

# Generator Objects

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\[cpython-main] [Doc] [c-api]gen.rst, line 1)**

Unknown directive type "highlight".

```
.. highlight:: c
```

Generator objects are what Python uses to implement generator iterators. They are normally created by iterating over a function that yields values, rather than explicitly calling `c:func:PyGen_New` or `c:func:PyGen_NewWithQualName`.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\[cpython-main] [Doc] [c-api]gen.rst, line 8); [backlink](#)**

Unknown interpreted text role "c:func".

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\[cpython-main] [Doc] [c-api]gen.rst, line 8); [backlink](#)**

Unknown interpreted text role "c:func".

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\[cpython-main] [Doc] [c-api]gen.rst, line 13)**

Unknown directive type "c:type".

```
.. c:type:: PyGenObject

    The C structure used for generator objects.
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\[cpython-main] [Doc] [c-api]gen.rst, line 18)**

Unknown directive type "c:var".

```
.. c:var:: PyTypeObject PyGen_Type

    The type object corresponding to generator objects.
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\[cpython-main] [Doc] [c-api]gen.rst, line 23)**

Unknown directive type "c:function".

```
.. c:function:: int PyGen_Check(PyObject *ob)

    Return true if *ob* is a generator object; *ob* must not be ``NULL``. This
    function always succeeds.
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\[cpython-main] [Doc] [c-api]gen.rst, line 29)**

Unknown directive type "c:function".

```
.. c:function:: int PyGen_CheckExact(PyObject *ob)

    Return true if *ob*'s type is c:type:PyGen_Type; *ob* must not be
    ``NULL``. This function always succeeds.
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\[cpython-main] [Doc] [c-api]gen.rst, line 35)**

Unknown directive type "c:function".

```
.. c:function:: PyObject* PyGen_New(PyFrameObject *frame)
```

Create and return a new generator object based on the *\*frame\** object.  
A reference to *\*frame\** is stolen by this function. The argument must not be  
``NULL``.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\[cpython-main] [Doc] [c-api]gen.rst, line 41)**

Unknown directive type "c:function".

```
.. c:function:: PyObject* PyGen_NewWithQualName(PyFrameObject *frame, PyObject *name, PyObject *qualn
```

Create and return a new generator object based on the *\*frame\** object,  
with ``\_\_name\_\_`` and ``\_\_qualname\_\_`` set to *\*name\** and *\*qualname\**.  
A reference to *\*frame\** is stolen by this function. The *\*frame\** argument  
must not be ``NULL``.