



Policy Director has been renamed “IBM Tivoli Access Manager for e-business.” This was announced on 9<sup>th</sup> April.

We have tried to replace all occurrences of ‘Policy Director’ in workshop material with ‘Access Manager’. You may, however, still find ‘PD’ or ‘Policy Director’ in the material and/or the product. Please consider this to be Access Manager 3.9, unless the text explicitly says otherwise.

This intent of this overview is to give you a quick summary of the new features of Access Manager 3.9.

# Agenda

- ◆ Recent & Upcoming News
- ◆ Brief Overview
  - Packages, Platforms, Directories, pre-requisites
- ◆ New Feature Highlights
- ◆ Miscellaneous (not discussed in other presentations)

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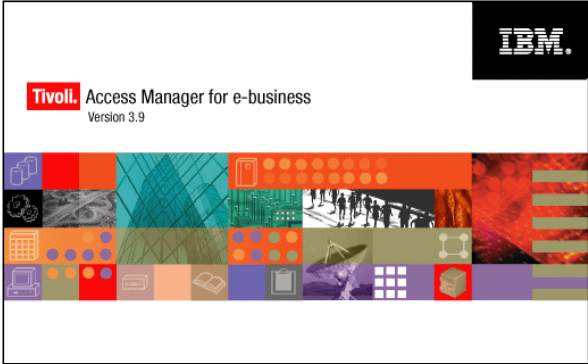
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Policy Director has New Name!

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~~IBM Tivoli Policy Director~~

**IBM Tivoli Access Manager for e-business**

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Some places in the product will still say “Policy Director” -> think “Access Manager”.

When you see “PD”, think “AM”

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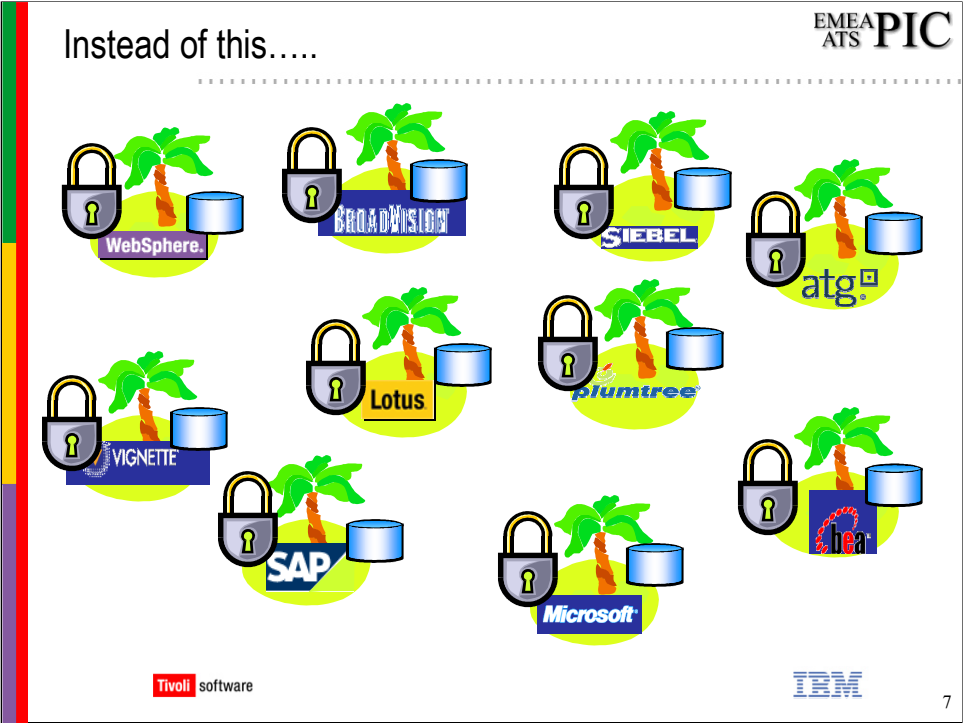
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Brief Overview

