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