.Quantity method), 30</code>
DTYPE	<code>(wikibaseintegrator.datatypes.time.Time attribute), 38</code>	<code>equals()</code> <code>(wikibaseintegrator.datatypes.sense.Sense method), 32</code>
DTYPE	<code>(wikibaseintegrator.datatypes.url.URL attribute), 41</code>	<code>equals()</code> <code>(wikibaseintegrator.datatypes.string.String method), 34</code>
DTYPE	<code>(wikibaseintegrator.models.claims.Claim attribute), 60</code>	<code>equals()</code> <code>(wikibaseintegrator.datatypes.tabulardata.TabularData method), 36</code>
<b>E</b>		
	<code>edit_entity() (in module wikibaseintegrator.wbi_helpers), 90</code>	<code>equals()</code> <code>(wikibaseintegrator.datatypes.time.Time method), 38</code>
EDTF	<code>(class in wikibaseintegrator.datatypes.extra.edtf), 1</code>	<code>equals()</code> <code>(wikibaseintegrator.datatypes.url.URL method), 41</code>
ENDC	<code>(wikibaseintegrator.wbi_helpers.BColors attribute), 89</code>	<code>equals()</code> <code>(wikibaseintegrator.models.claims.Claim method), 60</code>
equals()	<code>(wikibaseintegrator.datatypes.basedatatype.BaseDataType method), 5</code>	<code>error_dict</code> <code>(wikibaseintegrator.wbi_exceptions.ModificationFailed attribute), 83</code>
equals()	<code>(wikibaseintegrator.datatypes.commonsmedia.CommonsMedia method), 7</code>	<code>error_dict</code> <code>(wikibaseintegrator.wbi_exceptions.MWApiError attribute), 82</code>
equals()	<code>(wikibaseintegrator.datatypes.externalid.ExternalID method), 9</code>	<code>error_dict</code> <code>(wikibaseintegrator.wbi_exceptions.NonExistentEntityError attribute), 84</code>
equals()	<code>(wikibaseintegrator.datatypes.extra.edtf.EDTF method), 1</code>	<code>error_dict</code> <code>(wikibaseintegrator.wbi_exceptions.SaveFailed attribute), 84</code>
equals()	<code>(wikibaseintegrator.datatypes.extra.localmedia.LocalMedia method), 3</code>	<code>ETYPE</code> <code>(wikibaseintegrator.entities.baseentity BaseEntity attribute), 43</code>
equals()	<code>(wikibaseintegrator.datatypes.form.Form method), 11</code>	<code>ETYPE</code> <code>(wikibaseintegrator.entities.item.ItemEntity attribute), 45</code>
equals()	<code>(wikibaseintegrator.datatypes.geoshape.GeoShape method), 13</code>	<code>ETYPE</code> <code>(wikibaseintegrator.entities.lexeme.LexemeEntity attribute), 49</code>
equals()	<code>(wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate method), 16</code>	<code>ETYPE</code> <code>(wikibaseintegrator.entities.mediainfo.MediaInfoEntity attribute), 52</code>
equals()	<code>(wikibaseintegrator.datatypes.item.Item method), 18</code>	<code>ETYPE</code> <code>(wikibaseintegrator.entities.property.PropertyEntity attribute), 55</code>
equals()	<code>(wikibaseintegrator.datatypes.lexeme.Lexeme method), 20</code>	<code>execute_sparql_query() (in module wikibaseintegrator.wbi_helpers), 90</code>
equals()	<code>(wikibaseintegrator.datatypes.math.Math method), 21</code>	<code>ExternalID</code> <code>(class in wikibaseintegrator.datatypes.externalid), 9</code>
equals()	<code>(wikibaseintegrator.datatypes.monolingualtext.MonolingualText method), 23</code>	<code>EXTERNALID</code> <code>(wikibaseintegrator.wbiEnums.WikibaseDatatype attribute), 80</code>
equals()	<code>(wikibaseintegrator.datatypes.musicalnotation.MusicalNotation method), 25</code>	<b>F</b>
		<code>FAIL (wikibaseintegrator.wbi_helpers.BColors attribute), 89</code>

FastRunContainer (class in wikibaseintegrator.wbi\_fastrun), 85  
FORCE\_APPEND (wikibaseintegrator.wbiEnums.ActionIfExists attribute), 80  
Form (class in wikibaseintegrator.datatypes.form), 11  
Form (class in wikibaseintegrator.models.forms), 64  
FORM (wikibaseintegrator.wbiEnums.WikibaseDatatype attribute), 81  
format2wbi() (in module wikibaseintegrator.wbi\_helpers), 91  
format\_amount() (in module wikibaseintegrator.wbi\_helpers), 91  
format\_query\_results() (wikibaseintegrator.wbi\_fastrun.FastRunContainer method), 86  
Forms (class in wikibaseintegrator.models.forms), 65  
forms (wikibaseintegrator.entities.lexeme.LexemeEntity property), 50  
forms (wikibaseintegrator.models.forms.Forms property), 65  
from\_json() (wikibaseintegrator.datatypes.basedatatype.BaseDataType method), 5  
from\_json() (wikibaseintegrator.datatypes.commonsmedia.CommonsMedia method), 7  
from\_json() (wikibaseintegrator.datatypes.externalid.ExternalID method), 9  
from\_json() (wikibaseintegrator.datatypes.extra.edtf.EDTF method), 2  
from\_json() (wikibaseintegrator.datatypes.extra.localmedia.LocalMedia method), 3  
from\_json() (wikibaseintegrator.datatypes.form.Form method), 11  
from\_json() (wikibaseintegrator.datatypes.geoshape.GeoShape method), 13  
from\_json() (wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate method), 16  
from\_json() (wikibaseintegrator.datatypes.item.Item method), 18  
from\_json() (wikibaseintegrator.datatypes.lexeme.Lexeme method), 20  
from\_json() (wikibaseintegrator.datatypes.math.Math method), 22  
from\_json() (wikibaseintegrator.datatypes.monolingualtext.MonolingualText method), 24  
from\_json() (wikibaseintegrator.datatypes.musicalnotation.MusicalNotation method), 26  
from\_json() (wikibaseintegrator.datatypes.property.Property method), 28  
from\_json() (wikibaseintegrator.datatypes.quantity.Quantity method), 30  
from\_json() (wikibaseintegrator.datatypes.sense.Sense method), 32  
from\_json() (wikibaseintegrator.datatypes.string.String method), 34  
from\_json() (wikibaseintegrator.datatypes.tabulardata.TabularData method), 36  
from\_json() (wikibaseintegrator.datatypes.time.Time method), 39  
from\_json() (wikibaseintegrator.datatypes.url.URL method), 41  
from\_json() (wikibaseintegrator.entities.baseentity.BaseEntity method), 44  
from\_json() (wikibaseintegrator.entities.item.ItemEntity method), 47  
from\_json() (wikibaseintegrator.entities.lexeme.LexemeEntity method), 50  
from\_json() (wikibaseintegrator.entities.mediainfo.MediaInfoEntity method), 53  
from\_json() (wikibaseintegrator.entities.property.PropertyEntity method), 56  
from\_json() (wikibaseintegrator.models.aliases.Alias method), 58  
from\_json() (wikibaseintegrator.models.aliasesAliases method), 59  
from\_json() (wikibaseintegrator.models.claims.Claim method), 60  
from\_json() (wikibaseintegrator.models.claims.Claims method), 62  
from\_json() (wikibaseintegrator.models.descriptions.Descriptions method), 63  
from\_json() (wikibaseintegrator.models.forms.Form method), 64  
from\_json() (wikibaseintegrator.models.forms.Forms method), 65  
from\_json() (wikibaseintegrator.models.forms.Representations method), 66  
from\_json() (wikibaseintegrator.models.labels.Labels method), 67  
from\_json() (wikibaseintegrator.models.language\_values.LanguageValue

