JAVA.LANG.SECURITYMANAGER CLASS

http://www.tutorialspoint.com/java/lang/java lang securitymanager.htm

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Introduction

The **java.lang.SecurityManager** class allows applications to implement a security policy. It allows an application to determine, before performing a possibly unsafe or sensitive operation, what the operation is and whether it is being attempted in a security context that allows the operation to be performed. The application can allow or disallow the operation.

Class declaration

Following is the declaration for **java.lang.SecurityManager** class:

public class SecurityManager
extends Object

Class constructors

S.N. Constructor & Description

1

SecurityManager

This constructs a new SecurityManager.

Class methods

S.N. Method & Description

1 void checkAcceptStringhost, intport

This method throws a SecurityException if the calling thread is not permitted to accept a socket connection from the specified host and port number.

void checkAccessThreadt

This method throws a SecurityException if the calling thread is not allowed to modify the thread argument.

3 <u>void checkAccessThreadGroupg</u>

This method throws a SecurityException if the calling thread is not allowed to modify the thread group argument.

4 void checkAwtEventQueueAccess

This method throws a SecurityException if the calling thread is not allowed to access the AWT event queue.

5

void checkConnectStringhost, intport

This method throws a SecurityException if the calling thread is not allowed to open a socket connection to the specified host and port number.

6 void checkConnectStringhost, intport, Objectcontext

This method throws a SecurityException if the specified security context is not allowed to open a socket connection to the specified host and port number.

7 void checkCreateClassLoader

This method throws a SecurityException if the calling thread is not allowed to create a new class loader.

8 <u>void checkDeleteStringfile</u>

This method throws a SecurityException if the calling thread is not allowed to delete the specified file.

9 void checkExecStringcmd

This method throws a SecurityException if the calling thread is not allowed to create a subprocess.

void checkExitintstatus

This method throws a SecurityException if the calling thread is not allowed to cause the Java Virtual Machine to halt with the specified status code.

void checkLink*Stringlib*

This method throws a SecurityException if the calling thread is not allowed to dynamic link the library code specified by the string argument file.

void checkListenintport

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This method throws a SecurityException if the calling thread is not allowed to wait for a connection request on the specified local port number.

void checkMemberAccessClass < ? > clazz, intwhich

This method throws a SecurityException if the calling thread is not allowed to access members.

void checkMulticastInetAddressmaddr

This method throws a SecurityException if the calling thread is not allowed to use join/leave/send/receive IP multicast.

15 void checkPackageAccessStringpkg

This method throws a SecurityException if the calling thread is not allowed to access the package specified by the argument.

16 <u>void checkPackageDefinitionStringpka</u>

This method throws a SecurityException if the calling thread is not allowed to define classes in the package specified by the argument.

17 void checkPermissionPermissionperm

This method throws a SecurityException if the requested access, specified by the given permission, is not permitted based on the security policy currently in effect.

18 void checkPe<u>rmissionPermissionperm</u>, *Objectcontext*

This method throws a SecurityException if the specified security context is denied access to the resource specified by the given permission.

void checkPrintJobAccess

This method throws a SecurityException if the calling thread is not allowed to initiate a print job request.

void checkPropertiesAccess

This method throws a SecurityException if the calling thread is not allowed to access or modify the system properties.

void checkPropertyAccessStringkey

This method throws a SecurityException if the calling thread is not allowed to access the system property with the specified key name.

void checkReadFileDescriptorfd

This method throws a SecurityException if the calling thread is not allowed to read from the specified file descriptor.

void checkReadStringfile

This method throws a SecurityException if the calling thread is not allowed to read the file specified by the string argument.

24 <u>void checkReadStringfile, Objectcontext</u>

This method throws a SecurityException if the specified security context is not allowed to read the file specified by the string argument.

25 <u>void checkSecurityAccessStringtarget</u>

This method determines whether the permission with the specified permission target name should be granted or denied.

26

void checkSetFactory

This method throws a SecurityException if the calling thread is not allowed to set the socket factory used by ServerSocket or Socket, or the stream handler factory used by URL.

27

void checkSystemClipboardAccess

This method throws a SecurityException if the calling thread is not allowed to access the system clipboard.

28

boolean checkTopLevelWindowObjectwindow

This method returns false if the calling thread is not trusted to bring up the top-level window indicated by the window argument.

29

void checkWriteFileDescriptorfd

This method throws a SecurityException if the calling thread is not allowed to write to the specified file descriptor.

30

void checkWriteStringfile

This method throws a SecurityException if the calling thread is not allowed to write to the file specified by the string argument.

31

protected Class[] getClassContext

This method returns the current execution stack as an array of classes.

32

Object getSecurityContext

This method creates an object that encapsulates the current execution environment.

33

ThreadGroup getThreadGroup

This method returns the thread group into which to instantiate any new thread being created at the time this is being called.

Methods inherited

This class inherits methods from the following classes: