| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | [**Class**](http://docs.google.com/java/util/Enumeration.html) | **Use** | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
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| PREV   NEXT | [**FRAMES**](http://docs.google.com/index.html?java/util//class-useEnumeration.html)    [**NO FRAMES**](http://docs.google.com/Enumeration.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

**Uses of Interface**

**java.util.Enumeration**

| Packages that use [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
| --- | --- |
| [**java.applet**](#3znysh7) | Provides the classes necessary to create an applet and the classes an applet uses to communicate with its applet context. |
| [**java.awt**](#2et92p0) | Contains all of the classes for creating user interfaces and for painting graphics and images. |
| [**java.beans**](#tyjcwt) | Contains classes related to developing *beans* -- components based on the JavaBeansTM architecture. |
| [**java.io**](#3dy6vkm) | Provides for system input and output through data streams, serialization and the file system. |
| [**java.lang**](#1t3h5sf) | Provides classes that are fundamental to the design of the Java programming language. |
| [**java.net**](#4d34og8) | Provides the classes for implementing networking applications. |
| [**java.security**](#2s8eyo1) | Provides the classes and interfaces for the security framework. |
| [**java.security.acl**](#17dp8vu) | The classes and interfaces in this package have been superseded by classes in the java.security package. |
| [**java.sql**](#3rdcrjn) | Provides the API for accessing and processing data stored in a data source (usually a relational database) using the JavaTM programming language. |
| [**java.util**](#26in1rg) | Contains the collections framework, legacy collection classes, event model, date and time facilities, internationalization, and miscellaneous utility classes (a string tokenizer, a random-number generator, and a bit array). |
| [**java.util.concurrent**](#lnxbz9) | Utility classes commonly useful in concurrent programming. |
| [**java.util.jar**](#35nkun2) | Provides classes for reading and writing the JAR (Java ARchive) file format, which is based on the standard ZIP file format with an optional manifest file. |
| [**java.util.logging**](#1ksv4uv) | Provides the classes and interfaces of the JavaTM 2 platform's core logging facilities. |
| [**java.util.zip**](#44sinio) | Provides classes for reading and writing the standard ZIP and GZIP file formats. |
| [**javax.activation**](#2jxsxqh) |  |
| [**javax.management.loading**](#z337ya) | Provides the classes which implement advanced dynamic loading. |
| [**javax.naming**](#3j2qqm3) | Provides the classes and interfaces for accessing naming services. |
| [**javax.naming.ldap**](#1y810tw) | Provides support for LDAPv3 extended operations and controls. |
| [**javax.net.ssl**](#4i7ojhp) | Provides classes for the secure socket package. |
| [**javax.security.sasl**](#2xcytpi) | Contains class and interfaces for supporting SASL. |
| [**javax.sql.rowset.spi**](#1ci93xb) | The standard classes and interfaces that a third party vendor has to use in its implementation of a synchronization provider. |
| [**javax.swing**](#3whwml4) | Provides a set of "lightweight" (all-Java language) components that, to the maximum degree possible, work the same on all platforms. |
| [**javax.swing.table**](#2bn6wsx) | Provides classes and interfaces for dealing with javax.swing.JTable. |
| [**javax.swing.text**](#qsh70q) | Provides classes and interfaces that deal with editable and noneditable text components. |
| [**javax.swing.text.html**](#3as4poj) | Provides the class HTMLEditorKit and supporting classes for creating HTML text editors. |
| [**javax.swing.text.html.parser**](#1pxezwc) | Provides the default HTML parser, along with support classes. |
| [**javax.swing.tree**](#49x2ik5) | Provides classes and interfaces for dealing with javax.swing.JTree. |
| [**org.xml.sax.helpers**](#2p2csry) | This package contains "helper" classes, including support for bootstrapping SAX-based applications. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [java.applet](http://docs.google.com/java/applet/package-summary.html) | |
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| Methods in [java.applet](http://docs.google.com/java/applet/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[Applet](http://docs.google.com/java/applet/Applet.html)> | **AppletContext.**[**getApplets**](http://docs.google.com/java/applet/AppletContext.html#getApplets())()            Finds all the applets in the document represented by this applet context. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [java.awt](http://docs.google.com/java/awt/package-summary.html) | |
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| Methods in [java.awt](http://docs.google.com/java/awt/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[MenuShortcut](http://docs.google.com/java/awt/MenuShortcut.html)> | **MenuBar.**[**shortcuts**](http://docs.google.com/java/awt/MenuBar.html#shortcuts())()            Gets an enumeration of all menu shortcuts this menu bar is managing. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [java.beans](http://docs.google.com/java/beans/package-summary.html) | |
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| Methods in [java.beans](http://docs.google.com/java/beans/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
| --- | --- |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[String](http://docs.google.com/java/lang/String.html)> | **FeatureDescriptor.**[**attributeNames**](http://docs.google.com/java/beans/FeatureDescriptor.html#attributeNames())()            Gets an enumeration of the locale-independent names of this feature. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [java.io](http://docs.google.com/java/io/package-summary.html) | |
