
url-hostname

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```
class url_hostname.host.Host(val: str = "", *, second_level_domain: str = "", top_level_domain: str = "", subdomains: Union[Iterable[str], str] = ())
```

Immutable representation of a host in URL Modifying the host will return new instance of the class, thus allowing chaining

Example

```
>>> leaf      domain name
>>> _|_      __|__
>>>
>>> www.prixroberval.utc.fr
>>> _____
>>>   |      |    |
>>> subdomains  second  top
>>>           domain  domain
>>>           level   level
```

```
classmethod build(second_level_domain: str, top_level_domain: str, subdomains: Iterable[str] = ())
```

Creates and returns a new Host:

Parameters

- **second_level_domain (str)** – single part
- **top_level_domain (str)** – level in the hierarchical DNS after the root domain
- **subdomains (Iterable[str], optional)** – parts on the left of the domain name

Returns new Host instance

Return type *Host*

Examples

```
>>> Host.build("utc", "fr")
Host('utc.fr')
```

property domain_name

Get the minimal part of the domain space that corresponds to an IP address as a string

Returns second and top level domains

Return type *Host*

Examples

```
>>> host = Host.build("utc", "fr", subdomains=("www", "prixroerval"))
>>> host.domain_name
Host('utc.fr')
```

is_relative_to(*other)

Whether or not this Host is relative to other

Returns whether this Host is relative to other

Return type bool

Examples

```
>>> docs = Host.build('amazon', 'com', ("docs", 'aws'))
>>> macie = docs.with_subdomains(("us-west-2", "redirection", "macie", "aws"))
>>> macie.is_relative_to(docs)
True
```

property leaf

Left most part of the domain

Returns host domain's leaf

Return type str

Examples

```
>>> host = Host.build("utc", "fr", subdomains=("www", "prixroerval"))
>>> host.leaf
'www'
```

relative_to(*other)

Compute new a version of this Host relative to the path represented by other

Returns new with common domain names

Return type *Host*

Raises **ValueError** – when no relative host exists

Examples

```
>>> docs = Host.build('amazon', 'com', ("docs", 'aws'))
>>> macie = docs.with_subdomains(("us-west-2", "redirection", "macie", "aws"))
>>> macie.relative_to(docs)
Host('aws.amazon.com')
```

with_leaf(leaf: str)

New Host with the left most part of the domain replaced

Returns new with *leaf* replaced

Return type *Host*

Examples

```
>>> host = Host.build("wikipedia", "org", subdomains="en")
>>> host.with_leaf('fr')
Host('fr.wikipedia.org')
```

with_subdomains (*subdomains*: *Union[Iterable[str], str]*)

New Host with *subdomains* replaced

Parameters **subdomains** (*Union[Iterable[str], str]*) – subdomains with leaf at left

Returns new with *subdomains* replaced

Return type *Host*

Examples

```
>>> host = Host.build("utc", "fr", subdomains=("www", "prixroerval"))
>>> host.with_leaf('prixroerval')
Host('prixroerval.utc.fr')
```

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ONE**

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