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Setup Guide

VERSION 10.2014.04.0

Revision Information

Revision

Date	Updated Contents
2012-10-01	Initial Version
2012-11-01	Version 2 Following additions/changes have been made. <ul style="list-style-type: none"> • Added [<i>DatabaseServer</i>]. • Added [<i>When you have trouble setting up...</i>].
2012-12-21	Version 3 Following additions/changes have been made. <ul style="list-style-type: none"> • Added [<i>Base URL</i>]. • Added [<i>Authorization Policy Setting Cache</i>]. • Added [<i>In case error occurs when im-Juggling is used</i>].

Revision Date	Updated Contents
2013-04-01	<p>Version 4 Following additions/changes have been made.</p> <ul style="list-style-type: none"> ● Changed the contents reflecting the system requirements of intra-mart Accel Platform 2013 Spring (Climbing). ● In Tenant Environment Build, [Portlet Initialization] has been deleted because it is unnecessary. ● Corrected the descriptions of [LDAP Authentication Configuration File (in case LDAP authentication is used for account authentication)]. ● Corrected the descriptions of [In case of tenant environment setup / sample data setup failed]. ● Added the descriptions of [External Menu Linkage]. ● Corrected the descriptions of [In case error occurs during WAR file deployment in Resin]. ● Added the column about database authority to [DatabaseServer]. ● Corrected the descriptions of [WAR File Undeployment]. ● Added [In case error occurs when Web Application Server immediately after deployment is started]. ● Added the descriptions of [Authorization Resource Group Setting Cache]. ● Added the descriptions of [Routing Setting Cache at Manu Side]. ● Added the descriptions of [Authorization IPv4 Subject Setting Cache]. ● Added the descriptions of [Dropdown Tag Cache]. ● Added the descriptions of [Personal Setting Menu Cache]. ● Added the descriptions of [Registration/Deletion to Windows Service]. ● Added the descriptions of [Registration/Deletion to Linux Daemon]. ● Added the column about WAR file to [WAR File Output]. ● Added the setting method of [Apache HTTP Server]. ● Added the setting method of [Apache Cassandra]. ● Added the column about proxy setting to [Project Creation and Module Selection]. ● Added the column about multiple-tenant to [DatabaseServer]. ● Added the column about Microsoft SQL Server to [DatabaseServer]. ● Added [Module Update].
2013-04-30	<p>Version 5 Following additions/changes have been made.</p> <ul style="list-style-type: none"> ● Added [Application of Update/Patch]. ● Added the descriptions about proxy setting to [Project Creation and Module Selection].
2013-07-01	<p>Version 6 Following additions/changes have been made.</p> <ul style="list-style-type: none"> ● Improved the readability of expressions about the authority given to [Oracle Database] schema. ● Added the column about context path to [Tenant Environment Setup]. ● Added the remarks when Windows Server 2012 is used to [Console Startup/Stop]. ● Added [Confirmation/Change Method of .NET Framework Version used by Internet Information Services 7.5]. ● Added [.NET Framework Setup]. ● Added the remarks when [Integrated Windows Authentication] is set. ● Added the remarks about time zone setting to [Resin Configuration]. ● Improved the setting method of [Network]. ● Added the setting method of [Multiple Tenants by WAR file]. ● Added the change method of execution user in [Registration/Deletion to Linux Daemon].
2013-10-01	<p>Version 7 Following additions/changes have been made.</p> <ul style="list-style-type: none"> ● Added [In case SAStruts version portlet cannot be accessed due to 404 error]. ● Added [In case file input/output error occurs during Linux environment WAR file deployment]. ● Added [In case you failed to do tenant environment setup at Oracle WebLogic Server 12c (12.1.1)]. ● Corrected the descriptions of [Project Creation and Module Selection]. ● Corrected the descriptions of [DataSource]. ● Added [Configuration File for SAStruts (in case SAStruts version portlet is used)]. ● Added [How to Limit File Upload]. ● Corrected the descriptions of [Authorization Policy Setting Cache]. ● Corrected the descriptions of [Authorization Resource Group Setting Cache]. ● Corrected the descriptions of [Routing Setting Cache at Manu Side]. ● Corrected the descriptions of [Authorization IPv4 Subject Setting Cache]. ● Corrected the descriptions of [Dropdown Tag Cache]. ● Corrected the descriptions of [Personal Setting Menu Cache]. ● Added the remarks to [DataSource Mapping Setting]. ● Added the descriptions about [Display Sequence Seeting on Menu Setting Screen] to [External Menu Linkage]. ● Added the descriptions about [In case multiple IP addresses are set] to [Registration to Linux Daemon]. ● Added the remarks about work directory and change detection to [Resin Configuration]. ● Added the descriptions about TERASOLUNA Global Framework to [Project Creation and Module Selection]. ● Added the descriptions about TERASOLUNA Global Framework to [Various Configuration Files of intra-mart Accel Platform]. ● Added [Configuration File for TERASOLUNA Global Framework (in case shared database is used)]. ● Added [Configuration File for TERASOLUNA Global Framework (in case JPA is used for repository layer)]. ● Added [Configuration File for TERASOLUNA Global Framework (in case MyBatis is used for repository layer)]. ● Added [Editing Configuration File (Maintenance of setting items by updates)].

Revision

Date Updated Contents

2014-01-01	<p>Version 8 Following additions/changes have been made.</p> <ul style="list-style-type: none"> ● Improved the structure of table of contents. ● Changed the contents reflecting the system requirements of intra-mart Accel Platform 2013 Winter (Felicia). ● Added the descriptions about [Update from 2013 Autumn(8.0.5)] to [Editing Configuration File (Maintenance of setting items by updates)]. ● Added the descriptions about the tracking of error causes to [Import Process Result Log Confirmation]. ● Added the descriptions of [Text Extract Setting (solr-extractor-config.xml)]. ● Added [In case timeout occurred during tenant environment setup]. ● Added [Configuration File for IM-Workflow (in case sequence object numbering function is used)]. ● Added the descriptions about Cassandra version upgrade to [Application of Update/Patch]. ● Added [In case WAR file cannot be re-deployed normally in Resin]. ● Added [How to Remove IMBox Module]. ● Added [In case client type is treated as PC when accessing from iPad]. ● Added the descriptions about the settings when IM-SecureSignOn for Accel Platform is used to [External Menu Linkage Service for intra-mart WebPlatform v7.2]. ● Added the descriptions about static contents and tenant environment setup to [Application of Update/Patch]. ● Deleted [Apache HTTP Server (Setting by mod_caucho.dll)] because it is deprecated. ● Added the descriptions of [About Java version for use] to [Apache Solr].
<hr/>	
2014-02-14	<p>Version 9 Following additions/changes have been made.</p> <ul style="list-style-type: none"> ● Improved the setting method of [Internet Information Services (IIS)]. ● Changed the setting method of [Integrated Windows Authentication].
<hr/>	
2014-04-01	<p>Version 10 Following additions/changes have been made.</p> <ul style="list-style-type: none"> ● Improved the structure of table of contents. ● Corrected the descriptions about menu provider information of [External Menu Linkage], and added the descriptions about menu provider setting at the time of multi-tenant operations. ● Added [In case automatic log-in function is used]. ● Changed the setting method of [Integrated Windows Authentication]. ● Added the remarks when WAR files are deployed to [Various Configuration Files of intra-mart Accel Platform]. ● Added [IM-Workflow System Setting] to [Various Configuration Files of intra-mart Accel Platform]. ● Added the module selection method for each edition to [Project New Creation]. ● Changed the log output destination information of [Setup Execution Result Log Confirmation]. ● Added [Changes from intra-mart Accel Platform 2014 Spring(Granada)] to [IMBox]. ● Added [Utilize Web service in Integrated Windows Authentication Environment]. ● Added [Utilize External Software Linkage Function in Integrated Windows Authentication Environment]. ● Added calculation formula of cache size to [Authorization IPv4 Subject Setting Cache]. ● Added [Tenant Resolution Function] to [Appendix]. ● Added [Resin Clustering] to [Appendix]. ● Added [Port List] to [Appendix]. ● Added [Application of im-Juggling] to [Appendix]. ● Added [intra-mart Accel Platform Tuning] to [Appendix]. ● Added [Authorization Resource Blockage Information Cache].

Introduction

Document Purpose

This document describes the setup procedures of intra-mart Accel Platform.

Prerequisites

- It is necessary that the system requirements stated in the Release Note should be met. Please refer to [**Release Note**] for details.
- This document shows the setup contents of Resin.



Note

For WebSphere Application Server 8.5.5, please refer to [**Setup Guide for WebSphere**].
For Oracle WebLogic Server 12c (12.1.1), please refer to [**Setup Guide for WebLogic**].

- For the port number used in intra-mart Accel Platform, please refer to [**Appendix**] - [**Port List**].

Target Readers

This document describes the setup for the Systems Operations environment.

If you want to just experience intra-mart Accel Platform or set up intra-mart Accel Platform for the first time,

Please refer to [**Quick Setup Guide**],

which describes the simple setup with minimum configuration (standalone) of intra-mart Accel Platform.

Terminologies

Directory at which Resin is installed is abbreviated as %RESIN_HOME%.

Directory at which Apache HTTP Server is installed is abbreviated as %APACHE_HOME%.

Directory which is used as Storage is abbreviated as %STORAGE_PATH%.

Directory which is used as PublicStorage is abbreviated as %PUBLIC_STORAGE_PATH%.

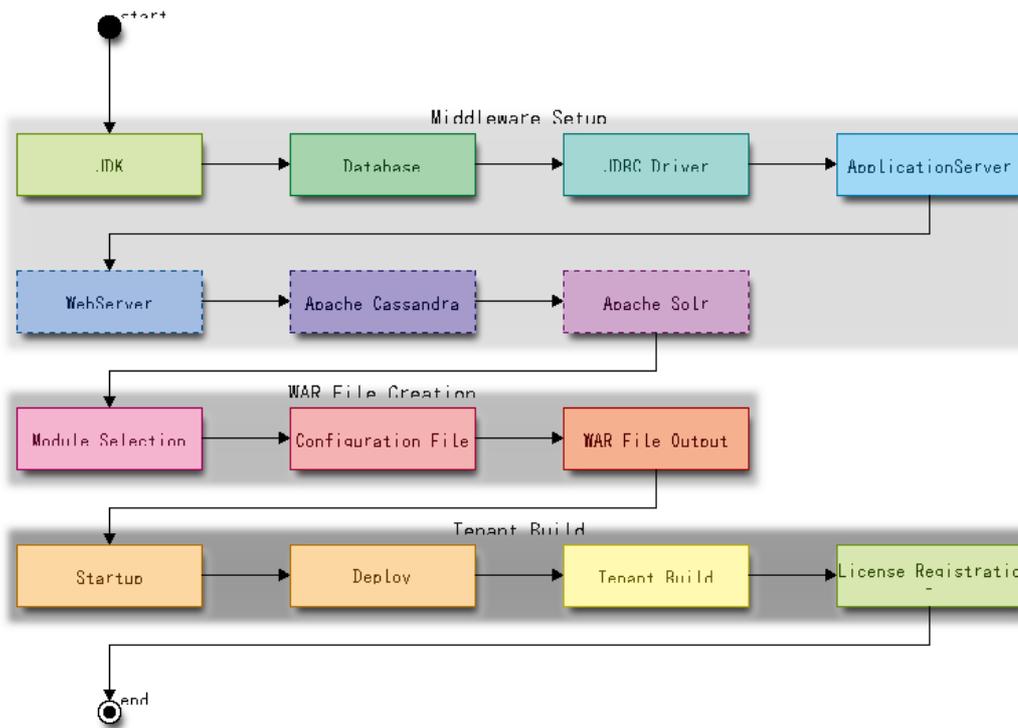
Directory to which static contents are placed when the Web server is used is abbreviated as %WEB_PATH%.

Setup Flow

Flow of setup is as follows :

Legend





Name	Description
start	
JDK	JDK
Database	DatabaseServer
JDBC Driver	JDBC Driver
ApplicationServer	Web Application Server
WebServer	Web Server
Apache Cassandra	Apache Cassandra
Apache Solr	Apache Solr
Module Selection	WAR File Creation - Project New Creation
Configuration File	WAR File Creation - Various Configuration Files of intra-mart Accel Platform
WAR File Output	WAR File Creation - WAR File Output
Startup	Web Application Server Startup/Stop
Deploy	WAR File Deployment
Tenant Build	Tenant Environment Setup
License Registration	License Registration
end	

Middleware Setup

Following installations and settings that are necessary for the setup of intra-mart Accel Platform are made.

JDK

In case intra-mart Accel Platform is used, JDK is necessary.

In case of Resin, you should obtain Oracle Java and do the setup. Please get it from the source below.

In case of Web Application Server other than Resin, please see the document for the respective document.

Oracle Java (JDK)

<http://www.oracle.com/technetwork/java/javase/downloads/index.html> (English)

Database

Installation and setting that are necessary for the setup of Database are performed.

Topics

- **Installation of Database**
 - **Remarks when creating each Database**
 - **Oracle Database**
 - **Microsoft SQL Server**
 - **IBM DB2**
 - **PostgreSQL**
 - **Installation of PostgreSQL**
 - **Creation of Database and Log-in Role**

Installation of Database

- Database is required for intra-mart Accel Platform. Please install Database to be used. Please refer to the document of each product provider for the installation details. In this document PostgreSQL (Windows version) is described as an example.



Warning

Database encoding should be implemented in *UTF-8*.



Warning

For Database the authority to create table or VIEW is necessary in addition to the authority to register/update/delete data. Please refer to the document provided by the respective database vendors for the concrete setting methods.



Note

In case multiple tenants are built, it is recommended to separate Database at connection destination by each instance.

Remarks when creating each Database

Oracle Database

- In order to utilize intra-mart Accel Platform, at least the authority of [CONNECT], [RESOURCE], [CREATE VIEW] and [UNLIMITED TABLESPACE] should be given. In addition to the above, there are necessary authorities depending on the applications and extension series to be used. Please refer to the release note and setup guide of each product for details.

Microsoft SQL Server

- For the default matching sequence of the database to be created, please check the Windows system locale name on the Control Panel-[Region and Language Option] -[Detail Setting] tab of the platform (OS) to which Database is installed. Matching sequence specifier that corresponds to the matching sequence setting in the existing Windows locale should be specified.

Each Windows matching sequence can be combined as a series of suffixes that define capital/small letters, accentation, character width, and KANA type. It is necessary to set the combination of suffixes in the operations environment.



Note

On intra-mart Accel Platform it is recommended to create the database with a setting that differentiates capital and small letters. Recommended setting value is [Japanese_90_CS_AS_KS_WS].



Warning

In case IM-Workflow is used, there is a possibility that [Lock Wait by Table Scan] may occur. One of the ways to avoid the Lock Wait is the use of [READ_COMMITTED_SNAPSHOT]. Please assess the use of it, and utilize it as required. <*> For the [Lock Wait by Table Scan] and [READ_COMMITTED_SNAPSHOT], please refer to the document of Microsoft SQL Server for detail.

[How to Use READ_COMMITTED_SNAPSHOT]

In order to use it, you should set READ_COMMITTED_SNAPSHOT to ON for the database as below.

- ALTER DATABASE {data_base_name} SET READ_COMMITTED_SNAPSHOT ON;

<*> Please execute it when all the connections to the database have been finished.

IBM DB2

- When the database is created, it is necessary to set [32k] to [Default Buffer Pool and Table Space Page Size].

PostgreSQL

Installation of PostgreSQL

- You can download PostgreSQL from the URL below.
Please download the one that is suitable for your environment, and install it.

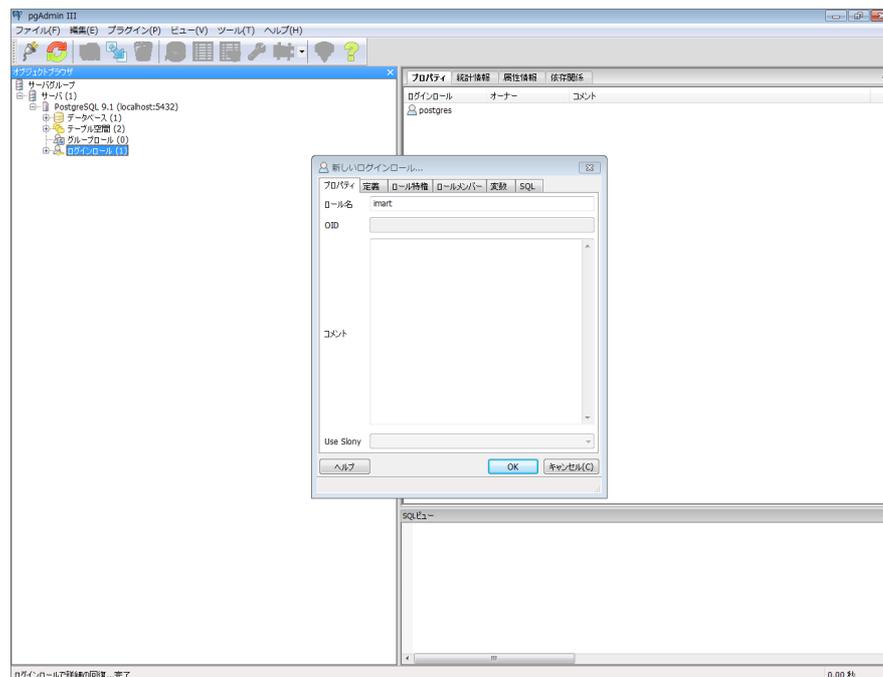
<http://www.enterprisedb.com/products-services-training/pgdownload>

Creation of Database and Log-in Role

- Launch pgAdmin tool.
- Create Log-in Role

On the [Object Browser], right click on [Log-in Role], and click [New Log-in Role].

Sub-window is displayed.



Enter the items below and click [OK].

Property Tab
[Role Name](optional)

Definition Tab
[Password](optional)



Note

In this document the items below are specified as an example.

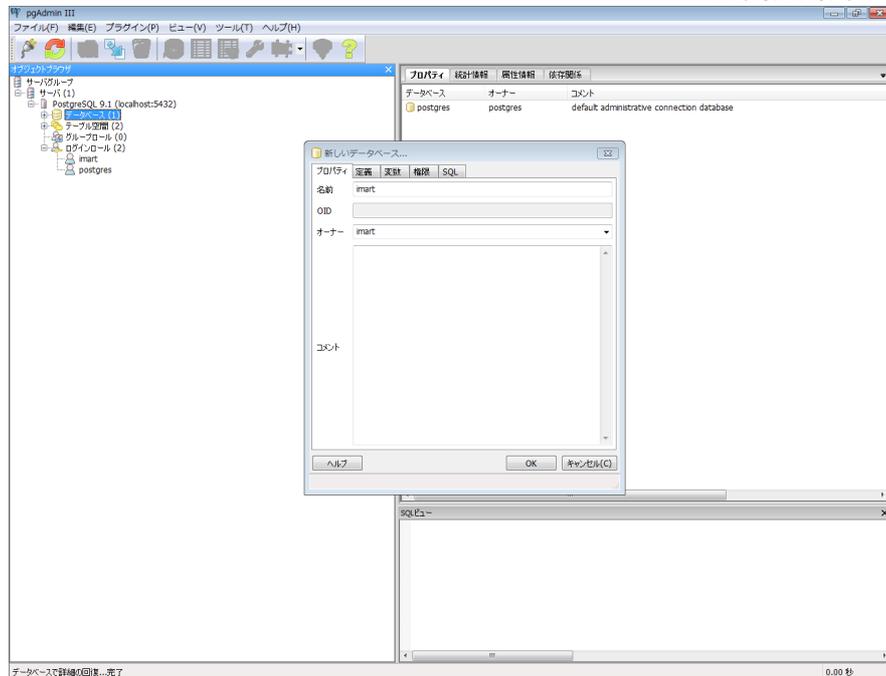
Role Name [imart]

Password [imart]

- Create Database

On the [Object Browser], right click on [Database] and click [New Database].

Sub-window is displayed.



Enter the items below and click [OK].

Property Tab
 [Name](optional)
 [Owner](Log-in Role which was created in [2. Create Log-in Role] above)

Note

In this document following items are specified as an example.

Name[iap_db]
 Owner[imart]

JDBC Driver

Topics

- **How to obtain JDBC Driver**
 - PostgreSQL
 - Oracle Database
 - Microsoft SQL Server
 - IBM DB2

How to obtain JDBC Driver

You can obtain the JDBC driver specified by Database to be used. Please see below to find out where you can get it.

Warning

JDBC driver used by intra-mart Accel Platform is **JDBC 4**. JDBC 4.1 has not been verified yet.

PostgreSQL

1. JDBC driver for PostgreSQL can be downloaded from the URL below.
 In case of PostgreSQL 9.2, please obtain <postgresql-9.2-1004.jdbc4.jar> file.
<http://jdbc.postgresql.org/download/postgresql-9.2-1004.jdbc4.jar>
 In case of PostgreSQL 9.3, please obtain <postgresql-9.3-1100.jdbc4.jar> file.
<http://jdbc.postgresql.org/download/postgresql-9.3-1100.jdbc4.jar>

Oracle Database

1. JDBC driver for Oracle can be downloaded from the URL below.

<http://www.oracle.com/technetwork/indexes/downloads/index.html>

2. Obtain <ojdbc6.jar> file.

Microsoft SQL Server

1. JDBC driver for Microsoft SQL Server can be downloaded from the URL below.

<http://www.microsoft.com/ja-jp/download/details.aspx?id=11774>

2. Obtain <sqljdbc4.jar> file.

IBM DB2

1. Please install DB2 JDBC Driver Type4, which is attached to IBM DB2.
Please refer to DB2 document for detail.
2. Obtain <db2jcc.jar> file.



Note

JDBC driver for DB2 has been verified by db2jcc.jar.
We have confirmed that JDBC driver (db2jcc4.jar) which supports JDBC4.0 does not work properly.



Note

JDBC driver which is used for database connection has been verified by our company in Type4 (Non-XA).

Web Application Server

Resin (Windows Version) Installation

Topics

- [Installation](#)
- [Placement of JDBC Driver](#)

Installation

Please expand the <resin-pro-4.0.37.zip> file in the enclosed directory to arbitrary path.



Warning

In the Windows Server 2012 environment, [.NET Framework] version which is initially included is [4.5].
Resin does not work in this version.
It is necessary to do the setup of [.NET Framework 3.5(which includes .NET 2.0 and 3.0)].
Please see [.NET Framework Setup](#) for detail.

Placement of JDBC Driver

1. Please download JDBC driver.
Please see below for information about where you can get the JDBC driver.
[JDBC Driver](#)
2. Please copy the downloaded JDBC driver to the directory below.

<%RESIN_HOME%/lib>

Resin (Linux Version) Installation

Topics

- [Installation](#)
- [Placement of JDBC Driver](#)

Installation

1. Place the <resin-pro-4.0.37.tar.gz> file of the enclosed directory to the arbitrary path.
2. Expand the file.

```
# tar xzvf resin-pro-4.0.xx.tar.gz
```

3. From the directory where the source code of Resin is expanded, please execute the following.

```
./configure --prefix=<%RESIN_HOME%>
make
make install
```



Warning

In case of 64bitOS

Please add 64bit option to configure.

```
# ./configure --prefix=<%RESIN_HOME%> --enable-64bit
```



Note

In case the execution user who executes "make install" has the root authority, startup script resin is created under /etc/init.d directory.



Note

In Linux environment, if multi-byte characters get corrupted when the images are displayed on the screen of intra-mart Accel Platform, settings shown below would be needed.

Please install [JIS2004 Font] to the server on which intra-mart Accel Platform operates following the steps below.

1. After downloading [IPA Font], please decompress the ZIP file.
2. Copy the font file with [.ttf] extension to the <%JAVA_HOME%/jre/lib/fonts> directory.
3. Save <%STORAGE_PATH%/system/fontconfig/jre/lib/fontconfig.properties.linux> file as <%JAVA_HOME%/jre/lib/fontconfig.properties>.

Or,

Rename <%JAVA_HOME%/jre/lib/fontconfig.properties.src> to <fontconfig.properties>, add the setting below, and save it.

```
(Top)
#
# Copyright (c) 2003, Oracle and/or its affiliates. All rights reserved.
#
# fontconfig.properties using "IPA font"

##### Additions are made from here #####
# The IPA font is an outline font in accordance with JIS X 0213:2004.
# URL -> http://ossipedia.ipa.go.jp/ipafont/
# IPA gothic : ipag.ttf
# IPA P gothic : ipagp.ttf
# IPA UI gothic : ipagui.ttf
# IPA mincho : ipam.ttf
# IPA P mincho : ipamp.ttf
##### Additions end here #####

# Version
.
.
.

##### Additions are made from here #####
# Font File Names
filename.-b&h-lucidasans-medium-r-normal-sans-%d*-*p*-*iso8859-1=$JRE_LIB_FONTS/ipagui.ttf
filename.-b&h-lucidabright-medium-r-normal-%d*-*p*-*iso8859-1=$JRE_LIB_FONTS/ipagui.ttf
filename.-b&h-lucidabright-medium-i-normal-%d*-*p*-*iso8859-1=$JRE_LIB_FONTS/ipagui.ttf
filename.-b&h-lucidabright-medium-i-normal-%d*-*p*-*iso8859-1=$JRE_LIB_FONTS/ipagui.ttf
filename.-b&h-lucidasans-bold-r-normal-sans-%d*-*p*-*iso8859-1=$JRE_LIB_FONTS/ipagui.ttf
filename.-b&h-lucidasans-medium-i-normal-sans-%d*-*p*-*iso8859-1=$JRE_LIB_FONTS/ipagui.ttf
filename.-b&h-lucidasans-bold-i-normal-sans-%d*-*p*-*iso8859-1=$JRE_LIB_FONTS/ipagui.ttf
filename.-b&h-lucidatypewriter-medium-r-normal-sans-%d*-*m*-*iso8859-1=$JRE_LIB_FONTS/ipagui.ttf
filename.-b&h-lucidatypewriter-bold-r-normal-sans-%d*-*m*-*iso8859-1=$JRE_LIB_FONTS/ipagui.ttf
filename.-b&h-lucidatypewriter-medium-i-normal-sans-%d*-*m*-*iso8859-1=$JRE_LIB_FONTS/ipagui.ttf
filename.-b&h-lucidatypewriter-bold-i-normal-sans-%d*-*m*-*iso8859-1=$JRE_LIB_FONTS/ipagui.ttf
##### Additions end here #####
(Bottom)
```

4. Rename the valid <fontconfig.OS.Version.properties> and <fontconfig.OS.Version.bfc> in the <%JAVA_HOME%/jre/lib> directory.

Example)

- fontconfig.RedHat.bfc → fontconfig.RedHat.bfc.back
- fontconfig.Sun.bfc → fontconfig.Sun.bfc.back
- fontconfig.bfc → fontconfig.bfc.back

Placement of JDBC Driver

1. Download the JDBC driver.

Please see below for information about where you can get the JDBC driver.

JDBC Driver

2. Copy the downloaded JDBC driver to the directory below.

```
<%RESIN_HOME%/lib>
```

Resin Configuration

Topics

- **Standalone/Distributed Configuration Common**
- **Distributed Configuration**

Standalone/Distributed Configuration Common

1. Open <%RESIN_HOME%/conf/resin.properties> file.
2. To the [jvm_args] property, please set the memory value and the maximum heap size that match with the installation environment.

In this document following values are set as an example.

```
# Arg passed directly to the JVM
jvm_args : -Xmx1024m -XX:MaxPermSize=256m
```



Warning

The value to be set should be [1024m] or greater.
If the value smaller than [1024m] is set, functions may not be performed correctly.



Note

You can add [-Djava.io.tmpdir] option to [jvm_args] property, and change the work directory used by Resin.

If this option has not been specified, the work directory which is used by Resin will be the default setting of JVM.

Example below shows the setting by which work directory is changed to /var/resin-tmp.

```
# Arg passed directly to the JVM
jvm_args : -Xmx1024m -XX:MaxPermSize=256m -Djava.io.tmpdir=/var/resin-tmp
```



Warning

It is necessary that the directory specified by the [-Djava.io.tmpdir] option should have been created in advance.

It is also necessary to make the authorization settings to allow Resin execution users to do the read and write operations.

If this option has not been specified in the Linux environment, /tmp will be used.

Sometimes depending on the setting of cron etc., the setting to periodically delete the contents under /tmp may have been incorporated as standard.

On Resin if the changes are detected in the configuration file that is expanded to the work directory, automatic restart may take place.

Therefore, it is recommended that the work directory to be used by Resin has been changed in advance.



Note

You can add [-Duser.timezone] option to [jvm_args] property, and change the time zone.
Time zone to be set should be the one that exists in Time Zone Master.

For the Time Zone Master, please refer to [[Configuration File Reference Time Zone Master](#)].
In this document time zone is set to "UTC" as an example.

```
# Arg passed directly to the JVM
jvm_args : -Xmx1024m -XX:MaxPermSize=256m -Duser.timezone=UTC
```



Note

Initial setting of time zone setting depends on JDK to which installation has been made.



Warning

This setting should be made before the systems operations start.
If the time zone is changed after systems operations started, mismatch of date/time data would occur.



Note

If Resin detects the change of configuration file or change of programs after it is started, it will restart itself.

If you do not want Resin to detect these changes during development or during operations depending on the usage of the systems, you should set the [dependency_check_interval] item.

Following example shows the case in which change detection is suppressed.

```
dependency_check_interval : -1
```

You can set such values like 2s (every 2 seconds) or 5m (every 5 minutes) to [dependency_check_interval].

After the change is completed, Resin should be restarted.



Note

If the port duplication error occurs when Resin is started, please change the port number setting after Resin is stopped.

```
java.lang.RuntimeException: java.net.BindException: Address already in use: JVM_Bind
Can't bind to *:8080.
Check for another server listening to that port.
```

Please change the value [8080] which is set in [app.http] property to unused port number such as [8081].

```
# Set HTTP and HTTPS ports.
# Use overrides for individual server control, for example: app-0.http : 8081
app.http      : 8081
```

After the change is completed, Resin should be restarted.

Distributed Configuration

1. Open <%RESIN_HOME%/conf/resin.properties> file.
2. Set to [app_servers] property the Resin server information which is built as a distributed configuration.

As an example, if Resin is to be operated in 3 units configuration, following values should be set.

```
# app-tier Triad servers: app-0 app-1 app-2
app_servers : 192.168.100.1:6800 192.168.100.2:6800 192.168.100.3:6800
```

IDs app-0, app-1, and app-2 are assigned in the stated sequence to [IP Address: Port Number] that are set to [app_servers] property.



Warning

Please set the same contents to all <%RESIN_HOME%/conf/resin.properties> files of Resin that are included in the distributed configuration.

Only the local address can be specified as an IP address specified to the [app_servers] property.

Global address cannot be specified to it.

In case distributed environment is built, it does not function properly if the loop back address such as

127.0.0.1 is specified.



Note

For the clustering of Resin, please refer to [[Resin Clustering](#)].



Warning

In case distributed environment of Resin is to be built, Resin which is included in the product version would be necessary.

If you need to build the distributed environment for such purposes as verification, please contact our sales people.

Web Server

intra-mart Accel Platform can utilize Web Server.

Please install Web Server to be used. Please refer to the document for each Web Server for the installation details.

Apache HTTP Server

Topics

- [Use of mod_proxy/mod_rewrite](#)
- [Obtaining mod_proxy/mod_rewrite](#)
- [Placement of Static Files](#)
- [Editing apache Configuration File](#)
- [Editing the Access Log](#)
- [Limitations](#)

Use of mod_proxy/mod_rewrite

Here the setting for linking web server and intra-mart Accel Platform is made using the Apache module (mod_proxy/mod_rewrite) and not using the integrated module of Resin.

Obtaining mod_proxy/mod_rewrite

Please refer to the manuals of product vendors.

Placement of Static Files

Please decompress the [Static File], which was obtained from im-Juggling, to the apache document rule.

Please refer to [Static File Output](#) for information about the output of static files.

Editing apache Configuration File

1. Open <%APACHE_HOME%/conf/httpd.conf> file.
2. In the Dynamic Shared Object (DSO) Support Area, please add the following setting or comment it out.

```
LoadModule rewrite_module modules/mod_rewrite.so
LoadModule proxy_module modules/mod_proxy.so
LoadModule proxy_http_module modules/mod_proxy_http.so
```

3. Please add the AllowEncodedSlashes directive and the settings of mod_proxy and mod_rewrite at the bottom.

Context Path	imart
apache Document Root	/usr/local/apache/htdocs
Expand Folder of Statis File	/usr/local/apache/htdocs/imart
IP Address	192.168.1.1
Port Number	8080

Settings needed for the example above are as follows :

```

AllowEncodedSlashes On
RewriteEngine On
RewriteCond %{REQUEST_URI} ^/imart/(.*\gif|.*\GIF)$ [OR]
RewriteCond %{REQUEST_URI} ^/imart/(.*\png|.*\PNG)$ [OR]
RewriteCond %{REQUEST_URI} ^/imart/(.*\jpg|.*\JPG)$ [OR]
RewriteCond %{REQUEST_URI} ^/imart/(.*\css|.*\CSS)$ [OR]
RewriteCond %{REQUEST_URI} ^/imart/(.*\js|.*\JS)$ [OR]
RewriteCond %{REQUEST_URI} ^/imart/(.*\swf|.*\SWF)$ [OR]
RewriteCond %{REQUEST_URI} ^/imart/(.*\ico|.*\ICO)$ [OR]
RewriteCond %{REQUEST_URI} ^/imart/(.*\json|.*\JSON)$ [OR]
RewriteCond %{REQUEST_URI} ^/imart/(.*\jar|.*\JAR)$ [OR]
RewriteCond %{REQUEST_URI} ^/imart/(.*\xml|.*\XML)$ [OR]
RewriteCond %{REQUEST_URI} ^/imart/(.*\yaml|.*\YAML)$ [OR]
RewriteCond %{REQUEST_URI} ^/imart/(.*\txt|.*\TXT)$ [OR]
RewriteCond %{REQUEST_URI} ^/imart/(.*\html|.*\HTML|.*\htm|.*\HTM)$
RewriteRule ^/imart/(.*)?$ /imart/$1

ProxyPreserveHost On
ProxyPass /imart/ http://192.168.1.1:8080/imart/ nocanon
ProxyPassReverse /imart/ http://192.168.1.1:8080/imart/ nocanon

```



Note

File extension specified as above will be the one necessary for the static file in intra-mart Accel Platform Advanced_Version+intra-mart Accel Collaboration+IM-FormaDesigner for Accel Platform.
If you want to handle the static file that does not exist in RewriteCond above, please add it to the description of RewriteCond.



Warning

Please make sure that you include the context root of AP server in the request.
If the AP server side is *http://myapp/imart*, please make the request URL to *http://myweb/imart*.

4. Please restart Apache.

Editing the Access Log

In case of Reverse Proxy, every Source IP of the access.log generated by Resin will become 127.0.0.1. Output contents of access.log should be edited to avoid this problem.

1. Open <%RESIN_HOME%/conf/resin.xml> file.
2. Please add the following settings inside the <host id="" root-directory=""> directive, and restart Resin.

```

<access-log path="log/access.log">
<rollover-period>1D</rollover-period>
<format-%{X-Forwarded-For}i %h %l %u %t "%r" %>s %b "%{Referer}i" "%{User-Agent}i"</format>
</access-log>

```



Note

For the detail setting contents of access-log, please refer to [[Resin Documentation](#)].

Limitations

For limitations, please refer to [[Release Note](#)].

Internet Information Services (IIS)

Topics

- **Prerequisites**
 - **Application Request Routing Setup**
- **Setting**
- **Placement of Static File**
- **Editing the Access Log**
- **Operations Confirmation**

Prerequisites

- Setting of Base URL
In case Internet Information Services (IIS) is used, it is necessary to set the Base URL.



Note

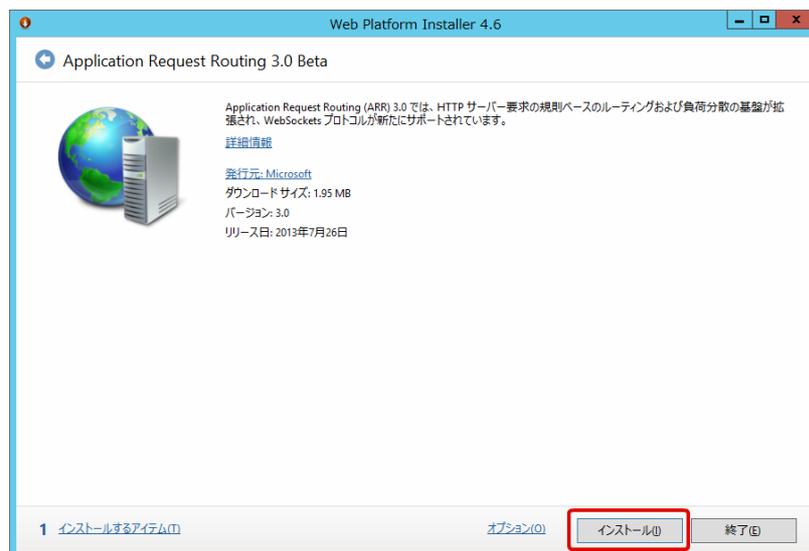
- For the Base URL, <http or https>://<IIS IP address>:<IIS Port Number>/<Context Path> should be set.
 - Please make the proper settings depending on the server environment to be built.
 - For the details of Base URL, please refer to **Base URL**.
- [Application Request Routing] is required to operate Internet Information Services (IIS). Please download the installer from the home page of [Application Request Routing] below, and do the setup by the steps below. In the following steps, an example of installing Application Request Routing 3.0 to Windows Server 2012 and setting IIS is described.

