

4.7 Checking AccessControlContext Independent Grants

This section describes the techniques used by containers to check permissions for which policy is defined in terms of the operation defined by the permission and independent of properties of the invocation context represented in the `AccessControlContext`. The `WebUserDataPermission` policy statements resulting from the translation of Servlet `user-data-constraint` elements are an example of such permissions. A container must use one of the following techniques to check an instance of a permission for which policy is defined independent of `AccessControlContext`.

- The container calls `AccessControlContext.checkPermission` with the permission being checked as argument. The call to `checkPermission` may be made on any `AccessControlContext`. If `checkPermission` throws an `AccessControlException`, the permission is not granted. Otherwise the permission is granted.
- The container calls `AccessController.checkPermission` with the permission being checked. The value of the current thread's `AccessControlContext` is irrelevant in the access determination. If `checkPermission` throws an `AccessControlException`, the checked permission is not granted. Otherwise the permission is granted.
- The container calls `SecurityManager.checkPermission` with the permission being checked. If `checkPermission` throws an `AccessControlException`, the checked permission is not granted. Otherwise the permission is granted.
- The J2EE 1.4 container calls `Policy.implies` with two arguments; the permission being checked and a `ProtectionDomain` that need not be constructed with principals. The checked permission is granted if `Policy.implies` returns true. Otherwise, the permission is not granted.
- The J2EE 1.4 container calls `java.security.Policy.getPermissions` with a `ProtectionDomain` that need not be constructed with principals. The container must call the `implies` method on the returned `PermissionCollection` using the permission being checked as argument. The checked permission is granted if the