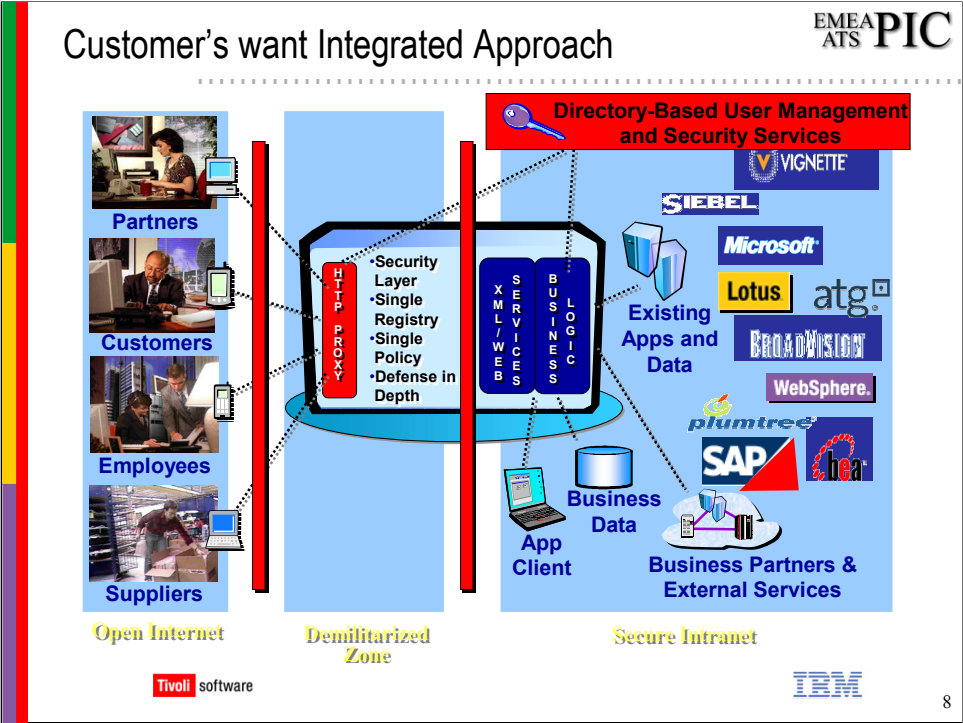
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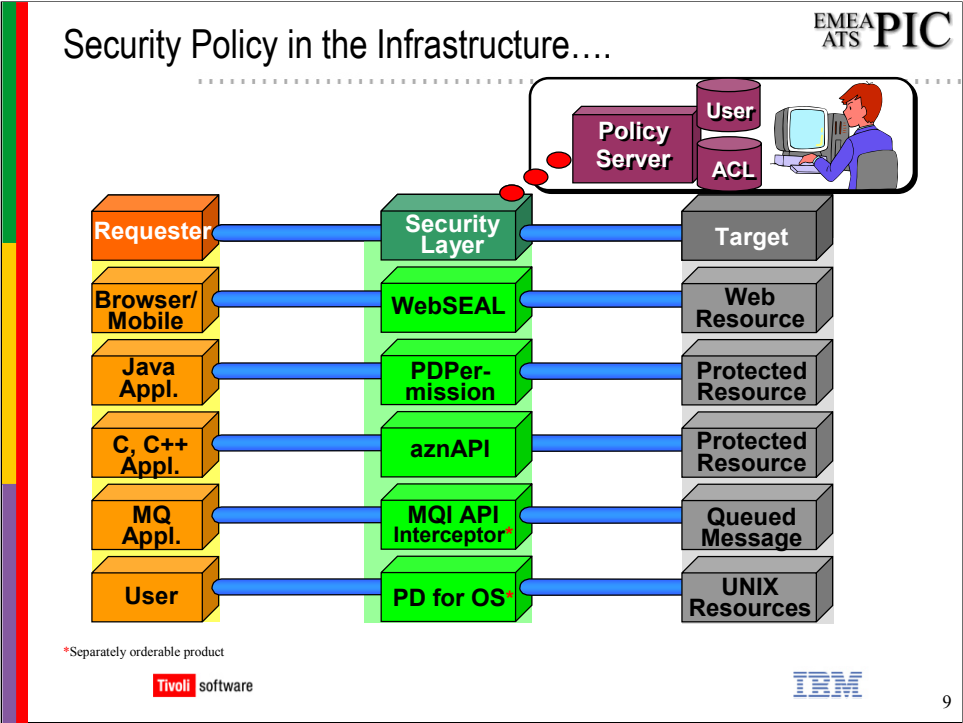
Each vendor has, over the years, provided their own vision of security. The result is that a large enterprise is populated with multiple ‘islands of security’ that are difficult (if not impossible) to manage with clear, simple policy that is necessary for effective security.

