

:mod:`platform` --- Access to underlying platform's identifying data

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]platform.rst, line 1); [backlink](#)

Unknown interpreted text role "mod".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]platform.rst, line 4)

Unknown directive type "module".

```
.. module:: platform
   :synopsis: Retrieves as much platform identifying data as possible.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]platform.rst, line 7)

Unknown directive type "moduleauthor".

```
.. moduleauthor:: Marc-Andr   Lemburg <mal@egenix.com>
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]platform.rst, line 8)

Unknown directive type "sectionauthor".

```
.. sectionauthor:: Bjorn Pettersen <bpettersen@corp.fairisaac.com>
```

Source code: `:source:`Lib/platform.py``

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]platform.rst, line 10); [backlink](#)

Unknown interpreted text role "source".

Note

Specific platforms listed alphabetically, with Linux included in the Unix section.

Cross Platform

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]platform.rst, line 24)

Unknown directive type "function".

```
.. function:: architecture(executable=sys.executable, bits='', linkage='')
```

Queries the given executable (defaults to the Python interpreter binary) for various architecture information.

Returns a tuple ``(bits, linkage)`` which contain information about the bit architecture and the linkage format used for the executable. Both values are returned as strings.

Values that cannot be determined are returned as given by the parameter presets. If bits is given as ``'``', the ``sizeof(pointer)`` (or ``sizeof(long)`` on Python version < 1.5.2) is used as indicator for the supported pointer size.

The function relies on the system's `:file:`file`` command to do the actual work. This is available on most if not all Unix platforms and some non-Unix platforms

and then only if the executable points to the Python interpreter. Reasonable defaults are used when the above needs are not met.

.. note::

On macOS (and perhaps other platforms), executable files may be universal files containing multiple architectures.

To get at the "64-bitness" of the current interpreter, it is more reliable to query the `:attr:`sys.maxsize`` attribute::

```
is_64bits = sys.maxsize > 2**32
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library]platform.rst, line 54)

Unknown directive type "function".

.. function:: machine()

Returns the machine type, e.g. ```i386```. An empty string is returned if the value cannot be determined.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library]platform.rst, line 60)

Unknown directive type "function".

.. function:: node()

Returns the computer's network name (may not be fully qualified!). An empty string is returned if the value cannot be determined.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library]platform.rst, line 66)

Unknown directive type "function".

.. function:: platform(aliased=0, terse=0)

Returns a single string identifying the underlying platform with as much useful information as possible.

The output is intended to be *human readable* rather than machine parseable. It may look different on different platforms and this is intended.

If **aliased** is true, the function will use aliases for various platforms that report system names which differ from their common names, for example SunOS will be reported as Solaris. The `:func:`system_alias`` function is used to implement this.

Setting **terse** to true causes the function to return only the absolute minimum information needed to identify the platform.

.. versionchanged:: 3.8

On macOS, the function now uses `:func:`mac_ver``, if it returns a non-empty release string, to get the macOS version rather than the darwin version.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library]platform.rst, line 88)

Unknown directive type "function".

.. function:: processor()

Returns the (real) processor name, e.g. ```amd64```.

An empty string is returned if the value cannot be determined. Note that many

platforms do not provide this information or simply return the same value as for :func:`machine`. NetBSD does this.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]platform.rst, line 97)

Unknown directive type "function".

```
.. function:: python_build()
```

Returns a tuple ``(buildno, builddate)`` stating the Python build number and date as strings.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]platform.rst, line 103)

Unknown directive type "function".

```
.. function:: python_compiler()
```

Returns a string identifying the compiler used for compiling Python.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]platform.rst, line 108)

Unknown directive type "function".

```
.. function:: python_branch()
```

Returns a string identifying the Python implementation SCM branch.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]platform.rst, line 113)

Unknown directive type "function".

```
.. function:: python_implementation()
```

Returns a string identifying the Python implementation. Possible return values are: 'CPython', 'IronPython', 'Jython', 'PyPy'.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]platform.rst, line 119)

Unknown directive type "function".

```
.. function:: python_revision()
```

Returns a string identifying the Python implementation SCM revision.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]platform.rst, line 124)

Unknown directive type "function".

```
.. function:: python_version()
```

Returns the Python version as string ``'major.minor.patchlevel'``.

Note that unlike the Python ``sys.version``, the returned value will always include the patchlevel (it defaults to 0).

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library]platform.rst, line 132)

Unknown directive type "function".

```
.. function:: python_version_tuple()
```

Returns the Python version as tuple ``(major, minor, patchlevel)`` of strings.

Note that unlike the Python ``sys.version``, the returned value will always include the patchlevel (it defaults to ``'0'``).

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library]platform.rst, line 140)

Unknown directive type "function".

```
.. function:: release()
```

Returns the system's release, e.g. ``'2.2.0'`` or ``'NT'``. An empty string is returned if the value cannot be determined.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library]platform.rst, line 146)

Unknown directive type "function".

```
.. function:: system()
```

Returns the system/OS name, such as ``'Linux'``, ``'Darwin'``, ``'Java'``, ``'Windows'``. An empty string is returned if the value cannot be determined.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library]platform.rst, line 152)

Unknown directive type "function".