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| Constructors in [java.io](http://docs.google.com/java/io/package-summary.html) with parameters of type [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| [**SequenceInputStream**](http://docs.google.com/java/io/SequenceInputStream.html#SequenceInputStream(java.util.Enumeration))([Enumeration](http://docs.google.com/java/util/Enumeration.html)<? extends [InputStream](http://docs.google.com/java/io/InputStream.html)> e)            Initializes a newly created SequenceInputStream by remembering the argument, which must be an Enumeration that produces objects whose run-time type is InputStream. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [java.lang](http://docs.google.com/java/lang/package-summary.html) | |
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| Methods in [java.lang](http://docs.google.com/java/lang/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| protected  [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[URL](http://docs.google.com/java/net/URL.html)> | **ClassLoader.**[**findResources**](http://docs.google.com/java/lang/ClassLoader.html#findResources(java.lang.String))([String](http://docs.google.com/java/lang/String.html) name)            Returns an enumeration of [URL](http://docs.google.com/java/net/URL.html) objects representing all the resources with the given name. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[URL](http://docs.google.com/java/net/URL.html)> | **ClassLoader.**[**getResources**](http://docs.google.com/java/lang/ClassLoader.html#getResources(java.lang.String))([String](http://docs.google.com/java/lang/String.html) name)            Finds all the resources with the given name. |
| static [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[URL](http://docs.google.com/java/net/URL.html)> | **ClassLoader.**[**getSystemResources**](http://docs.google.com/java/lang/ClassLoader.html#getSystemResources(java.lang.String))([String](http://docs.google.com/java/lang/String.html) name)            Finds all resources of the specified name from the search path used to load classes. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [java.net](http://docs.google.com/java/net/package-summary.html) | |
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| Methods in [java.net](http://docs.google.com/java/net/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[URL](http://docs.google.com/java/net/URL.html)> | **URLClassLoader.**[**findResources**](http://docs.google.com/java/net/URLClassLoader.html#findResources(java.lang.String))([String](http://docs.google.com/java/lang/String.html) name)            Returns an Enumeration of URLs representing all of the resources on the URL search path having the specified name. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[InetAddress](http://docs.google.com/java/net/InetAddress.html)> | **NetworkInterface.**[**getInetAddresses**](http://docs.google.com/java/net/NetworkInterface.html#getInetAddresses())()            Convenience method to return an Enumeration with all or a subset of the InetAddresses bound to this network interface. |
| static [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[NetworkInterface](http://docs.google.com/java/net/NetworkInterface.html)> | **NetworkInterface.**[**getNetworkInterfaces**](http://docs.google.com/java/net/NetworkInterface.html#getNetworkInterfaces())()            Returns all the interfaces on this machine. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[NetworkInterface](http://docs.google.com/java/net/NetworkInterface.html)> | **NetworkInterface.**[**getSubInterfaces**](http://docs.google.com/java/net/NetworkInterface.html#getSubInterfaces())()            Get an Enumeration with all the subinterfaces (also known as virtual interfaces) attached to this network interface. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [java.security](http://docs.google.com/java/security/package-summary.html) | |
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| Methods in [java.security](http://docs.google.com/java/security/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
| --- | --- |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[String](http://docs.google.com/java/lang/String.html)> | **KeyStore.**[**aliases**](http://docs.google.com/java/security/KeyStore.html#aliases())()            Lists all the alias names of this keystore. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[Permission](http://docs.google.com/java/security/Permission.html)> | **Permissions.**[**elements**](http://docs.google.com/java/security/Permissions.html#elements())()            Returns an enumeration of all the Permission objects in all the PermissionCollections in this Permissions object. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[Object](http://docs.google.com/java/lang/Object.html)> | **Provider.**[**elements**](http://docs.google.com/java/security/Provider.html#elements())() |
| abstract  [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[Permission](http://docs.google.com/java/security/Permission.html)> | **PermissionCollection.**[**elements**](http://docs.google.com/java/security/PermissionCollection.html#elements())()            Returns an enumeration of all the Permission objects in the collection. |
| abstract  [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[String](http://docs.google.com/java/lang/String.html)> | **KeyStoreSpi.**[**engineAliases**](http://docs.google.com/java/security/KeyStoreSpi.html#engineAliases())()            Lists all the alias names of this keystore. |
| abstract  [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[Identity](http://docs.google.com/java/security/Identity.html)> | **IdentityScope.**[**identities**](http://docs.google.com/java/security/IdentityScope.html#identities())()  **Deprecated.** Returns an enumeration of all identities in this identity scope. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[Object](http://docs.google.com/java/lang/Object.html)> | **Provider.**[**keys**](http://docs.google.com/java/security/Provider.html#keys())() |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [java.security.acl](http://docs.google.com/java/security/acl/package-summary.html) | |
| --- | --- |