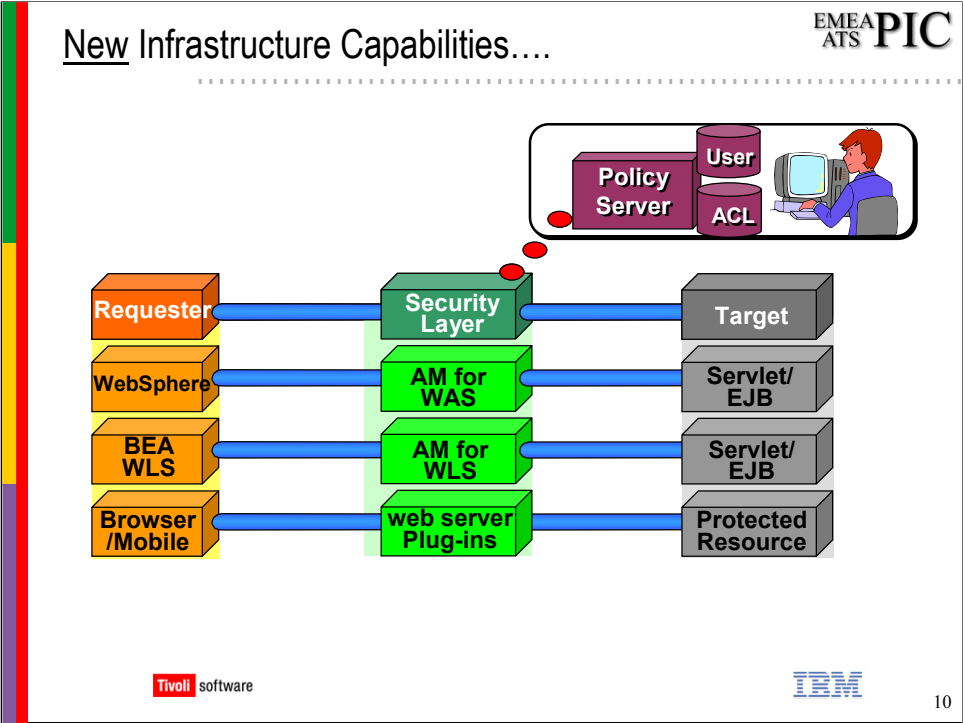


Access Manager provides the components and tools to define the security policy *within the infrastructure* of the enterprise. Minimizing configuration requirements and maximizing efficiency and security.

An excellent source for integration information is <http://integration.santacruz.na.tivoli.com/>. IBM internal network.







Policy Director 3.8 for Web Application Server 4.02 and Policy Director 3.8 for BEA WebLogic Server are available for web download to registered PD Customers.



The web server plug-ins are new to version 3.9

Access Manager 3.9 for WebSphere Application Server and AM 3.9 for WebLogic Server will have new features. These new features will be covered in the AM for Application Servers presentation.