```
.. function:: system_alias(system, release, version)
```

Returns ``(system, release, version)`` aliased to common marketing names used for some systems. It also does some reordering of the information in some cases where it would otherwise cause confusion.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library]platform.rst, line 159)

Unknown directive type "function".

```
.. function:: version()
```

Returns the system's release version, e.g. ``'#3 on degas'``. An empty string is returned if the value cannot be determined.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library]platform.rst, line 165)

Unknown directive type "function".

```
.. function:: uname()
```

Fairly portable uname interface. Returns a :func:`~collections.namedtuple` containing six attributes: :attr:`~system`, :attr:`~node`, :attr:`~release`, :attr:`~version`, :attr:`~machine`, and :attr:`~processor`.

Note that this adds a sixth attribute (:attr:`~processor`) not present in the :func:`~os.uname` result. Also, the attribute names are different

```
for the first two attributes; :func:`os.uname` names them
:attr:`sysname` and :attr:`nodename`.
```

Entries which cannot be determined are set to `''`.

```
.. versionchanged:: 3.3
    Result changed from a tuple to a namedtuple.
```

Java Platform

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library]platform.rst, line 186)

Unknown directive type "function".

```
.. function:: java_ver(release='', vendor='', vminfo=('', '', ''), osinfo=('', '', ''))
```

Version interface for Jython.

Returns a tuple ``(release, vendor, vminfo, osinfo)`` with *vminfo* being a tuple ``(vm_name, vm_release, vm_vendor)`` and *osinfo* being a tuple ``(os_name, os_version, os_arch)``. Values which cannot be determined are set to the defaults given as parameters (which all default to `''`).

Windows Platform

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library]platform.rst, line 200)

Unknown directive type "function".

```
.. function:: win32_ver(release='', version='', csd='', ptype='')
```

Get additional version information from the Windows Registry and return a tuple ``(release, version, csd, ptype)`` referring to OS release, version number, CSD level (service pack) and OS type (multi/single processor).

As a hint: *ptype* is ``'Uniprocessor Free'`` on single processor NT machines and ``'Multiprocessor Free'`` on multi processor machines. The *'Free'* refers to the OS version being free of debugging code. It could also state *'Checked'* which means the OS version uses debugging code, i.e. code that checks arguments, ranges, etc.

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Unknown directive type "function".

```
.. function:: win32_edition()
```

Returns a string representing the current Windows edition. Possible values include but are not limited to ``'Enterprise'``, ``'IoTUAP'``, ``'ServerStandard'``, and ``'nanoserver'``.

```
.. versionadded:: 3.8
```

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Unknown directive type "function".

```
.. function:: win32_is_iot()
```

Return ``True`` if the Windows edition returned by :func:`win32_edition` is recognized as an IoT edition.

```
.. versionadded:: 3.8
```

macOS Platform

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]platform.rst, line 232)

Unknown directive type "function".

```
.. function:: mac_ver(release='', versioninfo=('', '', ''), machine='')

    Get macOS version information and return it as tuple ``(release, versioninfo,
    machine)`` with *versioninfo* being a tuple ``(version, dev_stage,
    non_release_version)``.

    Entries which cannot be determined are set to `''`. All tuple entries are
    strings.
```

Unix Platforms

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]platform.rst, line 245)

Unknown directive type "function".

```
.. function:: libc_ver(executable=sys.executable, lib='', version='', chunksize=16384)

    Tries to determine the libc version against which the file executable (defaults
    to the Python interpreter) is linked. Returns a tuple of strings ``(lib,
    version)`` which default to the given parameters in case the lookup fails.

    Note that this function has intimate knowledge of how different libc versions
    add symbols to the executable is probably only usable for executables compiled
    using :program:`gcc`.

    The file is read and scanned in chunks of *chunksize* bytes.
```

Linux Platforms

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]platform.rst, line 261)

Unknown directive type "function".

```
.. function:: freedesktop_os_release()

    Get operating system identification from ``os-release`` file and return
    it as a dict. The ``os-release`` file is a `freedesktop.org` standard
    <https://www.freedesktop.org/software/systemd/man/os-release.html> and
    is available in most Linux distributions. A noticeable exception is
    Android and Android-based distributions.

    Raises :exc:`OSError` or subclass when neither ``/etc/os-release`` nor
    ``/usr/lib/os-release`` can be read.

    On success, the function returns a dictionary where keys and values are
    strings. Values have their special characters like ``"`` and ``$``
    unquoted. The fields ``NAME``, ``ID``, and ``PRETTY_NAME`` are always
    defined according to the standard. All other fields are optional. Vendors
    may include additional fields.

    Note that fields like ``NAME``, ``VERSION``, and ``VARIANT`` are strings
    suitable for presentation to users. Programs should use fields like
    ``ID``, ``ID_LIKE``, ``VERSION_ID``, or ``VARIANT_ID`` to identify
    Linux distributions.

    Example::

    def get_like_distro():
        info = platform.freedesktop_os_release()
        ids = [info["ID"]]
        if "ID_LIKE" in info:
            # ids are space separated and ordered by precedence
```

```
        ids.extend(info["ID_LIKE"].split())
    return ids

.. versionadded:: 3.10
```