



# IBM Tivoli Training IBM Tivoli Access Manager for e-business 6.0

Authentication and authorization overview

**Tivoli.** software



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## Objectives

- Upon completion of this module, you should be able to:
  - Describe the difference between authentication and authorization and how IBM Tivoli Access Manager for e-business uses each.

## Overview

IBM Tivoli Access Manager enforces your organization's security policy. The security policy determines what users can perform a which action on what object. Two components make enforcing the security policy possible :

- Authentication framework
- Authorization framework

In order to enforce your organization's security policy to components are required: authentication and authorizatoin.

## Authentication

- The purpose of authentication is simple—verify the user is who they say they are.
- Authentication mean username and password, token, certificate, or user-defined libraries.

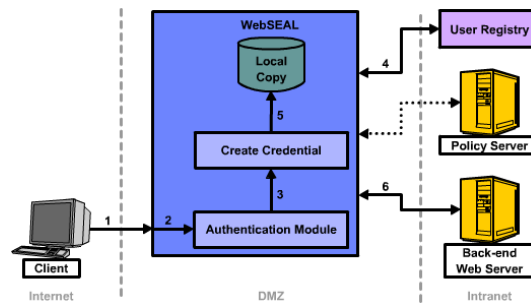
Authentication is simply verifying the user is who they say they are. You can collect the user information to verify identity using username and password, token, certificates, or user-defined libraries.

## Authorization

- The authorization engine returns a **yes** or **no** response to user requests for access to an object.
- The authorization framework makes decisions on behalf of applications and users.
- The hierarchical object model is called the protected object space. Access is controlled by attaching access control objects to objects in the protected object name space thus implementing the security policy.

Authorization returns a yes or no response to a request for a protected resource. The authorization engine makes a decision on behalf of the application whether or not the user should gain access. All of the resources in the environment are represented in a hierarchical object model called the protected-object space or Web space. Access to the objects in the Web space is controlled by access control lists (ACL) and protected object policies (POP). Together ACLs and POPs determine who can access what and when.

## Authentication and authorization process



1. In response to an authentication challenge from WebSEAL the browser requests a user ID and password from the user. Following is the sequence of events which take place during the authentication process:
2. The browser sends the user authentication information to WebSEAL.
3. WebSEAL passes the authentication information to the configured authentication module.
4. The authentication module validates the authentication information and returns an identity to WebSEAL.
5. WebSEAL uses this identity to create a credential for that user based on data stored for that user in the user registry.
6. WebSEAL uses this credential to get the authorization decision. When access is granted the user is allowed to access the protected resource.

\*\*same as slide above\*\*

## Training roadmap for *IBM Tivoli Access Manager for e-business 6.0*

- [http://www.ibm.com/software/tivoli/education/edu\\_prd.html](http://www.ibm.com/software/tivoli/education/edu_prd.html)

For more information see the IBM Tivoli Access Manager for e-business 6.0 training roadmap.

## Summary

- Key terms to remember when thinking about authorization and authentication:
  - Security policy
  - Object space
  - User registry
  - Policy database

Some key words to remember are :

The security policy which is defined by your organization and enforced by WebSEAL.

The object space which is the hierarchical map of the protected resources.

The user registry which verifies the user's identity.

The policy database is consulted for authorization decision.



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