**Note****URL (as of April, 2014)**

- Application Request Routing Home Page
<http://www.iis.net/downloads/microsoft/application-request-routing>
- Application Request Routing 3.0 Installer
http://www.microsoft.com/web/handlers/webpi.ashx?command=getinstaller&appid=ARRv3_0

Application Request Routing Setup

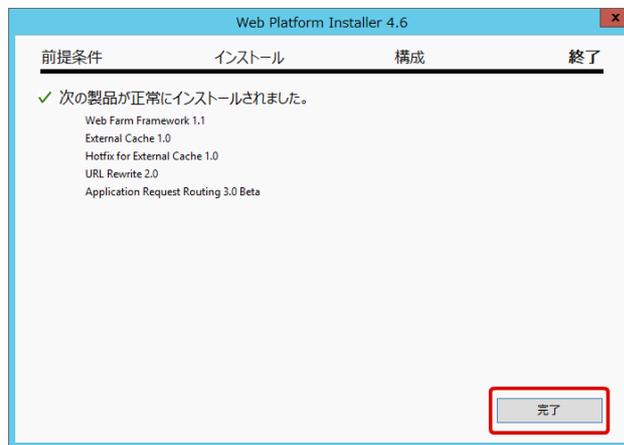
1. Execute the downloaded <ARRv3_0.exe>.
2. Click [Install].



3. After checking the prerequisites and licensing terms, please click [Agree].



4. Click [Complete].



- Click [Finish].



This completes the setup of Application Request Routing.

Setting

- Settings for the connection to Resin should be made. In the following steps, descriptions of the steps assume the environment below.

intra-mart Accel Platform Context Path	imart
IIS Root Directory	C:\inetpub\wwwroot
Expanded Folder of Static File	C:\imart
Resin IP Address	192.168.1.1
Resin Port Number	8080

- Create the configuration file <web.config> to connect Internet Information Services (IIS) and Resin immediately under <C:\inetpub\wwwroot>.

```
<?xml version="1.0" encoding="UTF-8"?>
<configuration>
  <system.web>
    <httpRuntime maxRequestLength="102400" requestPathInvalidCharacters="
    <customErrors mode="Off" />
  </system.web>
  <system.webServer>
    <security>
      <requestFiltering>
        <requestLimits maxAllowedContentLength="104857600" />
      </requestFiltering>
    </security>
    <httpErrors errorMode="Detailed" />
    <rewrite>
      <rules>
        <clear />
        <rule name="ReverseProxyInboundStatic" stopProcessing="true">
          <match url="^imart/(.*)\.(gif|\.png|\.jpg|\.css|\.js|\.swf|\.ico|\.json|\.
          <action type="None" />
        </rule>
        <rule name="ReverseProxyInboundDynamic" stopProcessing="true">
          <match url="^imart/(.*)" />
          <action type="Rewrite" url="http://192.168.1.1:8080/imart/{R:1}" />
        </rule>
      </rules>
    </rewrite>
  </system.webServer>
</configuration>
```

Note
web.config is a configuration file of Internet Information Services (IIS).

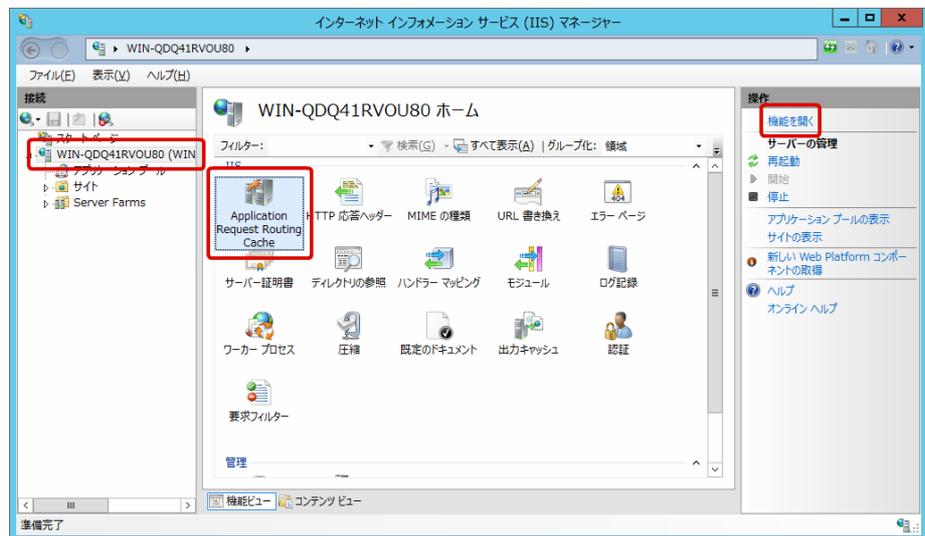
Warning
web.config file cannot be edited on im-Juggling.

2. Following elements inside the web.config are changed as appropriate according to the server environment.

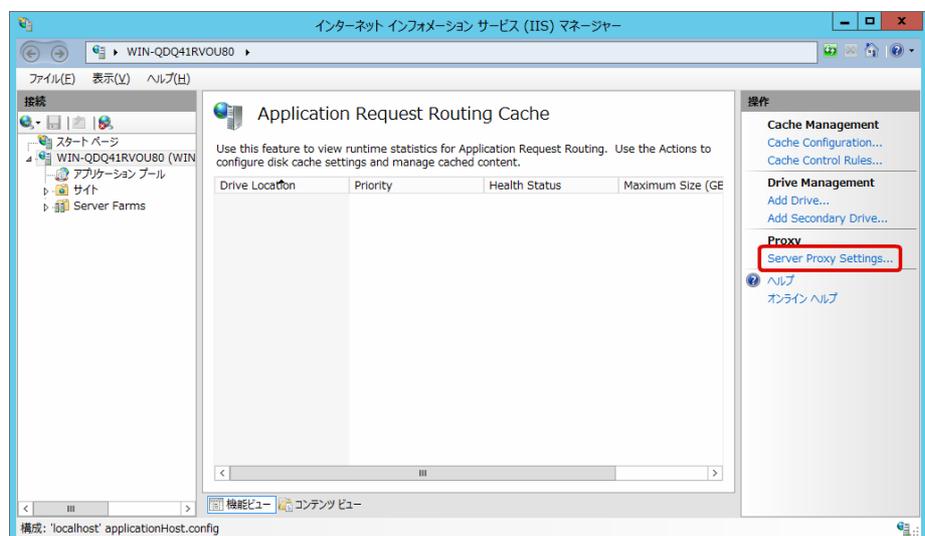
- maxRequestLength and maxAllowedContentLength Attributes
 - In order to change the limit of uploaded file size, please change the setting for maxRequestLength and maxAllowedContentLength attributes (100MB in the example above).

Note
Please refer to the reference below for the details of web.config.
<http://technet.microsoft.com/ja-jp/library/ee431610.aspx>

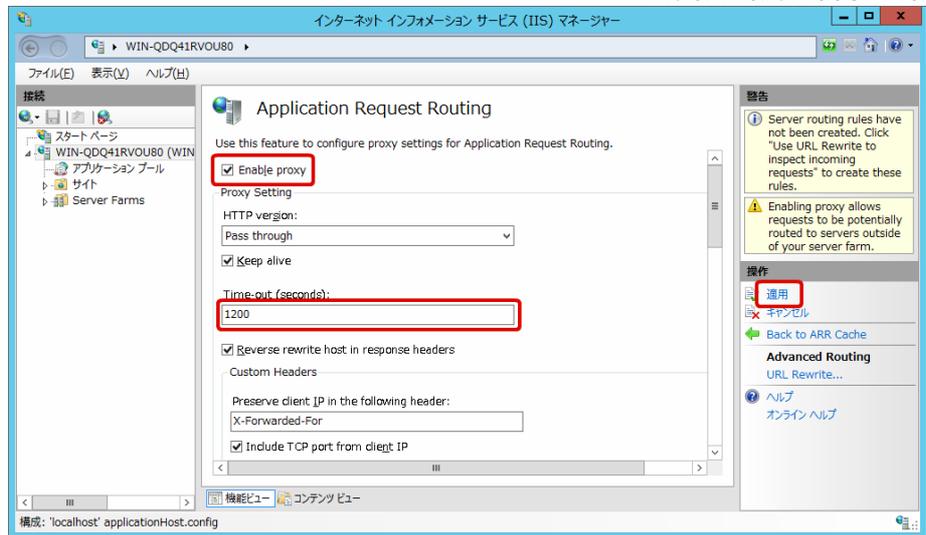
3. From Internet Information Service (IIS) Manager, please click [IIS Server(it is WIN-QDQ41RVOU80 here)], [Application Request Routing Cache], [Open Function] sequentially.



4. Click [Server Proxy Settings...], and display the [Application Request Routing] Setting Screen.



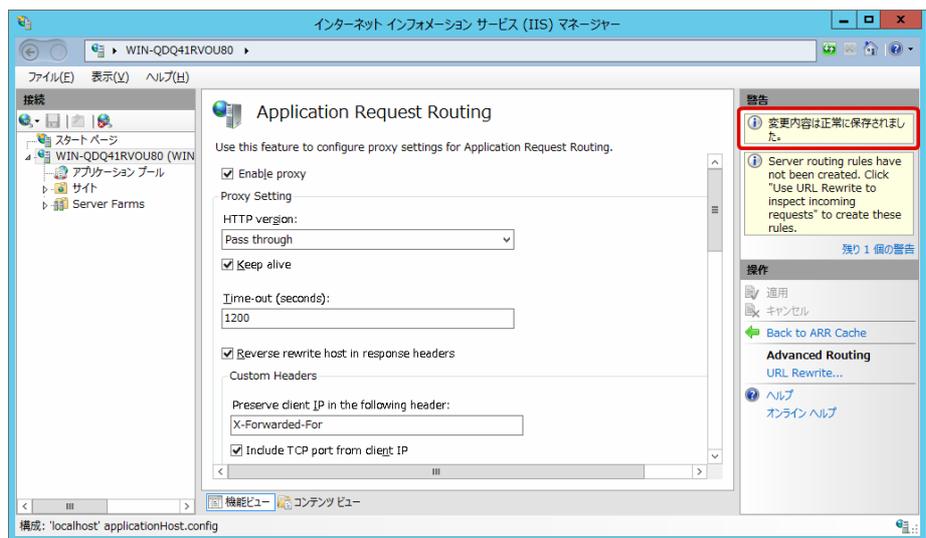
5. Check [Enable Proxy], and set the timeout value in seconds to [Time-out (seconds)].
Then, click [Apply] to reflect the setting.



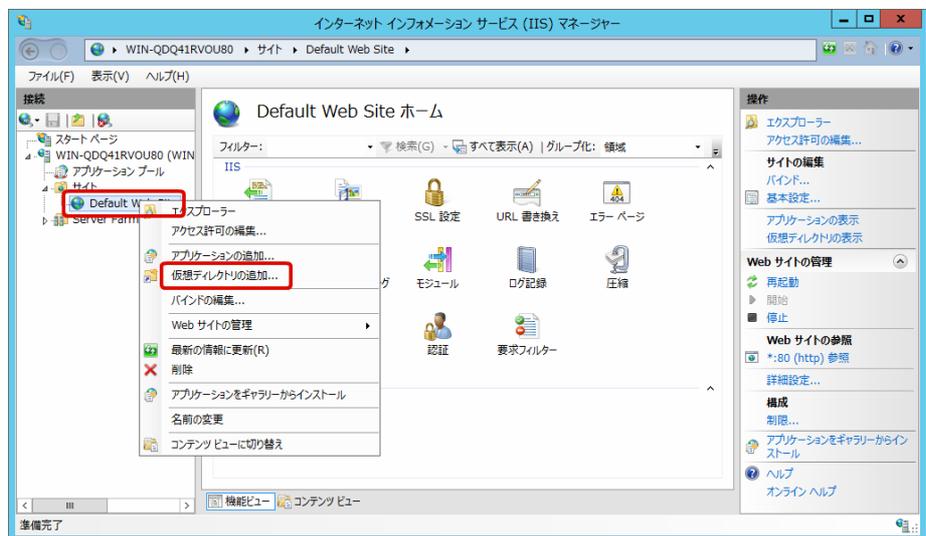
Note

In [Time-out (seconds)], timeout period before Application Request Routing disconnects the connection to Resin is set. Please set the big enough value for the tenant environment setup to complete. Here, 1200 seconds are set as an example.

6. Please confirm that [Changed contents were successfully saved.] is displayed.



7. Then, the virtual directory for the static file should be created. From the [Default Web Site] sub-menu in the Left Pane, click [Add virtual directory ...].

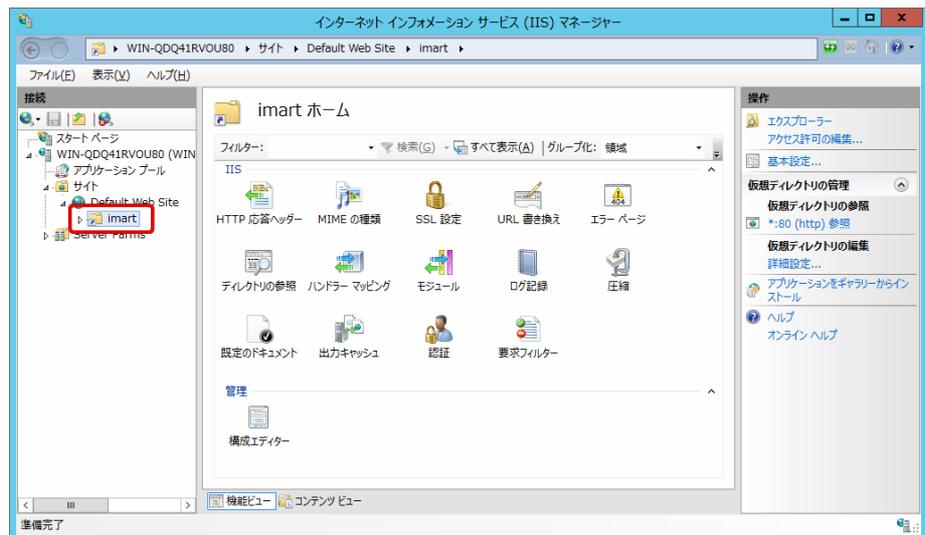


8. In the new window, please set [Alias(A)] and [Physical Path(P)] as below, and click [OK].

Alias imart
Physical Path C:\imart



9. Please confirm that the [imart] directory has been created.



Placement of Static File

Please expand the [Static File] obtained from im-Juggling to the directory of [Physical Path] which was set in the virtual directory.

For the details about output of static file, please refer to [Static File Output](#).

Editing the Access Log

In case of Reverse Proxy, every Source IP of access.log generated by Resin becomes the IP of IIS. In order to avoid this problem, output contents of access.log are edited.

1. Open the <%RESIN_HOME%/conf/resin.xml> file.
2. Please add the setting below inside <host id="" root-directory=""> directive, and restart Resin.

```
<access-log path='log/access.log'>
<rollover-period>1D</rollover-period>
<format>%{X-Forwarded-For}i %h %l %u %t "%r" %s %b "%{Referer}i" "%{User-Agent}i"</format>
</access-log>
```



Note

For the detail setting contents of access.log, please refer to [[Resin Documentation](#)].

Operations Confirmation

1. Launch Resin.
Please see below for the details about Resin.
 - [Web Application Server](#)
 - [Web Application Server Startup/Stop](#)
2. Restart Internet Information Services (IIS).
3. From the browser, please access <http://<IIS IP Address>:<IIS Port Number>/imart/login>. Setting is completed, if the log-in screen of intra-mart Accel Platform is displayed.

Apache Cassandra

Please refer to [[IMBox Cassandra Administrator Guide](#)] for detail.

Apache Solr

Topics

- Overview
- Prerequisites
- Setup
- Startup of [Apache Solr], Connection to Admin Screen, Stop
- About the Java version to be used

Overview

- Apache Solr is required to utilize [IM-ContentsSearch for Accel Platform].
- On im-Juggling you should select [Standard Application]-[IM-ContentsSearch for Accel Platform] module, and then if you are to use [IM-ContentsSearch for Accel Platform], it is necessary to build [Apache Solr] server.



Warning

You can select any server for building [Apache Solr]. However, since [Apache Solr] will generate large volume of disk accesses, response degradation may result if it is built in the same server hardware where [intra-mart Accel Platform] has been set up. Therefore, it is strongly recommended to build it in a separate server in the operations environment.

Prerequisites

- [Java] needs to have been installed.
- In case [Apache Solr] is set up on [Resin], [Resin] needs to have been installed.
- In case [Apache Solr] is set up on [Tomcat], [Tomcat] needs to have been installed.

Setup

[IM-ContentsSearch for Accel Platform] provides a setup tool for [Apache Solr].

Following processes can be executed by using the setup tool. On [Apache Solr] which was built by the setup tool, customization solely for [IM-ContentsSearch for Accel Platform] is considered as completed.

- Build and Launch using the application server [Jetty] (mainly for development or for demonstration)
- Generating group of files to be built on the application server [Resin]
- Generating group of files to be built on the application server [Tomcat]

1. Obtain [Apache Solr] setup tool.

[Apache Solr] setup tool can be downloaded from the URL below :

http://www.intra-mart.jp/download/product/iap/im_contents_search/solr_setup.zip

You can also use ./Products/tools/iap/im_contents_search/solr_setup.zip in the setup disk.

2. After obtaining the setup tool, please unzip the <solr_setup.zip> file to any path.

<*> For unzipping the compressed file, please choose the tool that can unzip the file in zip format.



Note

In this document the directory below is specified as an example.

[C:/solr]

3. Open Command Prompt and move to the path below.

C:/solr/solr_setup

4. Enter the setup command as shown below and hit the <Enter> key. Setup tool is executed, and the command list and its descriptions for the setup tool are displayed.

<In case of Windows> C:/solr/solr_setup> setup.bat

<In case of Linux> [root@localhost solr]# ./setup.sh



Note

This is an example of Windows environment.

```
C:\solr\solr_setup>
C:\solr\solr_setup> setup.bat
Buildfile: C:\solr\solr_setup\build\build.xml

usage:
[echo] Welcome to the Apache Solr Installation!
[echo] Use " " to display usage
[echo] Use 'usage' to display usage
[echo] Use 'jetty' to download the jetty zip file, solr zip file and the solr.war and unzip the zip files and config the jetty port
[echo] Use 'jetty.start' to download the jetty zip file, solr zip file and the solr.war and unzip the zip files and config the jetty port
[echo] Use 'resin' to download the solr zip file and the solr.war for resin and unzip the zip file
[echo] Use 'tomcat' to download the solr zip file and the solr.war for tomcat and unzip the zip file

BUILD SUCCESSFUL
Total time: 1 second

C:\solr\solr_setup>
```

Descriptions of each command in the Setup Tool are shown below.
Each command is specified as a parameter of setup.bat (in case of Windows) or setup.sh (in case of Linux).

Example: C:\solr\solr_setup> setup.bat jetty.start

<Setup Tool Command and its Description>

Command	Execution Contents
(None)	Descriptions of setup tool are displayed.
usage	Descriptions of setup tool are displayed.
jetty	Build Jetty in which [Apache Solr] is available where the startup port has been changed to the port specified by ./build_user.properties.
jetty.start	After executing the jetty command, start the application server Jetty.
resin	Group of files that are necessary for the setup of Resin are generated to ./dist directory.
tomcat	Group of files that are necessary for the setup of Tomcat are generated to ./dist directory.

5. Here, we would like to continue the explanation assuming setup.bat resin is executed.

When you execute C:\solr\solr_setup> setup.bat resin, resin directory is created under ./dist directory.

 **Note**

Part of the screen which is displayed after running setup.bat resin is shown.

```
[get] .....
[get] last modified = Thu Sep 27 01:25:24 JST 2012

md.resin.webapps:
[echo] make resin webapps dir(./dist/resin/resin/webapps)...
[mkdir] Created dir: C:\solr\solr_setup\dist\resin\resin\webapps

copy.resin.solr.war:
[echo] copy the solr.war from ./download/solr.war to ./dist/resin/resin/webapps...
[copy] Copying 1 file to C:\solr\solr_setup\dist\resin\resin\webapps

common.display.readme:
[echo] =====
[echo] [*] Definition
[echo]   Directory where <%resin_home%>:Application Server Resin is installed
[echo]
[echo] [*] Solr Placement and Setting
[echo]   Please copy /dist/resin_solr/resin/*. * to <%resin_home%>.
[echo]
[echo] [*] Solr Home Location Setting
[echo]   Add the contents of /dist/resin_solr/env-entry.txt to <%resin_home%>/conf/resin.xml.
[echo]
[echo]   Copy the contents of env-entry.txt of resin.xml to the location before </resin>.
[echo]
[echo] =====
[echo] C:\solr\solr_setup\dist\resin\readme.txt

BUILD SUCCESSFUL
Total time: 11 seconds

C:\solr\solr_setup>
```

6. When the execution of setup tool is completed, group of files that are necessary for the setup are generated to ./dist directory.

If you use Resin or Tomcat as an application server, please proceed and perform the steps shown in the readme.txt of the file (same contents as the ones displayed when the command is completed). If you use Jetty as an application server, it can be executed as it is since the main body of Jetty is stored in the ./dist/jetty directory.

7. Setup is now completed.

Startup of [Apache Solr], Connection to Admin Screen, Stop

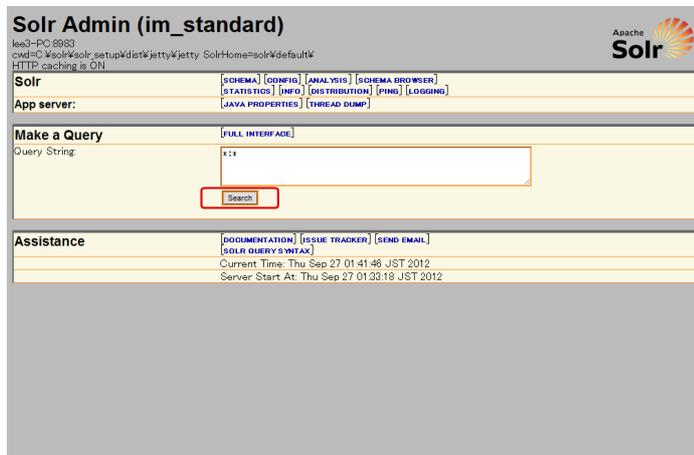
1. Start the application server where [Apache Solr] has been setup.

Since [Apache Solr] is started/stopped at the same timing the application server is started/stopped, please refer to the usage information of respective application server for ways to start/stop or services.

2. Connect to the Admin screen of [Apache Solr], and confirm that the [search] button works correctly.

For example, connection is made to the Admin screen of [common_apache_apachesolr] which is set up in Jetty.

<http://127.0.0.1:8983/solr/default/admin/>



3. Stop the application server where [Apache Solr] has been set up.

About the Java version to be used

There are remarks about the Java version to be used when Apache Solr is utilized.

In case Java SE Development Kit 7u40 version or above is used, it is necessary to specify the startup parameter below in JVM.

```
-XX:-UseSuperWord
```

If the startup parameter shown above is not specified, index data may be broken and it may not function properly. Because of this known defect, you must specify this parameter.

This problem would not occur, if the version prior to Java SE Development Kit 7u25 is used.

Please refer to the setting information of the respective application server to be used to learn how JVM startup parameter is specified.

In case you utilize Jetty which is included in the setup tool, you can take the following steps.

1. Execute `setup.bat jetty` or `setup.sh jetty` using the setup command previously stated.
2. Open the startup script for the OS by the editor.
 - in case of Windows: [solr_setup\dist\jetty\jetty\startup.bat]
 - in case of Linux: [solr_setup/dist/jetty/jetty/startup.sh]
3. Please confirm that there is `java -jar start.jar` stated in each of these files.
4. Please rewrite the identified statement to `java -XX:-UseSuperWord -jar start.jar`.

For the details of defect, please refer to the item below

[Irregular crash or corrupt term vectors in the Lucene libraries.]

which is stated in the release note of Java SE Development Kit 7u40.



Note

Update Release Notes - Java SE Development Kit 7, Update 40

<http://www.oracle.com/technetwork/java/javase/7u40-relnotes-2004172.html> (English)

WAR File Creation

Project Creation and Module Selection

Topics

- [What is im-Juggling ?](#)
- [im-Juggling Installation](#)
- [Project New Creation](#)
- [Module Selection](#)
- [Application Addition](#)

What is im-Juggling ?

im-Juggling is environment building tool that can manage modules and output WAR files.
By using this tool, new functions are introduced or defects fixes are applied.

im-Juggling Installation

im-Juggling that matches with the environment should be expanded to the arbitrary path from the directory included in the product.



Warning

Repository data to be used in im-Juggling is also included in the production version.

`%Product Version Media Image (DVD)%/Products/repository directory`

If im-Juggling is copied and started from product version media image,
this path may not be set properly.

Please confirm if reference destination of local repository is the correct setting path
from [Setting]-[im-juggling]-[Module Repository] which is on the right edge of toolbar in im-Juggling
window.

In case of internet connection, external repository is accessed
if the location starting with "`http://`" is enabled (if it is check marked).



Warning

If proxy setting is required in the environment in use, you should open [Setting]-[General]-[Network
Connection].

If [Native] is selected as active provider, proxy server setting information of Internet Explorer will be
inherited.

(This is the proxy server setting to be displayed by first displaying the menu by pressing [Alt] key on
Internet Explorer and then by clicking [Tool]→[Internet Option]→[Connection] Tab→[LAN Setting].)

Select [Manual Operations (manual)] as active provider
and click [Edit] of [HTTP] in proxy entry.

Set [Host], [Port], and [Authentication Information] on the edit screen of proxy entry and click [OK].



Warning

If an error such as obtaining error repository information occurs during project creation or WAR file
creation using im-Juggling,
please delete the data in the directory below, restart im-Juggling, and then try it again.

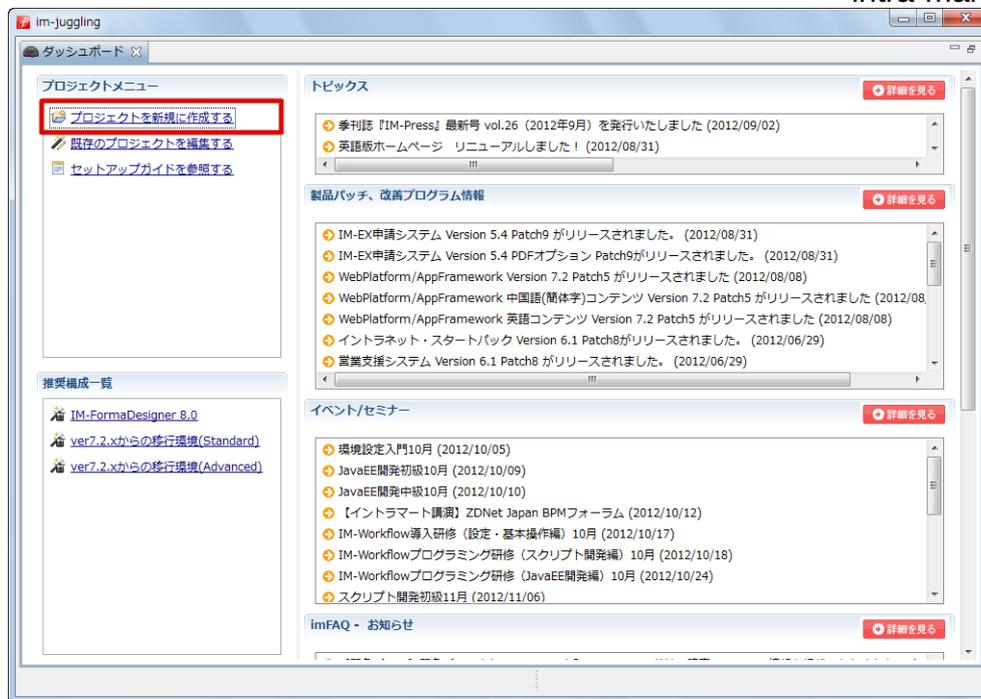
`%OS User Directory%/juggling/workspace/.repository directory`

Error may be caused because of the remaining old information.

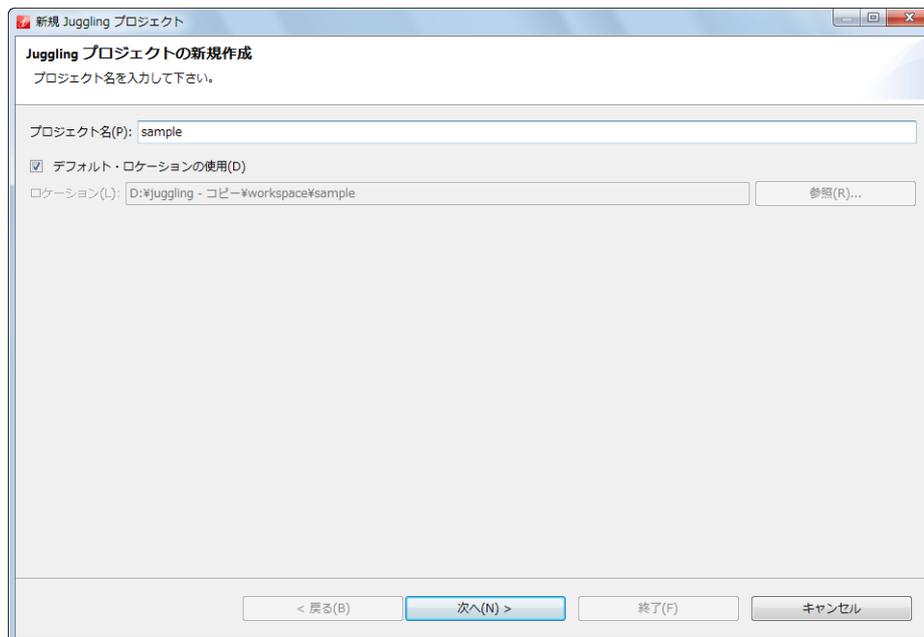
By deleting this old file, you can get the latest data again and can avoid the problem.

Project New Creation

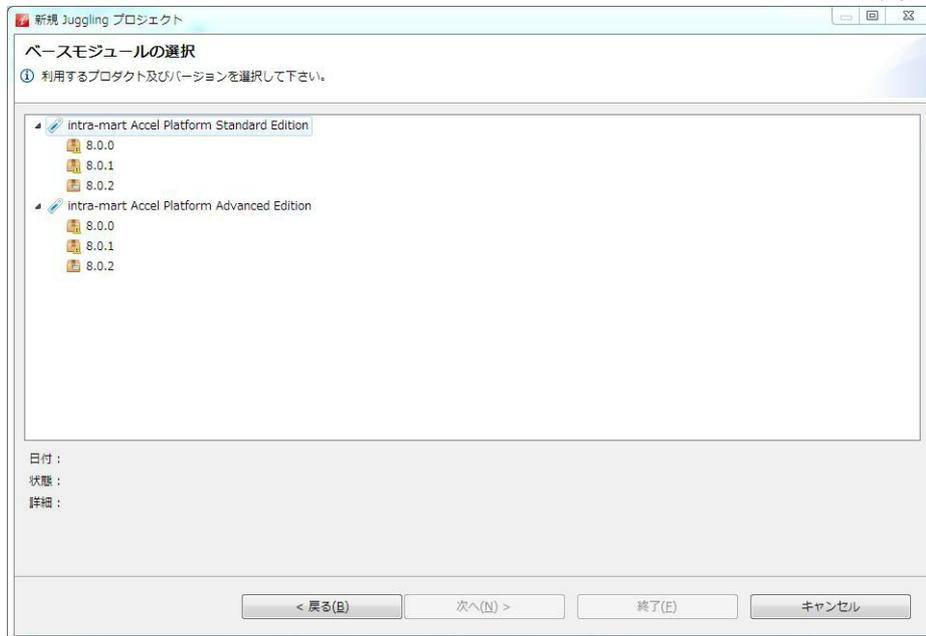
1. Start **juggling.exe** immediately under the expanded directory.
2. [License Contract Agreement] is displayed at the initial startup.
Select [Agree] and click [OK].
3. Dash board is displayed.
Select [Create new project].



4. Please enter arbitrary project name in single byte alpha-numeric characters to the [Project Name] inside the wizard screen which is pop-up displayed.
Click [Next(N)] after you entered.



5. Select product and version to be used.
Click [Next(N)] after you selected.



Warning

Following 3 configurations are offered on intra-mart Accel Platform.
Please see below for the selection method of each configuration.

Standard

Select from < intra-mart Accel Platform Standard Edition > tree.

Advanced

Select from < intra-mart Accel Platform Advanced Edition > tree.

Enterprise

Select from < intra-mart Accel Platform Advanced Edition > tree.
Please select IM-FormaDesigner for Accel Platform and IM-BIS for
Accel Platform
from next [Application Selection].

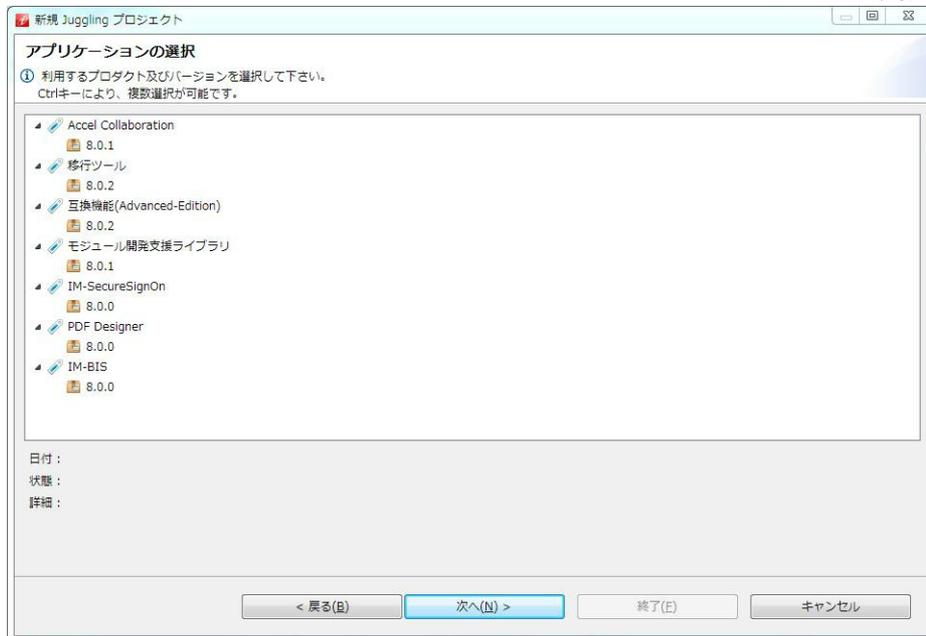
License you have purchased should be registered at [[License Registration](#)] for every product
configuration.
Please refer to [[Introduction](#)] for the details of product configuration.



Note

It is recommended to select the latest one if multiple versions are displayed on the same product.

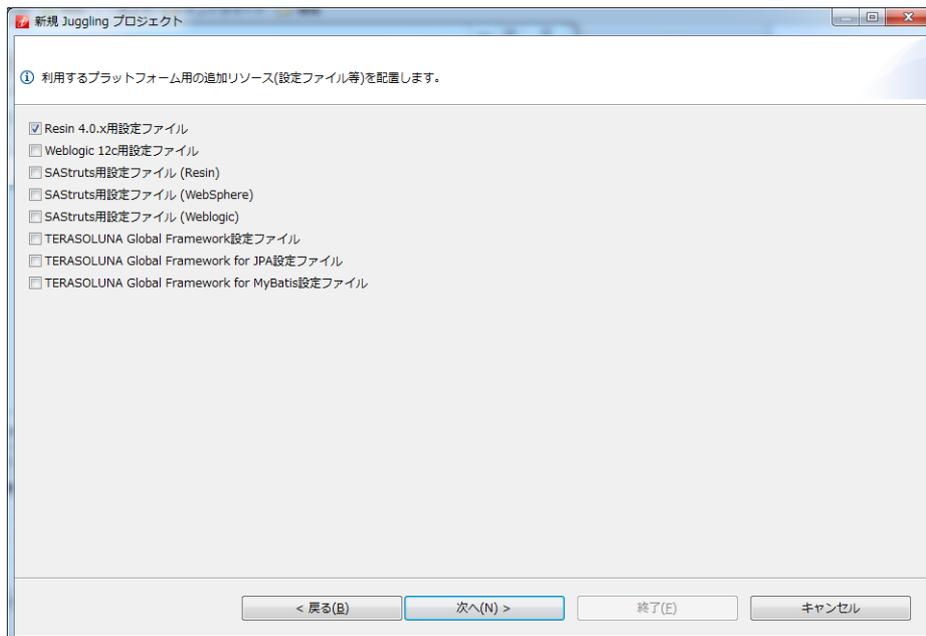
- Select the application to be used.
Click [Next(N)] after you selected.



Warning

Select [Migration Tool] and [Compatible Function] when migration from version7.2 is executed. If you build intra-mart Accel Platform newly, please be careful not to select this product. If you do migration from version7.2, please refer to [Migration Procedures] which is separately disclosed.