## Packages : Function - 1

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- ◆ **Access Manager Runtime Environment** (was PD Runtime)
  - common libraries for servers, C aznAPI applications
  - pdadmin command line, svrsslcfg utility, others
- ◆ **AM Policy Server** (was PD Management Server)
  - provides administration service (users, ACLs, ... etc)
  - distribution of authorization policy Db to other servers
- ◆ **AM Authorization Server**
  - maintains local copy of authorization policy Db
  - provides authorization service to:
    - remote-mode aznAPI applications
    - Java applications that use PDPermission
- ◆ **AM Java Runtime Environment** (new)
  - java classes for authentication, authorization
  - java classes for administration classes (new)
  - common classes and utilities classes



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The full name of each package is actually “IBM Tivoli Access Manager xxxxxx”. For example,

- IBM Tivoli Access Manager Policy Server
- IBM Tivoli Access Manager Authorization Server
- etc



This slide lists some installable packages of Access Manager for e-business, and provides a high-level overview of the package. It does not attempt to provide a complete description of the function provided by that package.



## Packages : Function - 2

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- ◆ **AM Authorization ADK**
  - libraries, header files for 'C' applications : aznAPI & Admin API
  - demo applications (java & 'C')
- ◆ **AM Web Portal Manager**
  - WebSphere application for AM Administration
- ◆ **AM WebSEAL**
  - extensive feature reverse-proxy web server for access management of web resources
- ◆ **AM WebSEAL ADK**
  - custom authentication library (CDAS)
  - cross domain name mapping CDMF (used only with ecSSO)
  - password strength library




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The Authorization ADK provides demo applications for:

- administration & authorization (java and 'C')
- external authorization and admin service ( 'C' only)


This slide lists some installable packages of Access Manager for e-business, and provides a high-level overview of the package. It does not attempt to provide a complete description of the function provided by that package.



## Packages : Function - 3

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- ◆ **AM for WebSphere Application Server** (new platform/registry)
  - authorization service using AM Authorization Server
- ◆ **AM for BEA WebLogic Server** (new platform/registry)
  - authentication to AM User Registry
  - authorization via AM group membership
  - SSO with WebSEAL
- ◆ **AM Plug-in for WebSphere Edge Server**
  - authorization, authentication with local AM policy Db
  - custom authentication library (CDAS) (new)
- ◆ **AM Plug-in for WebServers** (new)
  - authorization, authentication with local AM policy Db
  - many, not all, features of WebSEAL



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The 'new-ish' features are features that are included with AM 3.9, but are also recently available (via web download) features for Policy Director 3.8.

This slide lists some installable packages of Access Manager for e-business, and provides a very high overview of the package. It does not attempt to provide a complete description of the function provided by that package.



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## Pre-requisites - 2

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### ◆ WebSEAL

- AM Runtime Environment

### ◆ AM for WebSphere Application Server

- AM Java Runtime Environment
- WebSphere 4.02

### ◆ AM for BEA WebLogic Server 6.1

- AM Runtime Environment w/ LDAP Client
- AM Java Runtime Environment

### ◆ AM Plug-in for WebSphere Edge Server

- AM Runtime Environment
- WS Edge Server 2.0 plus ptf-1 (2.01)

### ◆ AM Web Server Plug-ins

- AM Runtime Environment

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## Directories


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- ◆ **IBM SecureWay Directory v3.2.2**
  - LDAP Server can be 3.2.1 or 3.2.2
    - AM always uses IBM SW 3.2.2 client
  - LDAP 3.2.2 packaged with AM
    - Includes DB2 Personal Edition v7.2
    - AIX 4.3.3/5.1, Solaris 7/8, Win NT/2K, Redhat Linux 7.1
- ◆ **iPlanet Directory Server 5.0**
  - Server available on all AM platforms
    - Access Manager uses IBM SW LDAP 3.2.2 client
  - AM packages available on all platforms (i.e., no client pre-req problem)
- ◆ **Lotus Domino Server 5.0.4 (new)**
  - Server available on all AM platforms
    - Access Manager uses both Notes & SW LDAP 3.2.2 client
  - AM packages available only on Windows
- ◆ **Active Directory (new)**
  - Windows 2000 Advanced Server
    - Access Manager uses ADSI client
  - AM packages available only on Windows 2000

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## New Directory : MS Active Directory