<code>from_json()</code>	<code>(wikibaseintegrator.models.language_values.LanguageValues method)</code> , 69	<code>get()</code>	<code>(wikibaseintegrator.entities.property.PropertyEntity method)</code> , 57
<code>from_json()</code>	<code>(wikibaseintegrator.models.lemmas.Lemmas method)</code> , 70	<code>get()</code>	<code>(wikibaseintegrator.models.aliases.Aliases method)</code> , 59
<code>from_json()</code>	<code>(wikibaseintegrator.models.qualifiers.Qualifiers method)</code> , 72	<code>get()</code>	<code>(wikibaseintegrator.models.claims.Claims method)</code> , 62
<code>from_json()</code>	<code>(wikibaseintegrator.models.references.Reference method)</code> , 73	<code>get()</code>	<code>(wikibaseintegrator.models.descriptions.Descriptions method)</code> , 63
<code>from_json()</code>	<code>(wikibaseintegrator.models.references.References method)</code> , 74	<code>get()</code>	<code>(wikibaseintegrator.models.forms.Forms method)</code> , 65
<code>from_json()</code>	<code>(wikibaseintegrator.models.senses.Glosses method)</code> , 75	<code>get()</code>	<code>(wikibaseintegrator.models.forms.Representations method)</code> , 66
<code>from_json()</code>	<code>(wikibaseintegrator.models.senses.Sense method)</code> , 76	<code>get()</code>	<code>(wikibaseintegrator.models.labels.Labels method)</code> , 67
<code>from_json()</code>	<code>(wikibaseintegrator.models.senses.Senses method)</code> , 77	<code>get()</code>	<code>(wikibaseintegrator.models.language_values.LanguageValues method)</code> , 69
<code>from_json()</code>	<code>(wikibaseintegrator.models.sitelinks.Sitelinks method)</code> , 78	<code>get()</code>	<code>(wikibaseintegrator.models.lemmas.Lemmas method)</code> , 71
<code>from_json()</code>	<code>(wikibaseintegrator.models.snaks.Snaks method)</code> , 79	<code>get()</code>	<code>(wikibaseintegrator.models.qualifiers.Qualifiers method)</code> , 72
<code>from_json()</code>	<code>(wikibaseintegrator.models.snaks.Snaks method)</code> , 79	<code>get()</code>	<code>(wikibaseintegrator.models.references.References method)</code> , 74
<code>fulltext_search()</code>	<code>(in module wikibaseintegrator.wbi_helpers)</code> , 91	<code>get()</code>	<code>(wikibaseintegrator.models.senses.Glosses method)</code> , 75
<b>G</b>			
<code>generate_edit_credentials()</code>	<code>(wikibaseintegrator.wbi_login.Clientlogin method)</code> , 97	<code>get()</code>	<code>(wikibaseintegrator.models.senses.Senses method)</code> , 77
<code>generate_edit_credentials()</code>	<code>(wikibaseintegrator.wbi_login.Login method)</code> , 98	<code>get()</code>	<code>(wikibaseintegrator.models.sitelinks.Sitelinks method)</code> , 78
<code>generate_edit_credentials()</code>	<code>(wikibaseintegrator.wbi_login.OAuth1 method)</code> , 100	<code>get()</code>	<code>(wikibaseintegrator.models.snaks.Snaks method)</code> , 79
<code>generate_edit_credentials()</code>	<code>(wikibaseintegrator.wbi_login.OAuth2 method)</code> , 101	<code>get_all_data()</code>	<code>(wikibaseintegrator.wbi_fastrun.FastRunContainer method)</code> , 86
<code>generate_entity_instances()</code>	<code>(in module wikibaseintegrator.wbi_helpers)</code> , 91	<code>get_by_title()</code>	<code>(wikibaseintegrator.entities.mediainfo.MediaInfoEntity method)</code> , 53
<code>GeoShape</code>	<code>(class in wikibaseintegrator.datatypes.geoshape)</code> , 13	<code>get_conflicting_entity_ids</code>	<code>(wikibaseintegrator.wbi_exceptions.ModificationFailed property)</code> , 83
<code>GEOSHAPE</code>	<code>(wikibaseintegrator.wbiEnums.WikibaseDatatype attribute)</code> , 81	<code>get_conflicting_entity_ids</code>	<code>(wikibaseintegrator.wbi_exceptions.MWApiError property)</code> , 82
<code>get()</code>	<code>(wikibaseintegrator.entities.item.ItemEntity method)</code> , 47	<code>get_conflicting_entity_ids</code>	<code>(wikibaseintegrator.wbi_exceptions.NonExistentEntityError property)</code> , 84
<code>get()</code>	<code>(wikibaseintegrator.entities.lexeme.LexemeEntity method)</code> , 50	<code>get_conflicting_entity_ids</code>	<code>(wikibaseintegrator.wbi_exceptions.SaveFailed property)</code> , 84
<code>get()</code>	<code>(wikibaseintegrator.entities.mediainfo.MediaInfoEntity method)</code> , 53	<code>get_day()</code>	<code>(wikibaseintegrator.datatypes.time.Time method)</code> , 39
		<code>get_edit_cookie()</code>	<code>(wikibaseintegrator.</code>

*tor.wbi\_login.Clientlogin method), 97*  
`get_edit_cookie()` (wikibaseintegrator.wbilib\_login.Login method), 99  
`get_edit_cookie()` (wikibaseintegrator.wbilib\_login OAuth1 method), 100  
`get_edit_cookie()` (wikibaseintegrator.wbilib\_login OAuth2 method), 102  
`get_edit_token()` (wikibaseintegrator.wbilib\_login.Clientlogin method), 98  
`get_edit_token()` (wikibaseintegrator.wbilib\_login.Login method), 99  
`get_edit_token()` (wikibaseintegrator.wbilib\_login OAuth1 method), 101  
`get_edit_token()` (wikibaseintegrator.wbilib\_login OAuth2 method), 102  
`get_entity_url()` (wikibaseintegrator.entities.baseentity.BaseEntity method), 44  
`get_entity_url()` (wikibaseintegrator.entities.item.ItemEntity method), 47  
`get_entity_url()` (wikibaseintegrator.entities.lexeme.LexemeEntity method), 50  
`get_entity_url()` (wikibaseintegrator.entities.mediainfo.MediaInfoEntity method), 54  
`get_entity_url()` (wikibaseintegrator.entities.property.PropertyEntity method), 57  
`get_fastrun_container()` (in module wikibaseintegrator.wbifastrun), 88  
`get_item()` (wikibaseintegrator.wbifastrun.FastRunContainer method), 87  
`get_items()` (wikibaseintegrator.wbifastrun.FastRunContainer method), 87  
`get_json()` (wikibaseintegrator.datatypes.basedatatype.BaseDataType method), 6  
`get_json()` (wikibaseintegrator.datatypes.commonsmedia.CommonsMedia method), 7  
`get_json()` (wikibaseintegrator.datatypes.externalid.ExternalID method), 9  
`get_json()` (wikibaseintegrator.datatypes.extra.edtf.EDTF method), 2  
`get_json()` (wikibaseintegrator.datatypes.extra.localmedia.LocalMedia method), 4  
`get_json()` (wikibaseintegrator.datatypes.form.Form method), 11  
`get_json()` (wikibaseintegrator.datatypes.geoshape.GeoShape method), 14  
`get_json()` (wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate method), 16  
`get_json()` (wikibaseintegrator.datatypes.item.Item method), 18  
`get_json()` (wikibaseintegrator.datatypes.lexeme.Lexeme method), 20  
`get_json()` (wikibaseintegrator.datatypes.math.Math method), 22  
`get_json()` (wikibaseintegrator.datatypes.monolingualtext.MonolingualText method), 24  
`get_json()` (wikibaseintegrator.datatypes.musicalnotation.MusicalNotation method), 26  
`get_json()` (wikibaseintegrator.datatypes.property.Property method), 28  
`get_json()` (wikibaseintegrator.datatypes.quantity.Quantity method), 30  
`get_json()` (wikibaseintegrator.datatypes.sense.Sense method), 32  
`get_json()` (wikibaseintegrator.datatypes.string.String method), 34  
`get_json()` (wikibaseintegrator.datatypes.tabulardata.TabularData method), 36  
`get_json()` (wikibaseintegrator.datatypes.time.Time method), 39  
`get_json()` (wikibaseintegrator.datatypes.url.URL method), 41  
`get_json()` (wikibaseintegrator.entities.baseentity.BaseEntity method), 45  
`get_json()` (wikibaseintegrator.entities.item.ItemEntity method), 47  
`get_json()` (wikibaseintegrator.entities.lexeme.LexemeEntity method), 50  
`get_json()` (wikibaseintegrator.entities.mediainfo.MediaInfoEntity method), 54  
`get_json()` (wikibaseintegrator.entities.property.PropertyEntity method), 57  
`get_json()` (wikibaseintegrator.models.aliases.Alias method), 58  
`get_json()` (wikibaseintegrator.models.aliases.Aliases method), 59  
`get_json()` (wikibaseintegrator.models.claims.Claim method), 61

```

get_json() (wikibaseintegrator.models.claims.Claims
            method), 62
get_json() (wikibaseintegrator.models.descriptions.Descriptions
            method), 63
get_json() (wikibaseintegrator.models.forms.Form
            method), 65
get_json() (wikibaseintegrator.models.forms.Forms
            method), 65
get_json() (wikibaseintegrator.models.forms.Representations
            method), 66
get_json() (wikibaseintegrator.models.labels.Labels
            method), 67
get_json() (wikibaseintegrator.models.language_values.LanguageValue
            method), 68
get_json() (wikibaseintegrator.models.language_values.LanguageValues
            method), 70
get_json() (wikibaseintegrator.models.lemmas.Lemmas
            method), 71
get_json() (wikibaseintegrator.models.qualifiers.Qualifiers
            method), 72
get_json() (wikibaseintegrator.models.references.Reference
            method), 73
get_json() (wikibaseintegrator.models.references.References
            method), 74
get_json() (wikibaseintegrator.models.senses.Glosses
            method), 75
get_json() (wikibaseintegrator.models.senses.Sense
            method), 76
get_json() (wikibaseintegrator.models.senses.Senses
            method), 77
get_json() (wikibaseintegrator.models.snaks.Snak
            method), 79
get_json() (wikibaseintegrator.models.snaks.Snaks
            method), 79
get_language_data() (wikibaseintegrator.wbi_fastrun.FastRunContainer
            method), 87
get_languages (wikibaseintegrator.wbi_exceptions.ModificationFailed
            property), 83
get_languages (wikibaseintegrator.wbi_exceptions.MWApiError
            property), 82
get_languages (wikibaseintegrator.wbi_exceptions.NonExistentEntityError
            property), 84
get_languages (wikibaseintegrator.wbi_exceptions.SaveFailed
            property), 85
get_month() (wikibaseintegrator.datatypes.time.Time
            method), 39
get_prop_datatype() (wikibaseintegrator.wbi_fastrun.FastRunContainer
            method), 87
get_session() (wikibaseintegrator.wbi_login.Clientlogin
            method), 98
get_session() (wikibaseintegrator.wbi_login.Login
            method), 99
get_session() (wikibaseintegrator.wbi_login.OAuth1
            method), 101
get_session() (wikibaseintegrator.wbi_login.OAuth2
            method), 102
get_sparql_value() (wikibaseintegrator.datatypes.basedatatype.BaseDataType
            method), 6
get_sparql_value() (wikibaseintegrator.datatypes.commonsmedia.CommonsMedia
            method), 8
get_sparql_value() (wikibaseintegrator.datatypes.externalid.ExternalID
            method), 9
get_sparql_value() (wikibaseintegrator.datatypes.extra.edtf.EDTF
            method), 2
get_sparql_value() (wikibaseintegrator.datatypes.extra.localmedia.LocalMedia
            method), 4
get_sparql_value() (wikibaseintegrator.datatypes.form.Form
            method), 12
get_sparql_value() (wikibaseintegrator.datatypes.geoshape.GeoShape
            method), 14
get_sparql_value() (wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate
            method), 16
get_sparql_value() (wikibaseintegrator.datatypes.item.Item
            method), 18
get_sparql_value() (wikibaseintegrator.datatypes.lexeme.Lexeme
            method), 20
get_sparql_value() (wikibaseintegrator.datatypes.math.Math
            method), 22
get_sparql_value() (wikibaseintegrator.datatypes.monolingualtext.MonolingualText
            method), 24
get_sparql_value() (wikibaseintegrator.datatypes.musicalnotation.MusicalNotation
            method), 26
get_sparql_value() (wikibaseintegrator.datatypes.property.Property
            method), 28
get_sparql_value() (wikibaseintegrator.datatypes.quantity.Quantity
            method),