7. Select additional resource (such as setting file) for using platform.
Click [Next(N)] after you selected.



Warning

If you deploy WAR file to Oracle WebLogic Server 12c (12.1.1), you must select [**Configuration file for Weblogic 12c**]. If this configuration file is not placed, error will occur when deploying to WebLogic.



Note

If you use database at SAStruts+S2JDBC, please put a check mark on [**Configuration File for SAStruts**] for the Web application server to be used. Setting change is described in **Configuration File for SAStruts (in case database is used on SAStruts+S2JDBC)**.



Note

If you use TERASOLUNA Global Framework, please put a check mark on [**Configuration File for**

TERASOLUNA Global Framework].

Setting change is described in [Configuration File for TERASOLUNA Global Framework \(in case shared database is used\)](#).

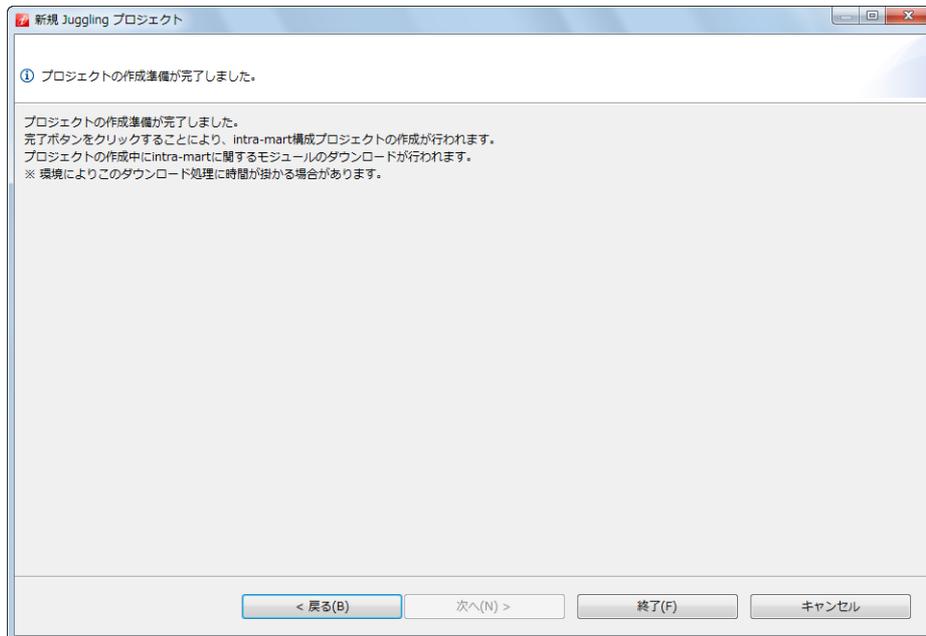
If JPA is used for repository layer, please put a check mark on [Configuration File for TERASOLUNA Global Framework for JPA].

Setting change is described in [Configuration File for TERASOLUNA Global Framework \(in case JPA is used for repository layer\)](#).

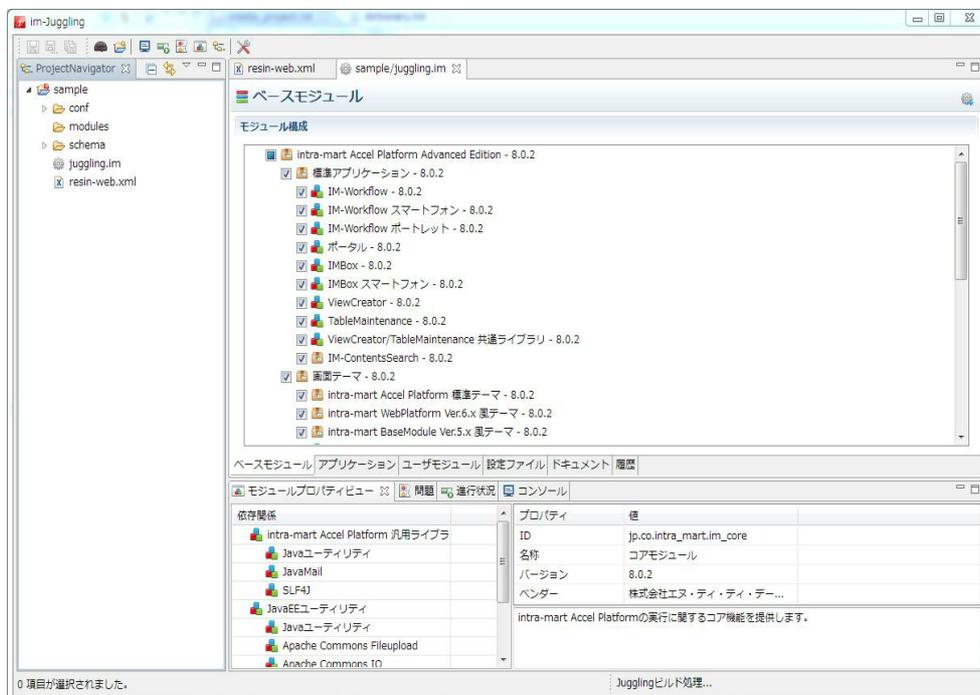
If MyBatis is used for repository layer, please put a check mark on [Configuration File for TERASOLUNA Global Framework for MyBatis].

Setting change is described in [Configuration File for TERASOLUNA Global Framework \(in case MyBatis is used for repository layer\)](#).

8. Finally, please click [Finish(F)].



9. Creation process of project is executed and the screen below will be displayed after it is completed.

**Warning**

If you deploy to WAR file to Oracle WebLogic Server 12c (12.1.1), please do not select following modules.

These libraries cannot be used in Oracle WebLogic Server 12c (12.1.1), so the error will occur at startup.

- Library > Third party library > Metro
- Library > Third party library > OpenPortal WSRP



Warning

Development framework [TERASOLUNA Global Framework on Accel Platform] module cannot be used in Oracle WebLogic Server 12c (12.1.1) and WebSphere Application Server 8.5.5. Therefore, if you deploy WAR file to Oracle WebLogic Server 12c (12.1.1) or WebSphere Application Server 8.5.5, please do not select the development framework [TERASOLUNA Global Framework on Accel Platform] module.

Module Selection

1. You can select or deselect related modules at one time from the sub menu displayed by the right click on modules that are displayed in the project.



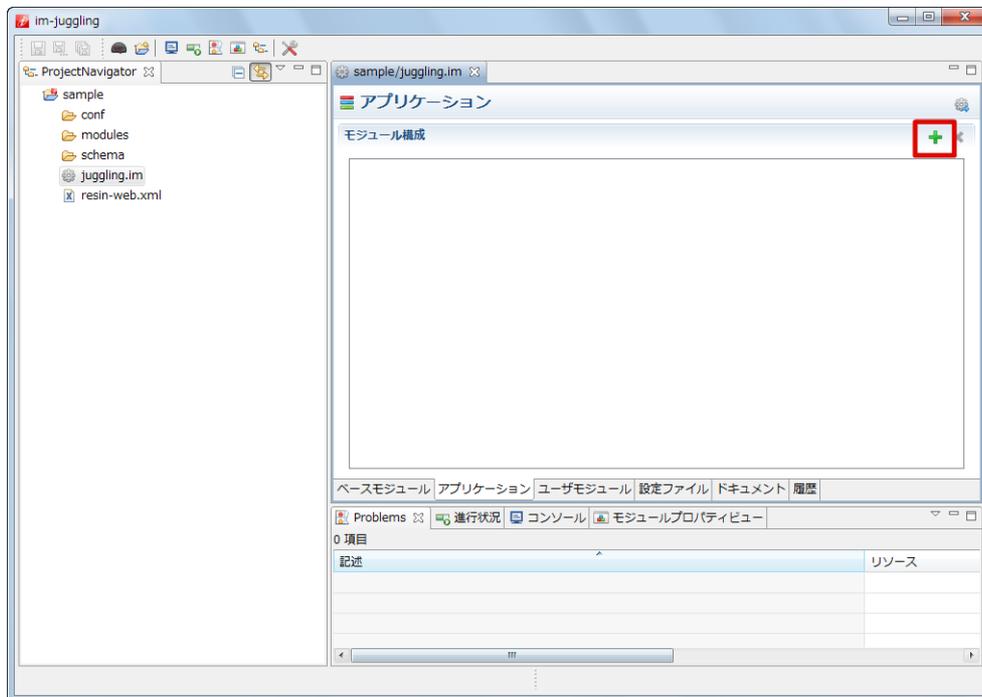
Note

For example, if IMBox is not included in the configuration, IMBox module should be removed. Please refer to [[How to Remove IMBox Module](#)] for detail.

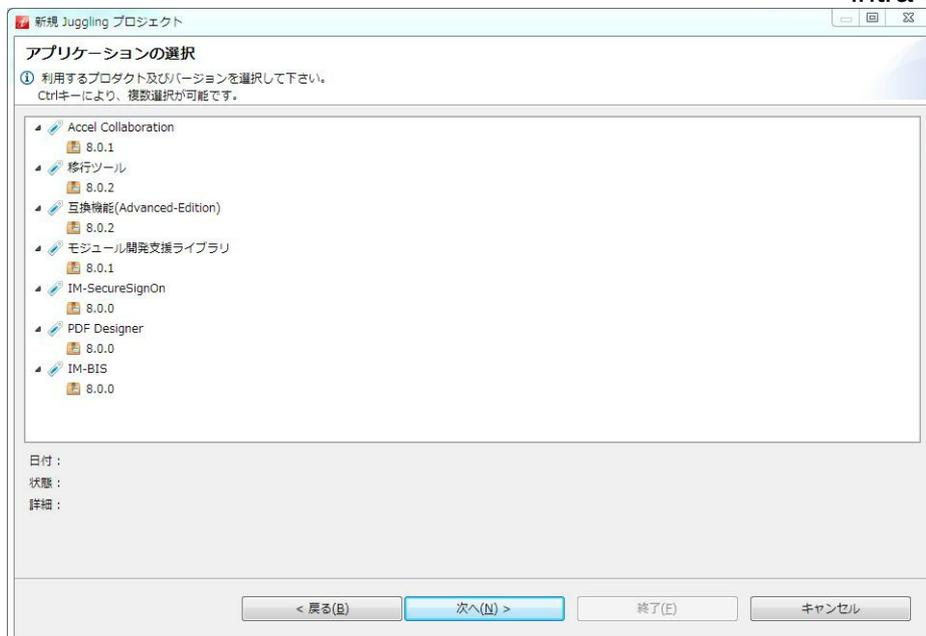
Application Addition

Application can be added after the project is created.

1. Click [Application] tab and click [+].



2. Click the application you want to add and click [OK].



Warning

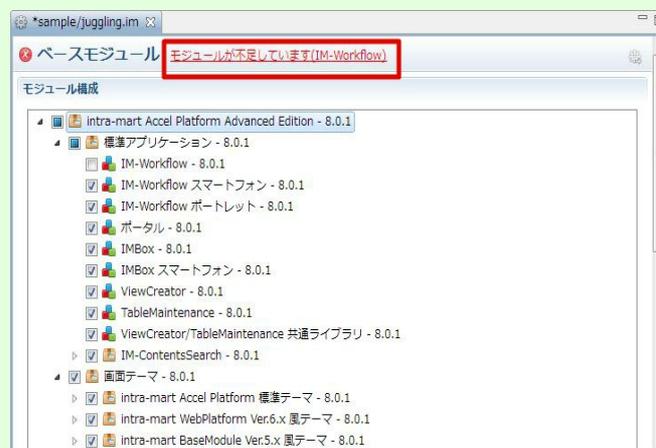
[Migration tool] and [Compatible Function] are to be selected when migration from version7.2 is executed.
If intra-mart Accel Platform is newly built, please make sure that you do not to select this product.
If you do migration from version7.2, please refer to the [Migration Procedure] which is separately published.



Note

In case error message is displayed on the upper part of the screen

There is a dependency relationship by module and by application.



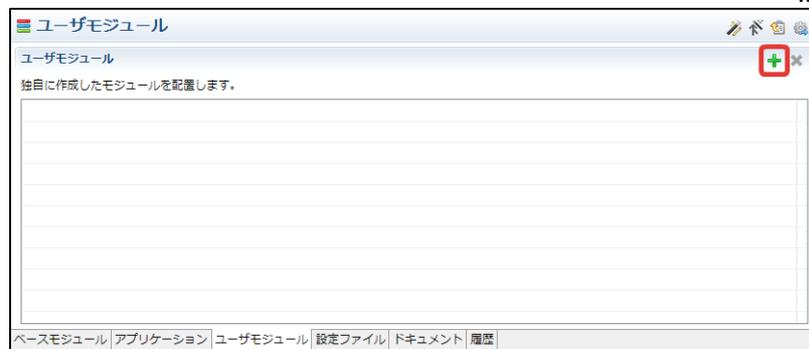
Necessary settings can be added by the following procedures.

1. Click Message.
2. Click [OK] on [Resolve Dependency].

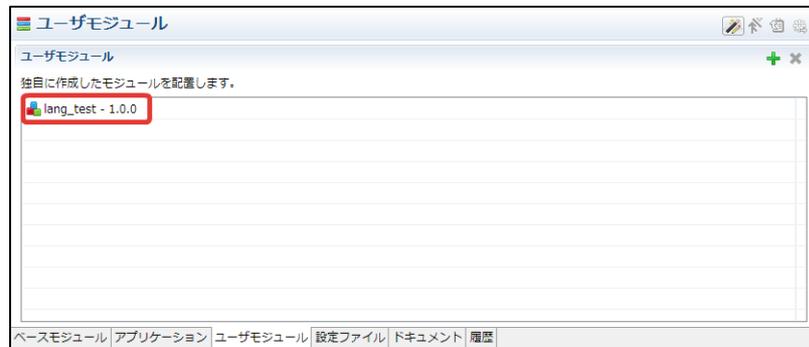
User Module

Application that is originally created can be added to WAR file as a user module after the project creation.

1. Click [User Module] tab and click [+].



2. Select imm file that you want to add and click [OK].



Various Configuration Files of intra-mart Accel Platform

Following configuration files should be edited to operate intra-mart Accel Platform.



Warning

If the same configuration file included in your own module already exists on im-Juggling project, the configuration file placed on im-Juggling project will be reflected when the WAR file in this project is output. Operations specification is to reflect the configuration file of im-Juggling project. A setting to operate the user module should be copied to the configuration file side that is placed on im-Juggling project.

Base

DataSource

Setting of the database to be used on intra-mart Accel Platform is made.

Topics

- **Connection Destination Type**
- **DataSource Setting**
 - PostgreSQL 9.2 / PostgreSQL 9.3
 - Oracle Database 11g Release 2 / Oracle Database 12c Release 1
 - Microsoft SQL Server 2008 R2 / Microsoft SQL Server 2012
 - IBM DB2 9.7 FixPack5 / IBM DB2 10.1 FixPack2
- **DataSource Mapping Setting**

Connection Destination Type

On intra-mart Accel Platform, you can connect to the following 3 types of database.

- System database
 - It is a database to save system data.
 - Connection to the system database should be made available before the application is started.
 - System database is not recommended as the connection destination of application in production environment, since it is used inside the system.
- Tenant database
 - It is a database to save the data to be used in the tenant.
- Shared database

It is a database to save the data outside the intra-mart Accel Platform.
It is used when the linkage with external system is necessary.



Warning

Database that can be used in ViewCreator/TableMaintenance etc. are the tenant database and shared database.

You can set system database and tenant database as the same connection destination, but the use of the table created as the system database will be outside the scope of support.

DataSource Setting

1. Open <(project name)/resin_web.xml> file inside the [ProjectNavigator] by double-clicking and select [Source] tab.
2. Database connection information of the connection destination should be set to <web-app>/<database>/<driver>. Following is the connection example for each database.



Note

In case of multiple tenants

Please prepare DataSource's for the number of tenants.
Please set DataSource to be used for each tenant.

PostgreSQL 9.2 / PostgreSQL 9.3

```
<driver>
<type>org.postgresql.Driver</type>
<url>jdbc:postgresql://localhost:5432/dbname</url>
<user>username</user>
<password>password</password>
</driver>
```

Oracle Database 11g Release 2 / Oracle Database 12c Release 1

```
<driver>
<type>oracle.jdbc.driver.OracleDriver</type>
<url>jdbc:oracle:thin:@localhost:1521:orcl</url>
<user>username</user>
<password>password</password>
</driver>
```

Microsoft SQL Server 2008 R2 / Microsoft SQL Server 2012

```
<driver>
<type>com.microsoft.sqlserver.jdbc.SQLServerDriver</type>
<url>jdbc:sqlserver://localhost:1433;DatabaseName=databasename</url>
<user>username</user>
<password>password</password>
<init-param>
<param-name>SelectMethod</param-name>
<param-value>cursor</param-value>
</init-param>
</driver>
```

IBM DB2 9.7 FixPack5 / IBM DB2 10.1 FixPack2

```
<driver>
<type>com.ibm.db2.jcc.DB2Driver</type>
<url>jdbc:db2://localhost:50000/databasename</url>
<user>username</user>
<password>password</password>
</driver>
```



Note

In case you set system database and tenant database as separate connection destinations, please specify different names as JNDI name.

DataSource Mapping Setting

1. Open <(project name)/conf/data-source-mapping-config.xml> file inside the [ProjectNavigator] by double-clicking,

and select [Source] tab.

- Specify JNDI name which is set as DataSource.
Specify DataSource which is set for each system database and tenant database.

Set JNDI name of the system database to `<data-source-mapping-config>/<system-data-source>/<resource-ref-name>`.

```
<system-data-source>
<resource-ref-name>java:comp/env/jdbc/system</resource-ref-name>
</system-data-source>
```

Set JNDI name of tenant database to `<data-source-mapping-config>/<tenant-data-source>/<resource-ref-name>`.

```
<tenant-data-source>
<tenant-id>default</tenant-id>
<resource-ref-name>java:comp/env/jdbc/tenant</resource-ref-name>
</tenant-data-source>
```



Warning

For `<tenant-id>`, please set Tenant ID which is created at the initial time.

Storage

The path to be used as Storage area is specified.

- Open `[(project name)/conf/storage-config.xml]` file inside the [ProjectNavigator] by double-clicking and select [Source] tab, and select [Source] tab.
- Please set the path of Storage area to `<storage-config>/<storage-info>/<root-path-name>`.

```
<root-path-name>/tmp/storage</root-path-name>
```

- About the storage (public storage) to be used for each tenant, the path would be different depending on whether it is specified by the configuration file or from the screen.
If it is specified by the configuration file, it will be `[<root-path-name>/<public-directory-name>/<storage-directory-name>/Tenant ID]`.
If it is specified from the screen that is described later, it will be `[Storage path specified from the screen /<storage-directory-name>]`.



Note

In case of Multiple Tenants by WAR file

Prepare Storage areas for the number of tenants.
Please set the Storage area to be used for each tenant.



Note

In case distributed environment is built

Path that is specified to the root directory of Storage must be set so that all of them refer to the same shared directory.
In case reference destination is different for each server, the file placed on the Storage cannot be shared.

SessionTimeout

Timeout time (minutes) from the last operation is set.

- Open `<(project name)/resin_web.xml>` file inside the [ProjectNavigator] by double-clicking and select [Source] tab.
- Specify timeout time (minutes) to `<web-app>/<session-config>/<session-timeout>`.

```
<session-config>
<session-timeout>30</session-timeout>
</session-config>
```



Note

In case of multiple tenants

Please set timeout time (minutes) for each tenant.

Locale

The language to be used is set.

intra-mart Accel Platform provides 3 languages, which are Japanese (ja), English (en), and Chinese (simplified) (zh_CN).

1. Double-click [juggling.im] inside the [ProjectNavigator].
2. Select [Internationalization]-[Locale Master] from [Configuration File] tab and click [Output] which is located on the right.
When it is output, <locale-config/im-locale-default.xml> file will be displayed inside the [ProjectNavigator].
3. Open <locale-config/im-locale-default.xml> file inside the [ProjectNavigator] by double-clicking and select [Source] tab.
4. Please edit inside the <locale-config>/<locale>.

```
<locale name="en" default="true">
  <encoding-name>UTF-8</encoding-name>
</locale>
<locale name="ja">
  <encoding-name>UTF-8</encoding-name>
</locale>
<locale name="zh_CN">
  <encoding-name>UTF-8</encoding-name>
</locale>
```



Note

Setting contents in case of Japanese (ja) only operations will be shown as an example.

```
<?xml version="1.0" encoding="UTF-8"?>
<locale-config
  xmlns="http://intra_mart.co.jp/system/i18n/locale/config/locale-config"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://intra_mart.co.jp/system/i18n/locale/config/locale-config"
  >
  <locale name="ja">
    <encoding-name>UTF-8</encoding-name>
  </locale>
</locale-config>
```



Warning

Even though the setting change has been made on intra-mart Accel Platform, data for the 3 languages will be imported when [Tenant Environment Setup] (which is described later) is executed. However, only the selected language will become available on the screen.



Warning

It is not recommended to change locale after the system operations started. Locale to be used should be determined before the operations are started.

JavaMail

This setting is about mail sending on intra-mart Accel Platform.

Open <(project name)/conf/javamail-config/javamail-config.xml> file inside the [ProjectNavigator] by double-clicking, and select [Source] tab.

Please refer to [[Configuration File Reference](#)] for the setting contents of [javamail-config.xml].

Setting for Distributed / Web Server Configuration

Network

Network configuration of intra-mart Accel Platform is set.

1. Open <conf/network-agent-config.xml> file inside the [ProjectNavigator] by double-clicking and select [Source] tab.
2. Specify IP address of Resin to <network-agent-config>/<TCP>/<initial-hosts>/<host>.

Please add them for the number of target Resin's in case of distributed configuration.

- Specify clustering ID to <network-agent-config>/<id>.

This clustering ID should be specified for each tenant, if multi-tenant environment is to be built. Please specify the same clustering ID in the case of distributed configuration.

- Specify the port number for communication when you do clustering to <network-agent-config>/<bind-port>.

Port numbers should be separated to avoid port number collision in case multi-tenant environment is built.

- Specify the port range to <network-agent-config>/<port-range>.

If the port number that is specified by <network-agent-config>/<bind-port> is already used, this port range searches and uses substitute port number for the range of setting value.

```
<id>prototype</id>
<bind-port>5200</bind-port>
<port-range>2</port-range>
<preferIPv4Stack>true</preferIPv4Stack>

<TCP>
<initial-hosts>
<host address="127.248.100.1"/>
<host address="127.248.100.2"/>
<host address="127.248.100.3"/>
</initial-hosts>
</TCP>
```

Base URL

Base URL for server context setting should be set.

- Open <conf/server-context-config.xml> inside the [ProjectNavigator] by double-clicking and select [Source] tab.
- Specify the base URL of intra-mart Accel Platform to <server-context-config>/<base-url>.



Warning

If base URL has not been set, following limitation will occur.

- If IM-Workflow is used.

Replacement of replacement character string [IM_URL] / [IM_URL_Limit] of Mail definition and IMBox definition is not executed.

Setting for each Module

External Menu Linkage

Topics :local:

- External Menu Linkage**

Overview

Connection destination information is set for the external menu linkage on intra-mart Accel Platform.

What is External Menu Linkage?

It is a function to display menu information from multiple providers as one menu for use on intra-mart Accel Platform SingleSignOn(SSO) when the system is built by using SingleSignOn(SSO).

Menu information thus obtained will be displayed on the global navigation of theme, tree menu and site map.

User code of intra-mart Accel Platform log-in user and that of menu provider must be the same.

What is Menu Provider ?

Web application at connection destination which obtains menu information is called a menu provider.

In the external menu linkage function, menu information is to be obtained from the menu provider by using SOAP Web service.

Web service module should be installed in menu provider in advance.

Please refer to [**Web Service Module**] for Web service module.

What is Menu Client?

Web application which obtains menu information from menu providers and integrates them into one menu information for display is called a menu client.

By accessing intra-mart Accel Platform which operates as menu client, users can use multiple Web application services without worrying where they are located.

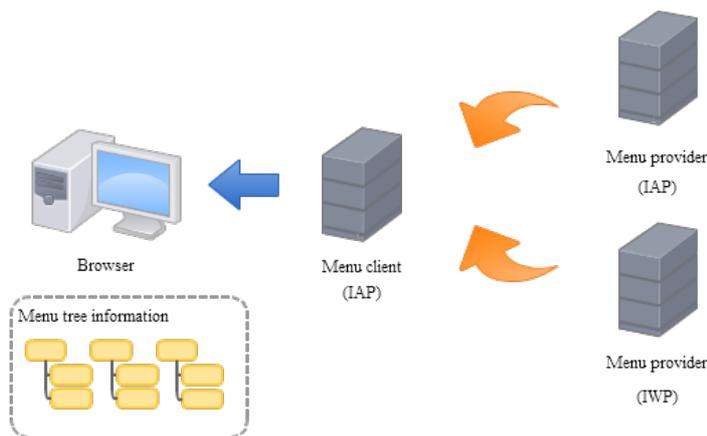


Diagram External Menu Linkage

Warning

If you use external menu linkage function, it is recommended to do SSO authentication on each application server to be linked.

If you use external menu linkage function without using SSO, following limitations will occur.

- Automatic log-in cannot be made even though you access the menu obtained from the menu provider.

Error page will be displayed if there is authority setting on the corresponding page. You can transition from the error page to the log-in screen for log-in, but you may not log-in properly depending on the browser setting or environment.

If the menu provider is intra-mart Accel Platform, the control will be in place to suppress the display of global navigation. However, this control will not work when you access without logging in, and the global navigation of menu client and that of menu provider are both displayed.
- Since you log-in to menu client and menu provider separately, it is not guaranteed that they are the same user.

Menu information to be obtained by external menu linkage is the information that is associated with the user who has logged-in to the menu client. It is difficult to judge on the screen if the log-in to menu provider is made by another user, and so incorrect operation might be performed.
- Even though you log-out from the menu client, you will not be automatically logged-out from menu provider side.

Access can be made while you logged-in by accessing menu provider directly.

Menu Client Environment Build Procedures

External Menu Linkage Module Selection

[Additional Function]-[External Menu Linkage] module is selected on im-Juggling.

Menu Provider Setting

Output [External Menu Linkage]-[External Menu Linkage Connection Destination Setting from [Configuration File] tab.

CState menu provider setting to [External Menu Linkage Connection Destination Setting (menu-provider-config.xml)] as follows.

```
<?xml version="1.0" encoding="UTF-8"?>
...
<menu-provider id="sample">
  <end-point> http://<HOST>:<PORT>/<CONTEXT_PATH>/services/MenuService </end-point>
  <login-group> <Log-in group ID at connection destination> </login-group>
  <user> <User code of connection destination user> </user>
  <password> <Connection destination user password> </password>
</menu-provider>
...
```

About Menu Provider Information

Setting information should be provided from the system administrator of menu provider in advance. Please contact the system administrator of menu provider for the following information.

Connection It is a connection destination URL of menu provider.
 Destination End Point Please see the format below.

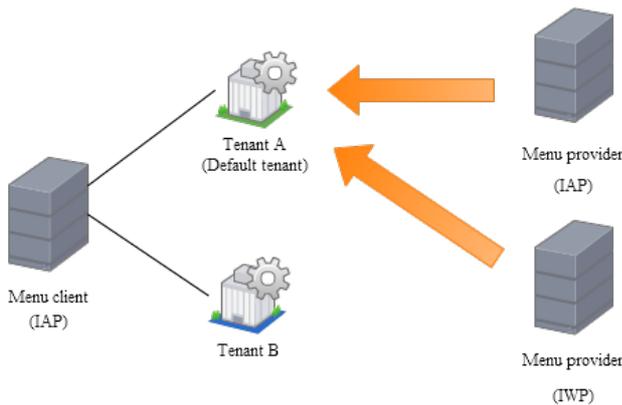
```
http://<HOST>:  

    <PORT>/<CONTEXT_PATH>/services/MenuService
```

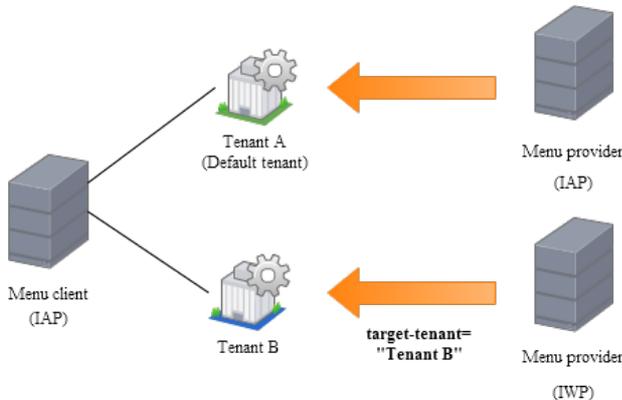
Connection	It is a log-in group ID when menu provider is intra-mart WebPlatform.
Destination Log-in Group ID	In case the menu provider is intra-mart Accel Platform, it will be the tenant ID.
Connection	It is a user code of the user for Web service connection with Web service authority.
Destination User Code	
Connection	It is a password of the user for Web service connection with Web service authority.
Destination User Password	

About Menu Provider Setting when Multiple Tenants are operated

When multiple tenants are operated, the menu provider setting will be enabled for the default tenant as standard.



If you want to set the menu provider to the tenant menu other than the default tenant, you can set the menu provider to arbitrary tenant menu by setting [target-tenant] option.



About Setting Sequence of Menu Provider

Multiple menu providers can be set.

In standard, the obtained menu information is displayed to global navigation, tree menu, and site map in the order they were set.

For global navigation, following operations are made by setting [editable] option.

- Item for display can be selected on the menu setting screen and can be set to display in arbitrary position.
- Menu information that was not selected on the menu setting screen would not be displayed.

Note
 Please refer to the [External Menu Linkage Connection Setting] section of [Setting Reference] for the detail setting contents of configuration file.

Note
 Please refer to the [External Site Menu Link Registration] section of [Tenant Administrator Operations Guide]

for display sequence setting on menu setting screen.

Information can be obtained from Menu Provider

Following information can be obtained from menu provider.

- **Menu information when general user displays the menu**
- **Menu information when menu administrator sets the menu**

Menu Information when General User displays the Menu

It is the menu information that can be obtained when general user displays the menu to global navigation or site map.

Menu information for which the user who has logged-in to the menu client has display authority is obtained from menu provider.

User code of log-in user and that of menu provider of intra-mart Accel Platform should be the same.

Major menu information that can be obtained are listed below.

- Menu Structure
- Menu Display Name
- Menu Information URL

[Menu Structure] is the information of display sequence and layer of menu folder and items that are set in the menu provider.

[Menu Display Name] is the user locale display name of the menu provider.

If user locale of menu provider and that of menu client do not match, the locale of display name will not be consistent.

[Menu Information URL] will be the absolute URL to access the menu provider.

If the menu provider should access by proxy server, appropriate base URL should be set at menu provider side.

Please refer to the setting method of base URL for each Web service module that is provided in next topic [**Web Service Module**], and do the setting.

Menu Information when Menu Administrator sets the Menu

It is the menu information that can be obtained as setting origin when the menu administrator sets display subject and display destination on the menu setting screen.

User who operates the menu setting screen of menu client obtains menu information with administrator authority from menu provider.

User code of log-in user and that of menu provider in intra-mart Accel Platform should be the same.

Major information that can be obtained are listed below.

- Menu Structure
- Menu Display Name
- Menu Information ID

[Menu Structure] is the information of display sequence and layer of menu folder and item that are set in the menu provider.

[Menu Display Name] is the user locale display name of the menu provider.

Display name that is obtained here will be used only on the menu setting screen.

When it is displayed in the global navigation, the display name that was obtained in [**Menu Information when General User displays the Menu**] will be used.

[Menu Information ID] will be the target menu ID when displaying in the global navigation.

If the display destination is set on the menu setting screen, [Provider ID] and [Menu Information ID] are saved.



Warning

In the module provided by **External Menu Linkage Service for intra-mart WebPlatform v7.2**, general user always obtains all information since he/she does not have administration authority.

Web Service Module

Following modules are the Web service provided by Intramart.

- External Menu Linkage Service for intra-mart Accel Platform
- External Menu Linkage Service for intra-mart WebPlatform v7.2

External Menu Linkage Service for intra-mart Accel Platform

External menu linkage service for intra-mart Accel Platform is an option module.

Select [Additional Function]-[Function for Web Service]-[External Menu Linkage Web Service] module in im-Juggling and create war.

If proxy server is used, base URL should be set for menu information generation.
 Base URL setting uses intra-mart Accel Platform common setting. Please refer to [**Base URL**] chapter.

Authorization setting should be done to enable Web service module.
 Please create new user for Web service connection and give execution permission to the following resources by authorization setting. (Authority may also be given to the existing user.)
 Please set the same authority to 2 resources below.

- Resource Type : Web Service
- Resource Group/Resource Name:
 1. External Menu Linkage/External Menu Information Obtaining
 2. External Menu Linkage/External Menu Information Obtaining (Administration)

Following information will be provided to the system administrator of menu client.

End Point for Web Service Connection	Please see below format.
	<i>http://<HOST>: <PORT>/<CONTEXT_PATH>/services/MenuService</i>
User Code for Web Service Connection	It is a user code of user who is authorized.
User Password for Web Service Connection	It is a password of user who is authorized.

External Menu Linkage Service for intra-mart WebPlatform v7.2

External Menu Linkage Service for WebPlatform v7.2 is provided from patch6 or later.
 Functions to set display sequence of external menu in menu client is provided in patch7 or later.

If proxy server is used, base URL should be set for menu information generation.
 Following settings are used in this module. Please add them if there is no setting.

- Configuration File : %Install Path of ServerManager% /conf/parameter.xml
- Setting Contents :

```

<param>
  <param-name>im.web_server.url</param-name>
  <param-value>http://<accessible host name>:<PORT></param-value>
</param>
```

Web service access setting should be done by log-in group administrator to enable Web service module.
 Please create a role for Web service connection and new user who has the role and give execution permission to the following Web service by Web service access setting. (Authority may also be given to the existing user.)
 Same authority should be set to the following 2 operations.

- Web Service Name : MenuService
- Operation Name :
 1. getAvailableMenuTree
 2. getManagedMenuTree (provided in patch7 or later.)

Following information are provided to the system administrator of menu client.

End Point for Web Service Connection	Please see the format below.
	<i>http://<HOST>: <PORT>/<CONTEXT_PATH>/services/MenuService</i>
Web Service Connection Destination Log-in Group ID	It is a log-in group ID that obtains menu information.
User Code for Web Service Connection	It is a user code of user who is authorized.
User Password for Web Service Connection	It is a user password of user who is authorized.

 **Warning**

In intra-mart WebPlatform v7.2.6, display sequence of external menu cannot be set.
 If intra-mart WebPlatform v7.2.6 is used, please do not set [editable] option to the configuration file of menu client.

A function to set display sequence of external menu can be used by applying individual patch in the following column.
 In that case, [editable] option can be set to the setting file of menu client.

**Note**

Individual patch module to enable the setting of external menu display sequence on intra-mart WebPlatform v7.2.6, you can download it from the URL below.

- http://www.intra-mart.jp/download/product/iap/archive/iwp726_id22891_20131001.zip

Please decompress the subject file, read the expanded readme.txt, and do the installation and setting.

**Note**

If you click intra-mart WebPlatform link from intra-mart Accel Platform menu, log-in to intra-mart WebPlatform will not be performed automatically. For automatic log-in, SingleSignOn (hereafter called as SSO) product support is separately required.

IM-SecureSignOn for Accel Platform (described as IM-SSO from now) is SSO product that supports iAP. In this module, additional module to achieve automatic log-in when external menu linkage is used using IM-SSO is included. After the installation of IM-SSO, please do the following setting to do automatic log-in using IM-SSO.

It modifies %Install Path of ApplicationRuntime% /doc/imart/WEB-INF/web.xml.

(Please add the setting correctly immediately after the setting of HTTPContextHandlingFilter. If the setting location is not correct, it does not work properly.)

```
<filter>
  <filter-name>HTTPContextHandlingFilter</filter-name>
  <filter-class>jp.co.intra_mart.common.aid.jsdk.javax.servlet.filter.HTTPContextHandlingFilter</filter-class>
</filter>
<!-- Add below ↓↓↓ -->
<filter>
  <filter-name>AutoLoginFilter</filter-name>
  <filter-class>jp.co.intra_mart.foundation.security.filter.AutoLoginFilter</filter-class>
</filter>
<!-- ↑↑↑ until here -->
:

<filter-mapping>
  <filter-name>HTTPContextHandlingFilter</filter-name>
  <servlet-name>MenuServlet</servlet-name>
</filter-mapping>
<!-- Add below ↓↓↓ -->
<filter-mapping>
  <filter-name>AutoLoginFilter</filter-name>
  <servlet-name>MenuServlet</servlet-name>
</filter-mapping>
<!-- ↑↑↑ until here -->
```

With the settings above, automatic log-in is performed by reading Cookie information that is set in VANADIS Login Server when accessing Menu URL (~.menu).

If Cookie information is set, general user cannot log-in/out on intra-mart WebPlatform. Please do not fail to execute log-in/out on VANADIS Login Server.

LDAP Authentication Configuration File (in case LDAP authentication is used for account authentication)

This section describes how to use LDAP authentication for account authentication on intra-mart Accel Platform.

