

语言和工具包

The java.lang.* and java.util.* Packages

提供几乎所有应用程序都使用的基本功能

The java.lang and java.util packages provide basic functionality that is used by almost all applications. Other packages with names that begin with java.lang and java.util provide supplemental APIs for specific features.

提供特定功能的补充APIs

Tutorials and Programmer's Guides

- [The Java Tutorial](#) 教程和程序员指南

API Enhancements

- [Enhancements in Java SE 7](#)
- [Enhancements in Java SE 6](#)
- [Enhancements in J2SE 5.0](#)
- [Enhancements in J2SDK 1.4](#)
- [Enhancements in J2SDK 1.3](#)

Package List

Package	Enhancements	More Information
java.lang Provides classes that are fundamental to the design of the Java programming language such as String , Math , and basic runtime support for threads and processes. 提供Java编程语言设计的基础类	J2SE 5.0 , J2SDK 1.4 , and J2SDK 1.3	<ul style="list-style-type: none"> • Package Version Identification • Location-Independent Access to Resources • Chained Exception Facility 访问资源 链式异常
java.lang.annotation Provides library support for the Java programming language annotation facility.	New in J2SE 5.0	<ul style="list-style-type: none"> • Using Annotations
java.lang.instrument Provides services that allow Java programming language agents to instrument programs running on the JVM.	Java SE 6 and J2SE 5.0	<ul style="list-style-type: none"> • Instrumenting Applications
java.lang.management Provides the management interface for monitoring and management of the JVM as well as the operating system on which the JVM is running.	Java SE 6	<ul style="list-style-type: none"> • Monitoring and Management
java.lang.ref Provides reference-object classes, which support a limited degree of interaction with the garbage collector.	New in J2SDK 1.3	No additional information
java.lang.reflect Provides classes and interfaces for obtaining reflective information about classes and objects.	Java SE 6 , J2SE 5.0 , and J2SDK 1.4	<ul style="list-style-type: none"> • Reflection APIs
java.util Provides the collections framework, formatted printing and scanning, array manipulation utilities, event model, date and time facilities, internationalization, and miscellaneous utility classes.	Java SE 6 , J2SE 5.0 , and J2SDK 1.3	<ul style="list-style-type: none"> • Collections Framework 提供集合框架，格式化打印和扫描，数组操作工具集、事件模型、日期和时间设施、国际化、混杂实用工具类
java.util.concurrent java.util.concurrent.atomic java.util.concurrent.locks Provides utility classes used in concurrent programming, including support for atomic updates of single variables and a locking framework which supplements	New in J2SE 5.0 提供并发编程中使用的实用工具类，包括对单个变量的原子更新支持和语言层面补充的锁框架	<ul style="list-style-type: none"> • Concurrency Utilities

language-level synchronization.		
java.util.jar java.util.zip Provides classes for reading and writing the standard ZIP and GZIP file formats as well as the JAR (Java ARchive) file format, which is based on the standard ZIP file format with an optional manifest file.	Java SE 6 and J2SDK 1.3	<ul style="list-style-type: none"> • Java Archive (JAR) Files
java.util.logging Provides support to maintain and service software at customer sites.	J2SE 5.0 and J2SDK 1.4	<ul style="list-style-type: none"> • Java Logging APIs
java.util.regex Provides classes for matching character sequences against patterns specified by regular expressions.	New in J2SDK 1.4	<ul style="list-style-type: none"> • Regular Expressions Tutorial
java.util.prefs Provides classes to store and retrieve user and system preference and configuration data.	J2SDK 1.4	<ul style="list-style-type: none"> • Preferences API
java.util.spi Service provider classes for the java.util package.	New in Java SE 6	No additional information