```

get_sparql_value()	(wikibaseintegrator.datatypes.sense.Sense method), 32
get_sparql_value()	(wikibaseintegrator.datatypes.string.String method), 34
get_sparql_value()	(wikibaseintegrator.datatypes.tabulardata.TabularData method), 36
get_sparql_value()	(wikibaseintegrator.datatypes.time.Time method), 39
get_sparql_value()	(wikibaseintegrator.datatypes.url.URL method), 41
get_sparql_value()	(wikibaseintegrator.models.claims.Claim method), 61
get_user_agent()	(in module wikibaseintegrator.wbi_helpers), 92
get_year()	(wikibaseintegrator.datatypes.time.Time method), 39
GlobeCoordinate	(class in wikibaseintegrator.datatypes.globecoordinate), 15
GLOBECOORDINATE	(wikibaseintegrator.wbiEnums.WikibaseDatatype attribute), 81
Glosses	(class in wikibaseintegrator.models.senses), 75
grammatical_features	(wikibaseintegrator.models.forms.Form property), 65
<b>H</b>	
has_equal_qualifiers()	(wikibaseintegrator.datatypes.basedatatype.BaseDataType method), 6
has_equal_qualifiers()	(wikibaseintegrator.datatypes.commonsmedia.CommonsMedia method), 8
has_equal_qualifiers()	(wikibaseintegrator.datatypes.externalid.ExternalID method), 10
has_equal_qualifiers()	(wikibaseintegrator.datatypes.extra.edtf.EDTF method), 2
has_equal_qualifiers()	(wikibaseintegrator.datatypes.extra.localmedia.LocalMedia method), 4
has_equal_qualifiers()	(wikibaseintegrator.datatypes.form.Form method), 12
has_equal_qualifiers()	(wikibaseintegrator.datatypes.geoshape.GeoShape method), 14
has_equal_qualifiers()	(wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate method), 16
has_equal_qualifiers()	(wikibaseintegrator.datatypes.item.Item method), 18
has_equal_qualifiers()	(wikibaseintegrator.datatypes.lexeme.Lexeme method), 20
has_equal_qualifiers()	(wikibaseintegrator.datatypes.math.Math method), 22
has_equal_qualifiers()	(wikibaseintegrator.datatypes.monolingualtext.MonolingualText method), 24
has_equal_qualifiers()	(wikibaseintegrator.datatypes.musicalnotation.MusicalNotation method), 26
has_equal_qualifiers()	(wikibaseintegrator.datatypes.property.Property method), 28
has_equal_qualifiers()	(wikibaseintegrator.datatypes.quantity.Quantity method), 30
has_equal_qualifiers()	(wikibaseintegrator.datatypes.sense.Sense method), 32
has_equal_qualifiers()	(wikibaseintegrator.datatypes.string.String method), 34
has_equal_qualifiers()	(wikibaseintegrator.datatypes.tabulardata.TabularData method), 36
has_equal_qualifiers()	(wikibaseintegrator.datatypes.time.Time method), 39
has_equal_qualifiers()	(wikibaseintegrator.datatypes.url.URL method), 41
has_equal_qualifiers()	(wikibaseintegrator.models.claims.Claim method), 61
hash	(wikibaseintegrator.models.references.Reference property), 73
hash	(wikibaseintegrator.models.snaks.Snak property), 79
HEADER	(wikibaseintegrator.wbi_helpers.BColors attribute), 89
HUNDRED_THOUSAND_YEARS	(wikibaseintegrator.wbiEnums.WikibaseDatePrecision attribute), 81
<b>I</b>	
id	(wikibaseintegrator.datatypes.basedatatype.BaseDataType property), 6
id	(wikibaseintegrator.datatypes.commonsmedia.CommonsMedia property), 8
id	(wikibaseintegrator.datatypes.externalid.ExternalID property), 10
id	(wikibaseintegrator.datatypes.extra.edtf.EDTF property), 2
id	(wikibaseintegrator.datatypes.extra.localmedia.LocalMedia property), 4
id	(wikibaseintegrator.datatypes.form.Form property), 12
id	(wikibaseintegrator.datatypes.geoshape.GeoShape property), 14
id	(wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate property), 16
id	(wikibaseintegrator.datatypes.item.Item property), 18