Topics

- **LDAP Authentication Module Function**
- **LDAP Authentication Module Use**
- **LDAP Authentication Configuration File**
 - **<ldap-certification-config>**
 - **<ldap-server>**
 - **<search-controls>**
 - **<certification-options>**
 - **<option>**

It is a module to do the authentication for LDAP server using user ID and password which were entered when the account was authenticated.

LDAP authentication module provides the following functions.

- You can search and authenticate the user who exists under the directory of LDAP server which has been set (multiple OU's are supported).
- Multiple LDAP servers can be set.
 - In case LDAP server goes down, the contact destination will be sequentially switched among available LDAP servers.
 - In case the authentication has failed on LDAP server, the contact destination can be sequentially switched among LDAP servers.



Warning

Account that has the same user ID with the user ID of LDAP server is also required on intra-mart Accel Platform.

- Account information of intra-mart Accel Platform will be used for the information other than password.



Warning

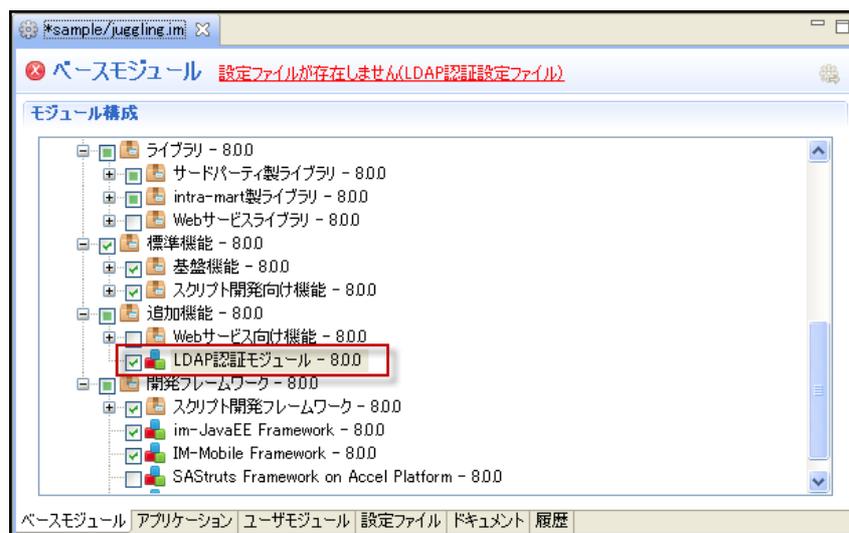
When Active Directory is used for LDAP server, it is necessary to set the LDAP user for search for doing the user search on LDAP server.

Please refer to [<search-controls>](#) for details.

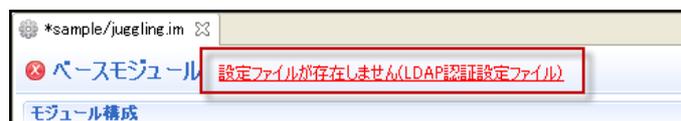
LDAP Authentication Module Use

In case you use LDAP authentication module, the module should be added by the following procedures.

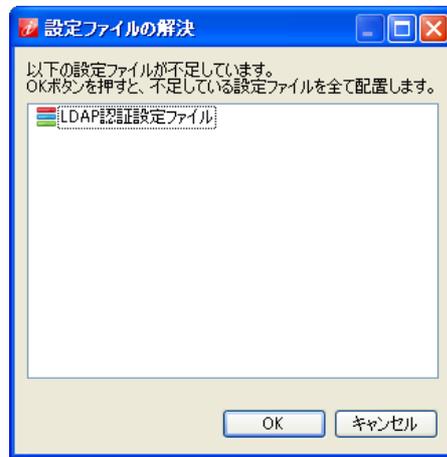
1. Select LDAP authentication module at im-Juggling.



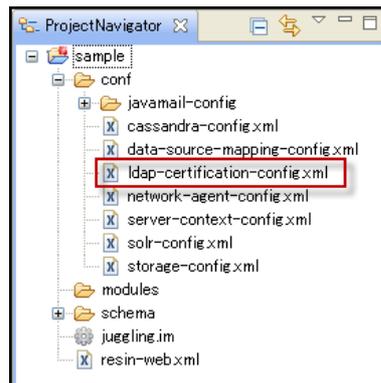
2. When LDAP authentication module is selected, warning message will be displayed on the upper part of editor. Then click the link of [Configuration file does not exist(LDAP authentication configuration file)].



3. Click [OK] after you see [Configuration File Resolution] dialog is displayed. LDAP authentication configuration file (ldap-certification-config.xml) will be added to "conf" in the project.



4. Please edit the added ldap-certification-config.xml by the editor.



LDAP Authentication Configuration File

This file sets LDAP server and various other items for LDAP authentication.

```
<?xml version="1.0" encoding="UTF-8"?>
<ldap-certification-config
xmlns="http://intra-mart.co.jp/system/security/certification/provider/ldap"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://intra-mart.co.jp/system/security/certification/provider/ldap ../schema/ldap-certification-config.xsd">
  <enable>false</enable>
  <load-balancing>false</load-balancing>
  <attempt-on-failed-authentication>true</attempt-on-failed-authentication>
  <log>false</log>
  <ldap-servers>
    <ldap-server>
      <permit-no-password>true</permit-no-password>
      <provider-url>ldap://localhost:389/</provider-url>
      <context-factory>com.sun.jndi.ldap.LdapCtxFactory</context-factory>
      <base-dn>dc=ldaps,dc=intra,dc=intra-mart,dc=jp</base-dn>
      <search-filter>sAMAccountName=?</search-filter>
      <search-controls>
        <connect-timeout-property-name>com.sun.jndi.ldap.connect.timeout</connect-timeout-property-name>
        <connect-timeout>0</connect-timeout>
        <searching-dn>sAMAccountName=admin,cn=User,dc=ldaps,dc=intra,dc=intra-mart,dc=jp</searching-dn>
        <searching-pw>*****</searching-pw>
        <count-limit>0</count-limit>
        <time-limit>0</time-limit>
      </search-controls>
    </ldap-server>
    <ldap-server>
      <permit-no-password>true</permit-no-password>
      <provider-url>ldap://localhost2:389/</provider-url>
      <context-factory>com.sun.jndi.ldap.LdapCtxFactory</context-factory>
      <base-dn>ou=People,dc=example,dc=com</base-dn>
      <search-filter>uid=?</search-filter>
      <search-controls>
        <connect-timeout-property-name>com.sun.jndi.ldap.connect.timeout</connect-timeout-property-name>
        <connect-timeout>0</connect-timeout>
        <searching-dn>uid=admin,ou=People,dc=example,dc=com</searching-dn>
        <searching-pw>*****</searching-pw>
        <count-limit>0</count-limit>
        <time-limit>0</time-limit>
      </search-controls>
    </ldap-server>
  </ldap-servers>
</ldap-certification-config>
```

<ldap-certification-config>

It provides common settings for LDAP authentication.

Child Elements of <ldap-certification-config>

Tag	Description	Mandatory	Setting Value	Default Value	Multiple Settings
<enable>	It sets if LDAP authentication is used.	O	true / false	None	X
<load-balancing>	Enable load balancer. false : It tries to do authentication in the sequence of <ldap-server> that is set in <ldap-servers>. true : It determines the starting position of <ldap-server> randomly, and tries the authentication in the sequence from the determined position.	X	true / false	false	X
<attempt-on-failed-authentication>	It tries to do authentication for next LDAP <ldap-server> when the authentication has failed (due to invalid user ID or password). false : It does not make a try for next <ldap-server>. true : It tries to do authentication for the next <ldap-server>.	X	true / false	false	X
<log>	It sets whether to output log to the console. It is an option for debugging.	X	true / false	false	X
<ldap-servers>	It sets LDAP server to be used for authentication by using <ldap-server> under this tag.	O	None	None	X

<ldap-server>

LDAP server setting for LDAP authentication is stated.

They are the child elements of <ldap-servers>.

Child Elements of <ldap-server>

Tag	Description	Mandatory	Setting Value	Default Value	Multiple Settings
<ldap-server>	LDAP server setting for the authentication is stated. If there are multiple server settings, an attempt to communicate with the LDAP server is made in the sequence of setting. If the communication cannot be established, it tries to communicate with the next LDAP server.	O	None	None	One or more

Child Elements of <ldap-server>

Tag	Description	Mandatory	Setting Value	Default Value	Multiple Settings
<permit-no-password>	It sets if authentication by null password is permitted. false : Null password is considered as authentication failure. true : Inquire LDAP with null password.	X	true/false	false	X
<provider-url>	It sets provider URL. [Example]ldap://localhost:389/	O	URL	None	X
<context-factory>	It states LDAP server setting for authentication.	X	Context factory class name	com.sun.jndi.ldap.LdapCtxFactory	X

Tag	Description	Mandatory	Setting Value	Default Value	Multiple Settings
<base-dn>	It sets the base of identification information. [Example]ou=People,dc=example,dc=com (Open LDAP) [Example]dc=ldaps,dc=intra,dc=intra-mart,dc=jp (Active Directory)	O	None	None	X
<search-filter>	It sets unique attribute to identify the user. [example]uid=? (Open LDAP) [Example]sAMAccountName=? (Active Directory) <serch-filter> can be used instead of <search-filter>, but please use <search-filter>.	O	None	None	X
<search-controls>	It sets options to search the user on LDAP server.	X	None	None	X
<certification-options>	It sets the option when contacting LDAP server on user authentication.	X	None	None	X

<search-controls>

Options to be used to inquire LDAP server for user search are set. They are the child elements of <ldap-server>.

Child Elements of <search-controls>

Tag	Description	Mandatory	Setting Value	Default Value	Multiple Settings
<connect-timeout-property-name>	It sets the property name which sets the connection timeout. [Example]com.sun.jndi.ldap.connect.timeout	X	Character string	None	X
<connect-timeout>	It sets the connection timeout time. In case com.sun.jndi.ldap.connect.timeout is set to <connect-timeout-property-name>, the integer value greater than 0 should be set representing number of milliseconds. Connection trial will be cancelled if the connection with the LDAP server cannot be established within this time period. If integer 0 or less is set or if no setting is made, timeout value of network protocol such as TCP will be applied.	X	milli second	None	X
<searching-dn> or <serching-dn>	It sets user (DN) to search the user by LDAP server. [Example]uid=admin,?ou=People,dc=example,dc=com (Open LDAP) [Example]sAMAccountName=?,dc=ldaps,dc=intra,dc=intra-mart,dc=jp (Active Directory) This setting is required for the case of ActiveDirectory. <serching-dn> can also be used instead of <searching-dn>, but please use <searching-dn>.	X	None	None	X
<searching-pw> or <serching-pw>	It sets user password to search the user by LDAP server. This setting is required for the case of ActiveDirectory. <serching-pw> can also be used instead of <searching-pw>, but please use <searching-pw>.	X	None	None	X
<count-limit>	It sets the maximum search numbers. Default:0 (No upper limit)	X	Maximum search numbers	0(no upper limit)	X
<time-limit>	It sets time limitation (milliseconds).	X	Milli second	0(no limitation)	X
<deref-linf>	It sets presence or absence of indirect reference.	X	true / false	false	X
<returning-obj>	It sets if a part of results is returned as object.	X	true / false	false	X

Tag	Description	Mandatory	Setting Value	Default Value	Multiple Settings
<returning-attribute>	It sets the attribute that will be returned as the result. With specification : It returns only the specified attribute. Without specification : It returns all attributes.	X	Attribute ID (multiple IDs can be set: delimit by [.] comma)	No specification (all attributes)	X
<options>	It sets additional option to be used for contacting LDAP server on user search. It is a parent tag to set additional options. Additional options are to be set by using <option> under this tag.	X	None	None	X

<certification-options>

It sets the option to be used for contacting LDAP server for user authentication.
They are the child elements of <ldap-server>.

Child Elements of <certification-options>

Tag	Description	Mandatory	Setting Value	Default Value	Multiple Settings
<options>	It sets additional option to be used for contacting LDAP server for user authentication. It is a parent tag to set additional options. Additional options are to be set by using <option> under this tag.	X	None	None	X

<option>

It sets additional options to be used for contacting LDAP server.
they are the child elements of <options>.

```
<options>
  <option name="*****" value="*****"/>
</options>
```

Child Elements of <option>

Tag	Description	Mandatory	Setting Value	Default Value	Multiple Settings
<option>	It sets the contents of addinational options to be used for contacting LDAP server for user authentication.	O	None	None	One or more

<option> Attribute

Attribute Name	Description	Mandatory	Setting Value	Default Value
name	It sets option name.	O	Character string	None
value	It sets option value.	O	Character string	None

SAStruts

Configuration File for SAStruts (in case database is used on SAStruts+S2JDBC)

Settings will be changed or confirmed in case SAStruts+S2JDBC framework is used.

- app.dicon is edited.

1. Please remove the comment out of s2jdbc.dicon and enable include.

```
<include path="convention.dicon"/>
<include path="aop.dicon"/>
<include path="j2ee.dicon"/>
<include path="s2jdbc.dicon"/>
```

**Note**

After the war file is expanded, it is necessary to set "dialect" that defines which database is used in s2jdbc.dicon.
Put <property name="dialect"> definition out of the comment and enable it according to the database that you want to connect to.
Please refer to http://s2container.seasar.org/2.4/ja/s2jdbc_setup.html as to how dialect should be set for the database to be used.

Configuration File for SAStruts (in case SAStruts version portlet is used)

If SAStruts version portlet is used, configuration file should be changed.

- struts-config.xml file is edited.
 1. Add configuration file on [ProjectNavigator].
 - There are following methods.
 - Add [Configuration File for SAStruts] from additional resource placement in the wizard that creates im-Juggling project.
 - Add [Configuration File for SAStruts] from [Additional Resource Selection] after im-Juggling project is created.
 2. Open <struts-config.xml> file inside the [ProjectNavigator] by double-clicking and select [Source] tab.
 3. Change the next setting.

Before change :

processorClass="jp.co.intra_mart.framework.extension.seasar.struts.action.IMS2RequestProcessor"

After change :

processorClass="jp.co.intra_mart.framework.extension.seasar.struts.portlet.action.IMS2RequestProcessor"

TERASOLUNA Global Framework**Configuration File for TERASOLUNA Global Framework (in case shared database is used)**

If the shared database of Accel Platform is used by TERASOLUNA Global Framework, the shared database needs to be registered to the following configuration file.

- classes/META-INF/spring/applicationContext-im_tgfw_common.xml file is edited.
 1. Remove the following comment-out of applicationContext-im_tgfw_common.xml, and specify [Connection ID] to the "value" value of connectId parameter, which becomes the unique ID on the shared database.

```
<bean id="sharedDataSource" class="jp.co.intra_mart.framework.extension.spring.d
<constructor-arg name="connectId" value="<ConnectionID>" />
</bean>
```

**Note**

[Connection ID] is specified when the shared database is registered to tenant.
Please refer to **Shared Database Setting of System Administrator Operations Guide** for how to register the shared database to tenant.

**Note**

In case multiple shared databases are used, please define bean tag for each and set id attribute of bean which is unique from each other.

Configuration File for TERASOLUNA Global Framework (in case JPA is used for repository layer)

If JPA is used for the repository layer of TERASOLUNA Global Framework, following changes of configuration file are necessary.

Settin for Tenant Database

- classes/META-INF/spring/applicationContext-jpa.xml file will be edited.
 1. Please specify the appropriate value to the "value" value of database property according to the

database to be used in the tenant database of <bean id="jpaVendorAdapter">. [*] PostgreSQL is set as the initial setting.

Database	database Property Value
Oracle Database	ORACLE
PostgreSQL	POSTGRESQL
Microsoft SQL Server	SQL_SERVER
IBM DB2	DB2

```
<bean id="jpaVendorAdapter"
class="org.springframework.orm.jpa.vendor.HibernateJpaVendorAdapter">
<property name="showSql" value="false" />
<property name="database">
<value>POSTGRESQL</value>
<!--
<value>DB2</value>
<value>DEFAULT</value>
<value>HSQL</value>
<value>INFORMIX</value>
<value>MYSQL</value>
<value>ORACLE</value>
<value>POSTGRESQL</value>
<value>SQL_SERVER</value>
<value>SYBASE</value>
-->
</property>
</bean>
```

Note

There are 4 validated property values as listed above. Please refer to <http://docs.spring.io/spring/docs/3.2.x/javadoc-api/org.springframework.orm.jpa.vendor.Database.html> for other database property values that can be specified.

- In <bean id="entityManagerFactory">, please specify the package in which entity class (class with @Entity annotation) is stored to the "value" value of packagesToScan property. If there are multiple packages, please specify them with the comma delimiters.

```
<bean id="entityManagerFactory" class="org.springframework.orm.jpa.LocalContainerEntityManagerFactoryBean">
<property name="packagesToScan" value="jp.co.intra_mart.framework.extension.spring.entity" />
<property name="jtaDataSource" ref="dataSource" />
<property name="jpaVendorAdapter" ref="jpaVendorAdapter" />
<property name="jpaPropertyMap" ref="hibernateProperties" />
<property name="persistenceUnitName" value="tenant" />
</bean>
```

Note

For the initial setting of packagesToScan property, "jp.co.intra_mart.framework.extension.spring.entity" package is set. This package is stated only as an example and is not necessary. Please delete this package when packagesToScan property is specified.

Setting when the Shared Database is used

- classes/META-INF/spring/applicationContext-jpa.xml file is edited.
- Remove the following comment-out of applicationContext-jpa.xml, and set packagesToScan property and jtaDataSource property. Please specify the package in which entity class (class with @Entity annotation) is stored to the "value" value of packagesToScan property. If there are multiple packages, please specify them with comma delimiters. For jtaDataSource property, please specify Bean id of shared data source which is registered by applicationContext-im_tgfw_common.xml file.

```
<bean id="sharedEntityManagerFactory" class="org.springframework.orm.jpa.LocalContainerEntityManagerFactoryBean">
<property name="packagesToScan" value="jp.co.intra_mart.framework.extension.spring.entity" />
<property name="jtaDataSource" ref="sharedDataSource" />
<property name="jpaVendorAdapter" ref="jpaVendorAdapter" />
<property name="jpaPropertyMap" ref="hibernateProperties" />
<property name="persistenceUnitName" value="shared" />
</bean>
```

Note

For the initial setting of packagesToScan property, "jp.co.intra_mart.framework.extension.spring.entity" package is set. This package is described as an example and is not necessary. Please delete this package when packagesToScan property is specified.

**Note**

If multiple shared databases are used, please specify bean tag for each, and set id attribute of bean and persistenceUnitName property unique each other.

Configuration File for TERASOLUNA Global Framework (in case MyBatis is used for repository layer)

If MyBatis is used for the repository layer of TERASOLUNA Global Framework, confirmations and changes in the following configuration file are necessary.

Setting for Tenant Database

- Setting for the tenant database is set to classes/META-INF/spring/applicationContext-mybatis.xml file. Please use it as it is with the initial setting.

```
<bean id="sqlMapClient" class="org.springframework.orm.ibatis.SqlMapClientFactoryBean" scope="
<property name="configLocations" value="classpath*:META-INF/mybatis/config/*sqlMapConfig
<property name="mappingLocations" value="classpath*:META-INF/mybatis/sql/**/*-sqlmap.xml
<property name="dataSource" ref="dataSource" />
</bean>

<bean id="queryDAO"
class="jp.terasoluna.fw.dao.ibatis.QueryDAOiBatisImpl">
<property name="sqlMapClient" ref="sqlMapClient" />
</bean>

<bean id="updateDAO"
class="jp.terasoluna.fw.dao.ibatis.UpdateDAOiBatisImpl">
<property name="sqlMapClient" ref="sqlMapClient" />
</bean>

<bean id="spDAO"
class="jp.terasoluna.fw.dao.ibatis.StoredProcedureDAOiBatisImpl">
<property name="sqlMapClient" ref="sqlMapClient" />
</bean>

<bean id="queryRowHandleDAO"
class="jp.terasoluna.fw.dao.ibatis.QueryRowHandleDAOiBatisImpl">
<property name="sqlMapClient" ref="sqlMapClient" />
</bean>
```

Setting in case the Shared Database is used

- classes/META-INF/spring/applicationContext-mybatis.xml file is edited.
- Please remove the following comment-out of applicationContext-mybatis.xml, and specify the Bean id of the shared database registered by the applicationContext-im_tgfw_common.xml file to the "ref" value of dataSource property of <bean id="sharedSqlMapClient">.

```
<bean id="sharedSqlMapClient" class="org.springframework.orm.ibatis.SqlMapClientFactoryBean"
<property name="configLocations" value="classpath*:META-INF/mybatis/config/*sqlMapConfig
<property name="mappingLocations" value="classpath*:META-INF/mybatis/sql/**/*-sqlmap.xml
<property name="dataSource" ref="sharedDataSource" />
</bean>

<bean id="sharedQueryDAO"
class="jp.terasoluna.fw.dao.ibatis.QueryDAOiBatisImpl">
<property name="sqlMapClient" ref="sharedSqlMapClient" />
</bean>

<bean id="sharedUpdateDAO"
class="jp.terasoluna.fw.dao.ibatis.UpdateDAOiBatisImpl">
<property name="sqlMapClient" ref="sharedSqlMapClient" />
</bean>

<bean id="sharedSpDAO"
class="jp.terasoluna.fw.dao.ibatis.StoredProcedureDAOiBatisImpl">
<property name="sqlMapClient" ref="sharedSqlMapClient" />
</bean>

<bean id="sharedQueryRowHandleDAO"
class="jp.terasoluna.fw.dao.ibatis.QueryRowHandleDAOiBatisImpl">
<property name="sqlMapClient" ref="sharedSqlMapClient" />
</bean>
```

**Note**

In case multiple shared databases are used, please specify bean newly for each of SqlMapClientFactoryBean / QueryDAOiBatisImpl / UpdateDAOiBatisImpl / StoredProcedureDAOiBatisImpl / QueryRowHandleDAOiBatisImpl. And then please specify the Bean id of shared database at connection destination to the "ref" value of dataSource property of SqlMapClientFactoryBean. Please also specify the Bean id of SqlMapClientFactoryBean to the sqlMapClient property of each Bean of QueryDAOiBatisImpl / UpdateDAOiBatisImpl /

IMBox

In this section IMBox module for using IMBox is described.
It explains the setting method of Apache Cassandra to be used in IMBox.

Topics

- **IMBox Module Function**
- **IMBox Module Use**
- **Cassandra Server Connection Configuration File (cassandra-config.xml)**
- **Changes from intra-mart Accel Platform 2014 Spring(Granada)**

IMBox Module Function

It is a module to use IMBox.
The function below is provided by IMBox module.

- IMBox can be used.

IMBox Module Use

If you use IMBox module, please select IMBox module in im-Juggling.
In initial setting when im-Juggling project is created, IMBox module is already selected.



Note

In case IMBox is used on smart phone, IMBox smart phone module is needed.
In case IMBox is used in portlet, IMBox portlet module is needed.

Cassandra Server Connection Configuration File (cassandra-config.xml)

Setting Contents

This file is to retain setting information related to Cassandra server connection.



Warning

For the setting value to cassandra-config, its usage has been changed from intra-mart Accel Platform 2014 Spring(Granada).
Please refer to **Changes from intra-mart Accel Platform 2014 Spring(Granada)** for details.



Warning

To cassandra-config.xml, please specify the connection information of <%CASSANDRA_HOME%/conf/cassandra.yaml> file which was set when Cassandra server was built.
Please refer to [IMBox Cassandra Administrator Guide] for the details related to Apache Cassandra settings.

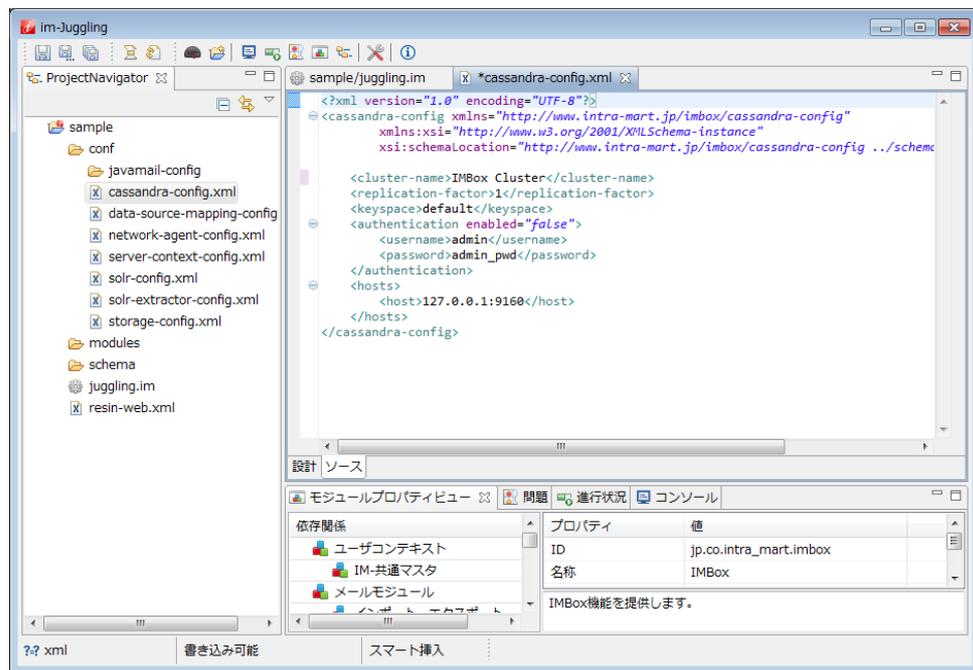
- [IMBox Cassandra Administrator Guide \(Japanese\)](#)
- [IMBox Cassandra Administrator Guide \(English\)](#)
- [IMBox Cassandra Administrator Guide \(Chinese\)](#)

Setting Method

Part of cassandra-config.xml provided as standard is shown below.

```
<cluster-name>Test Cluster</cluster-name>
<replication-factor>1</replication-factor>
<keyspace>default</keyspace>
<authentication enabled="false">
  <username>admin</username>
  <password>admin_pwd</password>
</authentication>
<hosts>
  <host>127.0.0.1:9160</host>
</hosts>
```

- In case setting is made by im-Juggling



Setting Items

Cassandra server connection configuration file items are described.

cassandra-config.xml Elements

Tag	Description	Mandatory	Setting Value	Default Value	Multiple Setting
<cluster-name>	It sets cluster name of Cassandra server. "Test Cluster" which is set to the initial value is the initial value of <%CASSANDRA_HOME%/conf/cassandra.yaml> file.	○	Cluster name	Test Cluster	X
<replication-factor>	Number of data replicas inside the cluster in the distributed configuration are set. Please refer to [Cluster Build of IMBox Cassandra Administrator Guide Cassandra] for the setting of number of replicas.	○	Numeric value	1	X
<keyspace>	It sets key space of Cassandra server. If you build intra-mart Accel Platform newly, you can proceed on the process with initial value "default". If you use same Cassandra cluster from multiple intra-mart Accel Platform, you should specify different key space for each intra-mart Accel Platform tenant.	○	Key space	default	X

Tag	Description	Mandatory	Setting Value	Default Value	Multiple Setting
<authentication>	It sets authentication information for connection to Cassandra. Authentication information setting would be enabled only when "true" is set to enabled attribute. If you use authentication information, you should do connection authentication setting for Cassandra itself. Please refer to [Connection Authentication Setting for IMBox Cassandra Administrator Guide Cassandra] for connection authentication.	O	None	None	X
<username>	It sets connection user name. The setting is applied only when authentication information is used.	"O" only when authentication setting is used	Connection user name	admin	X
<password>	It sets connection password. The setting is applied only when authentication information is used.	"O" only when authentication setting is used	Connection password	admin_pwd	X
<hosts>	It does server setting on which Cassandra is operated.	O	None	None	X
<username>	It sets IP address and port number of server on which Cassandra is operated. If multiple Cassandra's are operated in the distributed configuration, please set IP address and port number of every Cassandra server.	O	IP address : Port number	127.0.0.1:9160	O



Warning

If there exist multiple Cassandra servers, cluster may be configured only by looking at cluster name and judging if Cassandra is in the same cluster.
If you build intra-mart Accel Platform newly, it is recommended to change the initial value.

Changes from intra-mart Accel Platform 2014 Spring(Granada)

Usage of cassandra-config setting value has been changed as below.

- o In case of intra-mart Accel Platform 2013 Winter(Felicia) or earlier
 - o Setting value of connection to Cassandra
- o In case of intra-mart Accel Platform 2014 Spring(Granada) or later
 - o Initial value of Cassandra connection information for tenant environment setup



Note

From intra-mart Accel Platform 2014 Spring(Granada), Cassandra connection information which is registered in Tenant Management - Cassandra Connection Information was used when the connection is made.

Initial value and setting value of Cassandra connection information screen

Item name of Cassandra connection information	Setting value of cassandra-config	Notes
Cluster name	cluster-name	
Key space	keyspace	
Connection destination	host	If multiple hosts are set, all of them will be reflected.
Replication factor	replication-factor	
Authentication information setting	authentication	
Authentication user name	username	It is displayed only when enabled attribute of authentication is true.

Item name of Cassandra connection information	Setting value of cassandra-config	Notes
Authentication password	password	It is displayed only when enabled attribute of authentication is true.

- Cassandra connection information screen

IM-ContentsSearch

Apache Solr to be used in IM-ContentsSearch for Accel Platform is set.

Topics

- **IM-ContentsSearch Function**
- **IM-ContentsSearch Module Use**
- **IM-ContentsSearch Search Subject Addition Module Use**
- **Solr Server Connection Setting (solr-config.xml)**
 - **Changes from intra-mart Accel Platform 2014 Spring(Granada)**
- **Text Extract Setting (solr-extractor-config.xml)**

IM-ContentsSearch Function

It is a module to achieve full text search function in intra-mart Accel Platform. In order to use full text search function, [Apache Solr] server needs to be built. Search subject addition module should be added to add the search subject.

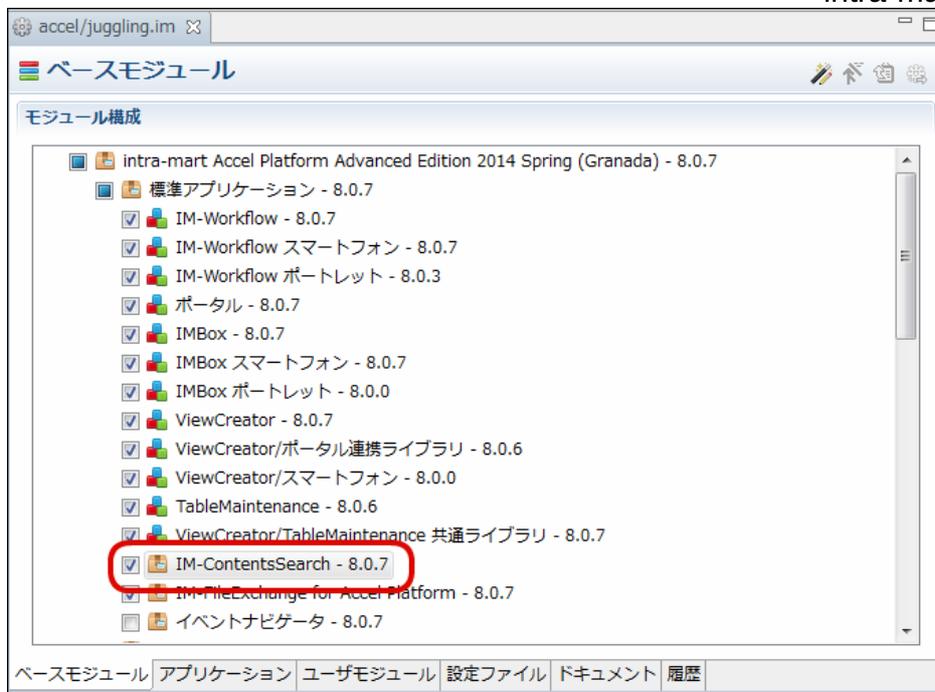
 **Note**

Please refer to the link below for [Apache Solr Setup].

Link : [**Apache Solr Setup**](#)

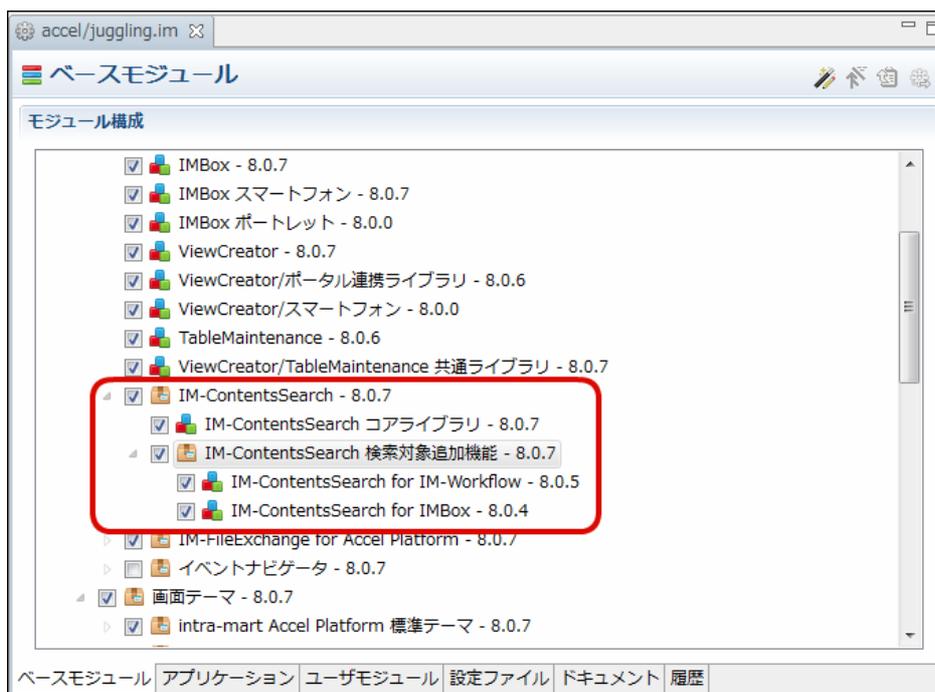
IM-ContentsSearch Module Use

If IM-ContentsSearch module is used, IM-ContentsSearch module should be selected in im-Juggling. In the initial setting when project of im-Juggling is created, IM-ContentsSearch module has been already selected.



IM-ContentsSearch Search Subject Addition Module Use

If search subject addition module is changed, the module under tree of IM-ContentsSearch > IM-ContentsSearch search subject addition function module should be changed.



Solr Server Connection Setting (solr-config.xml)

Setting Contents

It is a file to retain the connection setting information for Solr server.



Warning

For the setting value of solr-config.xml, the intended usage has been changed from intra-mart Accel Platform 2014 Spring(Granada). Please refer to [Changes from intra-mart Accel Platform 2014 Spring\(Granada\)](#) for details.

Setting Method

Shown below is the part of solr-config.xml that is provided as standard.

```

<group name="default">
  <searcher>
    <method>POST</method>
    <distribution-policy>FIRST</distribution-policy>
    <servers>
      <url>http://localhost:8983/solr/default</url>
    </servers>
  </searcher>
  <indexer>
    <distribution-policy>IDHASH</distribution-policy>
    <servers>
      <url>http://localhost:8983/solr/default</url>
    </servers>
  </indexer>
  <extractor ref="im_default" />
</group>

```

Setting Items

solr-config.xml Elements					
Tag	Description	Mandatory	Setting Value	Default Value	Multiple Settings
<group>	It sets Solr server group name. Solr server group name should be set to name of <group>. It can remain as the initial value, "default".	O	Solr server group setting	None	O
<searcher>	It sets Solr server that IM-ContentsSearch connects to for search.	O	Solr server setting for search	None	X
<method>	It sets the method of request that IM-ContentsSearch sends to Solr server for search. Normally, it does not need to be changed from POST.	X	Request method setting that is used for search	POST	X
<distribution-policy>	It sets policy that selects Solr server to which IM-ContentsSearch sends the search request. Available policy for search and that for index creation are different.	X	Selection policy setting of Solr server for search	FIRST	X
<servers>	It sets Solr server list that IM-ContentsSearch connects to for search. Solr server setting is set by the subordinate url tag.	O	Solr server list setting for search	None	X
<url>	It sets Solr server URL that IM-ContentsSearch connects to for search. default is Apache Solr core name and it is the setting value different from Solr server group name. Therefore, please do not change it.	O	Solr server URL setting for search	None	O
<indexer>	It sets Solr server that IM-ContentsSearch connects to for index creation.	O	Solr server setting for index creation	None	O
<distribution-policy>	It sets policy that selects the server for index creation. Available policy for search and that for index creation are different.	X	Selection policy setting of Solr server for index creation	IDHASH	X

Tag	Description	Mandatory	Setting Value	Default Value	Multiple Settings
<servers>	It sets Solr server list that IM-ContentsSearch connects to for index creation. Solr server setting is set by the subordinate url tag.	O	Solr server list setting for index creation	None	X
<url>	It sets Solr server URL that IM-ContentsSearch connects to for index creation. default is Apache Solr core name and it is the setting value different from Solr server group name. Therefore, please do not change it.	O	Solr server URL setting for index creation	None	O
<extractor>	It specifies the setting group of file that IM-ContentsSearch does text extract for index creation. Text extract setting group ID that is defined in solr-extractor-config.xml is specified to ref attribute.	O	Specify text extract setting group	None	X

Changes from intra-mart Accel Platform 2014 Spring(Granada)

If intra-mart Accel Platform 2014 Spring(Granada) version or later is used, the intended usage of solr-config setting value has changed as below.