| Methods in [java.security.acl](http://docs.google.com/java/security/acl/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
| --- | --- |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[AclEntry](http://docs.google.com/java/security/acl/AclEntry.html)> | **Acl.**[**entries**](http://docs.google.com/java/security/acl/Acl.html#entries())()            Returns an enumeration of the entries in this ACL. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[Permission](http://docs.google.com/java/security/acl/Permission.html)> | **Acl.**[**getPermissions**](http://docs.google.com/java/security/acl/Acl.html#getPermissions(java.security.Principal))([Principal](http://docs.google.com/java/security/Principal.html) user)            Returns an enumeration for the set of allowed permissions for the specified principal (representing an entity such as an individual or a group). |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<? extends [Principal](http://docs.google.com/java/security/Principal.html)> | **Group.**[**members**](http://docs.google.com/java/security/acl/Group.html#members())()            Returns an enumeration of the members in the group. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[Permission](http://docs.google.com/java/security/acl/Permission.html)> | **AclEntry.**[**permissions**](http://docs.google.com/java/security/acl/AclEntry.html#permissions())()            Returns an enumeration of the permissions in this ACL entry. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [java.sql](http://docs.google.com/java/sql/package-summary.html) | |
| --- | --- |

| Methods in [java.sql](http://docs.google.com/java/sql/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
| --- | --- |
| static [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[Driver](http://docs.google.com/java/sql/Driver.html)> | **DriverManager.**[**getDrivers**](http://docs.google.com/java/sql/DriverManager.html#getDrivers())()            Retrieves an Enumeration with all of the currently loaded JDBC drivers to which the current caller has access. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [java.util](http://docs.google.com/java/util/package-summary.html) | |
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| Classes in [java.util](http://docs.google.com/java/util/package-summary.html) that implement [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
| --- | --- |
| class | [**StringTokenizer**](http://docs.google.com/java/util/StringTokenizer.html)            The string tokenizer class allows an application to break a string into tokens. |

| Methods in [java.util](http://docs.google.com/java/util/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
| --- | --- |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[E](http://docs.google.com/java/util/Vector.html)> | **Vector.**[**elements**](http://docs.google.com/java/util/Vector.html#elements())()            Returns an enumeration of the components of this vector. |
| abstract  [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[V](http://docs.google.com/java/util/Dictionary.html)> | **Dictionary.**[**elements**](http://docs.google.com/java/util/Dictionary.html#elements())()            Returns an enumeration of the values in this dictionary. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[V](http://docs.google.com/java/util/Hashtable.html)> | **Hashtable.**[**elements**](http://docs.google.com/java/util/Hashtable.html#elements())()            Returns an enumeration of the values in this hashtable. |
| static   | <T> [Enumeration](http://docs.google.com/java/util/Enumeration.html)<T> | | --- | | **Collections.**[**enumeration**](http://docs.google.com/java/util/Collections.html#enumeration(java.util.Collection))([Collection](http://docs.google.com/java/util/Collection.html)<T> c)            Returns an enumeration over the specified collection. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[String](http://docs.google.com/java/lang/String.html)> | **PropertyResourceBundle.**[**getKeys**](http://docs.google.com/java/util/PropertyResourceBundle.html#getKeys())()            Returns an Enumeration of the keys contained in this ResourceBundle and its parent bundles. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[String](http://docs.google.com/java/lang/String.html)> | **ListResourceBundle.**[**getKeys**](http://docs.google.com/java/util/ListResourceBundle.html#getKeys())()            Returns an Enumeration of the keys contained in this ResourceBundle and its parent bundles. |
| abstract  [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[String](http://docs.google.com/java/lang/String.html)> | **ResourceBundle.**[**getKeys**](http://docs.google.com/java/util/ResourceBundle.html#getKeys())()            Returns an enumeration of the keys. |
| abstract  [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[K](http://docs.google.com/java/util/Dictionary.html)> | **Dictionary.**[**keys**](http://docs.google.com/java/util/Dictionary.html#keys())()            Returns an enumeration of the keys in this dictionary. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[K](http://docs.google.com/java/util/Hashtable.html)> | **Hashtable.**[**keys**](http://docs.google.com/java/util/Hashtable.html#keys())()            Returns an enumeration of the keys in this hashtable. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<?> | **Properties.**[**propertyNames**](http://docs.google.com/java/util/Properties.html#propertyNames())()            Returns an enumeration of all the keys in this property list, including distinct keys in the default property list if a key of the same name has not already been found from the main properties list. |

