



IBM Software Group

IBM WebSphere Application Server V6

Internationalization service



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Converted to video May 13, 2015

This presentation will discuss the Internationalization Service programming model extension.

Goals

- Understand the Internationalization Service extension
- Learn how to enable and configure the Internationalization Service



The goals for this presentation are to be able to understand the Internationalization Service, learn how to enable and configure it, and understand under which circumstances you would be able to take advantage of this programming model extension.

Agenda

- Internationalization Service Overview
- Enabling and Configuring
- Summary



The agenda for this presentation includes a discussion of the Internationalization service and information on enabling and configuring the service for your WebSphere Application Server and your applications.

Section

Overview



This section will provide an overview of the Internationalization Service.

Internationalization Service: Overview

- Provides architected support for application components running on computers within different locales or time zones
 - ▶ Recognize the calling client's time zone and locale information so your application can act appropriately
 - ▶ Deliver the correct convention to each user, around the world



Internationalization support is critical in the global economy. Applications need to recognize different client time zones and different client "locales". An object that returns a client's local time needs to be "time zone aware" with respect to that client. Moreover, the way that dates and times are expressed will be different based on specific cultural conventions. The same is true of currency and decimal points, as the representation of these things may differ across cultural boundaries. Sorting rules vary by language as well.

The Internationalization service allows you to automatically recognize the calling client's time zone and location information so that your application can act appropriately. This technology allows you to deliver to each user, around the world, the right date and time information, the appropriate currencies and languages, and the correct date and decimal formats.

Internationalization Service: Overview

- Declarative and programmatic support for managing internationalization contexts
- Transparently propagate and manage localization information within relevant Java™ 2 Enterprise Edition (J2EE) application components
 - ▶ Addresses the problem of locale and time zone mismatch across remote application components, without having to program this information as a parameter on every method invocation
- JSR 150 Internationalization Service for J2EE
<http://www.jcp.org/en/jsr/detail?id=150>



The Internationalization context may be managed declaratively through the container and deployment descriptors or programmatically through the APIs. The context is propagated in a non-intrusive manner, on the current thread. This is important, as conventional methods of addressing the problem of mismatching locale and time zone settings previously had to be solved by programming the information on each method invocation. Opening up method signatures to pass along client locale and time zone information is error-prone and tedious, and can be especially burdensome for already deployed applications.

Section

Enable and configure



This section will show you how to enable the Internationalization Service on the WebSphere Application Server and how to configure the support in your applications.

Enabling the Internationalization Service

- From the WebSphere Application Server Administrative Console, ensure the Internationalization Service is enabled
- Select:
 - ▶ Servers > Application Servers > *server_name* > Container Services > Internationalization Service
 - ▶ Check “Enable service at server startup” checkbox

Application servers > *server1* > Internationalization Service

An internationalized application can be configured to interact with users from different regions in culturally appropriate ways. The internationalization service enables you to configure and manage an internationalization context for a J2EE application whose components are distributed across the enterprise.

Configuration

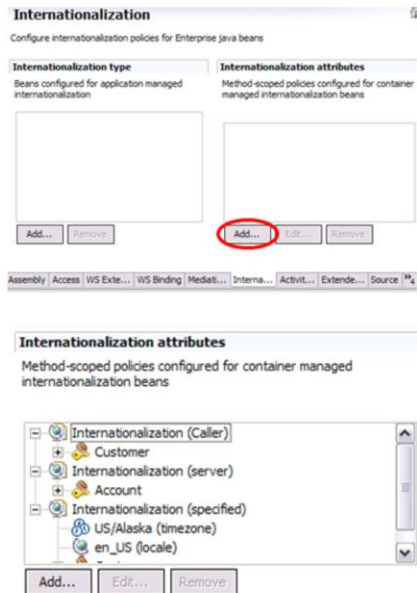
General Properties	Additional Properties
<input checked="" type="checkbox"/> Enable service at server startup	<input type="checkbox"/> Custom Properties
Apply OK Reset Cancel	



Use the WebSphere Application Server V6 administrative console to select the option to enable the Internationalization Service on your server. To view this administrative console page, click Servers > Application Servers > *server_name* > Container Services > Internationalization Service, then select the “Enable service at server startup” checkbox.

Configuring Internationalization policies

- Using IBM Rational® Application Developer or IBM Application Server Toolkit, open EJB deployment descriptor
 - ▶ Select Internationalization tab
- Select Add for application-managed (AMI) or container-managed (CMI) context management policies
 - ▶ CMI is the preferred internationalization context management policy for server application components
- Select Run-as: caller, server, or specified
 - ▶ Uses Internationalization context of caller, server, or custom specified
- Select EJBs and methods for policies



To configure internationalization context for your application, use Rational Application Developer or Application Server Toolkit to set the configuration for application-managed (AMI) or container-managed (CMI); select Run-as of caller, server, or specified. If set to caller, the container calls the method under the internationalization context of the calling process. If set to server, the container calls the method under the default locale and time zone of the Java Virtual Machine. If set to specified, the container calls the method under the internationalization context specified in the attribute. Select Run-as specified when you want the invocation to run under the custom invocation context that is specified in the policy; then provide the custom context elements by completing the Locales and Time zone ID fields.

Section

Summary

Summary

- Described the Internationalization Service
- Described how to enable and configure the service for your environment



In this presentation you learned about the Internationalization Service, it's benefits, and how to enable and configure the service for your server and applications.

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