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Python Wiki
Python Insider Blog
Python 2 or 3?
Help Fund Python



Non-English Resources

Release Schedule

Sunday, January 26
Python 3.4 beta 3
Sunday, February 9
Python 3.4 release c
Sunday, February 23
Python 3.4 release c
Sunday, March 16
Python 3.4 final
Showing events

Events Calendar

Saturday, February 1
FOSEDEM 2014
Sunday, February 2
FOSEDEM 2014
Friday, February 7
Django Weekend Ca
Saturday, February 8
Django Weekend Ca
Sunday, February

[Add an event](#) to this calendar.

User Group Calendar

Saturday, January 25
11:00pm Guadaluja
Sunday, January 26
» 1:00am Guadaluja
Tuesday, January 28
6:00pm Python Sh
10:30pm Dominicar
Wednesday, January 29

Times are shown in UTC/GMT.

[Add an event](#) to this calendar.

About Python

Python is a remarkably powerful dynamic programming language that is used in a wide variety of [application domains](#). Python is often compared to Tcl, Perl, Ruby, Scheme or Java. Some of its key distinguishing features include:

- very clear, readable syntax
- strong introspection capabilities
- intuitive object orientation
- natural expression of procedural code
- full modularity, supporting hierarchical packages
- exception-based error handling
- very high level dynamic data types
- extensive standard libraries and third party modules for virtually every task
- extensions and modules easily written in C, C++ (or Java for Jython, or .NET languages for IronPython)
- embeddable within applications as a scripting interface

Python is powerful... and fast

Fans of Python use the phrase "batteries included" to describe the [standard library](#), which covers everything from asynchronous processing to zip files. The language itself is a flexible powerhouse that can handle practically any [problem domain](#). Build your own web server in three lines of code. Build flexible data-driven code using Python's powerful and dynamic introspection capabilities and advanced language features such as [meta-classes](#), [duck typing](#) and [decorators](#).

Python lets you write the code you need, quickly. And, thanks to a highly optimized byte compiler and support libraries, Python code runs more than fast enough for most applications. The traditional implementation of CPython uses a bytecode virtual machine; [PyPy](#) supports just-in-time (JIT) compilation to machine code. Also, Jython and IronPython (see below) support JIT compilation on their respective virtual machine implementations.

Python plays well with others

Python can integrate with [COM](#), [.NET](#), and [CORBA](#) objects.

For Java libraries, use [Jython](#), an implementation of Python for the Java Virtual Machine.

For .NET, try [IronPython](#), Microsoft's new implementation of Python for .NET, or [Python for .NET](#).

Python is also supported for the [Internet Communications Engine \(ICE\)](#) and many other integration technologies.

If you find something that Python cannot do, or if you need the performance advantage of low-level code, you can write [extension modules](#) in C or C++, or wrap existing code with [SWIG](#) or [Boost.Python](#). Wrapped modules appear to your program exactly like native Python code. That's language integration made easy. You can also go the opposite route and [embed Python](#) in your own application, providing your users with a language they'll enjoy using.

Python runs everywhere

Python is available for all major operating systems: Windows, Linux/Unix, OS/2, Mac, Amiga, among others. There are even versions that run on [.NET](#) and the [Java virtual machine](#). You'll be pleased to know that the same source code will run unchanged across all implementations.

Your favorite system isn't listed here? It may still support Python if there's a C compiler for it. Ask around on [news.comp.lang.python](#) - or just try compiling Python yourself.

Python is friendly... and easy to learn

The Python newsgroup is known as one of the friendliest around. The avid developer and user [community](#) maintains a [wiki](#), hosts international and local [conferences](#), runs development sprints, and contributes to online code repositories.

Python also comes with complete [documentation](#), both integrated into the language and as separate web pages. Online tutorials target both the [seasoned programmer](#) and the [newcomer](#). All are designed to make you productive quickly. The availability of first-rate [books](#) completes the learning package.

Python is Open

The Python implementation is under an open source license that makes it **freely usable and distributable, even for commercial use**. The [Python license](#) is administered by the [Python Software Foundation](#).

Take a look at [application domains](#) where Python is used, or try the [current download](#) for yourself.