- Solr connection setting to be registered for the initial tenant environment setup or the tenant environment setup in case no Solr connection setting has been registered
- Initial value of Solr connection setting new creation screen



Note

Only the setting with the name of <group> being "default" will be used.

Text Extract Setting (solr-extractor-config.xml)

Setting Contents

It is a file that retains setting information related to the following contents.

- Common Parameter Setting
- Text Extract Subject File Setting
- Text Extract Method Setting

Setting Method

Shown below is the part of solr-extractor-config.xml that are provided as standard.

```

<extractor name="im_default">
  <default>
    <min-size>0</min-size>
    <max-size>100M</max-size>
    <properties>
      <!-- temporary directory sample for Linux -->
      <property name="tmpDir" type="string">/tmp</property>
      <!-- temporary directory sample for Windows -->
      <!--
      <property name="tmpDir" type="string">C:\temp</property>
      -->
    </properties>
  </default>

  <mapping>
    <!-- Entry for text files -->
    <entry type="text/plain" extension="txt" max-size="1M" class="jp.co.nttdata.intra_mart.contentssearch.text.extraction.
    ...
  </mapping>
</extractor>

```

Setting Items

Items to be set to solr-extractor-config.xml are stated.

Since only the part of elements are described, please refer to [Configuration File Reference Text Extract Setting](#) for details.

solr-extractor-config.xml Elements (partial)

Tag	Description	Mandatory	Setting Value	Default Value	Multiple Settings
<extractor>	It represents one text extract setting group. Text extract setting group name is specified to name attribute.	O	Text extract setting group	None	O
<min-size>	It sets the defined value of text extract subject file size minimum value.	X	Defined value of text extract subject file size minimum value	0 (no limitation)	X
<min-size>	It sets the defined value of text extract subject file size maximum value.	X	Defined value of text extract subject file size maximum value	0 (no limitation)	X
<property>	It sets the defined value of property. Temporary disk area (name attribute "tmDir" of property tag) must be set. Disk area which is accessible for the user who executes intra-mart Accel Platform must be specified.	X	Property defined value setting	None	O

IM-Workflow

IM-Workflow System Setting

This section describes the system common setting of IM-Workflow.

IM-Workflow System Setting

**Note**

IM-Workflow system setting is included in IM-Workflow.

1. Open <conf/im-workflow-system-config.xml> file inside the [ProjectNavigator] by double-clicking and select [Source] tab.
2. Setting contents should be changed depending on the operations.

**Note**

Please refer to [4.1.1.1 System Setting] of [**IM-Workflow Specification**] for details.

IM-Workflow Designer Setting

**Note**

IM-Workflow designer setting is included in IM-Workflow.

1. Open <conf/im-workflow-designer-config.xml> file inside the [ProjectNavigator] by double-clicking and select [Source] tab.
2. Setting contents should be changed depending on the operations.

**Note**

Please refer to [4.1.1.2 Designer Setting] of [**IM-Workflow Specification**] for details.

**Warning**

If you change icon path definition of <im-workflow-designer-config>/<icon> from standard, or if you need to replace node icon, icon placement and replacement by the user module would be necessary.

Please create the user module so that the icon after replacement is deployed to the location defined by the icon path (under system storage), and include the user module to war.

Please refer to [**e Builder for Accel Platform / User Operation Guide**] for user module creation method.

Please edit module.xml in the user module, and IM-Workflow (module ID: jp.co.intra_mart.im_workflow) module must be specified as [Dependent Module]. Unless this specification is made, icon may not be replaced properly.

**Note**

Creation examples of module project are shown.

Module project creation example assumption

Project Name (Artifact ID)	workflow_user_icon_replace
Group ID	mypackage

- Example of module.xml

Specify IM-Workflow (module ID: jp.co.intra_mart.im_workflow) module as [Dependent Module].

```

<module xmlns="urn:intramart:jackling:module" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:conf="urn:intramart:jackling:toolkit:configurations"
xsi:schemaLocation="urn:intramart:jackling:module module.xsd
conf:schemaLocation="urn:intramart:jackling:toolkit:configurations toolkit:configurations.xsd">

<id>mypackage.workflow_user_icon_replace</id>
<version>1.0.0</version>
<type>module</type>

<name>${module.name}</name>
<vendor>${module.vendor}</vendor>
<description>${module.description}</description>

<!-- 変更を不可とする場合やサードパーティモジュールの場合のみ -->
<tags>
<tag>immutable</tag>
<tag>3rd-party</tag>
</tags>

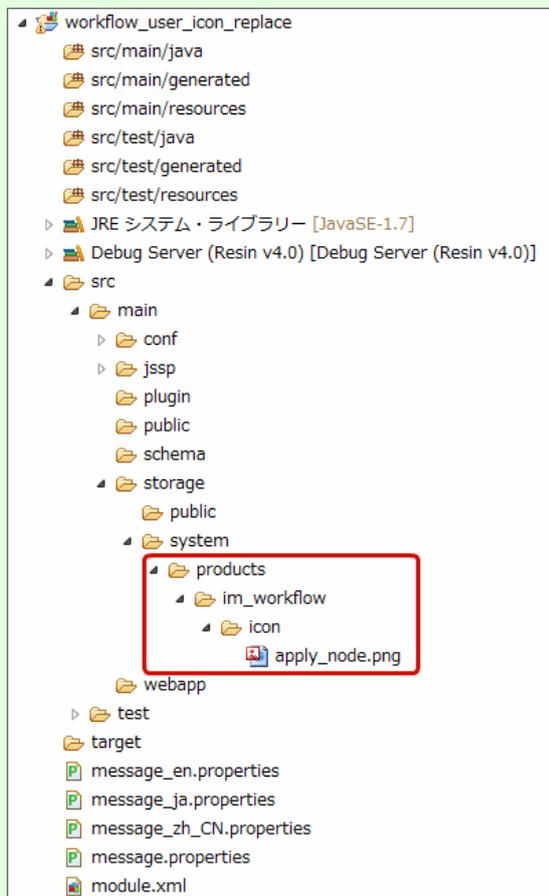
<dependencies>
<dependency>
<module-id>jp.co.intra_mart.im_workflow</module-id>
<verified-version min="8.0.7">8.0.7</verified-version>
</dependency>
</dependencies>

</module>
    
```

Module project resource placement example 1

If icon path definition of <im-workflow-designer-config>/<icon> remains as standard and application node icon is replaced,

only the icon to be replaced will be placed.



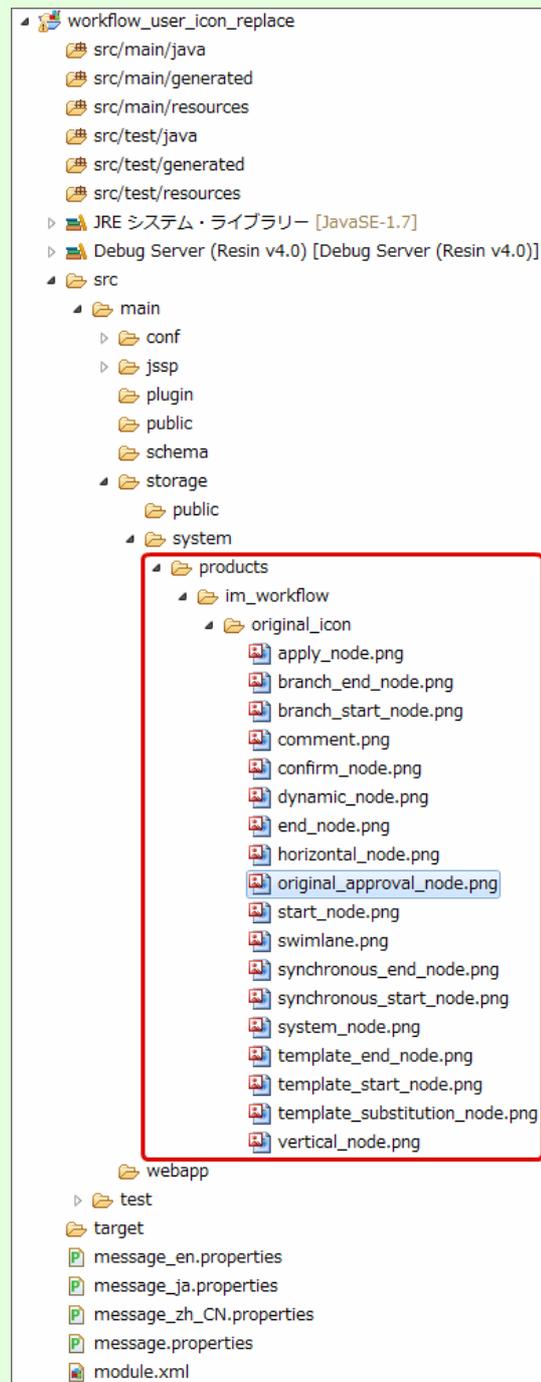
Module project resource placement example 2

If the change of icon path definition of <im-workflow-designer-config>/<icon> is specified as below
 [*] Parameter without any description would remain unchanged from the standard value.

Icon path definition setting	
node-icon-dir	products/im_workflow/original_icon/
approval-node-icon	original_approval_node.png

Since node icon save directory has been changed, all node icons are placed in the directory after the change. And for approval node, approval node icon file that

matches with the changed icon file name should be placed.



Configuration File for IM-Workflow (in case sequence object numbering function is used)

If you use sequence object numbering function, plug-in setting should be changed.

Sequence Object Numbering Function

It is a function to do numbering process using sequence object of database when serial numbers are obtained using WorkflowNumberingManager of IM-Workflow.



Warning

Sequence object numbering function can be used from 2013 Winter(8.0.6).

Use of Sequence Object Numbering Function

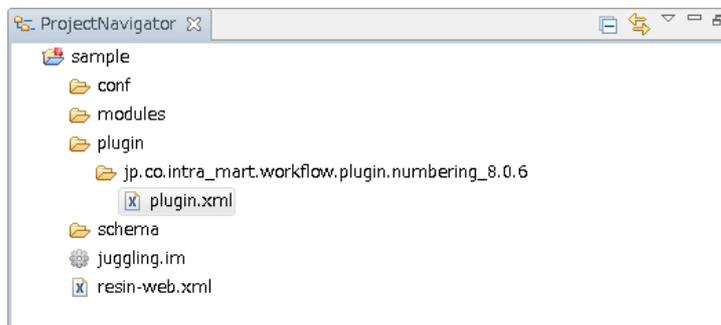
If you use sequence object numbering function, plug-in should be created by the following procedures.

1. Select the project by im-Juggling and create the folder.
Folder should be [plugin/jp.co.intra_mart.workflow.plugin.numbering_8.0.6].

2. Create [plugin.xml] to the created folder.
Please copy the contents below to [plugin.xml].

```
<?xml version="1.0" encoding="UTF-8"?>
<plugin>
  <extension point="jp.co.intra_mart.workflow.plugin.numbering" >
    <numbering
      name="simpleNumberCounter"
      id="jp.co.intra_mart.workflow.plugin.numbering.simpleNumberCounter"
      version="8.0.6"
      rank="0"
      enable="false">
      <extend>
        <java class="jp.co.intra_mart.system.workflow.plugin.numbering.SimpleNumberCounterEvent" />
      </extend>
    </numbering>
    <numbering
      name="databaseSequence"
      id="jp.co.intra_mart.workflow.plugin.numbering.databaseSequence"
      version="8.0.6"
      rank="0"
      enable="true">
      <extend>
        <java class="jp.co.intra_mart.system.workflow.plugin.numbering.DatabaseSequenceEvent" />
      </extend>
    </numbering>
  </extension>
</plugin>
```

- Project structure after plug-in is created



In case client type is treated as PC when accessing from iPad

On intra-mart Accel Platform, client types are assigned depending on the devices that make access. Followings are the client types provided as standard on intra-mart Accel Platform.

Client type ID	Version provided	Module provided	Notes
pc	2012 Autumn	Multi-device	Use from PC devices is assumed (standard)
sp	2012 Autumn	IM-Mobile Framework	Use from mobile devices such as smart phones or tablets is assumed.

On intra-mart Accel Platform, iPad is treated as smart phone devices as standard. In this chapter, setting method to handle iPad as PC device (not as smart phone) will be shown.

Disabling iPad Plug-in

plugin is adopted as the setting method for client type identification. Please refer to [[JavaDoc in PluginManager](#)] for the setting specifications of plugin. Shown below is the method to disable the setting that identifies the client type of iPad as sp.

1. Select the project by im-Juggling, and create the folder.
Folder should be [plugin/ignore_sp_for_ipad].
2. Create [plugin.xml] to the created folder.
Please copy the contents below to [plugin.xml].

```
<?xml version="1.0" encoding="utf-8"?>
<plugin>
  <extension point="jp.co.intra_mart.foundation.multi_device.client_type.matcher">
    <client-type-config id="ipad" version="8.0.999" enable="false" />
  </extension>
</plugin>
```



Note

By using the version function of plugin, setting for `ipad` is overridden and disabled.

In case automatic log-in function is used

Automatic log-in can be made on intra-mart Accel Platform by giving request parameters to the log-in execution page URL.

For example, if the URL below is accessed, log-in is made with user [ueda] and transition is made to [/inbox/mybox].

Please refer to [[Configuration File Reference - Authentication Function - Authentication Setting \(for general users\) - About automatic log-in](#)] for the details about automatic log-in function.

This automatic log-in function is disabled as default from the security point of view. In this chapter, how to make automatic log-in function enabled will be described.

Enabling Automatic Log-in Function

- [conf/token-filtering-target-config/im_certification.xml] file should be edited.
 1. Configuration file will be added on [ProjectNavigator].
 1. Double-click <(project name) /juggling.im> file.
 2. Click [Configuration File] tab.
 3. Select [Secure Token Filter Setting (for authentication function)] of [Authentication Function] and click [Output] which is located on the right.
 2. Open <conf/token-filtering-target-config/im_certification.xml> file inside the [ProjectNavigator] by double-clicking and select [Source] tab.
 3. Comment out the following setting.

- before change

```
<p:entry url="/certification" />
```

- after change

```
<!-- <p:entry url="/certification" /> -->
```

Cache Setting

Authorization Policy Setting Cache

Cache of authorization policy setting of intra-mart Accel Platform is set.



Note

Authorization policy setting cache setting is included in the tenant management function.

1. Open <conf/im-ehcache-config/authz-policy.xml> file inside the [ProjectNavigator] by double-clicking and select [Source] tab.
2. Contents of <im-ehcache-config>/<cache> should be changed according to the size of operations.

```
<cache
  name="IM_TENANT-AUTHZPOLICY"
  enable="true"
  max-bytes-memory="160M"
  time-to-live-seconds="3600"
  time-to-idle-seconds="1800"
/>
```



Note

Please refer to [[Authorization Specifications Authorization Cache Setting](#)] for details.

Authorization Resource Group Setting Cache

Cache about authorization resource group setting of intra-mart Accel Platform is set.



Note

Authorization resource group setting cache setting is included in the tenant management function.

1. Open <conf/im-ehcache-config/authz-resourcetype-service.xml> file inside [ProjectNavigator] by double-clicking and select [Source] tab.
2. Contents of <im-ehcache-config>/<cache> should be changed according to the size of operations.

```
<cache
name="IM_TENANT-AUTHZ_RESOURCECTYPE_GENERALSERVICE"
enable="true"
max-bytes-memory="128k"
time-to-live-seconds="86400"
time-to-idle-seconds="86400"
/>
```



Note

Please refer to [[Authorization Specifications Authorization Cache Setting](#)] for details.

Authorization Resource Blockage Information Cache

Cache about authorization resource blockage information of intra-mart Accel Platform is set.



Note

Authorization resource blockage information cache setting is included in the tenant management function.

1. Open <conf/im-ehcache-config/authz-resource-block.xml> file inside the [ProjectNavigator] by double-clicking and select [Source] tab.
2. Contents of <im-ehcache-config>/<cache> should be changed according to the size of operations.

```
<cache
name="IM_TENANT-AUTHZ_RESOURCE_BLOCK"
enable="true"
max-bytes-memory="320k"
time-to-live-seconds="86400"
time-to-idle-seconds="86400"
/>
```



Note

Please refer to [[Authorization Specifications Authorization Cache Setting](#)] for details.

Routing Setting Cache at Menu Side

Cache related to routing of menu setting in intra-mart Accel Platform is set.



Note

Routing setting cache setting on the menu side is included in the tenant management function.

1. Open <conf/im-ehcache-config/authz-mapped-entry-url.xml> file inside the [ProjectNavigator] by double-clicking and select [Source] tab.
2. Contents of <im-ehcache-config>/<cache> should be changed according to the size of operations.

```
<cache
name="IM_TENANT-AUTHZ_MAPPED_ENTRY_URL"
enable="true"
max-bytes-memory="128k"
time-to-live-seconds="86400"
time-to-idle-seconds="86400"
/>
```



Note

Please refer to [[Authorization Specifications Casche Setting of Authorization](#)] for details.

Authorization IPv4 Subject Setting Cache

It sets cache about IPv4 subject of authorization setting on intra-mart Accel Platform.

 **Note**
 Authorization IPv4 subject setting cache setting is included in the tenant management function.

1. Open <conf/im-ehcache-config/authz-subjecttype-ipv4.xml> file inside [ProjectNavigator] by double-clicking, and select [Source] tab.
2. <im-ehcache-config>/<cache> contents should be changed according to the size of operations.

```
<cache
name="IM_TENANT-AUTHZ_SUBJECTTYPE_IPV4"
enable="true"
max-bytes-memory="64k"
time-to-live-seconds="3600"
time-to-idle-seconds="1800"
/>
```

 **Note**
 In case [max-bytes-memory] and [max-bytes-disk] attributes are set, size of the object is to be calculated before the object is registered to Cache.
 If the object to be registered has a large number of references of another object, calculation process will consume much time, and could cause the performance degradation.
 If the object to be registered has 1000 or more references, the message below will be generated to the log.

The configured limit of 1,000 object references was reached while attempting to calculate size of object. Severe performance degradation could occur if the sizing operation continues. This can be avoided by setting the CacheManger or Cache <sizeOfPolicy> elements reference. If performance degradation is NOT an issue at the configured limit, raise the limit value. For more information, see the Ehcache configuration documentation.

In case this log was generated, please revise the configuration of the objects stored into cache, or consider the use of [max-elements-on-memory] or [max-elements-on-disk] instead of [max-bytes-memory] or [max-bytes-disk].

Unit of Object to be cached

Authorization IPv4 subject setting is to be cached for each tenant.
 Therefore, the number of objects to be cached is one.

Calculation Formula of Cache Size

Rough size of data that is cached can be calculated by the formula below.

$$\text{Cache size} = ((1) + (2)) \times (3)$$

- (1) ... Number of bytes of subject ID related to IPv4 (64 bytes)
- (2) ... Address pattern character string (average 100bytes)
- (3) ... Number of subjects related to the registered IPv4

Default value of intra-mart Accel Platform is set based on the following formula.

$$(64 + 100) \times 400 = 65600$$

$$\Rightarrow 64KB$$

Dropdown Tag Cache

Cache of drop down menu in intra-mart Accel Platform is set.

 **Note**
 Dropdown tag cache setting is included in the tenant management function.

1. Open <conf/im-ehcache-config/menu-dropdown.xml> inside the [ProjectNavigator] by double-clicking and select [Source] tab.
2. Contents of <im-ehcache-config>/<cache> should be changed according to the size of operations.

```
<cache
  name="IM_TENANT-MENU_DROPDOWN"
  enable="true"
  max-bytes-memory="62M"
  time-to-live-seconds="259200"
  time-to-idle-seconds="259200"
/>
```

**Note**

In case [max-bytes-memory] and [max-bytes-disk] attributes are set, size of the object is to be calculated before the object is registered to Cache.

If the object to be registered has a large number of references of another object, calculation process will consume much time, and could cause the performance degradation.

If the object to be registered has 1000 or more references, the message below will be generated to the log.

```
The configured limit of 1,000 object references was reached while attempting to calculate the size of the object. Severe performance degradation could occur if the sizing operation continues. This can be avoided by setting the CacheManger or Cache <sizeOfPolicy> elements. If performance degradation is NOT an issue at the configured limit, raise the limit value. For more information, see the Ehcache configuration documentation.
```

In case this log was generated, please revise the configuration of the objects stored into cache, or consider the use of [max-elements-on-memory] or [max-elements-on-disk] instead of [max-bytes-memory] or [max-bytes-disk].

Unit of Objects to be cached

Dropdown menu is cached for each unit.

Therefore, the number of objects to be cached should be estimated according to the number of users.

Calculation Formula of Cache Size

Approximate size of the data to be cached can be calculated by the calculation formula below.

$$\text{Cache size} = ((1) \times (2) + (3) \times (4) + (5)) \times (6)$$

(1) ... Size of contents to be set to each menu item (average 600bytes)

$$(1) = (1a) + (1b) + (1c) + (1d) + (1e) + (1f) + ((1g) \times (1h))$$

(1a) ... Number of bytes of HTML to be output for each menu item

(1b) ... Number of bytes of menu item ID

(1c) ... Number of bytes of URL

(1d) ... Menu item display name

(1e) ... Menu item display option (pop-up display, iframe display etc.)

(1f) ... Image information

(1g) ... Number of bytes of Argument (key+value)

(1h) ... Number of arguments

(2) ... Number of menu items to be displayed

(3) ... Size of contents to be set to each menu folder (average 150bytes)

$$(3) = (3a) + (3b) + (3c)$$

(3a) ... Number of bytes of HTML to be output for each menu folder

(3b) ... Menu folder display name

(3c) ... Image information

(4) ... Number of menu folders to be displayed

(5) ... HTML that dropdown tag always outputs (700 bytes)

(6) ... Number of users

Default value of intra-mart Accel Platform is set based on the calculation below.

$$(600 \times 50 + 150 \times 10 + 700) \times 2000 = 64400000$$

$$\Rightarrow 62\text{MB}$$

Personal Setting Menu Cache

Cache of personal setting menu of intra-mart Accel Platform is set.

**Note**

Personal setting menu cache setting is included in the tenant management function.

1. Open <conf/im-ehcache-config/menu-personal-settings-item.xml> file inside the [ProjectNavigator] by

- double-clicking and select [Source] tab.
2. Contents of `<im-ehcache-config>/<cache>` should be changed according to the size of operations.

```
<cache
name="IM_TENANT-MENU_PERSONAL_SETTINGS_ITEM"
enable="true"
max-bytes-memory="11M"
time-to-live-seconds="259200"
time-to-idle-seconds="259200"
/>
```



Note

In case [max-bytes-memory] and [max-bytes-disk] attributes are set, size of the object is to be calculated before the object is registered to Cache.

If the object to be registered has a large number of references of another object, calculation process will consume much time, and could cause the performance degradation.

If the object to be registered has 1000 or more references, the message below will be generated to the log.

```
The configured limit of 1,000 object references was reached while attempting to calculate size. Severe performance degradation could occur if the sizing operation continues. This can be avoided by setting the CacheManger or Cache <sizeOfPolicy> elements properly. If performance degradation is NOT an issue at the configured limit, raise the limit value. For more information, see the Ehcache configuration documentation.
```

In case this log was generated, please revise the configuration of the objects stored into cache, or consider the use of [max-elements-on-memory] or [max-elements-on-disk] instead of [max-bytes-memory] or [max-bytes-disk].

Object Unit to be cached

Personal setting menu is cached for each user.

Therefore, the number of objects to be cached will be estimated by the number of users.

Calculation Formula to be cached

Approximate size of the subject data to be cached can be calculated by the formula below.

Cache Size = (1) × (2)

(1) ... Personal menu size (average 5500 bytes)

(2) ... Number of users

Default value of intra-mart Accel Platform is set based on the following calculation.

$5500 \times 2000 = 11000000$
⇒ 11MB

Authorization Subject Information Cache of Portal

Cache of authorization subject information of portal of intra-mart Accel Platform is set.



Note

Authorization subject information cache setting of portal is included in the portal function.

1. Open `<conf/im-ehcache-config/im_portal-subjecttype.xml>` file inside the [ProjectNavigator] by double-clicking and select [Source] tab.
2. Contents of `<im-ehcache-config>/<cache>` should be changed according to the size of operations.

```
<cache
name="IM_PORTAL-SUBJECTTYPE"
enable="true"
max-elements-on-memory="200"
time-to-live-seconds="3600"
time-to-idle-seconds="1800"
/>
```



Note

In case [max-bytes-memory] and [max-bytes-disk] attributes are set, size of the object is to be calculated before the object is registered to Cache.

If the object to be registered has a large number of references of another object, calculation process will consume much time, and could cause the performance degradation.

If the object to be registered has 1000 or more references, the message below will be generated to the log.

```
The configured limit of 1,000 object references was reached while attempting to calculate. Severe performance degradation could occur if the sizing operation continues. This can be avoided by setting the CacheManger or Cache <sizeOfPolicy> elements. If performance degradation is NOT an issue at the configured limit, raise the limit value. For more information, see the Ehcache configuration documentation.
```

In case this log was generated, please revise the configuration of the objects stored into cache, or consider the use of [max-elements-on-memory] or [max-elements-on-disk] instead of [max-bytes-memory] or [max-bytes-disk].

Object Unit to be cached

Authorization subject information of portal is to be cached for each HTTP session. Therefore, the number of objects to be cached will be estimated by the number of maximum HTTP sessions concurrently accessed.

Calculation Formula of Cache Size

Approximate size of data to be cached can be calculated by the following formula.

$$\text{Cache Size (number of objects)} = (1)$$

(1) ... Number of HTTP sessions

Default value of intra-mart Accel Platform is set based on the following calculation.

Number of maximum HTTP sessions concurrently accessed is assumed to be 200.

Function Control Setting

How to Limit File Upload

Following configuration file is edited to operate intra-mart Accel Platform.

Request Control Setting

 **Note**
Request control setting is included in Web module function.

1. Open <(project name)/conf/request-control-config.xml> file inside the [ProjectNavigator] by double-clicking and select [Source] tab.
2. Please refer to [Configuration File Reference] for setting contents of [request-control-config.xml].

In case SAStruts is used

[struts-config.xml] setting is necessary for the file upload on SAStruts.

- struts-config.xml file is edited.
1. Please add the configuration file on [ProjectNavigator].
 - There are following methods.
 - Add [Configuration File for SAStruts] from the additional resource placement in the wizard that creates im-Juggling project.
 - Add [Configuration File for SAStruts] from [Additional Resource Selection] after im-Juggling project is created.
 2. Open <(project name)/struts-config.xml> file inside the [ProjectNavigator] by double-clicking and select [Source] tab.
 3. Click [Source] tab and move to the row where Controller Configuration is defined. ::

```
<!-- ===== Controller Configuration -->
<controller
  maxFileSize="1024K"
  bufferSize="1024"
  processorClass="org.seasar.struts.action.S2RequestProcessor"
  multipartClass="org.seasar.struts.upload.S2MultipartRequestHandler"/>
```

- It changes the value defined in [maxFileSize] attribute.

**Note**

If there is no configuration file in the tree inside [ProjectNavigator],

- Double-click on <(project name)/juggling.im> file.
- Click [Configuration File] tab.
- Select the subject configuration file and click on [Output] on the right.
- Double-click and edit the file displayed on the tree inside [ProjectNavigator].

**Note**

In case of [Multiple Tenants by WAR file] environment, please refer to **Multiple Tenants by WAR file**.

**Note**

Please refer to the document of each application for the configuration file in the module selected by each application.

WAR File Output

**Note**

What is WAR file ?

It is a Web Application Archive file defined in JavaEE.

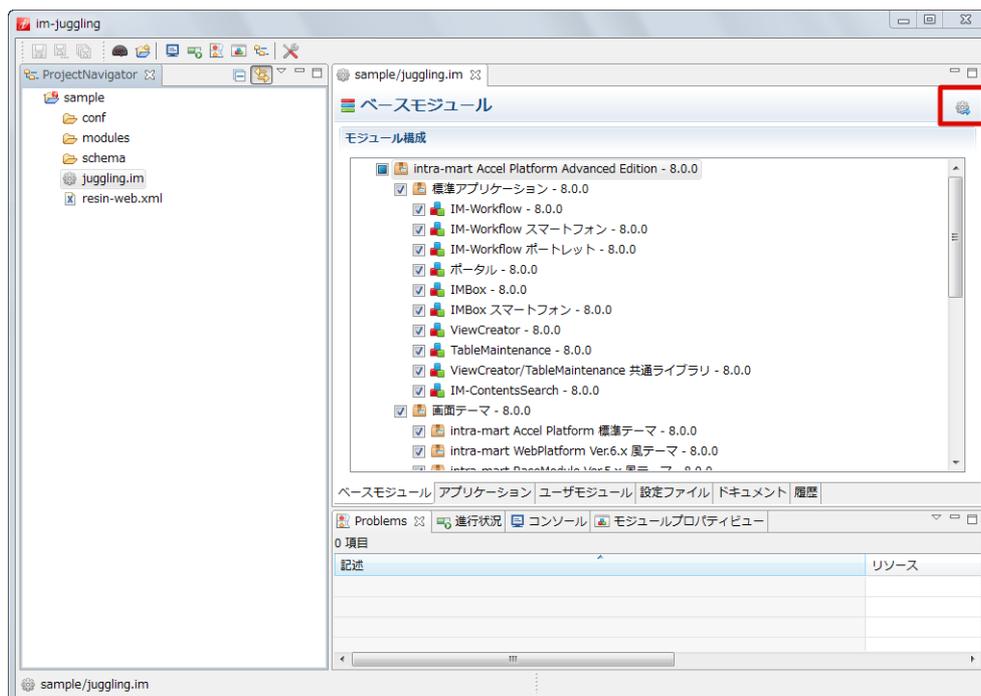
Various files that are necessary for the intra-mart Accel Platform operation are stored, and WAR file creation for intra-mart Accel Platform will be done by im-Juggling.

If you deploy WAR file created in im-Juggling to Web Application Server such as Resin and start Web Application Server,

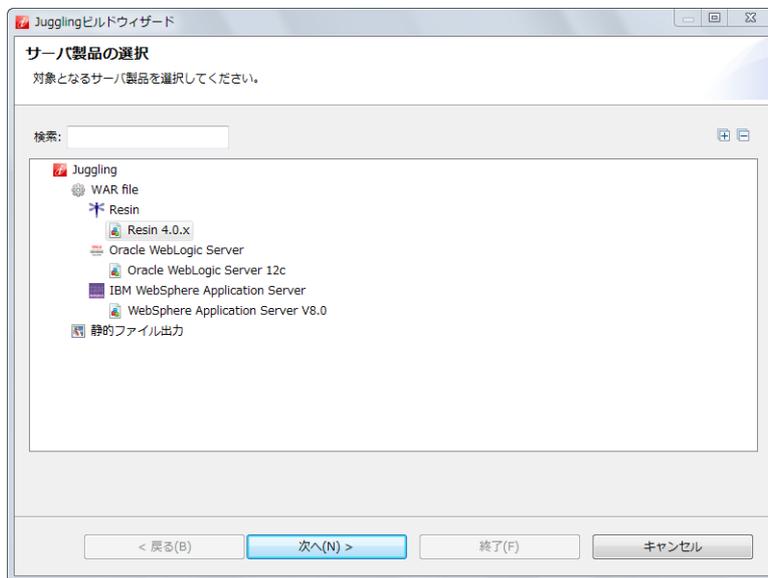
intra-mart Accel Platform itself and various applications that support intra-mart Accel Platform, which are stored in WAR file, can be started and used.

Thus it will be the minimum unit of intra-mart Accel Platform product itself, so the number of intra-mart Accel Platform licenses will be counted by WAR file unit.

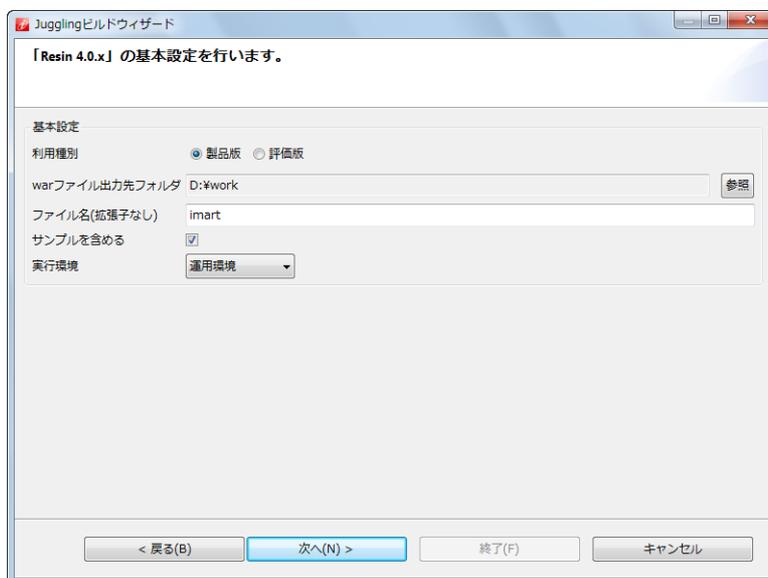
- Open <juggling.im> file and click [Build Wizard] icon on the upper right.



- Select the subject server on [Server Product Selection] screen and click [Next].



3. Do setting on [Base Setting] screen and click [Next].



Use Type

- Product version
 Please select this for the customer who purchased a license.
- Evaluation version
 This is an Evaluation version.
 Please purchase a license for the official use.

Including Sample Data

If you put a check mark, sample data will be input.

Execution Environment

- Execution environment is selected according to the environment intra-mart Accel Platform is operated on.
 Please refer to [[Execution Environment Change when WAR File is created](#)] for detail.



Warning

Please specify the folder for which execution user has authority to [WAR File Output Destination Folder].

4. Confirm the contents on [License Review], select [I agree to Use Condition Terms.] if you agree, and click [Next].

5. Please confirm the contents on [Setting Items Confirmation] and click [Finish].

Juggling build wizard will be started and the download will start.

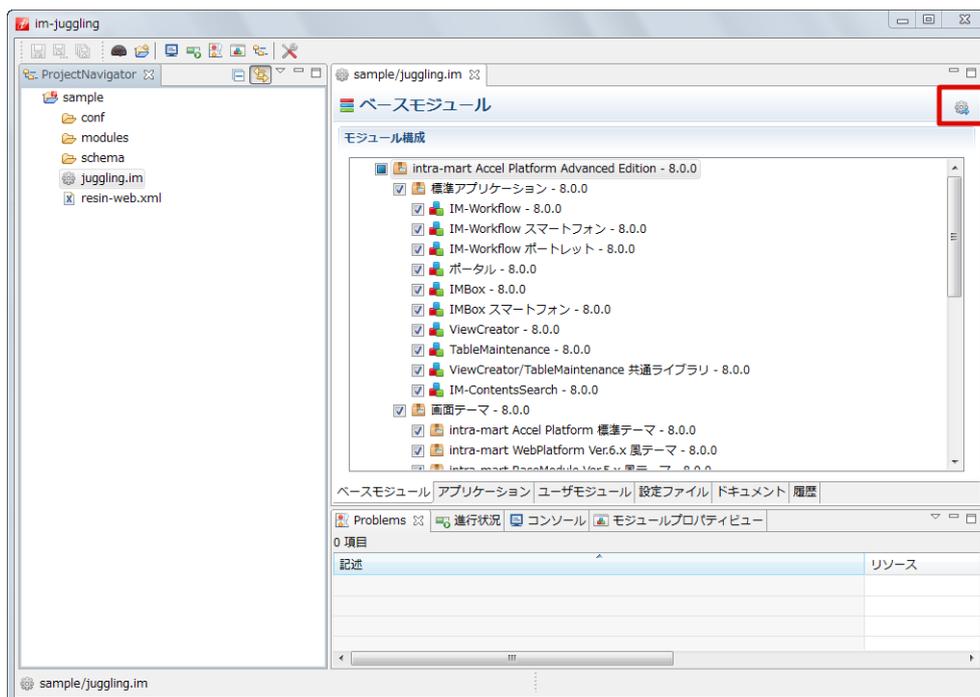
It takes some time for the download to complete. Please do not operate until its completion.



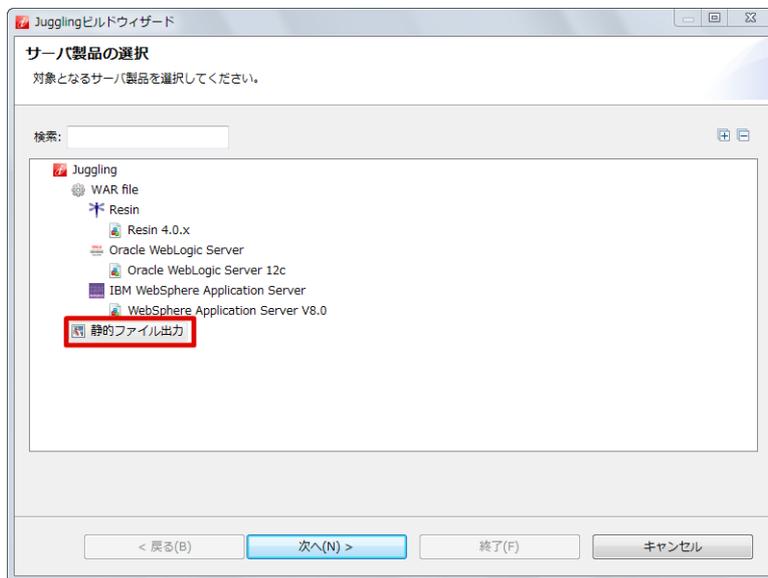
- Build wizard screen is closed when WAR file is output to the specified location.
WAR file is output to the specified directory.