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- ◆ **Two modes of configuration:**
  - **single-domain** : all users/groups in single AD Domain
  - **multi-domain** (single forest)
    - users can be defined in any domain
    - group & users must be in the **same domain** (Universal group not supported in this release)
    - a Global Catalog **must** be available in forest
- ◆ **Failover Support**
  - **single-domain** – fail-over support to multiple domain controllers
  - **multi-domain** :
    - failover support to multiple domain controllers in forest root only
    - when domain controller in non-root domain fails, other domains continue to operate
  - no “prefer replica” support – failover is to any available domain controller





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New Directory : Lotus Domino 5.04

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- ◆ **User & Group definitions shared by Domino and Access Manager**
  - Domino controls access to Notes databases
  - Access Manager controls access to AM protected objectspace
    - password authentication uses Notes internet (HTTP) password
- ◆ **WebSEAL can protect Domino WEB resources**
  - Easy Single Sign-on to Domino Server
    - Basic Authentication
    - LTPA Junction

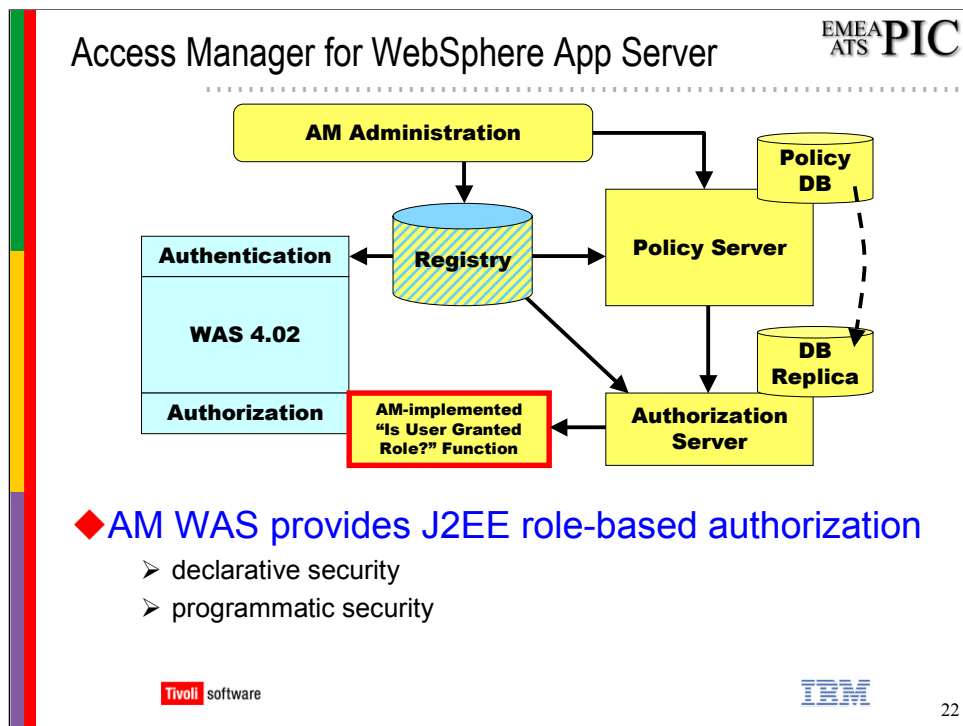
 

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Using Lotus Domino as the Policy Director user registry means using the Domino Notes Address Book (NAB) as the repository of user information rather than using LDAP.

The user definitions in the NAB are shared between Policy Director and Domino. This means that there are no user synchronisation problems for applications using user definitions in the NAB. Any user created by Policy Director (or created by Domino and imported into Policy Director) can access both Domino and Policy Director resources using the same identity.

The sharing of the user identity information (namely the users shortname and Internet password) means that achieving single sign-on is much simpler.