<code>id (wikibaseintegrator.datatypes.lexeme.Lexeme property), 20</code>	82
<code>id (wikibaseintegrator.datatypes.math.Math property), 22</code>	
<code>id (wikibaseintegrator.datatypes.monolingualtext.MonolingualText property), 24</code>	
<code>id (wikibaseintegrator.datatypes.musicalnotation.MusicalNote property), 26</code>	
<code>id (wikibaseintegrator.datatypes.property.Property property), 28</code>	
<code>id (wikibaseintegrator.datatypes.quantity.Quantity property), 30</code>	
<code>id (wikibaseintegrator.datatypes.sense.Sense property), 33</code>	
<code>id (wikibaseintegrator.datatypes.string.String property), 35</code>	
<code>id (wikibaseintegrator.datatypes.tabulardata.TabularData property), 37</code>	
<code>id (wikibaseintegrator.datatypes.time.Time property), 39</code>	
<code>id (wikibaseintegrator.datatypes.url.URL property), 42</code>	
<code>id (wikibaseintegrator.entities.baseentity.BaseEntity property), 45</code>	
<code>id (wikibaseintegrator.entities.item.ItemEntity property), 47</code>	
<code>id (wikibaseintegrator.entities.lexeme.LexemeEntity property), 50</code>	
<code>id (wikibaseintegrator.entities.mediainfo.MediaInfoEntity property), 54</code>	
<code>id (wikibaseintegrator.entities.property.PropertyEntity property), 57</code>	
<code>id (wikibaseintegrator.models.claims.Claim property), 61</code>	
<code>id (wikibaseintegrator.models.forms.Form property), 65</code>	
<code>info (wikibaseintegrator.wbi_exceptions.ModificationFailed attribute), 83</code>	
<code>info (wikibaseintegrator.wbi_exceptions.MWApiError attribute), 82</code>	
<code>info (wikibaseintegrator.wbi_exceptions.NonExistentEntityError attribute), 84</code>	
<code>info (wikibaseintegrator.wbi_exceptions.SaveFailed attribute), 85</code>	
<code>init_language_data() (wikibaseintegrator.wbi_fastrun.FastRunContainer method), 88</code>	
<code>Item (class in wikibaseintegrator.datatypes.item), 17</code>	
<code>ITEM (wikibaseintegrator.wbi_enums.WikibaseDatatype attribute), 81</code>	
<code>ItemEntity (class in wikibaseintegrator.entities.item), 45</code>	
<b>K</b>	
<code>KEEP (wikibaseintegrator.wbi_enums.ActionIfExists attribute), 80</code>	
<code>KNOWN_VALUE (wikibaseintegrator.wbi_enums.WikibaseSnakType attribute), 88</code>	
<b>L</b>	
<code>Labels (class in wikibaseintegrator.models.labels), 67</code>	
<code>LabelEntity (wikibaseintegrator.entities.item.ItemEntity property), 47</code>	
<code>Labels (wikibaseintegrator.entities.mediainfo.MediaInfoEntity property), 54</code>	
<code>labels (wikibaseintegrator.entities.property.PropertyEntity property), 57</code>	
<code>language (wikibaseintegrator.entities.lexeme.LexemeEntity property), 50</code>	
<code>language (wikibaseintegrator.models.aliases.Alias property), 58</code>	
<code>language (wikibaseintegrator.models.language_values.LanguageValue property), 69</code>	
<code>LanguageValue (class in wikibaseintegrator.models.language_values), 68</code>	
<code>LanguageValues (class in wikibaseintegrator.models.language_values), 69</code>	
<code>lastrevid (wikibaseintegrator.entities.baseentity.BaseEntity property), 45</code>	
<code>lastrevid (wikibaseintegrator.entities.item.ItemEntity property), 47</code>	
<code>lastrevid (wikibaseintegrator.entities.lexeme.LexemeEntity property), 51</code>	
<code>lastrevid (wikibaseintegrator.entities.mediainfo.MediaInfoEntity property), 54</code>	
<code>lastrevid (wikibaseintegrator.entities.property.PropertyEntity property), 57</code>	
<code>Lemmas (class in wikibaseintegrator.models.lemmas), 70</code>	
<code>lemmas (wikibaseintegrator.entities.lexeme.LexemeEntity property), 51</code>	
<code>Lexeme (class in wikibaseintegrator.datatypes.lexeme), 19</code>	
<code>LEXEME (wikibaseintegrator.wbi_enums.WikibaseDatatype attribute), 81</code>	
<code>lexeme_add_form() (in module wikibaseintegrator.wbi_helpers), 92</code>	
<code>lexeme_add_sense() (in module wikibaseintegrator.wbi_helpers), 92</code>	
<code>lexeme_edit_form() (in module wikibaseintegrator.wbi_helpers), 93</code>	
<code>lexeme_edit_sense() (in module wikibaseintegrator.wbi_helpers), 93</code>	

`lexeme_remove_form()` (in module `wikibaseintegrator.wbi_helpers`), 93  
`lexeme_remove_sense()` (in module `wikibaseintegrator.wbi_helpers`), 94  
`LexemeEntity` (class in `wikibaseintegrator.entities.lexeme`), 48  
`lexical_category` (`wikibaseintegrator.entities.lexeme.LexemeEntity` property), 51  
`LocalMedia` (class in `wikibaseintegrator.datatypes.extra.localmedia`), 3  
`Login` (class in `wikibaseintegrator.wbi_login`), 98  
`LoginError`, 99

**M**

`mainsnak` (`wikibaseintegrator.datatypes.basedatatype.BaseDataType` property), 6  
`mainsnak` (`wikibaseintegrator.datatypes.commonsmedia.CommonsMedia` property), 8  
`mainsnak` (`wikibaseintegrator.datatypes.externalid.ExternalID` property), 10  
`mainsnak` (`wikibaseintegrator.datatypes.extra.edtf.EDTF` property), 2  
`mainsnak` (`wikibaseintegrator.datatypes.extra.localmedia.LocalMedia` property), 4  
`mainsnak` (`wikibaseintegrator.datatypes.form.Form` property), 12  
`mainsnak` (`wikibaseintegrator.datatypes.geoshape.GeoShape` property), 14  
`mainsnak` (`wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate` property), 16  
`mainsnak` (`wikibaseintegrator.datatypes.item.Item` property), 18  
`mainsnak` (`wikibaseintegrator.datatypes.lexeme.Lexeme` property), 20  
`mainsnak` (`wikibaseintegrator.datatypes.math.Math` property), 22  
`mainsnak` (`wikibaseintegrator.datatypes.monolingualtext.MonolingualText` property), 24  
`mainsnak` (`wikibaseintegrator.datatypes.musicalnotation.MusicalNotation` property), 26  
`mainsnak` (`wikibaseintegrator.datatypes.property.Property` property), 28  
`mainsnak` (`wikibaseintegrator.datatypes.quantity.Quantity` property), 31  
`mainsnak` (`wikibaseintegrator.datatypes.sense.Sense` property), 33  
`mainsnak` (`wikibaseintegrator.datatypes.string.String` property), 35  
`mainsnak` (`wikibaseintegrator.datatypes.tabulardata.TabularData` property), 37  
`mainsnak` (`wikibaseintegrator.datatypes.time.Time` property), 39  
`mainsnak` (`wikibaseintegrator.datatypes.url.URL` property), 42  
`mainsnak` (`wikibaseintegrator.models.claims.Claim` property), 61  
`Math` (class in `wikibaseintegrator.datatypes.math`), 21  
`MATH` (`wikibaseintegrator.wbiEnums.WikibaseDatatype` attribute), 81  
`MaxRetriesReachedException`, 82  
`MediaInfoEntity` (class in `wikibaseintegrator.entities.mediainfo`), 52  
`mediawiki_api_call()` (in module `wikibaseintegrator.wbi_helpers`), 94  
`mediawiki_api_call_helper()` (in module `wikibaseintegrator.wbi_helpers`), 95  
`merge_items()` (in module `wikibaseintegrator.wbi_helpers`), 95  
`merge_lexemes()` (in module `wikibaseintegrator.wbi_helpers`), 95  
`messages` (`wikibaseintegrator.wbi_exceptions.ModificationFailed` attribute), 83  
`messages` (`wikibaseintegrator.wbi_exceptions.MWApiError` attribute), 82  
`messages` (`wikibaseintegrator.wbi_exceptions.NonExistentEntityError` attribute), 84  
`messages` (`wikibaseintegrator.wbi_exceptions.SaveFailed` attribute), 85  
`messages_names` (`wikibaseintegrator.wbi_exceptions.ModificationFailed` attribute), 83  
`messages_names` (`wikibaseintegrator.wbi_exceptions.MWApiError` attribute), 82  
`messages_names` (`wikibaseintegrator.wbi_exceptions.NonExistentEntityError` attribute), 84  
`messages_names` (`wikibaseintegrator.wbi_exceptions.SaveFailed` attribute), 85  
`MILLENNIUM` (`wikibaseintegrator.wbiEnums.WikibaseDatePrecision` attribute)

*tribute), 81*

**MILLION\_YEARS** *(wikibaseintegrator.wbiEnums.WikibaseDatePrecision attribute), 81*

**MissingEntityException**, 83

**ModificationFailed**, 83

**module**

- wikibaseintegrator.datatypes.basedatatype, 5*
- wikibaseintegrator.datatypes.commonsmedia, 7*
- wikibaseintegrator.datatypes.externalid, 9*
- wikibaseintegrator.datatypes.extra.edtf, 1*
- wikibaseintegrator.datatypes.extra.localmedia, 3*
- wikibaseintegrator.datatypes.form, 11*
- wikibaseintegrator.datatypes.geoshape, 13*
- wikibaseintegrator.datatypes.globecoordinate, 15*
- wikibaseintegrator.datatypes.item, 17*
- wikibaseintegrator.datatypes.lexeme, 19*
- wikibaseintegrator.datatypes.math, 21*
- wikibaseintegrator.datatypes.monolingualtext, 23*
- wikibaseintegrator.datatypes.musicalnotation, 25*
- wikibaseintegrator.datatypes.property, 27*
- wikibaseintegrator.datatypes.quantity, 29*
- wikibaseintegrator.datatypes.sense, 32*
- wikibaseintegrator.datatypes.string, 34*
- wikibaseintegrator.datatypes.tabulardata, 36*
- wikibaseintegrator.datatypes.time, 38*
- wikibaseintegrator.datatypes.url, 41*
- wikibaseintegrator.entities.baseentity, 43*
- wikibaseintegrator.entities.item, 45*
- wikibaseintegrator.entities.lexeme, 48*
- wikibaseintegrator.entities.mediainfo, 52*
- wikibaseintegrator.entities.property, 55*
- wikibaseintegrator.models.aliases, 58*
- wikibaseintegrator.models.basemodel, 60*
- wikibaseintegrator.models.claims, 60*
- wikibaseintegrator.models.descriptions, 63*
- wikibaseintegrator.models.forms, 64*
- wikibaseintegrator.models.labels, 67*
- wikibaseintegrator.models.language\_values, 68*
- wikibaseintegrator.models.lemmas, 70*
- wikibaseintegrator.models.qualifiers, 72*
- wikibaseintegrator.models.references, 73*