| Methods in [java.util](http://docs.google.com/java/util/package-summary.html) with parameters of type [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
| --- | --- |
| static   | <T> [ArrayList](http://docs.google.com/java/util/ArrayList.html)<T> | | --- | | **Collections.**[**list**](http://docs.google.com/java/util/Collections.html#list(java.util.Enumeration))([Enumeration](http://docs.google.com/java/util/Enumeration.html)<T> e)            Returns an array list containing the elements returned by the specified enumeration in the order they are returned by the enumeration. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [java.util.concurrent](http://docs.google.com/java/util/concurrent/package-summary.html) | |
| --- | --- |

| Methods in [java.util.concurrent](http://docs.google.com/java/util/concurrent/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
| --- | --- |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[V](http://docs.google.com/java/util/concurrent/ConcurrentHashMap.html)> | **ConcurrentHashMap.**[**elements**](http://docs.google.com/java/util/concurrent/ConcurrentHashMap.html#elements())()            Returns an enumeration of the values in this table. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[K](http://docs.google.com/java/util/concurrent/ConcurrentHashMap.html)> | **ConcurrentHashMap.**[**keys**](http://docs.google.com/java/util/concurrent/ConcurrentHashMap.html#keys())()            Returns an enumeration of the keys in this table. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [java.util.jar](http://docs.google.com/java/util/jar/package-summary.html) | |
| --- | --- |

| Methods in [java.util.jar](http://docs.google.com/java/util/jar/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[JarEntry](http://docs.google.com/java/util/jar/JarEntry.html)> | **JarFile.**[**entries**](http://docs.google.com/java/util/jar/JarFile.html#entries())()            Returns an enumeration of the zip file entries. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [java.util.logging](http://docs.google.com/java/util/logging/package-summary.html) | |
| --- | --- |

| Methods in [java.util.logging](http://docs.google.com/java/util/logging/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
| --- | --- |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[String](http://docs.google.com/java/lang/String.html)> | **LogManager.**[**getLoggerNames**](http://docs.google.com/java/util/logging/LogManager.html#getLoggerNames())()            Get an enumeration of known logger names. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [java.util.zip](http://docs.google.com/java/util/zip/package-summary.html) | |
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| Methods in [java.util.zip](http://docs.google.com/java/util/zip/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
| --- | --- |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<? extends [ZipEntry](http://docs.google.com/java/util/zip/ZipEntry.html)> | **ZipFile.**[**entries**](http://docs.google.com/java/util/zip/ZipFile.html#entries())()            Returns an enumeration of the ZIP file entries. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [javax.activation](http://docs.google.com/javax/activation/package-summary.html) | |
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| Methods in [javax.activation](http://docs.google.com/javax/activation/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
| --- | --- |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html) | **MimeTypeParameterList.**[**getNames**](http://docs.google.com/javax/activation/MimeTypeParameterList.html#getNames())()            Retrieve an enumeration of all the names in this list. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [javax.management.loading](http://docs.google.com/javax/management/loading/package-summary.html) | |
| --- | --- |

| Methods in [javax.management.loading](http://docs.google.com/javax/management/loading/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
| --- | --- |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[URL](http://docs.google.com/java/net/URL.html)> | **MLetMBean.**[**getResources**](http://docs.google.com/javax/management/loading/MLetMBean.html#getResources(java.lang.String))([String](http://docs.google.com/java/lang/String.html) name)            Finds all the resources with the given name. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [javax.naming](http://docs.google.com/javax/naming/package-summary.html) | |
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| Subinterfaces of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [javax.naming](http://docs.google.com/javax/naming/package-summary.html) | |
| --- | --- |
| interface | [**NamingEnumeration<T>**](http://docs.google.com/javax/naming/NamingEnumeration.html)            This interface is for enumerating lists returned by methods in the javax.naming and javax.naming.directory packages. |