Static File Output

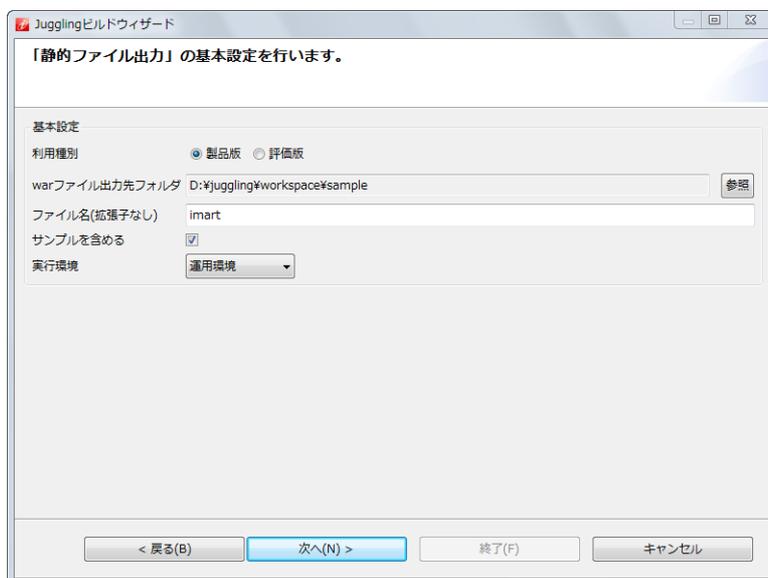
- Open <juggling.im> file and click [Build Wizard] icon on the upper right.



- Select [Static File] on [Server Product Selection] and click [Next].



3. Do setting on [Base Setting] screen and click [Next].



Use Type

- Product version
Please select this for the customer who purchased a license.
- Evaluation version
This is an Evaluation version.
Please purchase a license for the official use.

Including Sample Data

If you put a checkmark, sample data will be input.

Execution Environment

- Unit Test Environment
It represents Unit Test environment.
The case that JUnit is used is not assumed.
Performance test is not considered.
- System Integration Test Environment.
It represents System Integration Test environment.
Test environment where IDE is used is assumed.
Environment which is generally used at most is assumed.
It is an operations environment that meets minimum requirements.
- Product Test Environment
It represents Product Test environment.
Product test environment which uses the actual execution environment (AP server) is assumed.
It is assumed to use this environment even immediately after the system cutover.
- Operations Environment
It represents operations environment.
Performance is considered in this operations environment.

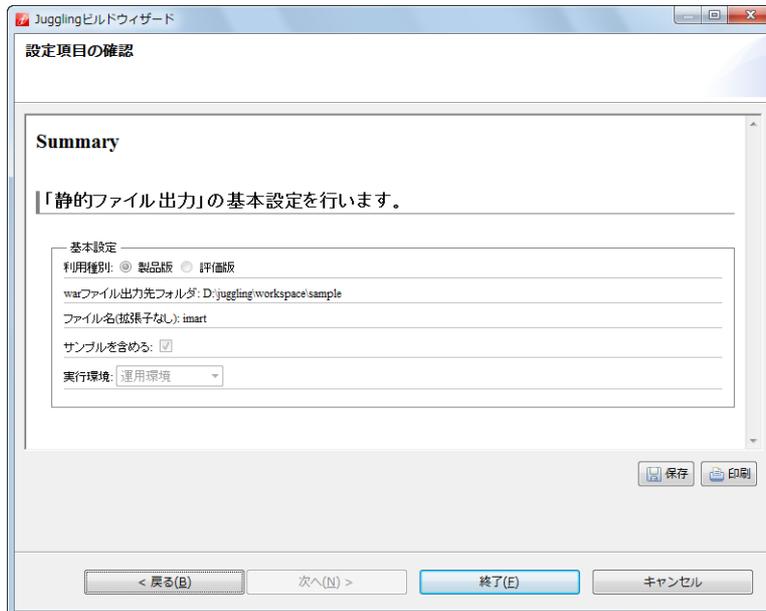


Warning

Please specify the folder for which the execution user has authority to [war File Output Destination Folder].

- Please confirm the contents on [License Review] screen, select [I agree to Use Conditions Terms] if you would agree, and click [Finish].
- Confirm the contents on [Setting Items Confirmation] and click [Finish].

Juggling build wizard will be started and the download will start.
It takes some time for the download to complete. Please do not operate until its completion.



- Build wizard screen is closed when the zip file is output to the specified location.
- Please expand the zip file to the directory which is set by virtual directory of Web Server and place the output zip file.

Web Application Server Startup/Stop

Windows

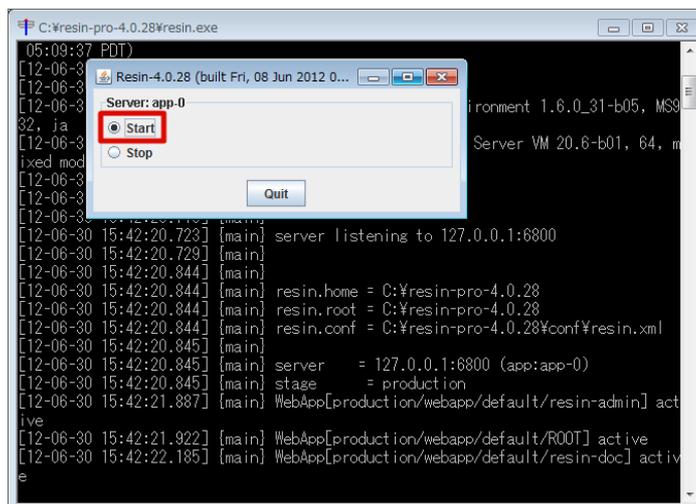
Console Startup/Stop

Topics

- Starting Resin
 - Starting from Console
 - In case multiple IP addresses are set
- Stopping Resin
 - Stopping from the Console

Starting Resin

- Please double-click the <%RESIN_HOME%/resin.exe> file.
Startup/Stop Screen and the Console are displayed.



**Warning**

Version of [.NET Framework] which is initially included in the Windows Server 2012 environment is [4.5]. Resin does not work with this version. It is necessary to do the setup of [.NET Framework 3.5 (including .NET 2.0 and 3.0)]. Please refer to [.NET Framework Setup](#) for details.

1. Startup is completed if the message below is displayed on the console.

```
[12-07-02 18:30:00.000] {main} http listening to *:8080
[12-07-02 18:30:00.000] {main}
[12-07-02 18:30:00.000] {main} Resin[id=app-0] started in 55480ms
```

**Note**

In case Apache Cassandra is used, please start Apache Cassandra before starting Resin.

Starting from Console

resin.exe can be executed from the console.

If it is started on the foreground, [console] should be specified as an argument.

```
# cd <%RESIN_HOME%>
# resin.exe console
```

If it is started on the background, [start] should be specified as an argument.

```
# cd <%RESIN_HOME%>
# resin.exe start
```

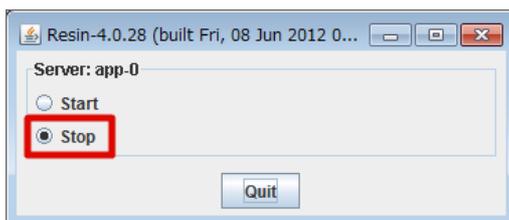
In case multiple IP addresses are set

In case multiple IP addresses are set in the started environment, it is necessary to do the startup by specifying the [jgroups.bind_addr] property on the console and not by double-clicking resin.exe.

```
# cd <%RESIN_HOME%>
# resin.exe console -Djgroups.bind_addr=192.168.1.1
```

Stopping Resin

1. On the Startup/Stop Screen which is displayed at the startup time, please click [Stop].



2. If the message below is displayed on the console, it is in stopped status.

```
{resin-shutdown} Shutdown Resin reason: OK
```

Stopping from the Console

If it has been started on the background from the console, [stop] should be specified in the argument to stop it.

This operation would not be available, if it has been started by the argument [console] or started by double-clicking resin.exe.

```
# cd <%RESIN_HOME%>
# resin.exe stop
```

Registration/Deletion to Windows Service**Topics**

- [Registration to Windows Service](#)
 - [In case multiple IP addresses are set](#)
- [Deletion of Windows Service](#)

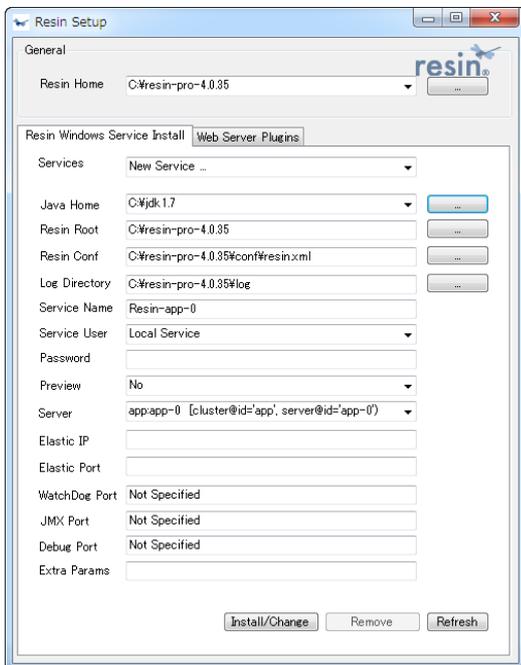
Registration to Windows Service

- Start [setup.exe] which is in the directory immediately under Resin is installed.

```
%RESIN_HOME%/setup.exe
```

Warning
 In case setup.exe is executed, .NET Framework 3.5 would be required.

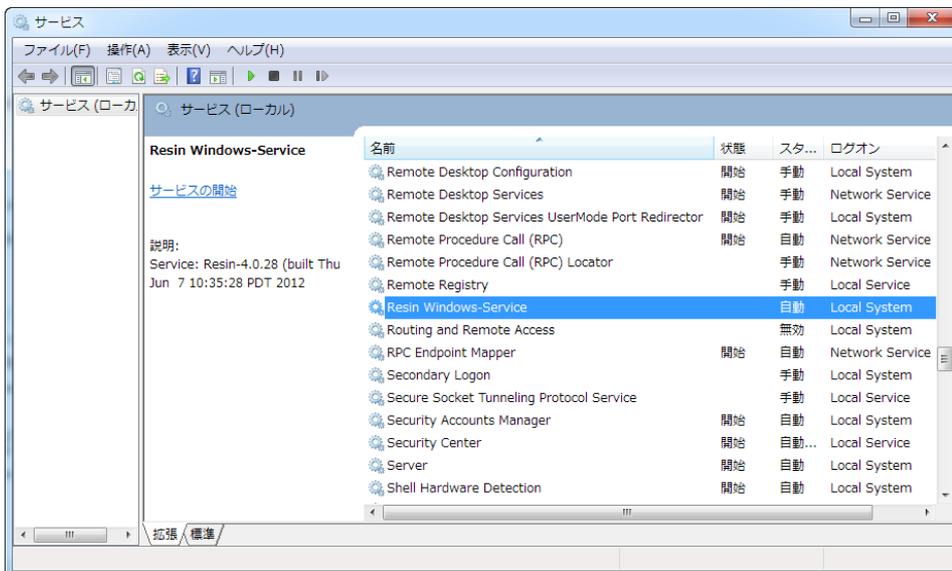
- After the startup, the screen below will be displayed.



- The item in the [Resin Windows Service Install] tab should be edited.

Note
 In this document Service Name is to be changed.
 before change : [Resin-app-0]
 after change : [Resin Winwdows-Service]

- Click [Install/Change] button which is located on the lower part.
- Registration to the Windows Service is completed, when the screen below is displayed. Please change the type of Startup to [Auto] if required.



In case multiple IP addresses are set

In case multiple IP addresses are set to the started environment, it is necessary to specify the [groups.bind_addr] property to [Extra Params] item.

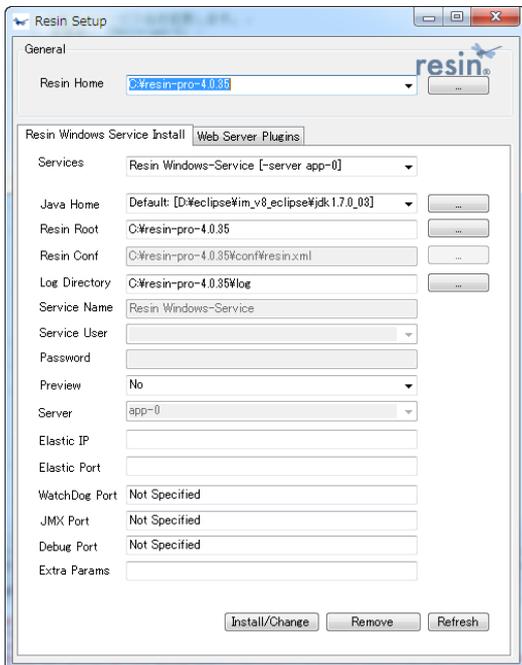
```
-Djgroups.bind_addr=192.168.1.1
```

Deletion of Windows Service

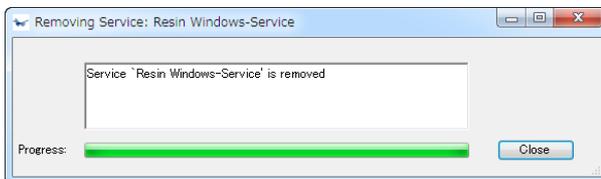
- Please start [setup.exe] which is in the directory immediately under Resin is installed.

```
%RESIN_HOME%/setup.exe
```

- After startup, the screen below is displayed.



- Click [Remove] button which is located on the lower part.
- Deletion from Windows Service is completed when the screen below is displayed.



Linux

Console Startup/Stop

Topics

- Starting Resin**
 - In case multiple IP addresses are set
- Stopping Resin**

Starting Resin

- Execute the following command.

```
# <%RESIN_HOME%/bin/resinctl -server app-0 start
```

- Startup is completed if the message below is displayed on the console.

```
[12-07-02 18:30:00.000] {main} http listening to *:8080
[12-07-02 18:30:00.000] {main}
[12-07-02 18:30:00.000] {main} Resin[id=app-0] started in 55480ms
```



Note

In the distributed configuration, please do the setup at each environment Resin is installed. For the [app-0] part, please set the ID that corresponds to IP address that is set to the [app_servers] property of <%RESIN_HOME%/conf/resin.properties> file.

**Warning**

In case Apache Cassandra is used, please start Apache Cassandra before starting Resin.

In case multiple IP addresses are set

If multiple IP addresses are set in the environment to be started, it is necessary to specify the [jgroups.bind_addr] system property before the startup.

```
# <%RESIN_HOME%/bin/resinctl -server app-0 start -Djgroups.bind_addr=192.168.1.1
```

Stopping Resin

1. Following command should be executed.

```
# %RESIN_HOME%/bin/resinctl -server app-0 stop
```

2. If the message below is displayed on the console, it is in stopped status.

```
{resin-shutdown} Shutdown Resin reason: OK
```

**Note**

In the distributed configuration, please stop it at each environment Resin is installed.
For the [app-0] part, please set the ID that corresponds to IP address that is set to the [app_servers] property of <%RESIN_HOME%/conf/resin.properties> file.

Registration/Deletion to Linux Daemon

Topics

- **Registration to Linux Daemon**
 - **In case multiple IP addresses are set.**
- **Deletion from Linux Daemon**
- **Change of Execution User**

Registration to Linux Daemon**Warning**

It should be installed by the method described in *[intra-mart Accel Platform \(Linux Version\) Installation and Setting](#)*.
Moreover, it is necessary that the user who has root authority should execute the installation.

- Please execute chkconfig command, and have it automatically started at the time of startup.

```
# chkconfig --add resin
```

- Please execute chkconfig command. It is successful if the following is displayed.

```
# chkconfig --list resin
resin 0:off 1:off 2:off 3:on 4:on 5:on 6:off
```

In case multiple IP addresses are set.

If multiple IP addresses are set in the environment to be started, it is necessary to edit the resin script which is placed in /etc/init.d directory, and specify the system property [jgroups.bind_addr].

Environment variable is specified in line 25 or its vicinity. Please add the environment variable [ARGS], and add the system property.

```
JAVA_HOME="/usr/lib/jvm/java-7-sun"
RESIN_HOME="/usr/local/resin"
CONSOLE="/var/log/resin/console.log"
# Add System Property
ARGS="-Djgroups.bind_addr=192.168.1.1"
```

Deletion from Linux Daemon

- Execute chkconfig command, and delete it.

```
# chkconfig --del resin
```

- Please execute chkconfig command. It is successful if the following is displayed.

```
# chkconfig --list resin
Service resin supports chkconfig, but it is not accessed at the execution level (run 'chkconfig --add resin').
```

- Please delete /etc/init.d/resin as required.

Change of Execution User

Execution user of Resin that is started as Linux daemon may be changed by editing the resin script placed in /etc/init.d directory. Environment variable is specified in line 25 or its vicinity. Please add the environment variable [USER], and specify Resin execution user. It is necessary that the execution user should have been created in advance.

```
JAVA_HOME="/usr/lib/jvm/java-7-sun"
RESIN_HOME="/usr/local/resin"
CONSOLE="/var/log/resin/console.log"
# Add execution user
USER=imart
```

WAR File Deployment

1. War files that are created by im-Juggling are placed to arbitrary directory.
2. Please execute the following commands.

In case of Windows (start Command Prompt)

```
# cd <%RESIN_HOME%>
# resin deploy any directory path/WAR file name
```

In case of Linux

```
# <%RESIN_HOME%/bin/resinctl deploy any directory path/war file name
```



Note

In case multi-tenant is used, please execute it for each necessary WAR file.



Warning

In order to deploy WAR files, it is necessary that Resin has been started.

Tenant Environment Setup

- Please perform **Tenant Environment Setup** on the Web browser. URL below should be accessed on the Web browser.

System Administrator Log-in Screen: <http://host name:port number/context path/system/login>



Note

Context path which is set at the deployment time should be specified. In case of Resin, it will be the WAR file name at the time of deployment. Please refer to **WAR File Deployment**. With regard to Web Application Server other than Resin, it should be the [Context Root] which was specified at the time of deployment.



Warning

In case you are using Apache Cassandra, please start Apache Cassandra before executing tenant environment setup. For the details about Apache Cassandra, please refer to [IMBox Cassandra Administrator Guide].

- [IMBox Cassandra Administrator Guide \(Japanese\)](#)
- [IMBox Cassandra Administrator Guide \(English\)](#)
- [IMBox Cassandra Administrator Guide \(Chinese\)](#)

- **Tenant Environment Setup** procedures of intra-mart Accel Platform are as follows.



Please see below for the details about each wizard.

System Administrator Information

1. **System Total Administrator** is set.



Item	Mandatory/Optional	Description
User Code	Mandatory	Enter user code of system administrator.
Password	Optional	Enter password of system administrator.
Password (confirmation)	Optional	Enter password of system administrator.
Locale	Mandatory	Select the locale of system administrator.

Tenant Information

1. **Tenant Basic Information** is set.

テナント設定

Step 1 Step 2 **Step 3** Step 4 Step 5 Step 6 Step 7 Step 8
Step 9

Step 3 - テナント情報

テナントID*

デフォルトロケール* 日本語 ▼

タイムゾーン* (GMT+09:00) 日本 / 東京 ▼

アカウントライセンス数 無制限

次へ

Item	Mandatory/Optional	Description
Tenant ID	Mandatory	Enter the Tenant ID.
Default Locale	Mandatory	Select the default locale of tenant.
Time Zone	Mandatory	Select the time zone of tenant.
Number of Account Licenses	Optional	Enter the number of account licenses of tenant.

Tenant Environment Information

1. **Tenant Environment Information** is set.

 **Warning**

In the case of Web Application Server other than Resin, setting for Resource Reference Name, Storage Path, and Base URL are not displayed.

テナント設定

Step 1 Step 2 Step 3 **Step 4** Step 5 Step 6 Step 7 Step 8
Step 9

Step 4 - テナント環境情報

リソース参照名

ストレージパス

ベースURL

次へ

Item	Mandatory/Optional	Description
Resource Reference Name	Optional	Resource Reference Name is selected.
Storage Path	Optional	Enter the path to Public Storage.
Base URL	Optional	Enter the Base URL.



Note

If it is not specified, contents of each setting file will be in effect.

Tenant Administrator Information

1. **Tenant Administrator** is set.

Item	Mandatory/Optional	Description
User Code	Mandatory	Enter user code of tenant administrator.
Pssword	Optional	Enter password of tenant administrator.
Password (confirmation)	Optional	Enter password of tenant administrator.



Note

If the setup is interrupted because of the error that has occurred during tenant environment setup, tenant administrator will not be registered even if you do the setup again.
 In case the normal registration of tenant administrator could not be done, you need to start from the Tenant Management Screen to register tenant administrator.
 For the details, please refer to the [Newly Create Tenant Administrator] section of [\[System Administrator Operations Guide\]](#)- [\[Tenant Management\]](#).

LDAP Linkage / Setting

1. **LDAP Linkage/Setting** Information is set.