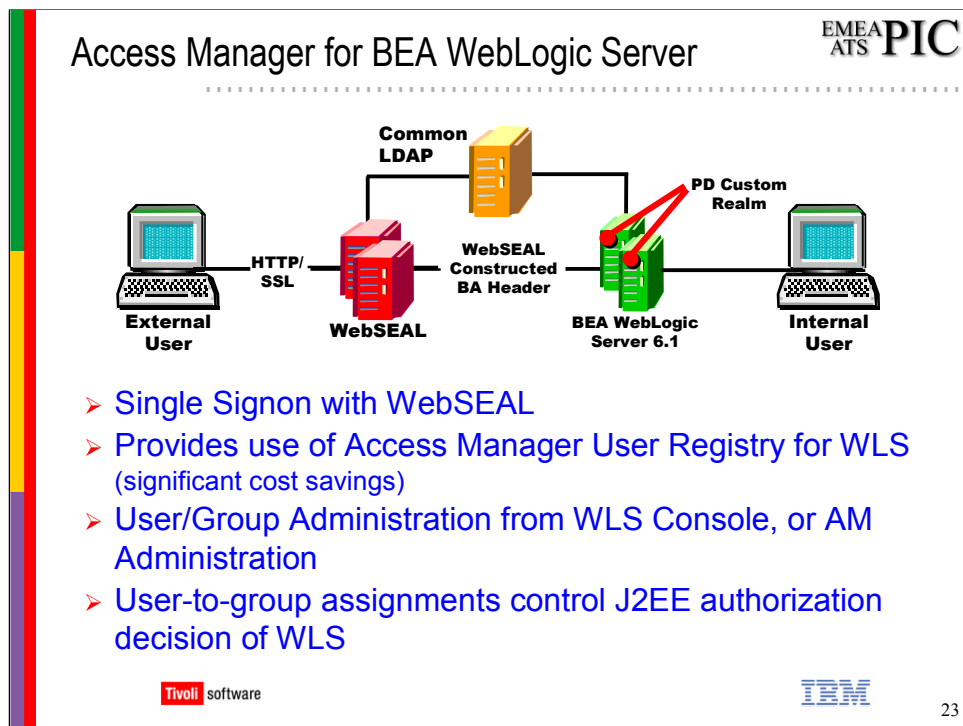
TAME 3.9 provides:

- an integration module that uses AM for WAS authorization requirements
- a migration utility for use with WAS applications

AM Administration applies ACLs to Role objects defined in AM protected object space. The AM ACL provides Role->Principal (user & group) mapping.

The **migration utility** examines the J2EE application deployment descriptor for:

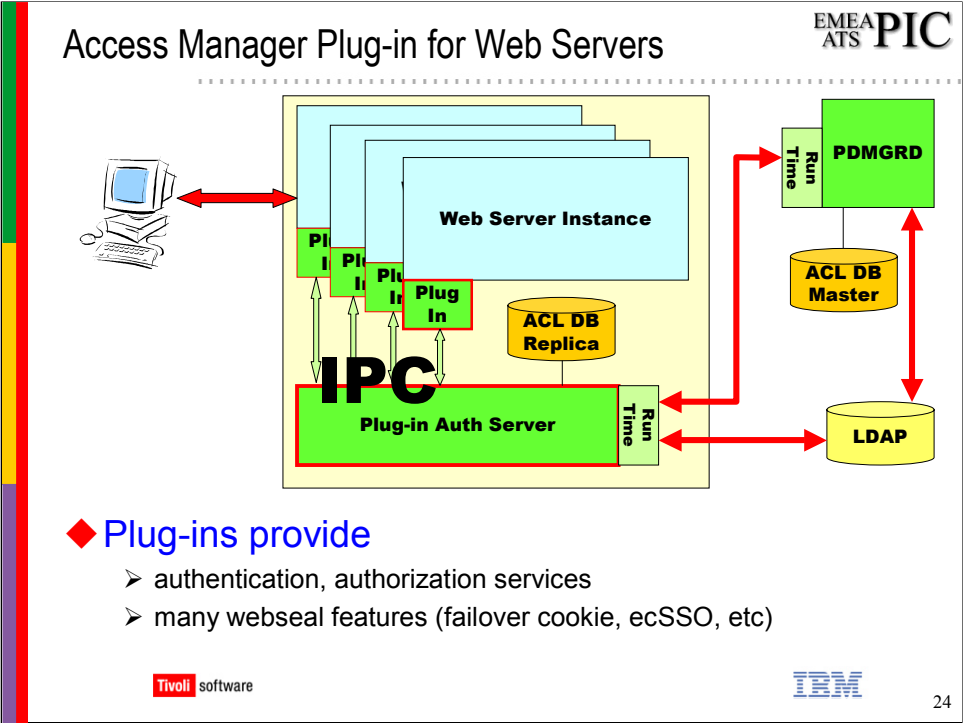
- Declared Roles → used to create objects in AM protected object space
- WebSphere .xmi files → used to create ACLs for that role



TAME 3.9 provides an implementation of the BEA WLS *Custom Realm*.