| Methods in [javax.naming](http://docs.google.com/javax/naming/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
| --- | --- |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[String](http://docs.google.com/java/lang/String.html)> | **CompoundName.**[**getAll**](http://docs.google.com/javax/naming/CompoundName.html#getAll())()            Retrieves the components of this compound name as an enumeration of strings. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[String](http://docs.google.com/java/lang/String.html)> | **CompositeName.**[**getAll**](http://docs.google.com/javax/naming/CompositeName.html#getAll())()            Retrieves the components of this composite name as an enumeration of strings. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[RefAddr](http://docs.google.com/javax/naming/RefAddr.html)> | **Reference.**[**getAll**](http://docs.google.com/javax/naming/Reference.html#getAll())()            Retrieves an enumeration of the addresses in this reference. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[String](http://docs.google.com/java/lang/String.html)> | **Name.**[**getAll**](http://docs.google.com/javax/naming/Name.html#getAll())()            Retrieves the components of this name as an enumeration of strings. |

| Constructors in [javax.naming](http://docs.google.com/javax/naming/package-summary.html) with parameters of type [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| [**CompositeName**](http://docs.google.com/javax/naming/CompositeName.html#CompositeName(java.util.Enumeration))([Enumeration](http://docs.google.com/java/util/Enumeration.html)<[String](http://docs.google.com/java/lang/String.html)> comps)            Constructs a new composite name instance using the components specified by 'comps'. |
| [**CompoundName**](http://docs.google.com/javax/naming/CompoundName.html#CompoundName(java.util.Enumeration,%20java.util.Properties))([Enumeration](http://docs.google.com/java/util/Enumeration.html)<[String](http://docs.google.com/java/lang/String.html)> comps, [Properties](http://docs.google.com/java/util/Properties.html) syntax)            Constructs a new compound name instance using the components specified in comps and syntax. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [javax.naming.ldap](http://docs.google.com/javax/naming/ldap/package-summary.html) | |
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| Methods in [javax.naming.ldap](http://docs.google.com/javax/naming/ldap/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[String](http://docs.google.com/java/lang/String.html)> | **LdapName.**[**getAll**](http://docs.google.com/javax/naming/ldap/LdapName.html#getAll())()            Retrieves the components of this name as an enumeration of strings. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [javax.net.ssl](http://docs.google.com/javax/net/ssl/package-summary.html) | |
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| Methods in [javax.net.ssl](http://docs.google.com/javax/net/ssl/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| [Enumeration](http://docs.google.com/java/util/Enumeration.html) | **SSLSessionContext.**[**getIds**](http://docs.google.com/javax/net/ssl/SSLSessionContext.html#getIds())()            Returns an Enumeration of all session id's grouped under this SSLSessionContext. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [javax.security.sasl](http://docs.google.com/javax/security/sasl/package-summary.html) | |
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| Methods in [javax.security.sasl](http://docs.google.com/javax/security/sasl/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| static [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[SaslClientFactory](http://docs.google.com/javax/security/sasl/SaslClientFactory.html)> | **Sasl.**[**getSaslClientFactories**](http://docs.google.com/javax/security/sasl/Sasl.html#getSaslClientFactories())()            Gets an enumeration of known factories for producing SaslClient. |
| static [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[SaslServerFactory](http://docs.google.com/javax/security/sasl/SaslServerFactory.html)> | **Sasl.**[**getSaslServerFactories**](http://docs.google.com/javax/security/sasl/Sasl.html#getSaslServerFactories())()            Gets an enumeration of known factories for producing SaslServer. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [javax.sql.rowset.spi](http://docs.google.com/javax/sql/rowset/spi/package-summary.html) | |
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| Methods in [javax.sql.rowset.spi](http://docs.google.com/javax/sql/rowset/spi/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| static [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[SyncProvider](http://docs.google.com/javax/sql/rowset/spi/SyncProvider.html)> | **SyncFactory.**[**getRegisteredProviders**](http://docs.google.com/javax/sql/rowset/spi/SyncFactory.html#getRegisteredProviders())()            Returns an Enumeration of currently registered synchronization providers. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [javax.swing](http://docs.google.com/javax/swing/package-summary.html) | |
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| Methods in [javax.swing](http://docs.google.com/javax/swing/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| [Enumeration](http://docs.google.com/java/util/Enumeration.html) | **JTree.DynamicUtilTreeNode.**[**children**](http://docs.google.com/javax/swing/JTree.DynamicUtilTreeNode.html#children())()            Subclassed to load the children, if necessary. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<?> | **DefaultListModel.**[**elements**](http://docs.google.com/javax/swing/DefaultListModel.html#elements())()            Returns an enumeration of the components of this list. |
| protected  [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[TreePath](http://docs.google.com/javax/swing/tree/TreePath.html)> | **JTree.**[**getDescendantToggledPaths**](http://docs.google.com/javax/swing/JTree.html#getDescendantToggledPaths(javax.swing.tree.TreePath))([TreePath](http://docs.google.com/javax/swing/tree/TreePath.html) parent)            Returns an Enumeration of TreePaths that have been expanded that are descendants of parent. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[AbstractButton](http://docs.google.com/javax/swing/AbstractButton.html)> | **ButtonGroup.**[**getElements**](http://docs.google.com/javax/swing/ButtonGroup.html#getElements())()            Returns all the buttons that are participating in this group. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[TreePath](http://docs.google.com/javax/swing/tree/TreePath.html)> | **JTree.**[**getExpandedDescendants**](http://docs.google.com/javax/swing/JTree.html#getExpandedDescendants(javax.swing.tree.TreePath))([TreePath](http://docs.google.com/javax/swing/tree/TreePath.html) parent)            Returns an Enumeration of the descendants of the path parent that are currently expanded. |

