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# Commit cf59bf7



encukou and StanFromIreland authored 13 hours ago · ✓ 94 / 97 · Verified

gh-146121: Clarify security model of pkgutil.getdata; revert checks (GH-148197)

This reverts commit [bcdf231](#), and clarifies get\_data's security model.

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main (#148197) · v3.15.0a8

1 parent [a4d9d64](#) commit cf59bf7



4 files changed +26 -27 lines changed

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```

Doc/library/pkgutil.rst
@@ -151,24 +151,48 @@ support.
```

```

151 151 :meth:`get_data <importlib.abc.ResourceLoader.get_data>` API. The
152 152 *package* argument should be the name of a package, in standard module
format
153 153 (`foo.bar`). The *resource* argument should be in the form of a relative
154 - filename, using `/` as the path separator. The parent directory name
155 - `..` is not allowed, and nor is a rooted name (starting with a `/`).
154 + filename, using `/` as the path separator.
156 155
157 156 The function returns a binary string that is the contents of the specified
158 157 resource.
159 158
159 + This function uses the :term:`loader` method
160 + :func:`~importlib.abc.FileLoader.get_data`
161 + to support modules installed in the filesystem, but also in zip files,
162 + databases, or elsewhere.
163 +
160 164 For packages located in the filesystem, which have already been imported,
161 165 this is the rough equivalent of::
162 166
163 167     d = os.path.dirname(sys.modules[package].__file__)
164 168     data = open(os.path.join(d, resource), 'rb').read()
165 169
170 + Like the :func:`open` function, :func:`~!get_data` can follow parent
171 + directories (`../`) and absolute paths (starting with `/` or `C:/`,
172 + for example).
173 + It can open compilation/installation artifacts like `.py` and `.pyc`
174 + files or files with :func:`reserved filenames <os.path.isreserved>`.
175 + To be compatible with non-filesystem loaders, avoid using these features.
176 +
177 + .. warning::
178 +
179 +     This function is intended for trusted input.
180 +     It does not verify that *resource* "belongs" to *package*.
181 +
182 +     If you use a user-provided *resource* path, consider verifying it.
183 +     For example, require an alphanumeric filename with a known extension, or
184 +     install and check a list of known resources.
185 +
166 186 If the package cannot be located or loaded, or it uses a :term:`loader`

```

```

167 187     which does not support :meth:`get_data
      <importlib.abc.ResourceLoader.get_data>,
168 188     then None is returned. In particular, the :term:`loader` for
169 189     :term:`namespace packages <namespace package> does not support
170 190     :meth:`get_data <importlib.abc.ResourceLoader.get_data>.
171 191
192 +     .. seealso::
193 +
194 +         The :mod:`importlib.resources` module provides structured access to
195 +         module resources.
172 196
173 197     .. function:: resolve_name(name)
174 198

```



#### Lib/pkgutil.py



```

... @@ -393,9 +393,6 @@ def get_data(package, resource):
393 393     # signature - an os.path format "filename" starting with the dirname of
394 394     # the package's __file__
395 395     parts = resource.split('/')
396 -     if os.path.isabs(resource) or '..' in parts:
397 -         raise ValueError("resource must be a relative path with no "
398 -                            "parent directory components")
399 396     parts.insert(0, os.path.dirname(mod.__file__))
400 397     resource_name = os.path.join(*parts)
401 398     return loader.get_data(resource_name)

```



#### Lib/test/test\_pkgutil.py



```

... @@ -61,25 +61,6 @@ def test_getdata_filesys(self):
61 61
62 62     del sys.modules[pkg]
63 63
64 -     def test_getdata_path_traversal(self):
65 -         pkg = 'test_getdata_traversal'
66 -
67 -         # Make a package with some resources
68 -         package_dir = os.path.join(self.dirname, pkg)
69 -         os.mkdir(package_dir)

```

```
70 - # Empty init.py
71 - f = open(os.path.join(package_dir, '__init__.py'), "wb")
72 - f.close()
73 -
74 - with self.assertRaises(ValueError):
75 -     pkgutil.get_data(pkg, '../.../etc/passwd')
76 - with self.assertRaises(ValueError):
77 -     pkgutil.get_data(pkg, 'sub/.../etc/passwd')
78 - with self.assertRaises(ValueError):
79 -     pkgutil.get_data(pkg, os.path.abspath('/etc/passwd'))
80 -
81 - del sys.modules[pkg]
82 -
83 64     def test_getdata_zipfile(self):
84 65         zip = 'test_getdata_zipfile.zip'
85 66         pkg = 'test_getdata_zipfile'
```



...6-03-16-18-07-00.gh-issue-146121.vRbdro.rst



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