テナント設定

Step 1 Step 2 Step 3 Step 4 Step 5 **Step 6** Step 7 Step 8 Step 9

Step 6 - LDAP連携・設定

設定内容*

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ldap-certification-config xmlns="http://intra-mart.co.jp/system/security/certification/provider/ldap">
  <enable>false</enable>
  <load-balancing>false</load-balancing>
  <attempt-on-failed-authentication>true</attempt-on-failed-authentication>
  <log>false</log>
  <ldap-servers>
    <ldap-server>
      <permit-no-password>true</permit-no-password>
      <provider-uri>ldap://localhost:389</provider-uri>
      <context-factory>com.sun.jndi.ldap.LdapCtxFactory</context-factory>
      <base-dn>dc=idaps,dc=intra,dc=intra-mart,dc=jp</base-dn>
      <search-filter>sAMAccountName=?</search-filter>
      <search-controls>
        <connect-timeout-property-name>com.sun.jndi.ldap.connect.timeout</connect-timeout-property-name>
        <connect-timeout>0</connect-timeout>
        <searching-dn>sAMAccountName=admin,cn=User,dc=idaps,dc=intra,dc=intra-mart,dc=jp</searching-dn>
        <searching-pw>*****</searching-pw>
        <count-limit>0</count-limit>
        <time-limit>0</time-limit>
      </search-controls>
    </ldap-server>
  </ldap-servers>
</ldap-certification-config>
```

次へ

 **Note**

Contents of Project /conf/ldap-certification-config.xml of im-Juggling will be displayed initially. Please note that the value of <enable> tag is false.

 **Warning**

LDAP authentication is enabled only when the contents of <enable> tag is true. In case LDAP authentication is made enabled, please do the correct setting of authenticated LDAP.

Item	Mandatory/Optional	Description
Setting Contents	Mandatory	LDAP Authentication Enable/Disable and Information of Authenticated LDAP are entered. Please refer to the descriptions of [LDAP Authentication Setting File] for input contents.

Apache Cassandra Connection Information

1. Apache Cassandra Connection Information is entered.

テナント 設定

Step 1 Step 2 Step 3 Step 4 Step 5 Step 6 Step 7 Step 8 Step 9

Step 7 - Cassandra接続情報

クラスタ名 * IMBox Cluster

キースペース * default

接続先 * 127.0.0.1:9160

レプリケーションファクタ * 1

認証情報設定 設定する
① 認証情報が必要なCassandraへの接続時のみ、設定してください。
 認証情報を設定する場合は書き込み権限の確認を行うため、事前にキースペースを作成しておく必要があります。

認証ユーザ名 * admin

認証パスワード *

テスト接続

次へ



Warning

Apache Cassandra connection information is displayed only when IMBox is used. Before you execute tenant environment setup, it is necessary that Apache Cassandra is set and launched. For the details of Apache Cassandra setting, please refer to [IMBox Cassandra Administrator Guide].

- [IMBox Cassandra Administrator Guide \(Japanese\)](#)
- [IMBox Cassandra Administrator Guide \(English\)](#)
- [IMBox Cassandra Administrator Guide \(Chinese\)](#)

Item	Mandatory/Optional	Description
Cluster Name	Mandatory	Enter cluster name of Cassandra server.
Key Space	Mandatory	Enter key space of Cassandra server.
Connection Destination	Mandatory	Enter IP address and port number of the server Cassandra is operated on. Connection destination is entered by [IP address] or [IP address:port address]. (In case port number is omitted, use 9160.) In case port number other than 9160 is specified, error will occur in the new node detection function. If multiple Cassandra's are operated in the distributed configuration, please enter every connection destination in each line one by one.
Replication Factor	Mandatory	Enter the number of Replicas of data inside the cluster. Replication factor is used only when the key space is created.
Authentication Information Setting	Optional	Select authentication usage in Cassandra connection. In case authentication information is set, it is necessary to create the key space in advance to check the write authority.
Authentication User Name	It is mandatory only when authentication setting is used.	Enter connection user name in Cassandra authentication connection. It is displayed only when authentication setting is used.
Authentication Password	It is mandatory only when authentication setting is used.	Enter password in Cassandra authentication connection. It is displayed only when authentication setting is used.
Test Connection		You can test if Cassandra connection can be established with the contents entered. It is recommended that you always perform it when any tenant is created.



Note

 Initial value of Cassandra connection information at registration time will be the setting value of Cassandra server connection setting (cassandra-config.xml). For the details of cassandra-config.xml, please refer to **Cassandra Server Connection Setting(cassandra-config.xml)**.

Apache Solr Connection Information

1. Apache Solr Connection Information is entered.



 **Warning**
 Apache Solr connection information is displayed, only when IM-ContentsSearch for Accel Platform is used.
 In case IM-ContentsSearch for Accel Platform is used, it is necessary to set up Apache Solr.
 For the details about setup of Apache Solr, please refer to [**Apache Solr**].

Item	Mandatory/Optional	Description
Set connection information.	Solr Optional	When tenant environment setup is made, this button switches if Apache Solr connection information is set or not.
Group ID	Fixed ("default")	Group ID of standard connection destination may not be changed from "default".
Standard Connection Destination	Mandatory (only when [Solr Connection Information] button is enabled)	Select connection destination. It can be selected only when [Solr Connection Information] button is enabled. Connection destination which is set as the standard connection destination for another tenant will not be displayed. If this is the initial tenant environment setup or if there is no setting for Solr connection, Solr connection setting ("default") which is defined in Solr Server Connection Configuration file (solr-config.xml) is displayed in the selection items.

 **Note**
 By making the items to non-display by [Set Solr Connection Information] button, tenant environment setup can be executed without setting the Apache Solrconnection information.
 On the Tenant Management Screen of System Administrator Menu, Apache Solr connection information can be set to the created tenant.
 If the Solr Server Connection Configuration file (solr-config.xml) does not exist or cannot be loaded, items are not displayed. They are always skipped.

 **Note**
 If the setting value ("default") of Solr Server Connection Configuration file (solr-config.xml) is selected and tenant environment setup is executed, setting value which is set in the setting value of solr-config.xml (<group name="default">) is registered to the system database as Solr connection information.
 For the details about solr-config.xml, please refer to [**Solr Server Connection Setting (solr-config.xml)**].

Registration

1. When the setting of each step has been completed, please click [Register].



Warning

Number of steps in the wizard would vary depending on the modules selected in [[Project Creation and Module Selection](#)].



Note

For the **Tenant Environment Setup** in the previous update versions, please refer to [Tenant Environment Setup in or before intra-mart Accel Platform 2013 Winter](#).

Application of Update/Patch

- The latest modules can be applied by using im-Juggling. There are 2 ways to apply the changes.

Update

- Update is a form of release that provides addition of functions and correction of defects within a certain period of time. Moreover, update provides Resin updates provided by our company and the changes of system requirements (support environment/validated environment).

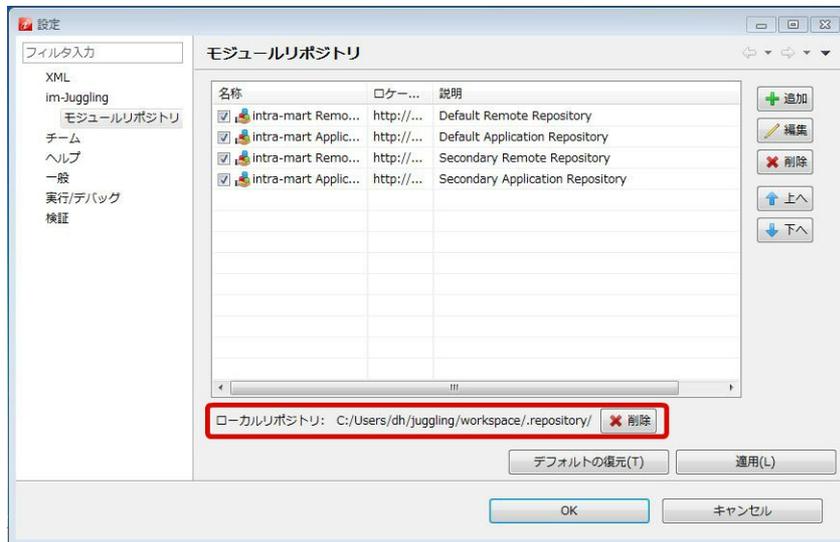
Module Update

Topics

- [Deletion of Old Repository Information](#)
- [Selecting the Subject for Update and Creating WAR File](#)
- [Editing the Configuration File \(Maintenance of Setting Items by Update\)](#)
- [WAR File Output](#)
- [WAR File Undeploy](#)
- [Updating Web Application Server](#)
- [WAR File Re-Deploy](#)
- [Output and Redeployment of Static File](#)
- [Tenant Environment Setup](#)

Deletion of Old Repository Information

- Old repository information which was previously used is deleted.
 1. Please start im-Juggling. On the right edge of toolbar in the window, please open [Setting]-[im-juggling]-[Module Repository].
 2. On the lower part of the screen, please click delete of [Local Repository].

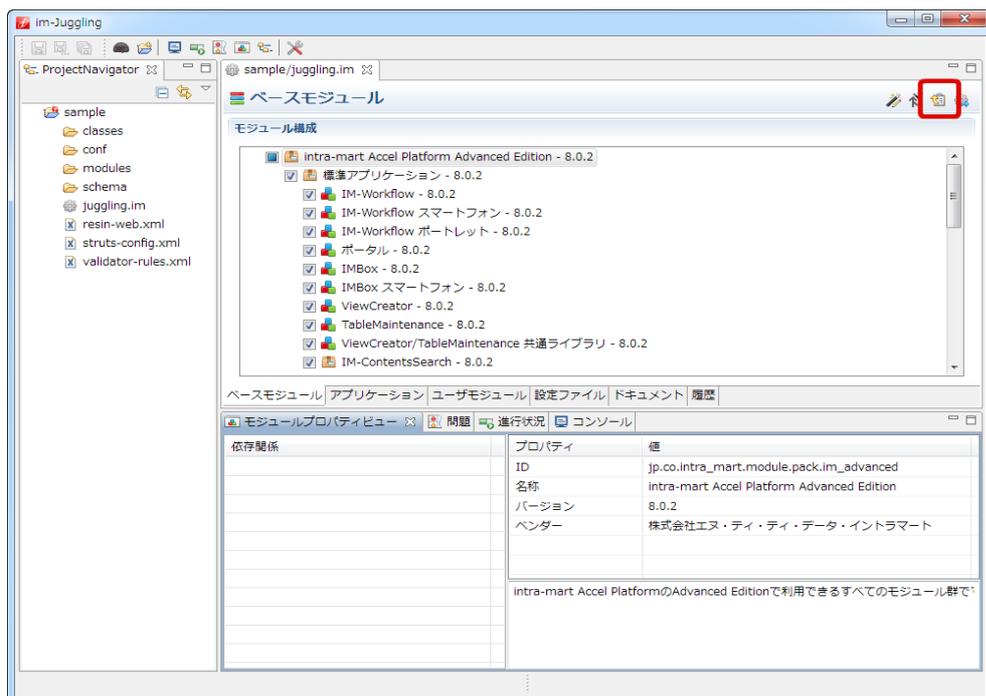
**Warning**

During the file deletion process, operations of im-Juggling cannot be performed.

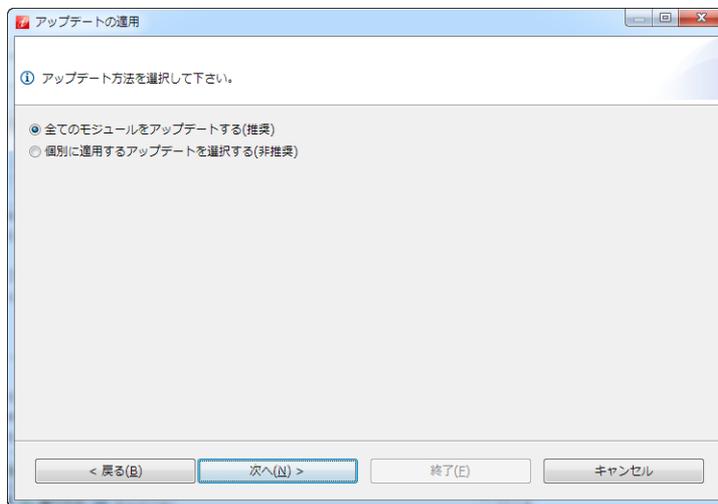
3. After the deletion is completed, please click OK.

Selecting the Subject for Update and Creating WAR File

- It is assumed that the previously stated [Deletion of Old Repository Information] has been executed.
1. Click [Update] icon on the upper right of the screen.

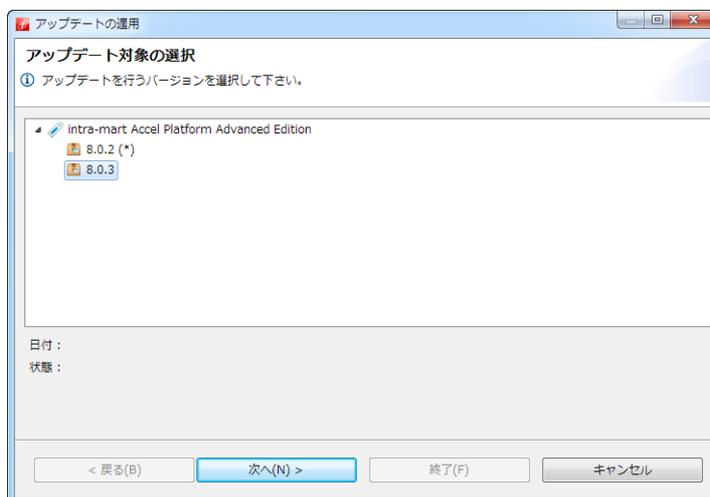


2. Please select update method.
[Update all modules (recommended)] should be usually selected.
After the selection is made, please click [Next(N)].

**Warning**

In case [Select individual updates to be applied (not recommended)] is selected, further updates may not be successfully performed.

3. Please select the subject for updates to the base module.
After the selection is made, click [Next(N)].

**Warning**

If all the versions of existing modules are the same ([8.0.2] is the case in the figure above), there exists no module that can be applied to the same version ([8.0.2 (*)]). Even if you select the same version ([8.0.2(*)]), it will not be displayed in the list.

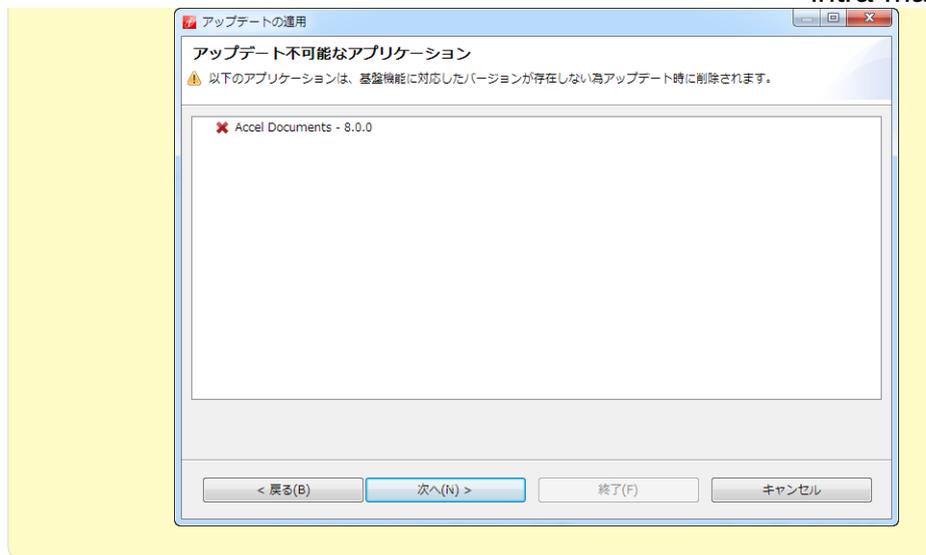
**Warning**

Existing applications may not be used depending on the update contents of base module.

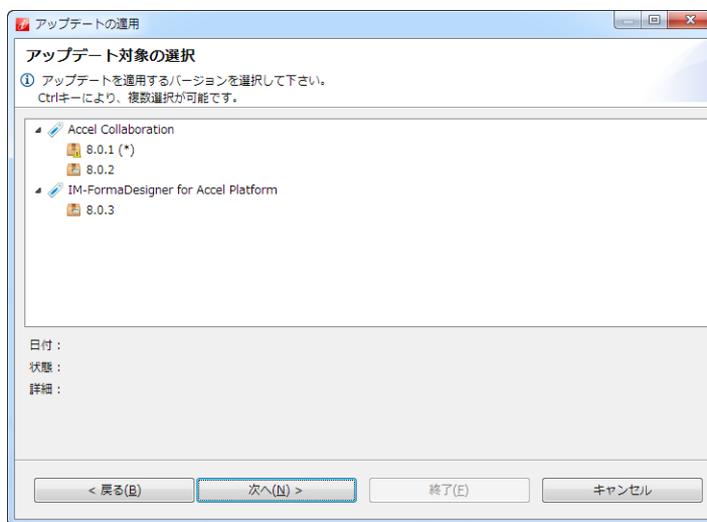
Example: In case existing project has the following configuration :

Base Module: 8.0.2
Application (Acccel Documents):8.0.0

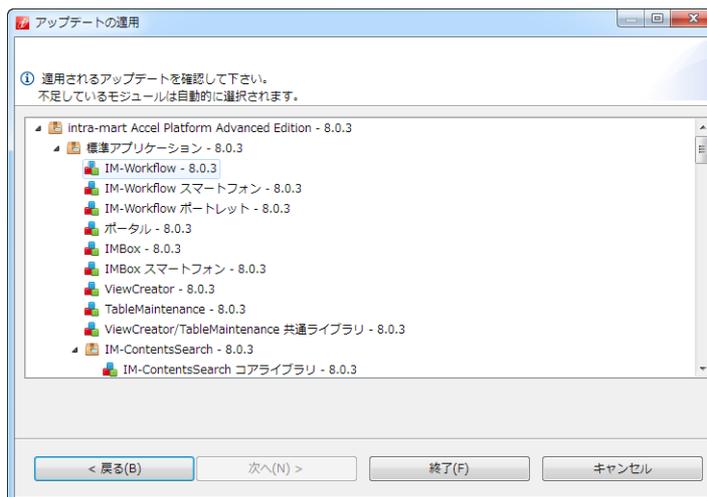
if [8.0.3] has been selected for the update of base module, following warning screen will be displayed, because application (Acccel Documents) does not support base module [8.0.3].



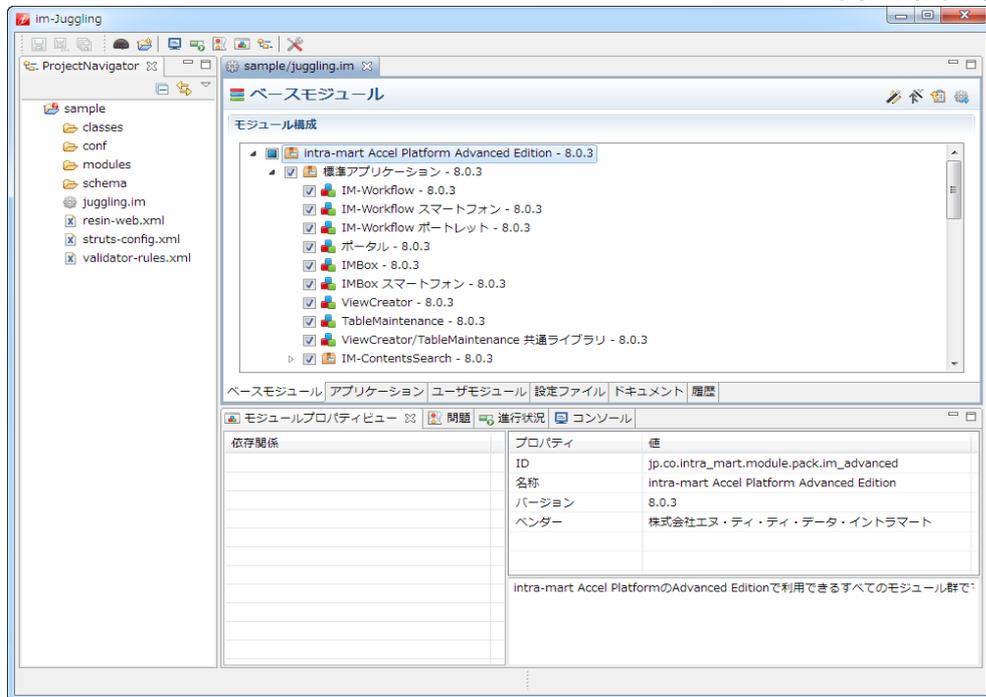
4. Please select the subject for update of application.
Based on the version selected as the subject for update to the base module, you can select the application and its version.
After the selection is made, please click [Next(N)].



5. Please check the contents of the update, and click [End(E)].



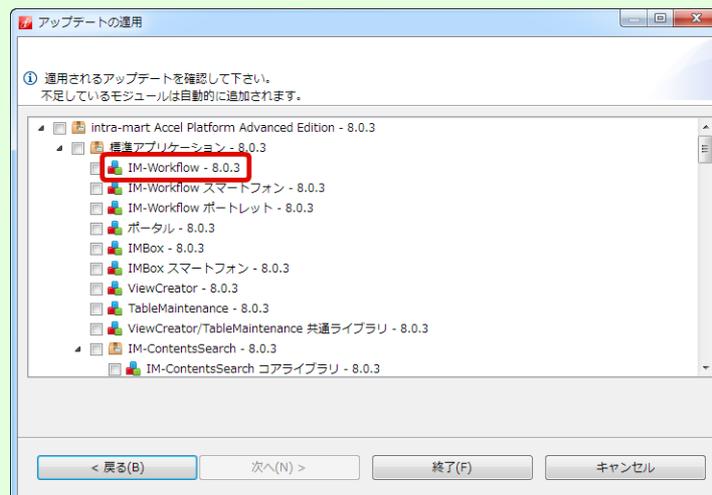
Update information is obtained, and the module information of the existing project is changed.



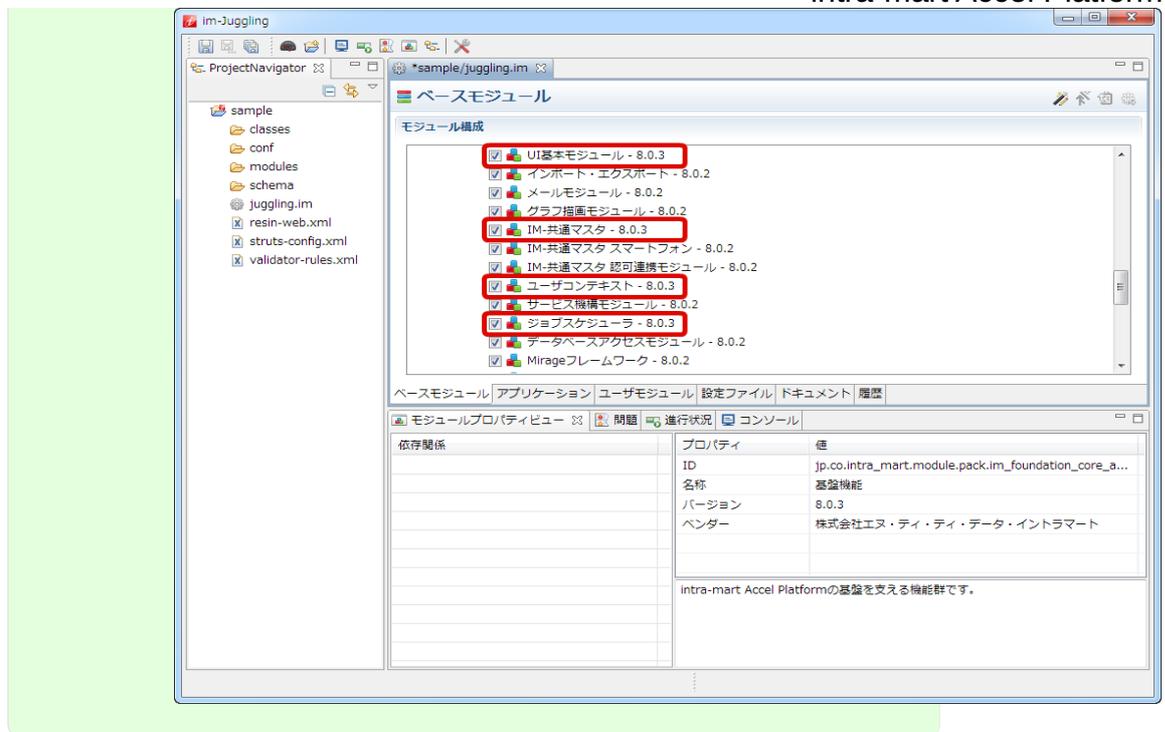
Note

In case [Select individual updates to be applied (not recommended)] has been selected, with regard to the module information of the existing project, the version numbers of the selected module and the modules that module depends will be updated.

Example: Only the [IM-Workflow] module is selected.



In the module configuration after the update has been applied, [IM-Workflow] and the modules such as [UI Base Module], [IM-Common Master], [User Context] and [Job Scheduler] that [IM-Workflow] depends are also automatically updated.



Subject for update will be reflected to the project.

Editing the Configuration File (Maintenance of Setting Items by Update)

- Individual work would be necessary, if the environment has been built before the update version is applied. Please refer to **Editing Configuration File (Maintenance of setting items by updates)** for detail.



Note

[*] Please refer to each Setup Guide for applications other than intra-mart Accel Platform.

WAR File Output

- If the previously stated settings on im-Juggling are completed, please do **WAR File Output**.

WAR File Undeploy

- Environment which is currently operated should be undeployed.
In case of Resin, please refer to **WAR File Undeployment**.
For Web Application Server other than Resin, please refer to the respective document provided by each product vendor.

Updating Web Application Server

- With regard to the Update, the update of Web Application Server may become necessary because of the changes of system requirements.
In case of Resin, the update should be made as follows.



Note

Latest version of Resin can be obtained either from the product media image /Products/tools/iAP/Resin directory or by downloading from the site below.

<http://www.intra-mart.jp/download/product/iap/index.html>

Various types of downloads (zip file)

[*] ID and password that were provided at the time of maintenance contract would be required for the download.

- Please stop the existing Resin environment.



Note

Release of Windows service or release of Linux daemon may be necessary as required. Please refer to **In case multiple IP addresses are set** and **In case multiple IP addresses are set**. for details.



Note

Existing Resin environment would not be used in the future. Please archive it if required.

- Please install the latest version of Resin provided by the update version.
Please refer to [Web Application Server \(Resin \)](#) for details.

**Note**

Registration of Windows service or the registration of Linux Daemon may be necessary.
Please refer to [Registration to Windows Service](#) or [Registration to Linux Daemon](#) for details.

- Contents that were set in the existing Resin environment should be reflected to the new Resin environment.
Example: JVM setting and so on in %RESIN_HOME%/conf/resin.properties file

**Warning**

In case there are changes of system requirements on Web Application Server other than Resin, please refer to the respective document provided by each product vendor for the update methods of each product.
This statement is applicable for the database products as well.

WAR File Re-Deploy

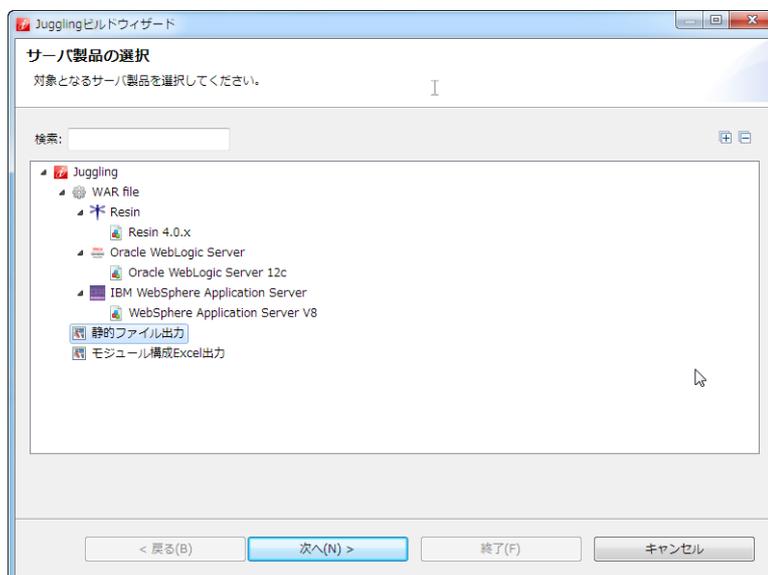
- Deployment should be done on WAR files that reflected the update version.
For Resin, please refer to [WAR File Deployment](#).
For WebSphere Application Server 8.5.5, please refer to [[Setup Guide for WebSphere](#)].
For Oracle WebLogic Server 12c (12.1.1), please refer to [[Setup Guide for WebLogic](#)].

**Warning**

If the situation arises in which added modules (resources) are not reflected at the deployment destination, Please refer to [[In case WAR file cannot be re-deployed normally in Resin](#)].

Output and Redeployment of Static File

- In case Web Server is used, static file is generated from im-Juggling.



- Static file that was generated should be placed under the directory which has been set as alias in Web Server.
[*] Please replace it with the existing file.

Tenant Environment Setup

- After starting Web Application Server, tenant environment setup will be conducted.

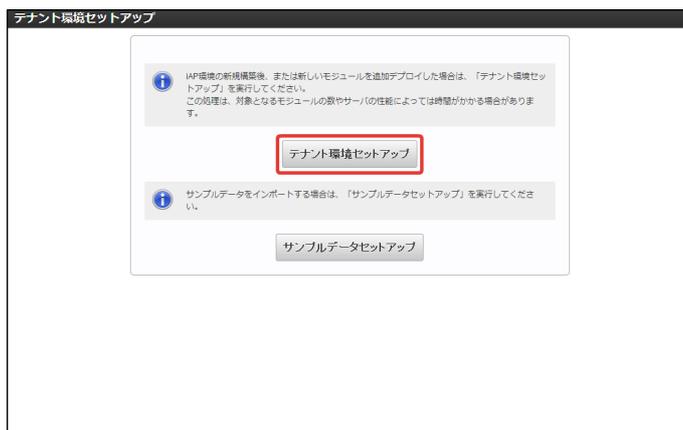
Please display menu screen of system administrator.
Click [Tenant Environment Setup] from the menu.



Tenant environment setup has been completed successfully, if the message which says [Tenant environment is the latest. There is no module that needs setup.] is displayed.



In case [Tenant Environment Setup] button is displayed as in the figure below, tenant environment setup is incomplete. Please click [Tenant Environment Setup] button and try the setup again.



Warning

In case tenant environment setup is made via Web Server, it is recommended that the timeout setting value of Web Server should be changed, or setup should be made via Web Application Server.

Note

Setup button for the sample will always be displayed regardless of the process result. Therefore, if the error has occurred during feeding the sample data, uniqueness limit violation would occur at Database, when the setup is performed again. In this case, please perform [**Uninstallation**], and start over from the setup again.

- For customers who use IMBox, it is strongly recommended to do the version upgrade to Apache Cassandra where known defects were already fixed.
 - Cassandra Administrator Guide - Cassandra Version Upgrade**

Patch

- Patch is a form of release that provides high priority fixes that are needed between updates by module unit. Contents that are provided by this patch (contents that fixed the defects) are included in the update version which will be released in the future.

Patch Application to Module

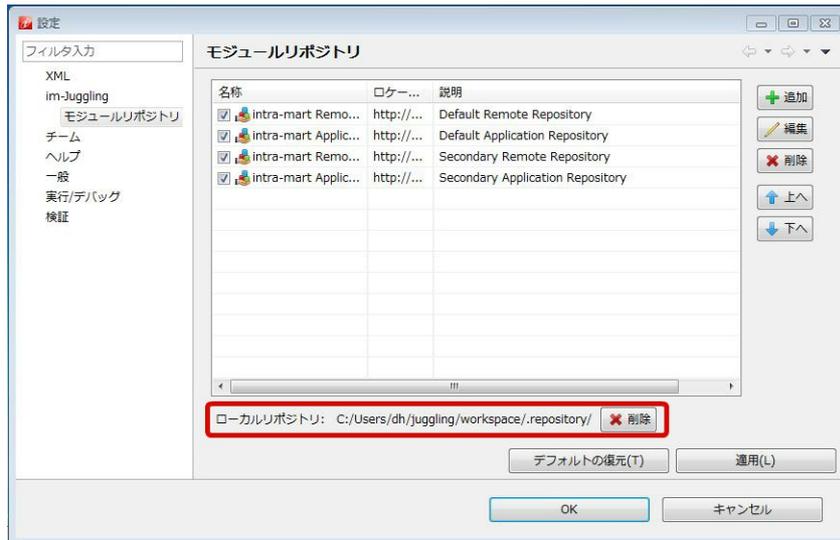
Topics

- Old repository information deletion
- Selection of Module the patch is applied to and Creation of WAR file
- WAR File Undeploy
- WAR File Re-deploy
- Output and Re-Placement of Static Files
- Tenant Environment Setup

Old repository information deletion

- Old repository information which was previously used should be deleted.

1. Start im-Juggling and open [Setting]-[im-juggling]-[Module Repository] located at the right edge of toolbar inside the window.
2. Click Delete [Local Repository] at the lower part.



Warning

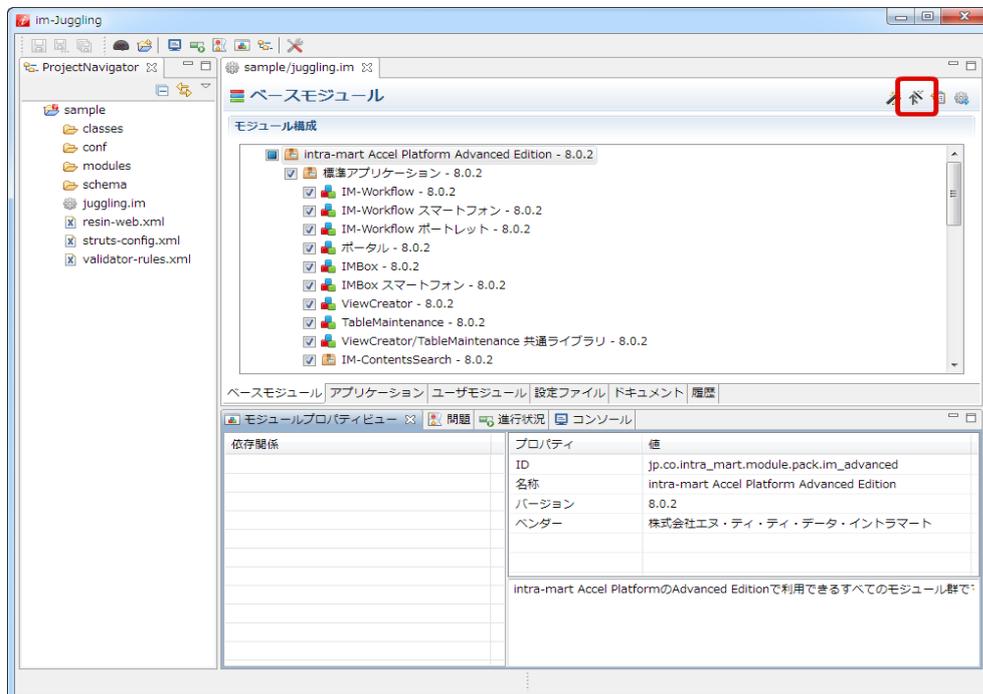
You cannot operate im-Juggling while file deletion process is being executed.

3. Click OK when the deletion is completed.

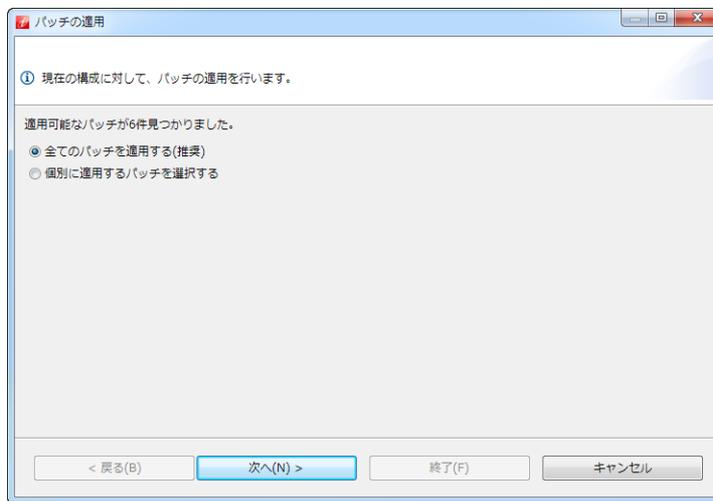
Selection of Module the patch is applied to and Creation of WAR file

- It is assumed that [Old Repository Information Deletion] described above is done.

1. Click [Patch] icon on the right side of screen.

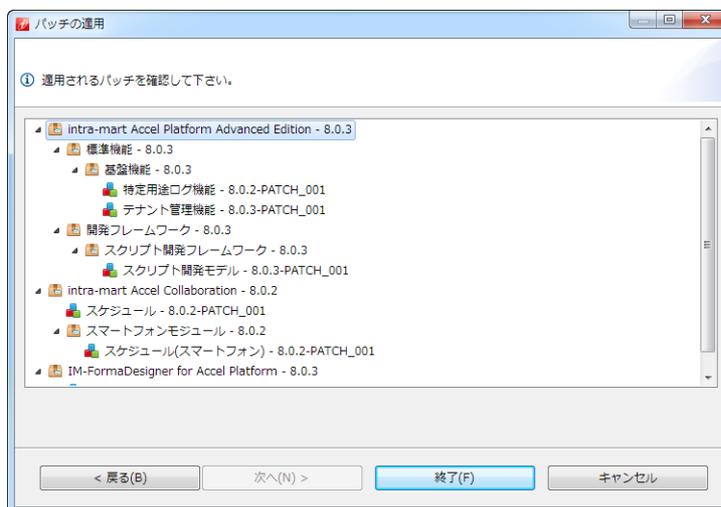


2. Select Patch Application Method.
 Select either [Apply all patches (recommended)]
 or [Select the patch to be applied individually].
 Click [Next (N)] after the selection.

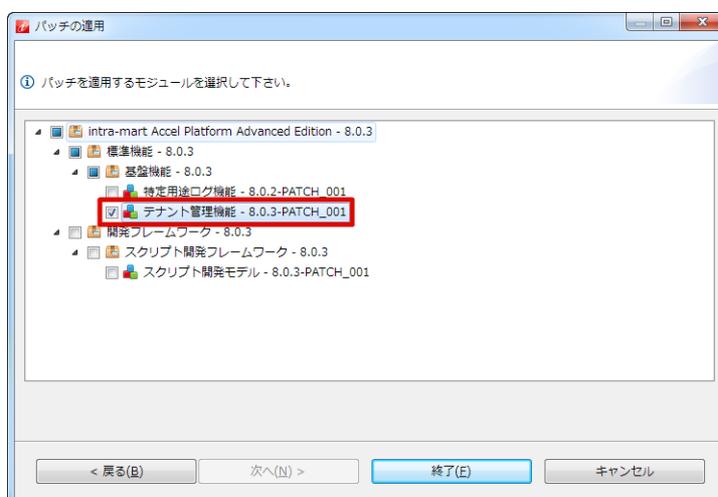
**Note**

Contents that are provided as patch (contents that corrected the defects) will be included in the updated version planned to be released later.

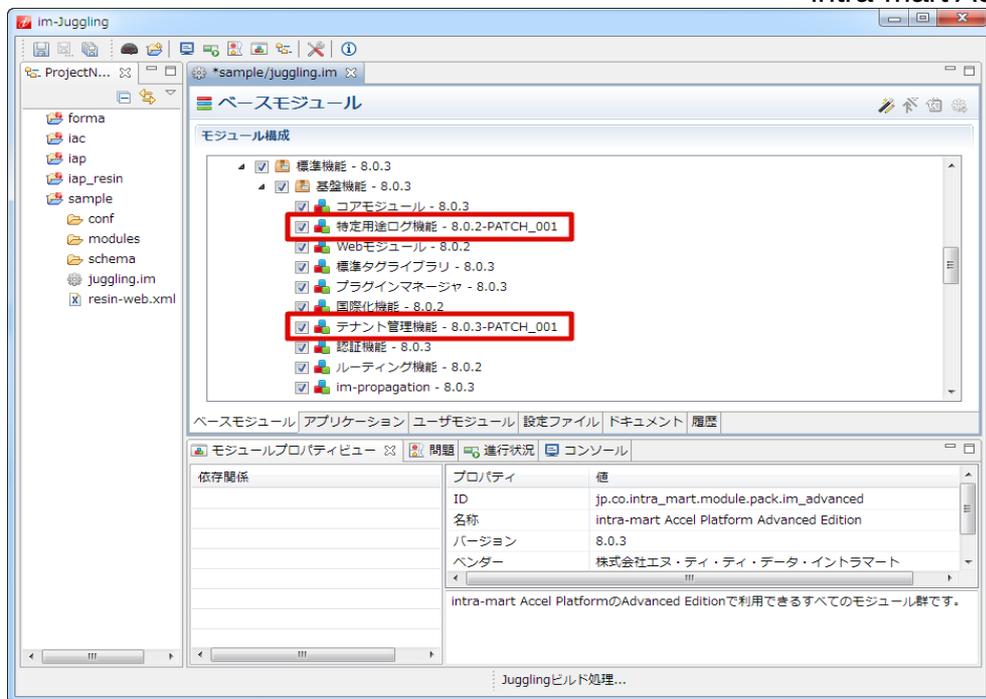
3. If [Apply all patches (recommended)] has been selected on the previous screen, patch contents to be applied will be displayed. Confirm the patch contents to be applied and click [End (E)].



4. If [Select the patch to be applied individually] has been selected on the previous screen, you should select the module that patch is applied to (put check mark on the check box). And then click [End (E)] after the selection.



Patch information is obtained and module information of existing project will be changed.



5. Do **WAR File Output** after the patch was reflected to the project.

WAR File Undeploy

1. Do undeployment in the environment which is currently operated.
Please refer to **WAR File Undeployment** for the case of Resin.
Please refer to document provided by each product vendor for Web Application Server other than Resin.

WAR File Re-deploy

1. Do deployment with the WAR file which reflects the patch.
Please refer to **WAR File Deployment** for Resin..
Please refer to **Setup Guide for WebSphere**] for WebSphere Application Server 8.5.5.
Please refer to **Setup Guide for WebLogic**] for Oracle WebLogic Server 12c (12.1.1).

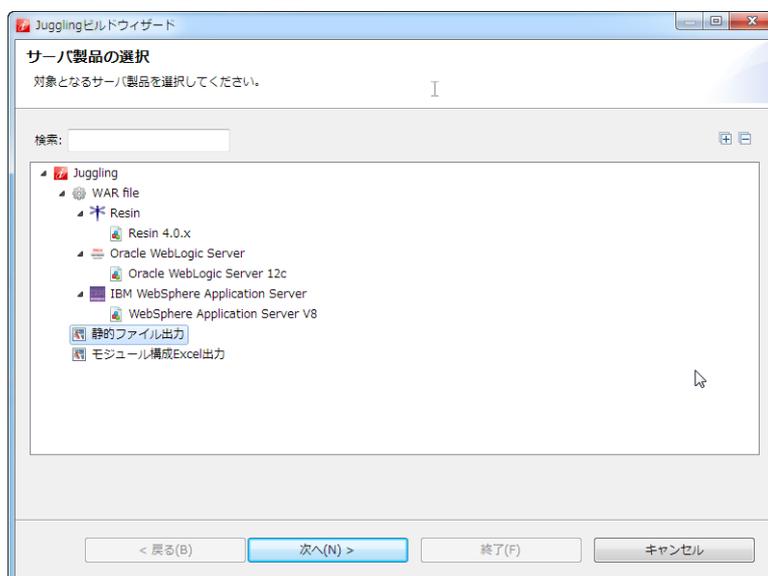


Warning

In case symptom that the added module (materials) is not reflected at deploy destination even though re-deployment is executed,
Please refer to [**In case WAR file cannot be re-deployed normally in Resin**].

Output and Re-Placement of Static Files

1. If Web Server is used, the static file will be output from im-Juggling.



2. The output static file is placed under directory Web Server which is set as alias.
[*] Please replace the existing file.

Tenant Environment Setup

- Do tenant environment setup after Web Application Server is started.

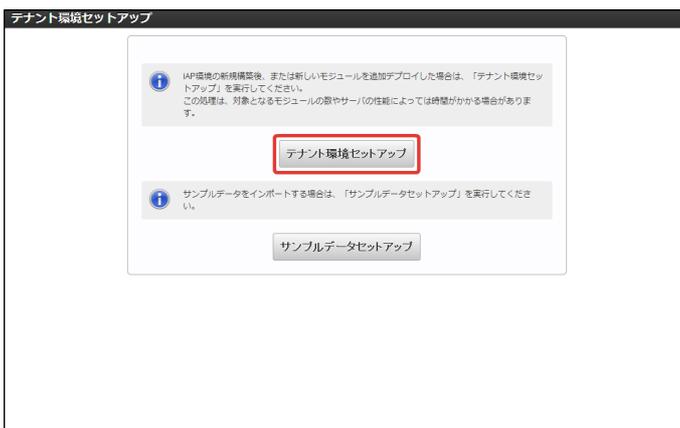
Display menu screen of system administrator.
Click [Tenant Environment Setup] from menu.



If the message says [Tenant environment is the most recent. There is no module that needs setup] is displayed as below, tenant environment setup is successfully completed.



If the [Tenant Environment Setup] button is displayed as below, the tenant environment setup is incomplete. You should do the setup again by clicking [Tenant Environment Setup] button.



Warning

If you do the tenant environment setup via Web Server, it is recommended to change the timeout setting value of Web Server, or do the setup via Web Application Server.



Note

The button for the sample setup will always be displayed regardless of the process result. Therefore, if the error occurs during feeding sample data, uniqueness limit violation will occur in Database when setup is performed again. In this case, it is recommended to do [**Uninstallation**] and start over again from the setup.



Note

It is recommended to take the backup before you apply updates and patches. Please refer to [**Backup**] for detail.



Note

If you use im-Juggling in the environment where you cannot connect to outside, please download the latest im-Juggling version and repository data from the site below in advance.

<http://www.intra-mart.jp/download/product/iap/index.html>

Various downloads (zip file)

[*] ID and Password that were provided at the maintenance contact are required for the download.

Appendix

Resin Clustering

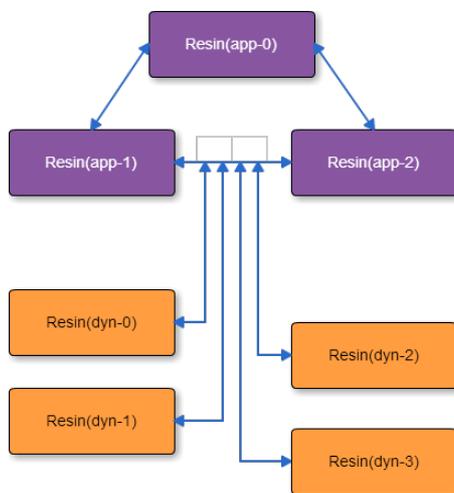
Topics

- Overview
- Triad Server
- Dynamic Server
- Deployment to the Cluster

Overview

Resin clustering is made up of 3 static servers (Triad Servers) and servers that are manually added/deleted depending on the load (Dynamic Servers).

By making the cluster configuration, load distribution, propagation of deploy/undeploy, and session failover would be possible.



Triad Server

Triad servers are the static servers that are always up and operational. They work as a hub in the center of the cluster, and actively audit each other among them.

Because of the triplex redundancy, even while 1 server is under maintenance, remaining 2 servers continue to be operational and secure reliability.

Please edit the **resin.properties** file in order to set the triad servers. IP addresses of 3 triad servers should be stated in **[app_servers]**.

Similar settings should be stated for all 3 servers.

```
# app-tier Triad servers: app-0 app-1 app-2
app_servers : 192.168.100.100 192.168.100.101 192.168.100.102
```

IDs are automatically assigned in the sequence IP addresses are stated. ID will have the prefix **[app-]** and the number starting from 0 shall be assigned.

Following IDs will be allocated in this example.

```
192.168.100.100 app-0
192.168.100.101 app-1
192.168.100.102 app-2
```

Please start the triad servers by executing the command from each server. Please specify your own ID for the ID included in the command according to each server.

Shown below is an example of command that is executed from the server with IP address 192.168.100.100.

Change the ID to **[app-1]** for the server 192.168.100.101, and to **[app-2]** for the server 192.168.100.102, before executing the command.

- In case of Windows

```
> resin.exe -server app-0 console
```

- In case of Linux

```
> resinctl -server app-0 console
```

This completes the procedures of triad servers.



Note

Triad server is a name meaning triplex redundancy. Only 1 unit or 2 units can serve the purpose, but since the triad server should always be operational even while 1 unit is under failure or maintenance, 3 units would be operational at maximum. In a system where triad server is not operational, dynamic server cannot participate in the cluster.

If there is no need to have dynamic servers and 2 servers would be enough from the expected system load viewpoint, clustering configuration with only 2 servers would be possible.

Dynamic Server

By utilizing the dynamic servers, you can manually add/delete servers as you like according to the system usage status. If a new dynamic server is added, automatic adjustment of the clustering is made and the server becomes the subject for active audit. Moreover, distribution of Web applications and the session failover will be automatically provided by the triad server.

resin.properties file should be edited to set up the dynamic servers. Following 3 settings would be required.

- **app_servers**
IP addresses for 3 triad servers are stated.
- **elastic_cloud_enable**
Attributes that are commented out should be enabled, and the value **[true]** is set.
- **home_cluster**
Cluster ID the dynamic server is added to should be specified. In case **resin.xml** file has the default setting, please set it to **[app]**.

Shown below is the example of dynamic server being used.

Please make the same setting to both the triad server and dynamic server.

```
# app-tier Triad servers: app-0 app-1 app-2
app_servers : 192.168.100.100 192.168.100.101 192.168.100.102
...
# Allow elastic nodes to join the cluster (enable for cloud mode)
elastic_cloud_enable : true
...
# The cluster that elastic nodes should join - each will contact a Triad server
# Use a separate resin.properties file for each cluster
home_cluster : app
```

It is recommended that you copy and save the **resin.properties** file that describes the settings so that the server can be easily duplicated.

Dynamic server should be executed. Please execute the command from the server.

All the triad servers should be started in advance.

- In case of Windows

```
> resin.exe --elastic-server --cluster app console
```

- In case of Linux

```
> resinctl --elastic-server --cluster app console
```

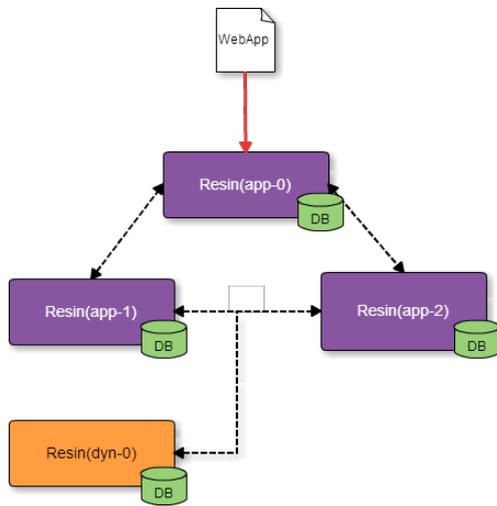
This completes the procedures of using dynamic servers.

Deployment to the Cluster

With regard to the deployment to the cluster, if the deployment is made to one server, Web applications will be replicated and deployed to all the servers.

Users should make the deployment only to the triad server. When the deploy command to the triad server is executed, war files are registered to the internal database of Resin.

war files that are registered will be replicated to other triad servers and dynamic servers, and deployment will be performed at each server automatically.



- Deployment Execution
 Please transfer the war files to any one of the triad servers, and execute the command on the server.
 - In case of Windows


```
> resin.exe deploy c:\imart.war
```
 - In case of Linux


```
> resinctl deploy ./imart.war
```
- Undeployment Execution
 Please execute the command from the server in a similar way for undeployment too. If you execute the command on any one of the triad servers, undeployment will be performed on all the servers.
 - In case of Windows


```
> resin.exe undeploy imart
```
 - In case of Linux


```
> resinctl undeploy imart
```

This completes the procedures for deployment.

Note

Deployment or undeployment command can be executed only on the triad servers. Please execute it on either one of app-0, app-1, or app-2. This command cannot be executed on dynamic servers.

Integrated Windows Authentication

Topics

- Overview
- Prerequisites
- Setup
 - Integrated Windows Authentication Function Setting
 - Setting of Tenant Resolution Plugin
 - Utilize Web service in Integrated Windows Authentication Environment
 - Utilize External Software Linkage Function in Integrated Windows Authentication Environment
 - Setting of Internet Explorer

Overview

Integrated Windows Authentication function allows the user who has the same user code with the authenticated user on the domain controller to allow automatic log-in by obtaining the user information who has completed Integrated Windows Authentication when intra-mart Accel Platform is accessed. This would allow Single Sign-On to be provided.

Warning

Log-in from the Log-in Screen is not supported. Please see the limitations below for detail.
There are remarks about SSO (SingleSignOn) environment.

Prerequisites

- Resin should be used as an application server.
- It is necessary to have Resin operate on Windows Server.
- Windows Server that executes Resin needs to participate in the domain.
- Integrated Windows Authentication Module is necessary.
 - You need to select [Additional Function]-[Integrated Windows Authentication Module] on im-Juggling, and build intra-mart Accel Platform.
 - For the Integrated Windows Authentication module, please use the version 8.0.0-PATCH_001 or later.

 **Warning**

In order to achieve Single Sign-On, it is necessary that the user code on the domain controller and the user code on intra-mart Accel Platform should match.

 **Warning**

Domain controller and the browser that supports Integrated Windows Authentication are required for the Integrated Windows Authentication function.

 **Warning**

Integrated Windows Authentication is executed on Resin as intra-mart Accel Platform function. Therefore, please disable Windows authentication of IIS. Please set other authentications as required.

Setup

Integrated Windows Authentication Function Setting

Please do the following settings after tenant environment setup.

- Setting of Function Enablement
 1. Open the Integrated Windows Authentication Setting File (<(expanded war)/WEB-INF/conf/im-sso-windows-config.xml>).
 2. Set <im-sso-windows-config><authentication><@enable> to true.
- Tenant Resolution Setting (intra-mart Accel Platform 2014 Spring (Granada) or later only)

plugin has been adopted as a method to resolve the tenant which is the subject for authentication. Please refer to [API Document for PluginManager] for the setting specifications of plugin.

 1. Open <(expanded war)/WEB-INF/plugin/jp.co.intra_mart.foundation.admin.tenant.context.tenant.resolver.windows_8.0.1/plugin.xml>.
 2. Specify implementation class to <plugin><extension><tenant-id-resolvers><tenant-id-resolver><@class>, and set the parameter to the implementation class as required.
 - For the available implementation class and the parameter to be set, please refer to **Setting of Tenant Resolution Plugin**.

This completes the setting of Integrated Windows Authentication function.

Setting of Tenant Resolution Plugin

Following 2 implementation classes are provided for the resolution of tenant :

Implementation Class	Overview
<i>jp.co.intra_mart.foundation.admin.tenant.context.DomainBasedWindowsTenantIdResolver</i>	Domain which the user participates is resolved as Tenant ID.
<i>jp.co.intra_mart.foundation.admin.tenant.context.FixedConfigBasedWindowsTenantIdResolver</i>	Fixed value that is set is resolved as Tenant ID.

- [*jp.co.intra_mart.foundation.admin.tenant.context.DomainBasedWindowsTenantIdResolver*](#)

Domain which the user participates is resolved as Tenant ID.
There is no parameter that is required for this implementation class.
- [*jp.co.intra_mart.foundation.admin.tenant.context.FixedConfigBasedWindowsTenantIdResolver*](#)

tenant_id receives the parameter, and resolves it by making the value as Tenant ID.
In the setting example below, [default] is resolved as Tenant ID.