| Methods in [javax.swing](http://docs.google.com/javax/swing/package-summary.html) with parameters of type [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| protected  void | **JTree.**[**removeDescendantToggledPaths**](http://docs.google.com/javax/swing/JTree.html#removeDescendantToggledPaths(java.util.Enumeration))([Enumeration](http://docs.google.com/java/util/Enumeration.html)<[TreePath](http://docs.google.com/javax/swing/tree/TreePath.html)> toRemove)            Removes any descendants of the TreePaths in toRemove that have been expanded. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [javax.swing.table](http://docs.google.com/javax/swing/table/package-summary.html) | |
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| Methods in [javax.swing.table](http://docs.google.com/javax/swing/table/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[TableColumn](http://docs.google.com/javax/swing/table/TableColumn.html)> | **DefaultTableColumnModel.**[**getColumns**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getColumns())()            Returns an Enumeration of all the columns in the model. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[TableColumn](http://docs.google.com/javax/swing/table/TableColumn.html)> | **TableColumnModel.**[**getColumns**](http://docs.google.com/javax/swing/table/TableColumnModel.html#getColumns())()            Returns an Enumeration of all the columns in the model. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [javax.swing.text](http://docs.google.com/javax/swing/text/package-summary.html) | |
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| Methods in [javax.swing.text](http://docs.google.com/javax/swing/text/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| abstract  [Enumeration](http://docs.google.com/java/util/Enumeration.html) | **AbstractDocument.AbstractElement.**[**children**](http://docs.google.com/javax/swing/text/AbstractDocument.AbstractElement.html#children())()            Returns the children of the receiver as an Enumeration. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html) | **AbstractDocument.BranchElement.**[**children**](http://docs.google.com/javax/swing/text/AbstractDocument.BranchElement.html#children())()            Returns the children of the receiver as an Enumeration. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html) | **AbstractDocument.LeafElement.**[**children**](http://docs.google.com/javax/swing/text/AbstractDocument.LeafElement.html#children())()            Returns the children of the receiver as an Enumeration. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<?> | **AbstractDocument.AbstractElement.**[**getAttributeNames**](http://docs.google.com/javax/swing/text/AbstractDocument.AbstractElement.html#getAttributeNames())()            Gets the names of all attributes. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<?> | **StyleContext.SmallAttributeSet.**[**getAttributeNames**](http://docs.google.com/javax/swing/text/StyleContext.SmallAttributeSet.html#getAttributeNames())()            Gets the names of all attributes. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<?> | **StyleContext.NamedStyle.**[**getAttributeNames**](http://docs.google.com/javax/swing/text/StyleContext.NamedStyle.html#getAttributeNames())()            Gets the names of all attributes. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<?> | **SimpleAttributeSet.**[**getAttributeNames**](http://docs.google.com/javax/swing/text/SimpleAttributeSet.html#getAttributeNames())()            Gets the names of the attributes in the set. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<?> | **AttributeSet.**[**getAttributeNames**](http://docs.google.com/javax/swing/text/AttributeSet.html#getAttributeNames())()            Returns an enumeration over the names of the attributes that are defined locally in the set. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<?> | **DefaultStyledDocument.**[**getStyleNames**](http://docs.google.com/javax/swing/text/DefaultStyledDocument.html#getStyleNames())()            Fetches the list of of style names. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<?> | **StyleContext.**[**getStyleNames**](http://docs.google.com/javax/swing/text/StyleContext.html#getStyleNames())()            Fetches the names of the styles defined. |

