entrypoints Documentation

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Entry points are a way for Python packages to advertise objects with some common interface. The most common examples are `console_scripts` entry points, which define shell commands by identifying a Python function to run.

*Groups* of entry points, such as `console_scripts`, point to objects with similar interfaces. An application might use a group to find its plugins, or multiple groups if it has different kinds of plugins.

The `entrypoints` module contains functions to find and load entry points. You can install it from PyPI with `pip install entrypoints`.

To advertise entry points when distributing a package, see `entry_points` in the Python Packaging User Guide.

The `pkg_resources` module distributed with `setuptools` provides a way to discover entrypoints as well, but it contains other functionality unrelated to entrypoint discovery, and it does a lot of work at import time. Merely importing `pkg_resources` causes it to scan the files of all installed packages. Thus, in environments where a large number of packages are installed, importing `pkg_resources` can be very slow (several seconds).

By contrast, `entrypoints` is focused solely on entrypoint discovery and it is faster. Importing `entrypoints` does not scan anything, and getting a given entrypoint group performs a more focused scan.

Contents:
1.1 High-level API

entrypoints.get_single(group, name, path=None)
    Find a single entry point.
    Returns an EntryPoint object, or raises NoSuchEntryPoint if no match is found.

entrypoints.get_group_named(group, path=None)
    Find a group of entry points with unique names.
    Returns a dictionary of names to EntryPoint objects.

entrypoints.get_group_all(group, path=None)
    Find all entry points in a group.
    Returns a list of EntryPoint objects.

These functions will all use sys.path by default if you don’t specify the path parameter. This is normally what you want, so you shouldn’t need to pass path.

1.2 EntryPoint objects

class entrypoints.EntryPoint (name, module_name, object_name, extras=None, distro=None)

    name
        The name identifying this entry point

    module_name
        The name of an importable module to which it refers

    object_name
        The dotted object name within the module, or None if the entry point refers to a module itself.
extras
    Extra setuptools features related to this entry point as a list, or None

distro
    The distribution which advertised this entry point - a Distribution instance or None

load()
    Load the object to which this entry point refers.

classmethod from_string(epstr, name, distro=None)
    Parse an entry point from the syntax in entry_points.txt

    Parameters

    • epstr (str) – The entry point string (not including 'name =')
    • name (str) – The name of this entry point
    • distro (Distribution) – The distribution in which the entry point was found

    Return type EntryPoint

    Raises BadEntryPoint – if epstr can’t be parsed as an entry point.

class entrypoints.Distribution (name, version)

    name
        The name of this distribution

    version
        The version of this distribution, as a string

1.3 Exceptions

type entrypoints.BadEntryPoint (epstr)

    Raised when an entry point can’t be parsed.

type entrypoints.NoSuchEntryPoint (group, name)

    Raised by get_single() when no matching entry point is found.
CHAPTER 2

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