*wikibaseintegrator.models.senses, 75*

*wikibaseintegrator.models.sitelinks, 77*

*wikibaseintegrator.models.snaks, 78*

*wikibaseintegrator.wbi\_backoff, 80*

*wikibaseintegrator.wbi\_config, 80*

*wikibaseintegrator.wbiEnums, 80*

*wikibaseintegrator.wbi\_exceptions, 82*

*wikibaseintegrator.wbi\_fastrun, 85*

*wikibaseintegrator.wbi\_helpers, 89*

*wikibaseintegrator.wbi\_login, 97*

*wikibaseintegrator.wikibaseintegrator, 102*

**MonolingualText** *(class in wikibaseintegrator.datatypes.monolingualtext), 23*

**MONOLINGUALTEXT** *(wikibaseintegrator.wbiEnums.WikibaseDatatype attribute), 81*

*(wikibaseintegrator.wbiEnums.WikibaseDatePrecision attribute), 81*

**MusicalNotation** *(class in wikibaseintegrator.datatypes.musicalnotation), 25*

**MUSICALNOTATION** *(wikibaseintegrator.wbiEnums.WikibaseDatatype attribute), 81*

**MWApiError**, 82

**N**

*new()* *(wikibaseintegrator.entities.item.ItemEntity method), 47*

*new()* *(wikibaseintegrator.entities.lexeme.LexemeEntity method), 51*

*(wikibaseintegrator.entities.mediainfo.MediaInfoEntity method), 54*

*(wikibaseintegrator.entities.property.PropertyEntity method), 57*

**NO\_VALUE** *(wikibaseintegrator.wbiEnums.WikibaseSnakType attribute), 82*

**NonExistentEntityError**, 83

**NORMAL** *(wikibaseintegrator.wbiEnums.WikibaseRank attribute), 81*

**O**

**OAuth1** *(class in wikibaseintegrator.wbi\_login), 99*

**OAuth2** *(class in wikibaseintegrator.wbi\_login), 101*

**OKBLUE** *(wikibaseintegrator.wbi\_helpers.BColors attribute), 89*

**OKCYAN** *(wikibaseintegrator.wbi\_helpers.BColors attribute), 89*

**OKGREEN** *(wikibaseintegrator.wbi\_helpers.BColors attribute), 89*

## P

pageid (wikibaseintegrator.entities.baseentity.BaseEntity property), 45  
pageid (wikibaseintegrator.entities.item.ItemEntity property), 48  
pageid (wikibaseintegrator.entities.lexeme.LexemeEntity property), 51  
pageid (wikibaseintegrator.entities.mediainfo.MediaInfoEntity property), 54  
pageid (wikibaseintegrator.entities.property.PropertyEntity property), 57  
parse\_sparql\_value() (wikibaseintegrator.datatypes.basedatatype.BaseDataType method), 6  
parse\_sparql\_value() (wikibaseintegrator.datatypes.commonsmedia.CommonsMedia method), 8  
parse\_sparql\_value() (wikibaseintegrator.datatypes.externalid.ExternalID method), 10  
parse\_sparql\_value() (wikibaseintegrator.datatypes.extra.edtf.EDTF method), 2  
parse\_sparql\_value() (wikibaseintegrator.datatypes.extra.localmedia.LocalMedia method), 4  
parse\_sparql\_value() (wikibaseintegrator.datatypes.form.Form method), 12  
parse\_sparql\_value() (wikibaseintegrator.datatypes.geoshape.GeoShape method), 14  
parse\_sparql\_value() (wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate method), 16  
parse\_sparql\_value() (wikibaseintegrator.datatypes.item.Item method), 18  
parse\_sparql\_value() (wikibaseintegrator.datatypes.lexeme.Lexeme method), 20  
parse\_sparql\_value() (wikibaseintegrator.datatypes.math.Math method), 22  
parse\_sparql\_value() (wikibaseintegrator.datatypes.monolingualtext.MonolingualText method), 24  
parse\_sparql\_value() (wikibaseintegrator.datatypes.musicalnotation.MusicalNotation method), 26  
parse\_sparql\_value() (wikibaseintegrator.datatypes.property.Property method), 28  
parse\_sparql\_value() (wikibaseintegrator.datatypes.quantity.Quantity method), 31  
parse\_sparql\_value() (wikibaseintegrator.datatypes.sense.Sense method), 33  
parse\_sparql\_value() (wikibaseintegrator.datatypes.string.String method), 35  
parse\_sparql\_value() (wikibaseintegrator.datatypes.tabulardata.TabularData method), 37  
parse\_sparql\_value() (wikibaseintegrator.datatypes.time.Time method), 39  
parse\_sparql\_value() (wikibaseintegrator.datatypes.url.URL method), 42  
PREFERRED (wikibaseintegrator.wbiEnums.WikibaseRank attribute), 82  
Property (class in wikibaseintegrator.datatypes.property), 27  
PROPERTY (wikibaseintegrator.wbiEnums.WikibaseDatatype attribute), 81  
property\_number (wikibaseintegrator.models.snaks.Snak property), 79  
PropertyEntity (class in wikibaseintegrator.entities.property), 55

## Q

Qualifiers (class in wikibaseintegrator.models.qualifiers), 72  
qualifiers (wikibaseintegrator.datatypes.basedatatype.BaseDataType property), 6  
qualifiers (wikibaseintegrator.datatypes.commonsmedia.CommonsMedia property), 8  
qualifiers (wikibaseintegrator.datatypes.externalid.ExternalID property), 10  
qualifiers (wikibaseintegrator.datatypes.extra.edtf.EDTF property), 2  
qualifiers (wikibaseintegrator.datatypes.extra.localmedia.LocalMedia property), 4  
qualifiers (wikibaseintegrator.datatypes.form.Form property), 12  
qualifiers (wikibaseintegrator.datatypes.geoshape.GeoShape property), 14  
qualifiers (wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate property), 16  
qualifiers (wikibaseintegrator.datatypes.item.Item property), 18  
qualifiers (wikibaseintegrator.datatypes.lexeme.Lexeme property), 20

<b>qualifiers</b>	( <i>wikibaseintegrator.datatypes.math.Math property</i> ), 22	<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.item.Item property</i> ), 19
<b>qualifiers</b>	( <i>wikibaseintegrator.datatypes.monolingualtext.MonolingualText property</i> ), 24	<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.lexeme.Lexeme property</i> ), 20
<b>qualifiers</b>	( <i>wikibaseintegrator.datatypes.musicalnotation.MusicalNotation property</i> ), 26	<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.math.Math property</i> ), 22
<b>qualifiers</b>	( <i>wikibaseintegrator.datatypes.property.Property property</i> ), 28	<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.monolingualtext.MonolingualText property</i> ), 24
<b>qualifiers</b>	( <i>wikibaseintegrator.datatypes.quantity.Quantity property</i> ), 31	<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.musicalnotation.MusicalNotation property</i> ), 26
<b>qualifiers</b>	( <i>wikibaseintegrator.datatypes.sense.Sense property</i> ), 33	<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.property.Property property</i> ), 28
<b>qualifiers</b>	( <i>wikibaseintegrator.datatypes.string.String property</i> ), 35	<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.quantity.Quantity property</i> ), 31
<b>qualifiers</b>	( <i>wikibaseintegrator.datatypes.tabulardata.TabularData property</i> ), 37	<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.sense.Sense property</i> ), 33
<b>qualifiers</b>	( <i>wikibaseintegrator.datatypes.time.Time property</i> ), 39	<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.string.String property</i> ), 35
<b>qualifiers</b>	( <i>wikibaseintegrator.datatypes.url.URL property</i> ), 42	<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.tabulardata.TabularData property</i> ), 37
<b>qualifiers</b>	( <i>wikibaseintegrator.models.claims.Claim property</i> ), 61	<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.time.Time property</i> ), 40
<b>qualifiers</b>	( <i>wikibaseintegrator.models.qualifiers.Qualifiers property</i> ), 72	<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.url.URL property</i> ), 42
<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.basedatatype.BaseDataType property</i> ), 6	<b>qualifiers_order</b>	( <i>wikibaseintegrator.models.claims.Claim property</i> ), 61
<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.commonsmedia.CommonsMedia property</i> ), 8	<b>Quantity</b>	( <i>class in wikibaseintegrator.datatypes.quantity</i> ), 29
<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.externalid.ExternalID property</i> ), 10	<b>QUANTITY</b>	( <i>wikibaseintegrator.wbiEnums.WikibaseDatatype attribute</i> ), 81
<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.extra.edtf.EDTF property</i> ), 2	<b>R</b>	
<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.extra.localmedia.LocalMedia property</i> ), 4	<b>rank</b>	( <i>wikibaseintegrator.datatypes.basedatatype.BaseDataType property</i> ), 6
<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.form.Form property</i> ), 12	<b>rank</b>	( <i>wikibaseintegrator.datatypes.commonsmedia.CommonsMedia property</i> ), 8
<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.geoshape.GeoShape property</i> ), 14	<b>rank</b>	( <i>wikibaseintegrator.datatypes.externalid.ExternalID property</i> ), 10
<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate property</i> ), 16	<b>rank</b>	( <i>wikibaseintegrator.datatypes.extra.edtf.EDTF property</i> ), 2
<b>qualifiers_order</b>	( <i>wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate property</i> ), 16	<b>rank</b>	( <i>wikibaseintegrator.datatypes.extra.localmedia.LocalMedia property</i> ), 4