| Methods in [javax.swing.text](http://docs.google.com/javax/swing/text/package-summary.html) with parameters of type [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| [AttributeSet](http://docs.google.com/javax/swing/text/AttributeSet.html) | **AbstractDocument.AttributeContext.**[**removeAttributes**](http://docs.google.com/javax/swing/text/AbstractDocument.AttributeContext.html#removeAttributes(javax.swing.text.AttributeSet,%20java.util.Enumeration))([AttributeSet](http://docs.google.com/javax/swing/text/AttributeSet.html) old, [Enumeration](http://docs.google.com/java/util/Enumeration.html)<?> names)            Removes a set of attributes for the element. |
| [AttributeSet](http://docs.google.com/javax/swing/text/AttributeSet.html) | **StyleContext.**[**removeAttributes**](http://docs.google.com/javax/swing/text/StyleContext.html#removeAttributes(javax.swing.text.AttributeSet,%20java.util.Enumeration))([AttributeSet](http://docs.google.com/javax/swing/text/AttributeSet.html) old, [Enumeration](http://docs.google.com/java/util/Enumeration.html)<?> names)            Removes a set of attributes for the element. |
| void | **AbstractDocument.AbstractElement.**[**removeAttributes**](http://docs.google.com/javax/swing/text/AbstractDocument.AbstractElement.html#removeAttributes(java.util.Enumeration))([Enumeration](http://docs.google.com/java/util/Enumeration.html)<?> names)            Removes a set of attributes for the element. |
| void | **StyleContext.NamedStyle.**[**removeAttributes**](http://docs.google.com/javax/swing/text/StyleContext.NamedStyle.html#removeAttributes(java.util.Enumeration))([Enumeration](http://docs.google.com/java/util/Enumeration.html)<?> names)            Removes a set of attributes for the element. |
| void | **MutableAttributeSet.**[**removeAttributes**](http://docs.google.com/javax/swing/text/MutableAttributeSet.html#removeAttributes(java.util.Enumeration))([Enumeration](http://docs.google.com/java/util/Enumeration.html)<?> names)            Removes an attribute set with the given names. |
| void | **SimpleAttributeSet.**[**removeAttributes**](http://docs.google.com/javax/swing/text/SimpleAttributeSet.html#removeAttributes(java.util.Enumeration))([Enumeration](http://docs.google.com/java/util/Enumeration.html)<?> names)            Removes a set of attributes from the list. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [javax.swing.text.html](http://docs.google.com/javax/swing/text/html/package-summary.html) | |
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| Methods in [javax.swing.text.html](http://docs.google.com/javax/swing/text/html/package-summary.html) with parameters of type [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| [AttributeSet](http://docs.google.com/javax/swing/text/AttributeSet.html) | **StyleSheet.**[**removeAttributes**](http://docs.google.com/javax/swing/text/html/StyleSheet.html#removeAttributes(javax.swing.text.AttributeSet,%20java.util.Enumeration))([AttributeSet](http://docs.google.com/javax/swing/text/AttributeSet.html) old, [Enumeration](http://docs.google.com/java/util/Enumeration.html)<?> names)            Removes a set of attributes for the element. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [javax.swing.text.html.parser](http://docs.google.com/javax/swing/text/html/parser/package-summary.html) | |
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| Methods in [javax.swing.text.html.parser](http://docs.google.com/javax/swing/text/html/parser/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<?> | **AttributeList.**[**getValues**](http://docs.google.com/javax/swing/text/html/parser/AttributeList.html#getValues())() |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [javax.swing.tree](http://docs.google.com/javax/swing/tree/package-summary.html) | |
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| Fields in [javax.swing.tree](http://docs.google.com/javax/swing/tree/package-summary.html) declared as [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| static [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[TreeNode](http://docs.google.com/javax/swing/tree/TreeNode.html)> | **DefaultMutableTreeNode.**[**EMPTY\_ENUMERATION**](http://docs.google.com/javax/swing/tree/DefaultMutableTreeNode.html#EMPTY_ENUMERATION)            An enumeration that is always empty. |