The Custom Realm provides these services to BEA WLS 6.1:

- User management (create, list, delete)
- User authentication - UserId/Password
- Group management
  - add/remove user from group
  - list user
  - answer group membership for user → used in authorization decision



The Access Manager Plug-in for Web Servers provides these benefits:

- allows use of preferred web server in DMZ
- eliminates the need for changes to edge network topology
- provides several of features provided by WebSEAL

For optimum security, the the AM Plug-ins should only be used when either:

- the web server is configured as a reverse-proxy to other servers in the secure network
- the web server is only hosting the presentation tier of J2EE applications where the business logic executes on an application server in the secure network.

Without one of these conditions, the benefits of a “security in depth” architecture with ‘Internet | DMZ | secure-network’ topology are compromised due to the direct access of unauthenticated users to business logic.



## New Features : WebSEAL

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- ◆ **Multiple WebSEAL on single machine**
  - effectively “hardware-based” virtual hosting
- ◆ **HTTP 1.1 support to back-end web servers**
- ◆ **HTTP Request Cache**
  - solution for ‘Lost POST data’ problem with form-login
    - initial authentication or re-authentication
- ◆ **Forced re-Authentication via access policy**
- ◆ **Force User Logout**
- ◆ **Switch User Capability**
- ◆ **Thread management by back-end junction**
- ◆ **Hardware accelerator support**
  - nCipher nForce 300 on Windows & Solaris

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## New Features : Web Portal Manager

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- ◆ **Support for AIX and Solaris**
- ◆ **Signon via Basic Authentication header**
  - Allows SSO from WebSEAL using GSO or other
    - other '-b' or '-B' options possible for 'same access' groups
- ◆ **Usability Improvements**
  - Objectspace 'Explorer'
  - "Pop-up list" for by ACL/POP attach
- ◆ **New function**
  - Create for Object & Objectspace
  - Create for Action & Action Group
- ◆ **Customisation**
  - Replace login pages with Customer design

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## AM Java Runtime

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- ◆ **Manual configuration only**
  - use "<AM-Install>/sbin/pdjrtecfg" utility
- ◆ **Contains all classes for AM Java applications**
  - Authentication & Authorization
    - PDPrincipal & PDPermission
  - Administration API
    - subset of 'C' Administration API
- ◆ **Easier SvrSslCfg operation to establish JVM trust**
  - Specify only user 'shortname'
    - User created and added to 'remote-acl-users' group
    - only syntax supported for Active Directory and Domino
- ◆ **Access to aznAPI Entitlements Service**
- ◆ **Jlog used for common logging format/configuration**
  - configured via 'pdjrtecfg' utility

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## AM 3.9 WES Plug-in Enhancements

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### ◆ Additional platforms

- Solaris 7 & 8 and AIX 5.1

### ◆ Cross Domain Authentication Service interface (CDAS)

- Allows custom authentication service
- Similar to WebSEAL CDAS interface
- Allows customization of
  - User/Password
  - Certificate
  - “Accept SSO” – CDAS receives request URL & Headers

### ◆ Store POST data of http request during authentication

### ◆ Performance & Documentation Enhancements

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## Upgrade/Migration

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### ◆ Upgrade Install (native install only)

- Install 3.9 on top of current installation
  - Current installation must be 3.7 or 3.8
- Data migration required for 3.7
  - No changes in data format between 3.8 & 3.9

### ◆ Installations prior to PD 3.7 must first be migrated to PD 3.7.1

### ◆ Migration Tool also supports data backup/restore

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