rank ( <i>wikibaseintegrator.datatypes.item.Item</i> property), 19	<i>wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate</i> property), 17
rank ( <i>wikibaseintegrator.datatypes.lexeme.Lexeme</i> property), 20	references ( <i>wikibaseintegrator.datatypes.item.Item</i> property), 19
rank ( <i>wikibaseintegrator.datatypes.math.Math</i> property), 22	references ( <i>wikibaseintegrator.datatypes.lexeme.Lexeme</i> property), 20
rank ( <i>wikibaseintegrator.datatypes.monolingualtext.MonolingualText</i> property), 24	references ( <i>wikibaseintegrator.datatypes.math.Math</i> property), 22
rank ( <i>wikibaseintegrator.datatypes.musicalnotation.MusicalNotation</i> property), 26	references ( <i>wikibaseintegrator.datatypes.monolingualtext.MonolingualText</i> property), 24
rank ( <i>wikibaseintegrator.datatypes.property.Property</i> property), 28	references ( <i>wikibaseintegrator.datatypes.musicalnotation.MusicalNotation</i> property), 26
rank ( <i>wikibaseintegrator.datatypes.quantity.Quantity</i> property), 31	references ( <i>wikibaseintegrator.datatypes.property.Property</i> property), 28
rank ( <i>wikibaseintegrator.datatypes.sense.Sense</i> property), 33	references ( <i>wikibaseintegrator.datatypes.quantity.Quantity</i> property), 31
rank ( <i>wikibaseintegrator.datatypes.string.String</i> property), 35	references ( <i>wikibaseintegrator.datatypes.sense.Sense</i> property), 33
rank ( <i>wikibaseintegrator.datatypes.tabulardata.TabularData</i> property), 37	references ( <i>wikibaseintegrator.datatypes.string.String</i> property), 35
rank ( <i>wikibaseintegrator.datatypes.time.Time</i> property), 40	references ( <i>wikibaseintegrator.datatypes.tabulardata.TabularData</i> property), 37
rank ( <i>wikibaseintegrator.datatypes.url.URL</i> property), 42	references ( <i>wikibaseintegrator.datatypes.time.Time</i> property), 40
rank ( <i>wikibaseintegrator.models.claims.Claim</i> property), 61	references ( <i>wikibaseintegrator.datatypes.url.URL</i> property), 42
reconstruct_statements() ( <i>wikibaseintegrator.wbi_fastrun.FastRunContainer</i> method), 88	references ( <i>wikibaseintegrator.models.claims.Claim</i> property), 61
Reference (class in <i>wikibaseintegrator.models.references</i> ), 73	references ( <i>wikibaseintegrator.models.references.References</i> property), 74
References (class in <i>wikibaseintegrator.models.references</i> ), 73	refs_equal() ( <i>wikibaseintegrator.datatypes.basedatatype.BaseDataType</i> static method), 6
references ( <i>wikibaseintegrator.datatypes.basedatatype.BaseDataType</i> property), 6	refs_equal() ( <i>wikibaseintegrator.datatypes.basedatatype.BaseDataType</i> static method), 6
references ( <i>wikibaseintegrator.datatypes.commonsmedia.CommonsMedia</i> property), 8	refs_equal() ( <i>wikibaseintegrator.datatypes.commonsmedia.CommonsMedia</i> static method), 8
references ( <i>wikibaseintegrator.datatypes.externalid.ExternalID</i> property), 10	refs_equal() ( <i>wikibaseintegrator.datatypes.externalid.ExternalID</i> static method), 10
references ( <i>wikibaseintegrator.datatypes.extra.edtf.EDTF</i> property), 2	refs_equal() ( <i>wikibaseintegrator.datatypes.extra.edtf.EDTF</i> static method), 2
references ( <i>wikibaseintegrator.datatypes.extra.localmedia.LocalMedia</i> property), 4	refs_equal() ( <i>wikibaseintegrator.datatypes.extra.localmedia.LocalMedia</i> static method), 4
references ( <i>wikibaseintegrator.datatypes.form.Form</i> property), 12	refs_equal() ( <i>wikibaseintegrator.datatypes.form.Form</i> static method), 12
references ( <i>wikibaseintegrator.datatypes.geoshape.GeoShape</i> property), 14	refs_equal() ( <i>wikibaseintegrator.datatypes.form.Form</i> static method), 12
references ( <i>wikibaseintegrator.integrator.Integrator</i> property), 14	refs_equal() ( <i>wikibaseintegrator.integrator.Integrator</i> static method), 14

<code>tor.datatypes.geoshape.GeoShape</code>	<code>static</code>	<code>method), 12</code>
<code>refs_equal()</code>		<code>(wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate static method), 17</code>
<code>refs_equal()</code>	<code>(wikibaseintegrator.datatypes.item.Item static method), 19</code>	
<code>refs_equal()</code>		<code>(wikibaseintegrator.datatypes.lexeme.Lexeme static method), 20</code>
<code>refs_equal()</code>	<code>(wikibaseintegrator.datatypes.math.Math static method), 22</code>	
<code>refs_equal()</code>		<code>(wikibaseintegrator.datatypes.monolingualtext.MonolingualText static method), 24</code>
<code>refs_equal()</code>		<code>(wikibaseintegrator.datatypes.musicalnotation.MusicalNotation static method), 26</code>
<code>refs_equal()</code>		<code>(wikibaseintegrator.datatypes.property.Property static method), 28</code>
<code>refs_equal()</code>		<code>(wikibaseintegrator.datatypes.quantity.Quantity static method), 31</code>
<code>refs_equal()</code>	<code>(wikibaseintegrator.datatypes.sense.Sense static method), 33</code>	
<code>refs_equal()</code>		<code>(wikibaseintegrator.datatypes.string.String static method), 35</code>
<code>refs_equal()</code>		<code>(wikibaseintegrator.datatypes.tabulardata.TabularData static method), 37</code>
<code>refs_equal()</code>		<code>(wikibaseintegrator.datatypes.time.Time static method), 40</code>
<code>refs_equal()</code>		<code>(wikibaseintegrator.datatypes.url.URL static method), 42</code>
<code>refs_equal()</code>	<code>(wikibaseintegrator.models.claims.Claim static method), 61</code>	
<code>remove()</code>		<code>(wikibaseintegrator.datatypes.basedatatype.BaseDataType method), 6</code>
<code>remove()</code>		<code>(wikibaseintegrator.datatypes.commonsmedia.CommonsMedia method), 8</code>
<code>remove()</code>		<code>(wikibaseintegrator.datatypes.externalid.ExternalID method), 10</code>
<code>remove()</code>	<code>(wikibaseintegrator.datatypes.extra.edtf.EDTF method), 2</code>	
<code>remove()</code>		<code>(wikibaseintegrator.datatypes.extra.localmedia.LocalMedia method), 4</code>
<code>remove()</code>	<code>(wikibaseintegrator.datatypes.form.Form</code>	
		<code>method), 12</code>
		<code>(wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate method), 14</code>
		<code>(wikibaseintegrator.datatypes.item.Item static method), 17</code>
		<code>(wikibaseintegrator.datatypes.lexeme.Lexeme static method), 19</code>
		<code>(wikibaseintegrator.datatypes.math.Math static method), 21</code>
		<code>(wikibaseintegrator.datatypes.monolingualtext.MonolingualText static method), 23</code>
		<code>(wikibaseintegrator.datatypes.monolingualtext.MonolingualText static method), 25</code>
		<code>(wikibaseintegrator.datatypes.musicalnotation.MusicalNotation static method), 27</code>
		<code>(wikibaseintegrator.datatypes.property.Property static method), 29</code>
		<code>(wikibaseintegrator.datatypes.quantity.Quantity static method), 31</code>
		<code>(wikibaseintegrator.datatypes.sense.Sense static method), 33</code>
		<code>(wikibaseintegrator.datatypes.string.String static method), 35</code>
		<code>(wikibaseintegrator.datatypes.tabulardata.TabularData static method), 37</code>
		<code>(wikibaseintegrator.datatypes.time.Time static method), 40</code>
		<code>(wikibaseintegrator.datatypes.url.URL static method), 42</code>
		<code>(wikibaseintegrator.models.aliases.Alias static method), 58</code>
		<code>(wikibaseintegrator.models.claims.Claim static method), 61</code>
		<code>(wikibaseintegrator.models.claims.Claims static method), 62</code>
		<code>(wikibaseintegrator.models.language_values.LanguageValue static method), 69</code>
		<code>(wikibaseintegrator.models.qualifiers.Qualifiers static method), 72</code>
		<code>(wikibaseintegrator.models.references.References static method), 74</code>
		<code>(wikibaseintegrator.models.senses.Sense static method), 76</code>
		<code>(in module wikibaseintegrator)</code>