| Methods in [javax.swing.tree](http://docs.google.com/javax/swing/tree/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| [Enumeration](http://docs.google.com/java/util/Enumeration.html) | **DefaultMutableTreeNode.**[**breadthFirstEnumeration**](http://docs.google.com/javax/swing/tree/DefaultMutableTreeNode.html#breadthFirstEnumeration())()            Creates and returns an enumeration that traverses the subtree rooted at this node in breadth-first order. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html) | **DefaultMutableTreeNode.**[**children**](http://docs.google.com/javax/swing/tree/DefaultMutableTreeNode.html#children())()            Creates and returns a forward-order enumeration of this node's children. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html) | **TreeNode.**[**children**](http://docs.google.com/javax/swing/tree/TreeNode.html#children())()            Returns the children of the receiver as an Enumeration. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html) | **DefaultMutableTreeNode.**[**depthFirstEnumeration**](http://docs.google.com/javax/swing/tree/DefaultMutableTreeNode.html#depthFirstEnumeration())()            Creates and returns an enumeration that traverses the subtree rooted at this node in depth-first order. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[TreePath](http://docs.google.com/javax/swing/tree/TreePath.html)> | **VariableHeightLayoutCache.**[**getVisiblePathsFrom**](http://docs.google.com/javax/swing/tree/VariableHeightLayoutCache.html#getVisiblePathsFrom(javax.swing.tree.TreePath))([TreePath](http://docs.google.com/javax/swing/tree/TreePath.html) path)            Returns an Enumerator that increments over the visible paths starting at the passed in location. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[TreePath](http://docs.google.com/javax/swing/tree/TreePath.html)> | **FixedHeightLayoutCache.**[**getVisiblePathsFrom**](http://docs.google.com/javax/swing/tree/FixedHeightLayoutCache.html#getVisiblePathsFrom(javax.swing.tree.TreePath))([TreePath](http://docs.google.com/javax/swing/tree/TreePath.html) path)            Returns an Enumerator that increments over the visible paths starting at the passed in location. |
| abstract  [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[TreePath](http://docs.google.com/javax/swing/tree/TreePath.html)> | **AbstractLayoutCache.**[**getVisiblePathsFrom**](http://docs.google.com/javax/swing/tree/AbstractLayoutCache.html#getVisiblePathsFrom(javax.swing.tree.TreePath))([TreePath](http://docs.google.com/javax/swing/tree/TreePath.html) path)            Returns an Enumerator that increments over the visible paths starting at the passed in location. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html) | **DefaultMutableTreeNode.**[**pathFromAncestorEnumeration**](http://docs.google.com/javax/swing/tree/DefaultMutableTreeNode.html#pathFromAncestorEnumeration(javax.swing.tree.TreeNode))([TreeNode](http://docs.google.com/javax/swing/tree/TreeNode.html) ancestor)            Creates and returns an enumeration that follows the path from ancestor to this node. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html) | **DefaultMutableTreeNode.**[**postorderEnumeration**](http://docs.google.com/javax/swing/tree/DefaultMutableTreeNode.html#postorderEnumeration())()            Creates and returns an enumeration that traverses the subtree rooted at this node in postorder. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html) | **DefaultMutableTreeNode.**[**preorderEnumeration**](http://docs.google.com/javax/swing/tree/DefaultMutableTreeNode.html#preorderEnumeration())()            Creates and returns an enumeration that traverses the subtree rooted at this node in preorder. |

| Uses of [Enumeration](http://docs.google.com/java/util/Enumeration.html) in [org.xml.sax.helpers](http://docs.google.com/org/xml/sax/helpers/package-summary.html) | |
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| Methods in [org.xml.sax.helpers](http://docs.google.com/org/xml/sax/helpers/package-summary.html) that return [Enumeration](http://docs.google.com/java/util/Enumeration.html) | |
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| [Enumeration](http://docs.google.com/java/util/Enumeration.html) | **NamespaceSupport.**[**getDeclaredPrefixes**](http://docs.google.com/org/xml/sax/helpers/NamespaceSupport.html#getDeclaredPrefixes())()            Return an enumeration of all prefixes declared in this context. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html) | **NamespaceSupport.**[**getPrefixes**](http://docs.google.com/org/xml/sax/helpers/NamespaceSupport.html#getPrefixes())()            Return an enumeration of all prefixes whose declarations are active in the current context. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html) | **NamespaceSupport.**[**getPrefixes**](http://docs.google.com/org/xml/sax/helpers/NamespaceSupport.html#getPrefixes(java.lang.String))([String](http://docs.google.com/java/lang/String.html) uri)            Return an enumeration of all prefixes for a given URI whose declarations are active in the current context. |

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | [**Class**](http://docs.google.com/java/util/Enumeration.html) | **Use** | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PREV   NEXT | [**FRAMES**](http://docs.google.com/index.html?java/util//class-useEnumeration.html)    [**NO FRAMES**](http://docs.google.com/Enumeration.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

[Submit a bug or feature](http://bugs.sun.com/services/bugreport/index.jsp)

For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

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