



IBM Software Group

IBM® WebSphere® Application Server V6

Managed Application Resources



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This presentation will focus on the basics of managed application resources in WebSphere Application Server, Version 6.

Goals

- Discuss application scope resources
- Discuss enhanced EAR files
- Take a look at Application Server Toolkit (AST)



The goal of this presentation is to discuss application scoped resources; you will learn about enhanced EAR files; and take a look at the Application Server Toolkit (AST) tool.

Agenda

- Application scope resource
- Enhanced EAR file
- Application Server Toolkit (AST)



You will take a brief look at application scope resources, then you will learn about the enhanced ear file, and lastly you be introduced to the Application Server Toolkit (AST).

Section

Application Scope / Enhanced EAR

This section will discuss application scope and the enhanced ear file.

Application Scope Resources

- Application scope is a new scope for Java™ 2 Enterprise Edition (J2EE) resource definitions
- Resource definitions in application context of configuration tree
- Use AST or wsadmin to view/modify application scope resource



The current V5.x mechanism for storing resource definitions is topological(cell, node, etc). If an application is moved to a different server, the resource definitions must also be made available for the new runtime.

But it's the application that needs the resources, not the server runtime. So, you need to be able to store resource definitions at the application level.

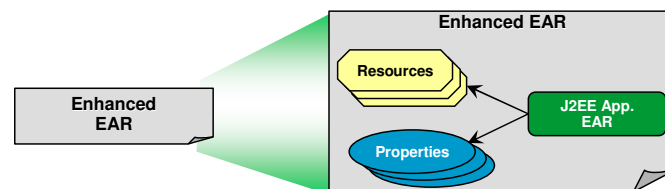
Resources can now be scoped at application level

It supports J2EE resource definitions in the application context of the configuration tree.

The Application Server Toolkit (AST) and wsadmin can be used to view/modify an application scope resource.

Enhanced EAR File

- Configuration metadata embedded inside EAR
- Contains configurations required by the EAR
 - Resources, Virtual Hosts, Shared Library, etc.
- Resources/properties included with the application
- Simplifies deployment



An enhanced EAR file contains a simple embedded configuration archive.

This is where users can define the required configurations for the application, such as, Resources, Virtual Hosts, Shared Library, etc.

The application resources and properties come with the application. All the application information needed to install the application on the Application Server is included.

In this way, users can deploy an application and create its required configurations all in one shot. And, moving an application from one server to another, moves the required resources as well.

Enhanced EAR File (Cont.)

- Detected during application install
- Resources created under application scope
- Cannot be edited in Administrative Console
- Support for enhanced EAR integrated within Rational® Tools, AST and wsadmin
- Application exported from WebSphere Application Server V6.0, exported as enhanced EAR



During the application installation, the configuration archive is detected and the configurations defined within the configuration archive are created.

Resources are created under the Application Scope.

Application Scope resources can not be edited in the Administrative Console.

Support for the enhanced EAR file is integrated within the Rational tools and Application Server Toolkit (AST).

Tools allow the defining of resources and properties on the application, and supports importing and exporting of the enhanced EAR file.

In WebSphere Application Server V5.x, when you exported an application, you lost any class loader or shared library information. In WebSphere Application Server V6.0, all applications are exported as enhanced EAR files. So round trip (export, update, import) of an application is much easier, since you now save more of the information.

Section

Application Server Toolkit (AST)



This section will discuss the Application Server Toolkit (AST).

Application Server Toolkit

- Built using Eclipse v3.0 technology
- Supports J2EE 1.4 specification
- Provides basic assembly and deployment tools
- Supports basic unit testing, debugging and profiling functions
- New edit page added for enhanced EAR support



The Application Server Toolkit is built using Eclipse v3.0 technology.

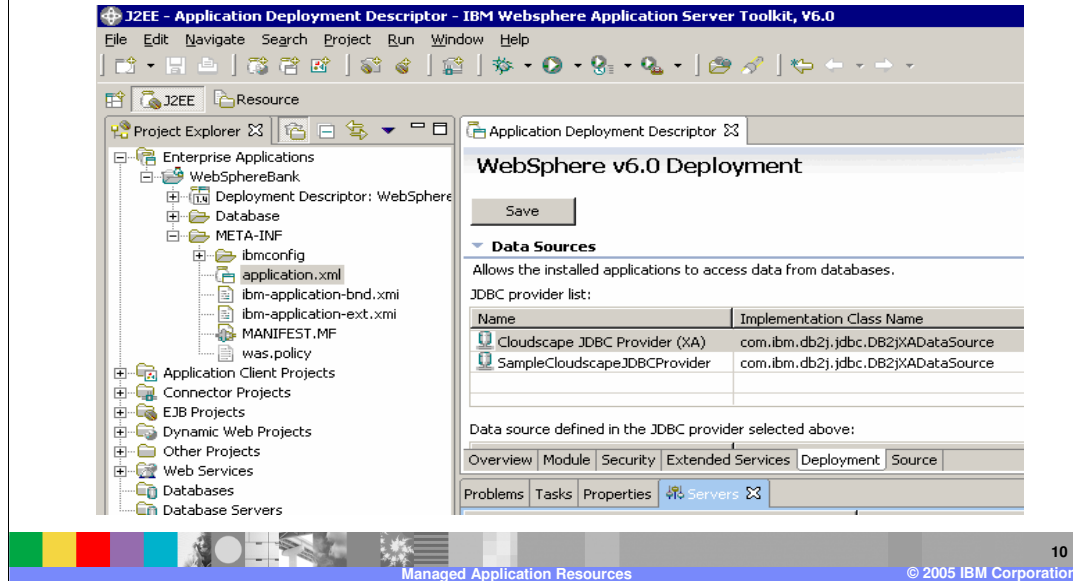
It supports new features that are defined in the Enterprise JavaBeans™ 2.1 specification and the J2EE 1.4 specification.

It provides basic tools required for assembly, deployment, testing and debugging.

It also provides tools necessary for enhanced EAR support.

Application Server Toolkit

- Same user interface as IBM Rational Application Developer



Although the Application Server Toolkit is not an application development tool, it has the same user interface as the IBM Rational Application Developer.

Section

Summary and Reference

This section will review what was covered.

Summary

- Application scoped resources are tied to a specific application
- Enhanced EAR file includes embedded application resources
- Application Server Toolkit provides enhanced EAR enablement support



Application scoped resources provide finer definitions by associating resources to specific applications.

Enhanced EAR file support simplifies application deployment by including application resources within an embedded configuration archive.

And the Application Server Toolkit provides enablement support for the creation of an enhanced EAR file.

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