removed (`wikibaseintegrator.wbif_helpers`), 96  
removed (`wikibaseintegrator.datatypes.basedatatype.BaseDataType.property`), 6  
removed (`wikibaseintegrator.datatypes.commonsmedia.CommonsMedia.property`), 8  
removed (`wikibaseintegrator.datatypes.externalid.ExternalID.property`), 10  
removed (`wikibaseintegrator.datatypes.extra.edtf.EDTF.property`), 2  
removed (`wikibaseintegrator.datatypes.extra.localmedia.LocalMedia.property`), 4  
removed (`wikibaseintegrator.datatypes.form.Form.property`), 12  
removed (`wikibaseintegrator.datatypes.geoshape.GeoShape.property`), 14  
removed (`wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate.property`), 17  
removed (`wikibaseintegrator.datatypes.item.Item.property`), 19  
removed (`wikibaseintegrator.datatypes.lexeme.Lexeme.property`), 21  
removed (`wikibaseintegrator.datatypes.math.Math.property`), 23  
removed (`wikibaseintegrator.datatypes.monolingualtext.MonolingualText.property`), 25  
removed (`wikibaseintegrator.datatypes.musicalnotation.MusicalNotation.property`), 27  
removed (`wikibaseintegrator.datatypes.property.Property.property`), 29  
removed (`wikibaseintegrator.datatypes.quantity.Quantity.property`), 31  
removed (`wikibaseintegrator.datatypes.sense.Sense.property`), 33  
removed (`wikibaseintegrator.datatypes.string.String.property`), 35  
removed (`wikibaseintegrator.datatypes.tabulardata.TabularData.property`), 37  
removed (`wikibaseintegrator.datatypes.time.Time.property`), 40  
removed (`wikibaseintegrator.datatypes.url.URL.property`), 42  
removed (`wikibaseintegrator.models.aliases.Alias.property`), 58  
removed (`wikibaseintegrator.models.claims.Claim.prop-`erty), 61  
removed (`wikibaseintegrator.models.language_values.LanguageValue.property`), 69  
`REPLACE_ALL` (`wikibaseintegrator.wbifEnums.ActionIfExists.attribute`), 80  
Representations (class in `wikibaseintegrator.models.forms`), 65  
representations (`wikibaseintegrator.models.forms.Form.property`), 65

## S

`SaveFailed`, 84  
`search_entities()` (in module `wikibaseintegrator.wbif_helpers`), 96  
`SearchError`, 85  
`Sense` (class in `wikibaseintegrator.datatypes.sense`), 32  
`Sense` (class in `wikibaseintegrator.models.senses`), 76  
`SENSE` (`wikibaseintegrator.wbifEnums.WikibaseDatatype.attribute`), 81  
`Senses` (class in `wikibaseintegrator.models.senses`), 76  
`senses` (`wikibaseintegrator.entities.lexeme.LexemeEntity.property`), 51  
`set()` (`wikibaseintegrator.models.aliasesAliases.method`), 59  
`set()` (`wikibaseintegrator.models.descriptions.Descriptions.method`), 64  
`set()` (`wikibaseintegrator.models.forms.Representations.method`), 66  
`set()` (`wikibaseintegrator.models.labels.Labels.method`), 68  
`set()` (`wikibaseintegrator.models.language_values.LanguageValues.method`), 70  
`set()` (`wikibaseintegrator.models.lemmas.Lemmas.method`), 71  
`set()` (`wikibaseintegrator.models.qualifiers.Qualifiers.method`), 72  
`set()` (`wikibaseintegrator.models.senses.Glosses.method`), 75  
`set()` (`wikibaseintegrator.models.sitelinks.Sitelinks.method`), 78  
`set_value()` (`wikibaseintegrator.datatypes.basedatatype.BaseDataType.method`), 6  
`set_value()` (`wikibaseintegrator.datatypes.commonsmedia.CommonsMedia.method`), 8  
`set_value()` (`wikibaseintegrator.datatypes.externalid.ExternalID.method`), 10

**s**

- `set_value()` (*wikibaseintegrator.datatypes.extra.edtf.EDTF* method), 3
- `set_value()` (*wikibaseintegrator.datatypes.extra.localmedia.LocalMedia* method), 4
- `set_value()` (*wikibaseintegrator.datatypes.form.Form* method), 12
- `set_value()` (*wikibaseintegrator.datatypes.geoshape.GeoShape* method), 14
- `set_value()` (*wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate* method), 17
- `set_value()` (*wikibaseintegrator.datatypes.item.Item* method), 19
- `set_value()` (*wikibaseintegrator.datatypes.lexeme.Lexeme* method), 21
- `set_value()` (*wikibaseintegrator.datatypes.math.Math* method), 23
- `set_value()` (*wikibaseintegrator.datatypes.monolingualtext.MonolingualText* method), 25
- `set_value()` (*wikibaseintegrator.datatypes.musicalnotation.MusicalNotation* method), 27
- `set_value()` (*wikibaseintegrator.datatypes.property.Property* method), 29
- `set_value()` (*wikibaseintegrator.datatypes.quantity.Quantity* method), 31
- `set_value()` (*wikibaseintegrator.datatypes.sense.Sense* method), 33
- `set_value()` (*wikibaseintegrator.datatypes.string.String* method), 35
- `set_value()` (*wikibaseintegrator.datatypes.tabulardata.TabularData* method), 37
- `set_value()` (*wikibaseintegrator.datatypes.time.Time* method), 40
- `set_value()` (*wikibaseintegrator.datatypes.url.URL* method), 42
- `Sitelink` (*class in wikibaseintegrator.models.sitelinks*), 77
- `Sitelinks` (*class in wikibaseintegrator.models.sitelinks*), 77
- `sitelinks` (*wikibaseintegrator.entities.item.ItemEntity* property), 48
- `Snak` (*class in wikibaseintegrator.models.snaks*), 78
- `Snaks` (*class in wikibaseintegrator.models.snaks*), 79
- `snaks` (*wikibaseintegrator.models.references.Reference* property), 73
- `snaks_order` (*wikibaseintegrator.models.references.Reference* property), 73
- `snaktype` (*wikibaseintegrator.models.snaks.Snak* property), 79
- `String` (*class in wikibaseintegrator.datatypes.string*), 34
- `STRING` (*wikibaseintegrator.wbiEnums.WikibaseDatatype* attribute), 81

**T**

- `TabularData` (*class in wikibaseintegrator.datatypes.tabulardata*), 36
- `TABULARDATA` (*wikibaseintegrator.wbiEnums.WikibaseDatatype* attribute), 81
- `Time` (*class in wikibaseintegrator.datatypes.time*), 38
- `TIME` (*wikibaseintegrator.wbiEnums.WikibaseDatatype* attribute), 81
- `title` (*wikibaseintegrator.entities.baseentity.BaseEntity* property), 45
- `title` (*wikibaseintegrator.entities.item.ItemEntity* property), 48
- `title` (*wikibaseintegrator.entities.lexeme.LexemeEntity* property), 51
- `title` (*wikibaseintegrator.entities.mediainfo.MediaInfoEntity* property), 54
- `title` (*wikibaseintegrator.entities.property.PropertyEntity* property), 57
- `type` (*wikibaseintegrator.datatypes.basedatatype.BaseDataType* property), 7
- `type` (*wikibaseintegrator.datatypes.commonsmedia.CommonsMedia* property), 8
- `type` (*wikibaseintegrator.datatypes.externalid.ExternalID* property), 10
- `type` (*wikibaseintegrator.datatypes.extra.edtf.EDTF* property), 3
- `type` (*wikibaseintegrator.datatypes.extra.localmedia.LocalMedia* property), 5
- `type` (*wikibaseintegrator.datatypes.form.Form* property), 12
- `type` (*wikibaseintegrator.datatypes.geoshape.GeoShape* property), 15
- `type` (*wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate* property), 17
- `type` (*wikibaseintegrator.datatypes.item.Item* property), 19
- `type` (*wikibaseintegrator.datatypes.lexeme.Lexeme* property), 21
- `type` (*wikibaseintegrator.datatypes.math.Math* property), 23
- `type` (*wikibaseintegrator.datatypes.monolingualtext.MonolingualText* property), 25

type (*wikibaseintegrator.datatypes.musicalnotation.MusicalNotation*)  
    property), 27  
type (*wikibaseintegrator.datatypes.property.Property*)  
    property), 29  
type (*wikibaseintegrator.datatypes.quantity.Quantity*)  
    property), 31  
type (*wikibaseintegrator.datatypes.sense.Sense*)  
    property), 33  
type (*wikibaseintegrator.datatypes.string.String*)  
    property), 35  
type (*wikibaseintegrator.datatypes.tabulardata.TabularData*)  
    property), 37  
type (*wikibaseintegrator.datatypes.time.Time*)  
    property), 40  
type (*wikibaseintegrator.datatypes.url.URL*)  
    property), 42  
type (*wikibaseintegrator.entities.baseentity.BaseEntity*)  
    property), 45  
type (*wikibaseintegrator.entities.item.ItemEntity*)  
    property), 48  
type (*wikibaseintegrator.entities.lexeme.LexemeEntity*)  
    property), 51  
type (*wikibaseintegrator.entities.mediainfo.MediaInfoEntity*)  
    property), 54  
type (*wikibaseintegrator.entities.property.PropertyEntity*)  
    property), 57  
type (*wikibaseintegrator.models.claims.Claim*)  
    property), 61

