Capsules

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

Unknown directive type "highlight".

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

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\(cpython-main)(Doc)(c-api)capsule.rst, line 8)

Unknown directive type "index".

```
.. index:: object: Capsule
```

Refer to :ref:`using-capsules` for more information on using these objects.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\(cpython-main)(Doc)(c-api)capsule.rst, line 10); *backlink*

Unknown interpreted text role "ref".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\(cpython-main)(Doc)(c-api)capsule.rst, line 12)

Unknown directive type "versionadded".

```
.. versionadded:: 3.1
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\(cpython-main)(Doc)(c-api)capsule.rst, line 15)

Unknown directive type "c:type".

```
.. c:type:: PyCapsule

   This subtype of :c:type:`PyObject` represents an opaque value, useful for C
   extension modules who need to pass an opaque value (as a :c:type:`void*`
   pointer) through Python code to other C code.  It is often used to make a C
   function pointer defined in one module available to other modules, so the
   regular import mechanism can be used to access C APIs defined in dynamically
   loaded modules.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\(cpython-main)(Doc)(c-api)capsule.rst, line 25)

Unknown directive type "c:type".

```
.. c:type:: PyCapsule_Destructor

   The type of a destructor callback for a capsule.  Defined as::

      typedef void (*PyCapsule_Destructor)(PyObject *);

   See :c:func:`PyCapsule_New` for the semantics of PyCapsule_Destructor
   callbacks.
```

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

Unknown directive type "c:function".

```
.. c:function:: int PyCapsule_CheckExact(PyObject *p)

   Return true if its argument is a :c:type:`PyCapsule`.  This function always
   succeeds.
```

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

Unknown directive type "c:function".

```
.. c:function:: PyObject* PyCapsule_New(void *pointer, const char *name, PyCapsule_Destructor destruc

   Create a :c:type:`PyCapsule` encapsulating the *pointer*.  The *pointer*
   argument may not be ``NULL``.

   On failure, set an exception and return ``NULL``.

   The *name* string may either be ``NULL`` or a pointer to a valid C string.  If
   non-``NULL``, this string must outlive the capsule.  (Though it is permitted to
   free it inside the *destructor*.)

   If the *destructor* argument is not ``NULL``, it will be called with the
   capsule as its argument when it is destroyed.

   If this capsule will be stored as an attribute of a module, the *name* should
   be specified as ``modulename.attributename``.  This will enable other modules
   to import the capsule using :c:func:`PyCapsule_Import`.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\(cpython-main)(Doc)(c-api)capsule.rst, line 60)

Unknown directive type "c:function".

```
.. c:function:: void* PyCapsule_GetPointer(PyObject *capsule, const char *name)

   Retrieve the *pointer* stored in the capsule.  On failure, set an exception
   and return ``NULL``.

   The *name* parameter must compare exactly to the name stored in the capsule.
   If the name stored in the capsule is ``NULL``, the *name* passed in must also
   be ``NULL``.  Python uses the C function :c:func:`strcmp` to compare capsule
   names.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\(cpython-main)(Doc)(c-api)capsule.rst, line 71)

Unknown directive type "c:function".

```
.. c:function:: PyCapsule_Destructor PyCapsule_GetDestructor(PyObject *capsule)

   Return the current destructor stored in the capsule.  On failure, set an
   exception and return ``NULL``.

   It is legal for a capsule to have a ``NULL`` destructor.  This makes a ``NULL``
   return code somewhat ambiguous; use :c:func:`PyCapsule_IsValid` or
   :c:func:`PyErr_Occurred` to disambiguate.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\(cpython-main)(Doc)(c-api)capsule.rst, line 81)

Unknown directive type "c:function".

```
.. c:function:: void* PyCapsule_GetContext(PyObject *capsule)

   Return the current context stored in the capsule.  On failure, set an
   exception and return ``NULL``.

   It is legal for a capsule to have a ``NULL`` context.  This makes a ``NULL``
   return code somewhat ambiguous; use :c:func:`PyCapsule_IsValid` or
   :c:func:`PyErr_Occurred` to disambiguate.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\(cpython-main)(Doc)(c-api)capsule.rst, line 91)

Unknown directive type "c:function".

```
.. c:function:: const char* PyCapsule_GetName(PyObject *capsule)

   Return the current name stored in the capsule.  On failure, set an exception
   and return ``NULL``.
```

```
It is legal for a capsule to have a ``NULL`` name.  This makes a ``NULL`` return
code somewhat ambiguous; use :c:func:`PyCapsule_IsValid` or
:c:func:`PyErr_Occurred` to disambiguate.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\(cpython-main) (Doc) (c-api)capsule.rst, line 101)

Unknown directive type "c:function".

```
.. c:function:: void* PyCapsule_Import(const char *name, int no_block)

   Import a pointer to a C object from a capsule attribute in a module.  The
   *name* parameter should specify the full name to the attribute, as in
   ``module.attribute``.  The *name* stored in the capsule must match this
   string exactly.

   Return the capsule's internal *pointer* on success.  On failure, set an
   exception and return ``NULL``.

   .. versionchanged:: 3.3
      *no_block* has no effect anymore.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\(cpython-main) (Doc) (c-api)capsule.rst, line 115)

Unknown directive type "c:function".

```
.. c:function:: int PyCapsule_IsValid(PyObject *capsule, const char *name)

   Determines whether or not *capsule* is a valid capsule.  A valid capsule is
   non-``NULL``, passes :c:func:`PyCapsule_CheckExact`, has a non-``NULL`` pointer
   stored in it, and its internal name matches the *name* parameter.  (See
   :c:func:`PyCapsule_GetPointer` for information on how capsule names are
   compared.)

   In other words, if :c:func:`PyCapsule_IsValid` returns a true value, calls to
   any of the accessors (any function starting with :c:func:`PyCapsule_Get`) are
   guaranteed to succeed.

   Return a nonzero value if the object is valid and matches the name passed in.
   Return ``0`` otherwise.  This function will not fail.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\(cpython-main) (Doc) (c-api)capsule.rst, line 131)

Unknown directive type "c:function".

```
.. c:function:: int PyCapsule_SetContext(PyObject *capsule, void *context)

   Set the context pointer inside *capsule* to *context*.

   Return ``0`` on success.  Return nonzero and set an exception on failure.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\(cpython-main) (Doc) (c-api)capsule.rst, line 138)

Unknown directive type "c:function".

```
.. c:function:: int PyCapsule_SetDestructor(PyObject *capsule, PyCapsule_Destructor destructor)

   Set the destructor inside *capsule* to *destructor*.

   Return ``0`` on success.  Return nonzero and set an exception on failure.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\(cpython-main) (Doc) (c-api)capsule.rst, line 145)

Unknown directive type "c:function".

```
.. c:function:: int PyCapsule_SetName(PyObject *capsule, const char *name)
```

```
   Set the name inside *capsule* to *name*.  If non-``NULL``, the name must
   outlive the capsule.  If the previous *name* stored in the capsule was not
   ``NULL``, no attempt is made to free it.

   Return ``0`` on success.  Return nonzero and set an exception on failure.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\(cpython-main)(Doc)(c-api)capsule.rst, line 154)

Unknown directive type "c:function".

```
.. c:function:: int PyCapsule_SetPointer(PyObject *capsule, void *pointer)

   Set the void pointer inside *capsule* to *pointer*.  The pointer may not be
   ``NULL``.

   Return ``0`` on success.  Return nonzero and set an exception on failure.
```