**U**

UNDERLINE (*wikibaseintegrator.wbi\_helpers.BColors* attribute), 89  
UNKNOWN\_VALUE (*wikibaseintegrator.wbiEnums.WikibaseSnakType* attribute), 82  
update() (*wikibaseintegrator.datatypes.basedatatype.BaseDataType*)  
    method), 7  
update() (*wikibaseintegrator.datatypes.commonsmedia.CommonsMedia*)  
    method), 8  
update() (*wikibaseintegrator.datatypes.externalid.ExternalID*)  
    method), 10  
update() (*wikibaseintegrator.datatypes.extra.edtf.EDTF*)  
    method), 3  
update() (*wikibaseintegrator.datatypes.extra.localmedia.LocalMedia*)  
    method), 5  
update() (*wikibaseintegrator.datatypes.form.Form*)  
    method), 12  
update() (*wikibaseintegrator.datatypes.geoshape.GeoShape*)  
    method), 15

update() (*wikibaseintegrator.datatypes.globecoordinate.GlobeCoordinate*)  
    method), 17  
update() (*wikibaseintegrator.datatypes.item.Item*)  
    method), 19  
update() (*wikibaseintegrator.datatypes.lexeme.Lexeme*)  
    method), 21  
update() (*wikibaseintegrator.datatypes.math.Math*)  
    method), 23  
update() (*wikibaseintegrator.datatypes.monolingualtext.MonolingualText*)  
    method), 25  
update() (*wikibaseintegrator.datatypes.musicalnotation.MusicalNotation*)  
    method), 27  
update() (*wikibaseintegrator.datatypes.property.Property*)  
    method), 29  
update() (*wikibaseintegrator.datatypes.quantity.Quantity*)  
    method), 31  
update() (*wikibaseintegrator.datatypes.sense.Sense*)  
    method), 33  
update() (*wikibaseintegrator.datatypes.string.String*)  
    method), 35  
update() (*wikibaseintegrator.datatypes.tabulardata.TabularData*)  
    method), 37  
update() (*wikibaseintegrator.datatypes.time.Time*)  
    method), 40  
update() (*wikibaseintegrator.datatypes.url.URL*)  
    method), 42  
update() (*wikibaseintegrator.models.claims.Claim*)  
    method), 61  
update\_frc\_from\_query() (*wikibaseintegrator.wbiFastrun.FastRunContainer*)  
    method), 88

**V**

URL (*class in wikibaseintegrator.datatypes.url*), 41  
URL (*wikibaseintegrator.wbiEnums.WikibaseDatatype* attribute), 81

value (*wikibaseintegrator.models.aliases.Alias*)  
    property), 59  
value (*wikibaseintegrator.models.language\_values.LanguageValue*)  
    property), 69  
values (*wikibaseintegrator.models.descriptions.Descriptions*)  
    property), 64  
values (*wikibaseintegrator.models.forms.Representations*)  
    property), 67

values (*wikibaseintegrator.models.labels.Labels* property), 68

values (*wikibaseintegrator.models.language\_values.LanguageValues* property), 70

values (*wikibaseintegrator.models.lemmas.Lemmas* property), 71

values (*wikibaseintegrator.models.senses.Glosses* property), 76

**W**

WARNING (*wikibaseintegrator.wbi\_helpers.BColors* attribute), 89

wbi\_backoff\_backoff\_hdrl() (*in module wikibaseintegrator.wbi\_backoff*), 80

wbi\_backoff\_check\_json\_decode\_error() (*in module wikibaseintegrator.wbi\_backoff*), 80

WikibaseDatatype (*class in wikibaseintegrator.wbiEnums*), 80

WikibaseDatePrecision (*class in wikibaseintegrator.wbiEnums*), 81

WikibaseIntegrator (*class in wikibaseintegrator.wikibaseintegrator*), 102

wikibaseintegrator.datatypes.basedatatype module, 5

wikibaseintegrator.datatypes.commonsmedia module, 7

wikibaseintegrator.datatypes.externalid module, 9

wikibaseintegrator.datatypes.extra.edtf module, 1

wikibaseintegrator.datatypes.extra.localmedia module, 3

wikibaseintegrator.datatypes.form module, 11

wikibaseintegrator.datatypes.geoshape module, 13

wikibaseintegrator.datatypes.globecoordinate module, 15

wikibaseintegrator.datatypes.item module, 17

wikibaseintegrator.datatypes.lexeme module, 19

wikibaseintegrator.datatypes.math module, 21

wikibaseintegrator.datatypes.monolingualtext module, 23

wikibaseintegrator.datatypes.musicalnotation module, 25

wikibaseintegrator.datatypes.property module, 27

wikibaseintegrator.datatypes.quantity module, 29

wikibaseintegrator.datatypes.sense module, 32

wikibaseintegrator.datatypes.string module, 34

wikibaseintegrator.datatypes.tabulardata module, 36

wikibaseintegrator.datatypes.time module, 38

wikibaseintegrator.datatypes.url module, 41

wikibaseintegrator.entities.baseentity module, 43

wikibaseintegrator.entities.item module, 45

wikibaseintegrator.entities.lexeme module, 48

wikibaseintegrator.entities.mediainfo module, 52

wikibaseintegrator.entities.property module, 55

wikibaseintegrator.models.aliases module, 58

wikibaseintegrator.models.basemodel module, 60

wikibaseintegrator.models.claims module, 60

wikibaseintegrator.models.descriptions module, 63

wikibaseintegrator.models.forms module, 64

wikibaseintegrator.models.labels module, 67

wikibaseintegrator.models.language\_values module, 68

wikibaseintegrator.models.lemmas module, 70

wikibaseintegrator.models.qualifiers module, 72

wikibaseintegrator.models.references module, 73

wikibaseintegrator.models.senses module, 75

wikibaseintegrator.models.sitelinks module, 77

wikibaseintegrator.models.snaks module, 78

wikibaseintegrator.wbi\_backoff module, 80

wikibaseintegrator.wbi\_config module, 80

wikibaseintegrator.wbiEnums module, 80

wikibaseintegrator.wbi\_exceptions module, 82

wikibaseintegrator.wbi\_fastrun

module, 85  
wikibaseintegrator.wbi\_helpers module, 89  
wikibaseintegrator.wbi\_login module, 97  
wikibaseintegrator.wikibaseintegrator module, 102  
WikibaseRank (*class* in *wikibaseintegrator.wbiEnums*), 81  
WikibaseSnakType (*class* in *wikibaseintegrator.wbiEnums*), 82  
with\_traceback() (*wikibaseintegrator.wbiExceptions.MaxRetriesReachedException* method), 83  
with\_traceback() (*wikibaseintegrator.wbiExceptions.MissingEntityException* method), 83  
with\_traceback() (*wikibaseintegrator.wbiExceptions.ModificationFailed* method), 83  
with\_traceback() (*wikibaseintegrator.wbiExceptions.MWApiError* method), 82  
with\_traceback() (*wikibaseintegrator.wbiExceptions.NonExistentEntityError* method), 84  
with\_traceback() (*wikibaseintegrator.wbiExceptions.SaveFailed* method), 85  
with\_traceback() (*wikibaseintegrator.wbiExceptions.SearchError* method), 85  
with\_traceback() (*wikibaseintegrator.wbiLogin.LoginError* method), 99  
write() (*wikibaseintegrator.entities.item.ItemEntity* method), 48  
write() (*wikibaseintegrator.entities.lexeme.LexemeEntity* method), 51  
write() (*wikibaseintegrator.entities.mediainfo.MediaInfoEntity* method), 54  
write() (*wikibaseintegrator.entities.property.PropertyEntity* method), 57  
write\_required() (*wikibaseintegrator.entities.baseentity.BaseEntity* method), 45  
write\_required() (*wikibaseintegrator.entities.item.ItemEntity* method), 48  
write\_required() (*wikibaseintegrator.entities.lexeme.LexemeEntity* method), 51  
write\_required() (*wikibaseintegrator.*

## Y

YEAR (*wikibaseintegrator.wbiEnums.WikibaseDatePrecision* attribute), 81