```
<tenant-id-resolver class="jp.co.intra_mart.foundation.admin.tenant.context.FixedConfigBasedWindowsTenantIdResolver">
  <init-param>
    <param-name>tenant_id</param-name>
    <param-value>default</param-value>
  </init-param>
</tenant-id-resolver>
```

Utilize Web service in Integrated Windows Authentication Environment

Following settings are necessary to utilize Web service in Integrated Windows Authentication environment.

- Setting of Function Enablement
 1. Open the setting file (<(expanded war)>/WEB-INF/conf/im-sso-windows-path-config/im-sso-windows-path-config_ws_auth.xml>).
 2. You should remove the comment and enable the setting as follows :

```
<no-authentication>
  <path regex="true"/>services/*</path>
  <path regex="true"/>axis2-admin/*</path>
</no-authentication>
```

Utilize External Software Linkage Function in Integrated Windows Authentication Environment

Following settings are necessary to utilize external software linkage function in Integrated Windows Authentication environment.

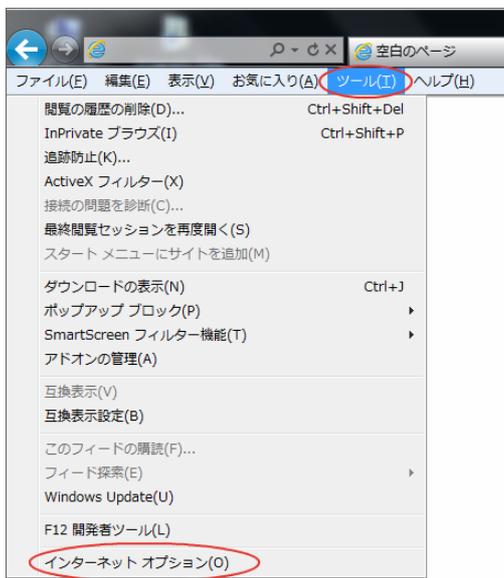
- Setting of Function Enablement
 1. Open the setting file (<(expanded war)>/WEB-INF/conf/im-sso-windows-path-config/im-sso-windows-path-config_imaca_provider.xml>).
 2. You should remove the comment and enable the setting as follows :

```
<no-authentication>
  <path>/HTTPActionEventListener</path>
</no-authentication>
```

Setting of Internet Explorer

Log-in user of Windows can automatically log in to intra-mart Accel Platform by changing the setting of Internet Explorer.

1. Display Internet Options.



Note

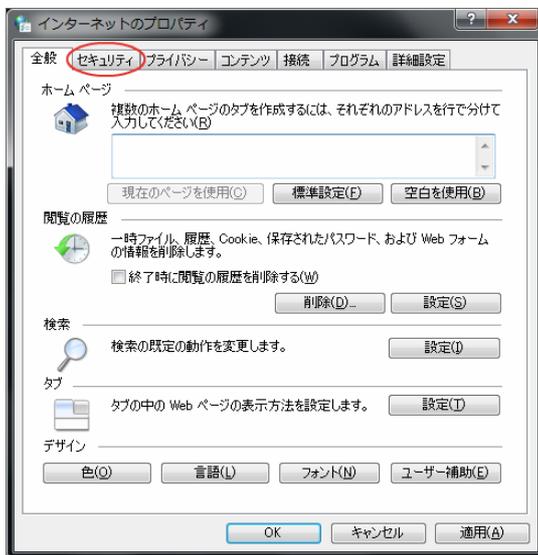
If the Tool Menu is not displayed, it will be displayed by pressing the Alt key.



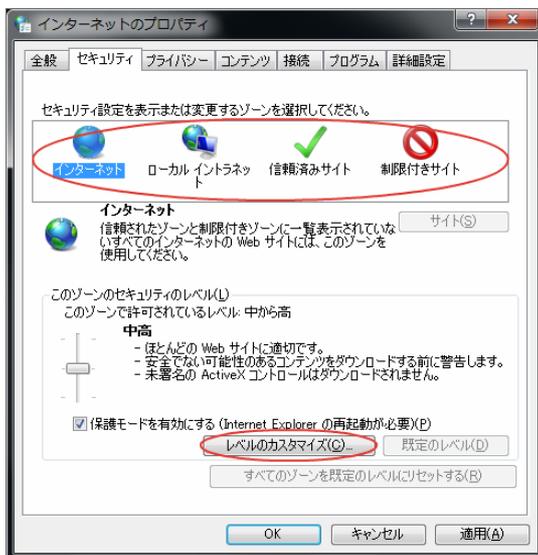
Note

You can display Internet Options from the Control Panel too.

2. Display Security Setting Screen.

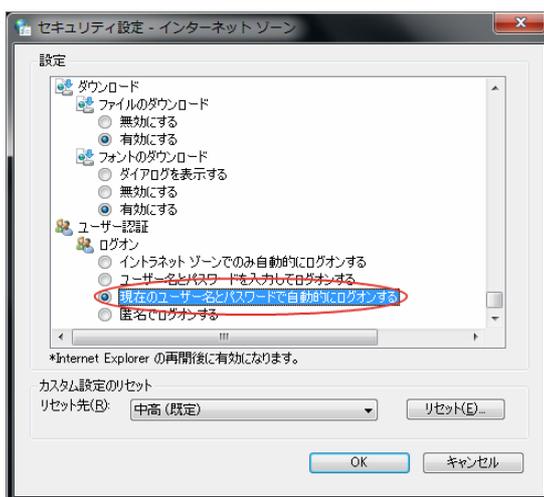


3. Display Customization Screen for the level of the corresponding zone to intra-mart Accel Platform.



4. Change User Authentication Setting.

Check [Log on automatically with current user name and password].



Note

By making the settings above, user authentication will be automatically made when Internet Explorer is used.

Multiple Tenants by WAR file

On intra-mart Accel Platform, multi-tenant environment is realized by deploying multiple war files onto Resin. In the multi-tenant environment, resource is not shared with each tenant environment. Therefore, settings of intra-mart Accel Platform should be separated for each tenant. Settings that need to be separated are as follows :

1. Clustering ID, Port Number for Clustering, and Port Range

Network Network Settings should be referred to.

It is necessary that the settings of clustering ID, port number for clustering, and port range are made to avoid duplication among tenants.

2. DataSource

Please refer to **DataSource**.

It is necessary that the database connection destination should be set for each tenant.

3. Storage Region

Please refer to **Storage**.

It is necessary that the Storage region for use by each tenant should be set.

4. Apache Cassandra Connection Destination

Please refer to **IMBox**.

It is necessary that the connection destination of Apache Cassandra for connection by each tenant and keyspace should be set respectively.

5. Apache Solr Connection Destination

Please refer to **IM-ContentsSearch**.

It is necessary that Apache Solr for connection by each tenant should be set.

6. war File Name

On Resin, context path is determined based on the name of war file.

In the multi-tenant environment, war file names should be separated.

**Warning**

In case Multiple Tenants by WAR file environment is built, please be aware that more memory is consumed than the single tenant case.

For the setting of memory usage amount, please refer to **Resin Configuration**.

Tenant Resolution Function

Overview

In this chapter, how the operation target tenant is resolved when virtual tenant function is used is described.

In intra-mart Accel Platform, tenant ID property of account context indicates the operation target tenant.

The tenant ID property of account context will be resolved by using tenant resolution function.

Specifications of tenant resolution function are hereafter described.

The program to be created on intra-mart Accel Platform does not have to engage the operation target tenant.

(Operation target tenant will be automatically resolved by the tenant resolution system that is described on this page.)

About Tenant Auto Resolution Function using Request Information

In intra-mart Accel Platform, tenant for operations can be determined using request information.

By using this function, particular tenant will be the tenant for operations regardless of user authentication status, and it is not necessary to specify the tenant ID for log-in.

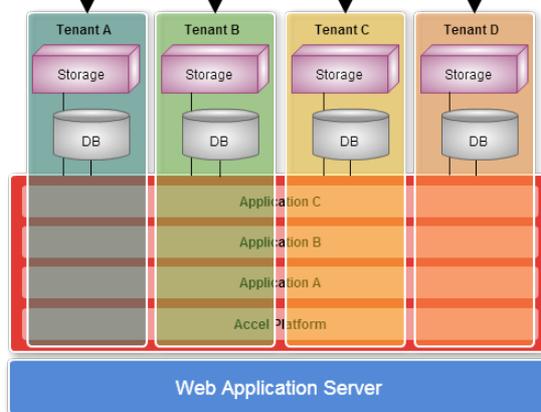
For example, if you do automatic resolution for tenant using sub-domain of URL, tenant for operations can be determined for each URL as shown below.

<http://tenant-a.accel-service.com>

<http://tenant-b.accel-service.com>

<http://tenant-c.accel-service.com>

<http://tenant-d.accel-service.com>



Note

Tenant Auto Resolution Function using Request Information is not used as standard.
 Tenant Auto Resolution Function using Request Information will be enabled if you use a module which provides [IM-SecureSingOn for Accel Platform] application or the function.

Note

Please refer to [[Providing Tenant Auto Resolution Function using Request Information](#)] for the implementation method of Tenant Auto Resolution Function using Request Information.

Tenant Resolution Scenarios

There are following scenarios to resolve tenant when Web accessing is made :

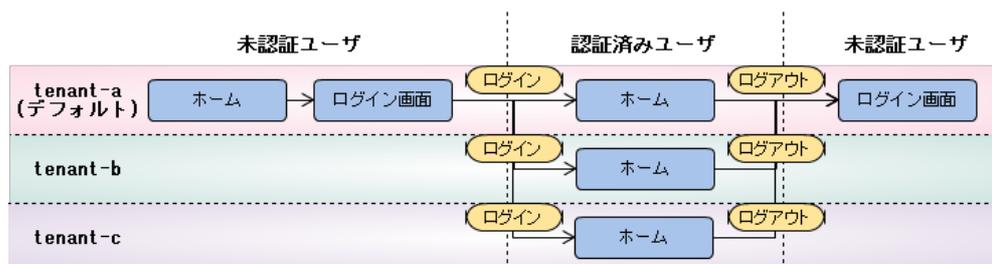
- General User
 - In case the tenant is specified for log-in
 - In case Tenant Auto Resolution Function using Request Information is used
- System Administrator

General User

In case the tenant is specified for log-in

If there are multiple tenants, you should specify the tenant on log-in screen of general user and log-in.

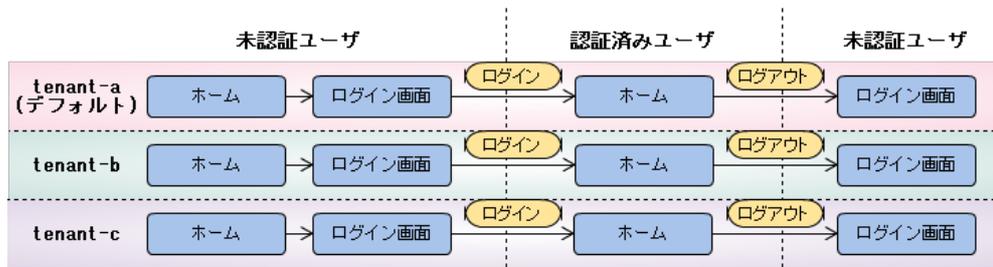
If you successfully log-in, the tenant specified on log-in screen will be the tenant for operations.
 If you log-out, it will be unauthenticated and the default tenant will become the subject for operations.
 In unauthenticated status, the default tenant will be the tenant which is the subject for operations.



In case Tenant Auto Resolution Function using Request Information is used

By using Tenant Auto Resolution Function using Request Information, the tenant can be resolved from arbitrary information of the request.
 When you are using this function, the tenant for operations will not be switched by log-in/out and you cannot log-in specifying the tenant on log-in screen.

In unauthenticated status, the tenant which is automatically resolved will be the tenant for operations.



System Administrator

In case of system administrator, the tenant for operations will be the default tenant.

System administrator can switch the tenant for operations using tenant switching function. Please refer to [Tenant Switching] for details.

Providing Tenant Auto Resolution Function using Request Information

Overview

If Tenant Auto Resolution Function using Request Information is enabled, tenant for operations will be resolved by the following flow.

1. Do tenant ID resolution in the provided tenant automatic resolution function.
2. Do tenant ID verification in the provided tenant verification function.
3. Set tenant ID to the tenant ID property of account context.

About **Tenant Automatic Resplution Function**, **Tenant Verification Function** and its providing method are described below.

Tenant Automatic Resplution Function

It is a function to resolve the tenant ID from the request information.

You can use Tenant Auto Resolution Function using Request Information ``RequestBasedTenantIdResolver`` by creating a class which implements interface and setting the plug-in setting file.

Multiple tenant resolution function can be set and provided.

If multiple tenant resolution functions are provided, a tenant resolution function will be executed in the priority sequence of tenant resolution function according to the plug-in specifications.

Tenant resolution process is closed at the point when the tenant resolution is executed (when the value other than `null` is returned by `getTenantId(HttpServletRequest)` method). Subsequent tenant resolution function will not be executed.

If the tenant cannot resolve tenant (`null` is returned by `getTenantId(HttpServletRequest)` method), tenant resolution may be done in subsequent tenant resolution function.

If all tenant resolution functions failed to resolve the tenant, (all returned `null`), it will be resolved as default tenant if there occurs no problem in **Tenant Verification Function** verification which will be stated in the next section.

Tenant Automatic Resolution Function Creation

The class that implements following interface is created.

```
jp.co.intra_mart.foundation.admin.tenant.context.RequestBasedTenantIdResolver
```

Following is the sample implementation that resolves tenant by using Cookie.

```
package sample.context;

import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServletRequest;

import jp.co.intra_mart.foundation.admin.tenant.context.RequestBasedTenantIdResolver;

public class CookieTenantIdResolver implements RequestBasedTenantIdResolver {

    private static final String COOKIE_KEY = "X-TENANT-ID";

    @Override
    public String getTenantId(final HttpServletRequest request) {
        return getCookieValue(request, COOKIE_KEY);
    }

    private Cookie getCookie(final HttpServletRequest request, final String name) {
        final Cookie[] cookies = request.getCookies();

        if (cookies == null) {
            return null;
        }

        for (final Cookie cookie : cookies) {
            if (name.equals(cookie.getName())) {
                return cookie;
            }
        }

        return null;
    }

    private String getCookieValue(final HttpServletRequest request, final String name) {
        final Cookie cookie = getCookie(request, name);

        if (cookie == null) {
            return null;
        }

        return cookie.getValue();
    }
}
```

**Note**

Please refer to [[API list of RequestBasedTenantIdResolver interface](#)] for details of `RequestBasedTenantIdResolver` interface.

Tenant Automatic Resolution Function Setting

Tenant automatic resolution function is set in plug-in file. Therefore, the setting that uses plug-in function can be performed. Extension point to set Tenant Auto Resolution Function using Request Information is

`jp.co.intra_mart.foundation.admin.tenant.context.tenant.resolvers`.

The created plug-in file is placed in `WEB-INF/plugin/sample_tenant_resolver/plugin.xml`. (Folder name immediately under plugin can be changed to any name that does not duplicate with other plug-ins.)

Plug-in setting sample that operates tenant automatic resolution function implementation which uses above Cookie is shown below.

```
<?xml version="1.0" encoding="UTF-8"?>
<plugin>
  <extension point="jp.co.intra_mart.foundation.admin.tenant.context.tenant.resolvers">
    <tenant-id-resolvers
      id="sample.context.cookie_resolver"
      version="1.0.0"
      rank="1">

      <!-- tenant-id-resolver タグは複数指定可能です。 -->
      <!-- RequestBasedTenantIdResolverインタフェースを実装したクラスの完全修飾クラス名をclass属性に指定してください。 -->
      <tenant-id-resolver class="sample.context.CookieTenantIdResolver" />

    </tenant-id-resolvers>
  </extension>
</plugin>
```

**Note**

Please refer to [[API List of PluginManager](#)] for the setting specification of plug-in.

If above materials are deployed, the value of Cookie key `X-TENANT-ID` will be treated as tenant ID.

Tenant Verification Function

It is a function to judge if the tenant ID resolved by the tenant automatic resolution function has a valid value.

If the tenant ID resolved by the tenant automatic resolution function was not an error in the verification function, it will be set to the tenant ID property of account context. For example, if non-existing tenant ID is set to the tenant ID property of account context, functions provided by intra-mart Accel Platform may not work properly. Validity check will be performed in tenant verification function to avoid conditions like this.

Multiple tenant verification functions can be set and provided.

If multiple tenant verification functions are provided, it will be executed in the priority sequence of tenant verification function according to the plug-in specifications.

At the point when error (`InvalidTenantIdException` by `validate(String, Resource)`) occurs in tenant verification, tenant verification is closed. Subsequent tenant verification functions will not be executed.

Tenant Verification Function Creation

Class that implements following interface is created.

- `jp.co.intra_mart.foundation.admin.tenant.context.TenantIdValidator`

Sample implementation is shown as below.

```

package jp.co.intra_mart.foundation.admin.tenant;

import jp.co.intra_mart.foundation.admin.tenant.context.TenantIdValidator;
import jp.co.intra_mart.foundation.context.core.Resource;
import jp.co.intra_mart.system.admin.tenant.InvalidTenantIdException;

public class SampleTenantIdValidator implements TenantIdValidator {

    @Override
    public void validate(final String tenantId, final Resource resource) throws InvalidTenantIdException {

        if (tenantId != null && !tenantId.startsWith("TENANT_")) {
            // テナントID書式チェック
            // テナントIDが"TENANT_" で始まっていることをチェックします。
            throw new InvalidTenantIdException("テナントIDの書式が正しくありません。");
        }
    }
}

```



Note

Please refer to [[API List of TenantIdValidator Interface](#)] for the details of `TenantIdValidator` interface.

Tenant Verification Function Setting

Tenant verification function is also set by plug-in setting file as tenant automatic resolution function.

Extension point to set the tenant verification function is `jp.co.intra_mart.foundation.admin.tenant.context.tenant.validators`.

Sample plug-in setting file is shown as below.

```

<?xml version="1.0" encoding="UTF-8"?>
<plugin>
  <extension point="jp.co.intra_mart.foundation.admin.tenant.context.tenant.validators">
    <tenant-id-validators
      id="sample.context.sample_tenant_id_validator"
      version="1.0.0"
      rank="1">

      <!-- tenant-id-validator タグは複数指定可能です。 -->
      <!-- TenantIdValidatorインタフェースを実装したクラスの完全修飾クラス名をclass属性に指定してください。 -->
      <tenant-id-validator class="sample.context.SampleTenantIdValidator" />

    </tenant-id-validators>
  </extension>
</plugin>

```

StandardTenantIdValidator

It is an implementation class of `TenantIdValidator` provided as standard.

Tenant resolution check and tenant existence check are implemented by tenant automatic resolution function.

Complete Class Qualifier

```
jp.co.intra_mart.system.admin.context.StandardTenantIdValidator
```

Initialization Parameter of Plug-in

Since `StandardTenantIdValidator` implements `PropertyInitParamable` interface, the initialization parameter can be passed by plug-in setting file.

Initialization parameter is specified by `<init-param>` tag.

```
<?xml version="1.0" encoding="UTF-8"?>
<plugin>
  <extension point="jp.co.intra_mart.foundation.admin.tenant.context.tenant.validators">
    <tenant-id-validators>
      id="jp.co.intra_mart.tenant_id.validator.standard"
      version="8.0.7"
      rank="100">
        <tenant-id-validator class="jp.co.intra_mart.system.admin.context.StandardTenantIdValidator">

          <init-param>
            <param-name>required_tenant_id</param-name>
            <param-value>true</param-value>
          </init-param>
          <init-param>
            <param-name>valid_tenant_id</param-name>
            <param-value>true</param-value>
          </init-param>

        </tenant-id-validator>
      </tenant-id-validators>
    </extension>
  </plugin>
```

param-name	Description
required_tenant_id	It checks if tenant ID is solved. It specifies <code>true</code> or <code>false</code> and will do the check in case of <code>true</code> . If the tenant ID is not resolved, exception <code>InvalidTenantIdException</code> will occur and you will not be able to access the system. Checking is not performed if it is omitted.
valid_tenant_id	It checks if the tenant ID is the one from tenant where the resolved tenant ID exists. It specifies <code>true</code> or <code>false</code> and will do the check in case of <code>true</code> . If the resolved tenant ID is not the one from the existing tenant, exception <code>InvalidTenantIdException</code> will occur and you will not be able to access the system. Checking is not performed if it is omitted.

 **Note**
Please refer to [\[API List of PropertyInitParamable Interface\]](#) for details of `PropertyInitParamable` interface.

Port List

- Port number to be used in intra-mart Accel Platform is described.

Topics

- Resin**
 - HTTP Communication Port
 - HTTPS Communication Port
 - Cluster Port (triad server)
 - Cluster Port (dynamic server)
 - watchdog Port
- JGroup
- Apache Cassandra
 - Client Connection Port
 - Inter-Node Communication Port
 - Inter-Node Communication Port (When SSL is used for inter-node communication)
 - JMX Connection Port
- Apache Solr

Resin

- Resin uses following function ports.
 - HTTP(HTTPS) port
 - Cluster port

 **Warning**
Setting methods of cluster port are different between triad server and dynamic server.

- Triad server
Edit resin.properties file
- Dynamic server

Specify command line argument

- watchdog port

HTTP Communication Port

- Port setting for Resin to do HTTP communication.
- Setting items

Default port number	8080
Default valid/invalid	Valid
Setting file	resin.properties
Property	app.http

- Setting example

If you use the same port for all servers, please state one [**app.http**].

```
app.http      : 8080
```

If you specify the port to be used for each server, [[**server ID**].http] should be stated. Resin of [**app-0**] uses [8080] in the example below, but other Resin uses [8080].

```
app.http      : 8080
app-0.http    : 8081
```

HTTPS Communication Port

- Port setting for Resin to do HTTPS communication.
- Setting items

Default port number	8443
Default valid/invalid	Invalid
Setting file	resin.properties
Property	app.https

- Setting example

If you use the same port for all servers, please state one [**app.https**].

```
app.https     : 8443
```

If you specify port to be used for each server, [[**server ID**].https] is stated. Resin of [**app-0**] uses [8444] in the example below, but other Resin uses [8443].

```
app.https     : 8443
app-0.https   : 8444
```

Cluster Port (triad server)

- It is a port setting for Resin to do Clustering.
- Setting items

Default port number	6800
Default valid/invalid	Valid
Setting file	resin.properties
Property	app_servers

- Setting example

If you specify default port number, please state IP address only in [**app_servers**].

```
app_servers   : 192.168.100.100 192.168.100.101 192.168.100.102
```

If you use unique port number, please state [[IP address]:[port number]].

```
app_servers   : 192.168.100.100:6801 192.168.100.101:6802 192.168.100.102:6803
```

Cluster Port (dynamic server)

- Port setting for Resin to do clustering.
- Setting items

Default port number	6830
Command line argument	-elastic-server-port

- Setting example

Default port number is used in starting command which does not specify the port number.

```
> resin.exe --elastic-server --cluster app console
```

If you use unique port number, please specify [--elastic-server-port] to starting command.

```
> resin.exe --elastic-server --cluster app --elastic-server-port 6831 console
```

watchdog Port

- Setting items

Default port number	6600
Default valid/invalid	Valid
Setting file	resin.xml
Tag	<watchdog-port>

- Setting example

```
<watchdog-port>6700</watchdog-port>
```

JGroup

- JGroups is used as inter-server communication.

Default port number	5200-5202
----------------------------	-----------

Apache Cassandra

- Apache Cassandra uses following function ports.
 - Client connection port
 - inter-node communication port
 - inter-node communication port (when SSL is used for inter-node communication)
 - JMX connection port



Note
Please refer to [[Cassandra Administrator Guide](#)] for detail.

Client Connection Port

Default port number	9160
----------------------------	------

Inter-Node Communication Port

Default port number	7000
----------------------------	------

Inter-Node Communication Port (When SSL is used for inter-node communication)

Default port number	7001
----------------------------	------

JMX Connection Port

Default port number	7199
----------------------------	------

Apache Solr

- It depends on the application server built by [[Apache Solr](#)].

Default port number	Application server [Jetty]	8983
	Application server [Resin]	8080
	Application server [Tomcat]	8080

Application of im-Juggling

How to create WAR file by CUI without using im-Juggling

WAR file is created by intra-mart Accel Platform using im-Juggling. This WAR file can also be created by CUI.

Directory in the following format does exist under plugins directory to which im-Juggling is installed.

```
jp.co.intra_mart.flashcat.ant_1.0.0.XXXXXXXXXXXXX/ant
```

[*] XXXXXXXXXXXXXXX is for time stamp.

[*] In case of after automatic update application, there may be multiple directories.
If there are multiple directories, please use directory of the latest stamp.

Structure inside the directory is shown as below.

```
jp.co.intra_mart.flashcat.ant_1.0.0.XXXXXXXXXXXXX/ant
├── build.xml // ant script for WAR creation
├── lib // library group which is necessary for WAR creation
│   ├── commons-compress-1.3.jar
│   ├── im_commons-8.0.3.jar
│   ├── im_core_base-8.0.3.jar
│   ├── im_j2ee_assist-8.0.2.jar
│   ├── im_j2ee_assist_base-8.0.2.jar
│   ├── im_j2ee_assist_impl-8.0.2.jar
│   ├── im_jackling_core-0.0.2.jar
│   ├── im_jackling_toolkit-0.0.2.jar
│   ├── im_jdk_assist-8.0.2.jar
│   ├── im_juggling_ant-1.0.0.jar
│   ├── im_modules-8.0.5.jar
│   ├── javassist-3.7.ga.jar
│   ├── ognl-2.7.3.jar
│   ├── slf4j-api-1.6.6.jar
│   └── xalan-2.7.0.jar
```

Directory named "project" should be created immediately under this ant directory, and im-Juggling project file group will be placed in it. After that, WAR file will be created by executing following command from the command line.

```
ant clean make
```



Warning

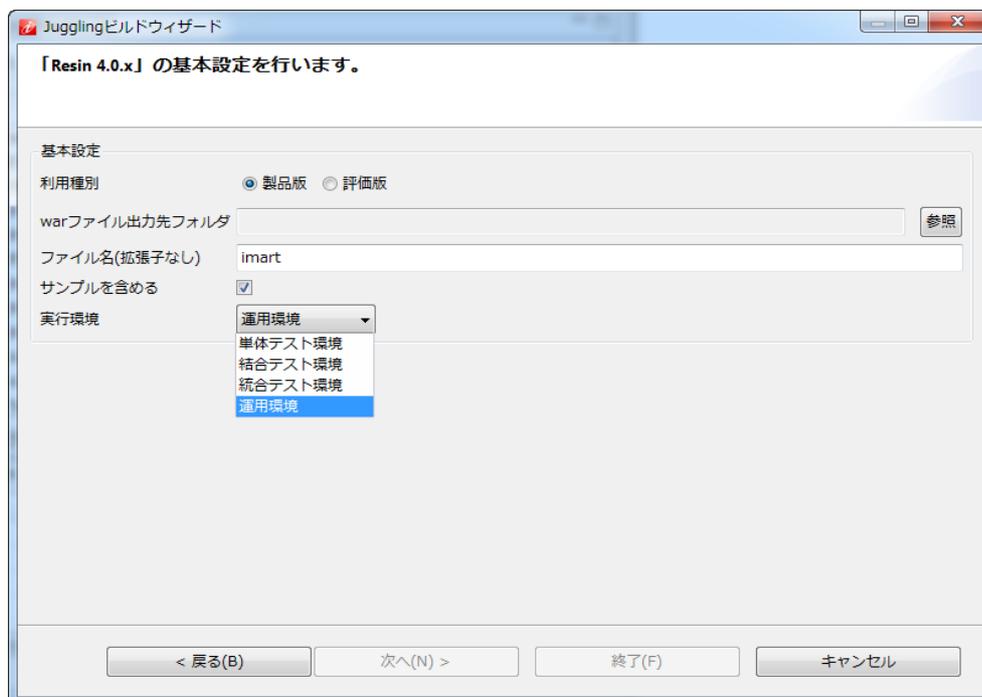
License agreement confirmation is not displayed when WAR file is created in CUI.

If the WAR file is used as it is, we automatically assume that you have agreed to the licensing terms.

Thank you for your understanding.

Execution Environment Change when WAR File is created

- When WAR file is created in im-Juggling, [Execution Environment] item can be selected on the following screen.



The main differences of [Execution Environment] item are follows.

- Unit Test Environment
 - It represents the unit test environment.
 - It typically assumes the case where JUnit is used.
 - Performance will not be considered.
- System Integration Test Environment

- **Multiple Accesses Scenario**
- **Each Setting Value for the Numbers of Threads**
- **GC Tuning**
- **Cache Setting**
- **Compiling Resin Native Functions**
- **GZip Compression Consideration**
- **Static File is placed on WEB server, and not on AP server**
- **Tuning at Database side**
- **PreparedStatementCache**
- **Profiling by using VirtualVM**
- **Repeated Execution of Load Test**

Objective of Load Test / Setting of Performance Objective

First, objective of load test and the objective value of performance (what level of performance is expected in what kind of environment) are set.

It would not be a problem if the load test is performed in the verification environment equivalent to production environment, or if the production environment performance can be estimated from the semi-production level environment. However, if, for example, the load test is performed in an environment built on notebook PC, the result of the load test would not help you to estimate the production level performance.

You must clarify the objective of load test or the objective value of performance before you consider load test environment or its implementation contents.

Load Test Perspective

In what view you want to do investigation on what should be clarified. Followings are the example of perspectives.

- Response at server side
- Response at client side
- Memory consumption status at server side
- Performance of original application
- Load status on the database

If you check all perspectives extracted from one load verification, it would take time to just obtain the data.

Particularly, in the open source load test tool such as JMeter, it would be difficult to obtain the server resource status at the same time when the load test is performed.

Please be aware in advance that substantial workload would be needed for data analysis after the data was obtained.

Multiple Accesses Scenario

Typical scenario of the load test is the case where the scenario to execute all requests at the same time is created and executed.

Such loads rarely occur in the actual operations.

Even though the sizing is made based on the numbers obtained from this scenario, in the actual operations, the specifications of server configuration may become excessive or on the contrary, expected response cannot be achieved.

In case the scenario is created, think time (consideration time delay) should be embedded for creation and implementation to replicate the load which is similar to the actual operation other than multiple accesses perspective.

Each Setting Value for the Numbers of Threads

It makes no sense even if you set each setting value of number of threads in Resin or intra-mart extremely big.

It is important to set the value considering assumed number of users.

Setting would not be completed after you set the values just once. You need to run load test several times by changing the setting value to find the optimum value for the environment.

GC Tuning

It will be very difficult to find the appropriate value if you consider what you put in which area such as using G1GC, or ConcurrentGC.

Especially, in case of WebSphere, memory usage would be drastically changed by just changing the GC policy.

In that case, close investigation is needed on profiling or GC log by using VirtualVM.

Cache Setting

Calculate and set the appropriate value based on [[Various Configuration Files of Intra-mart Accel Platform](#)]-[[Cache Setting](#)] and [[Authorization Specifications](#)].

In case memory is not considered, number based cache would be more effective than the cache capacity based LRU cache.

Compiling Resin Native Functions

Native functions are partially used for the optimization of File/IO, Socket/IO in Resin.

In case of Linux environment, please do installation by [./configure --prefix=`pwd` && make && sudo make install].

Setting of [sendfile] or [tcp_cork] in resin.properties are the settings for native functions.

GZip Compression Consideration

In case the operation is performed by building WEB server, GZip compression is to be considered. If GZip compression is done in the load test, please add [Accept-Encoding:gzip, deflate] to the request header which should be sent from the client side putting the load.

Static File is placed on WEB server, and not on AP server

Static file could be processed in Resin, but the threads for the static file process will be consumed if the process is performed and required processes may not be performed. It is recommended to place static files on the WEB server unless you are operating the small sized site. Apache HTTP Server 2.2.x is recommended as a WEB server.

Tuning at Database side

Tuning for Database is extremely important. Tuning must be done as a part of load test. In case the tuning is not implemented (example: PostgreSQL was simply installed and shared_buffers remained as default setting), performance issue may occur at the process peak time such as the end of the month. Possible alternative could be to introduce appliance servers such as **Oracle Database Appliance(ODA)** or **SQL Server SSD Appliance**.

PreparedStatementCache

Please set appropriate value if tenant environment setup is completed. prepared-statement-cache of Resin is managed by LRU, and it should have a big enough value.

Profiling by using VirtualVM

In addition to GC tuning, CPU usage time and number of method calls should be checked by the profiling using VirtualVM etc.

Repeated Execution of Load Test

It is unlikely that you can get an expected response by executing the load test just one time. Method to improve the response should be assessed based on the test result and the setting and load test should be retried and repeated. It may depend on the process speed of CPU or may depend on the memory size or network traffic etc. Moreover, disc IO influence or other factors would be considered, so it is important to implement verifications and analysis from various point of views.



Note

You can also utilize our consulting service for these issues. Please contact our sales representative for details.

Various Settings for Load Test Execution

- Items which require the setting change when the load test is executed on intra-mart Accel Platform are described in this section.

Topics

- Resin JVM Option Setting**
- Setting to make unique user log-ins**
- jsspRpc, and Setting to Do Test of Business Screen using deprecated form Tag**
- Setting for the Test that assumes Multiple Accesses**

Resin JVM Option Setting

Please change the JVM option setting such as heap size of Java.

```
Setting example(Set MaxHeapSize·MaxPermSize or option setting)
jvm_args : -Xmx2048m -XX:MaxPermSize=512m
```



Warning

If temp directory is not specified by JVM option in Linux OS, [/tmp] is used and the setting to delete contents under [/tmp] periodically may be embedded as standard depending on cron setting etc. There are times when Resin is automatically restarted when the change of setting file deployed in the work directory is detected, and the following setting should be done to avoid this.

```
jvm_args : -Xmx2048m -XX:MaxPermSize=512m -
Djava.io.tmpdir=/var/resin-tmp
```

[*] Please create directory specified in -Djava.io.tmpdir beforehand and do authority setting.

Setting to make unique user log-ins

By disabling the secure token setting and by specifying the parameter to [*http://host name : port number/context path/certification*] and accessing it, authentication may be done by any user. Setting method is to comment out [/certification] of WEB-INF/conf/token-filtering-target-config/im_certification.xml. Please see below for details.

WEB-INF/conf/token-filtering-target-config/im_certification.xml

```
<p.entry url="/certification">
↓
<!-- <p.entry url="/certification" /> -->
```

Now the following URL can be used for logging-in.

```
http://Host name : port number/context path/certification?im_user=(user name)&im_password=(password)
```

And transition to the unique application screen also can be done after automatic log-in by adding [&im_url] attribute.

```
http://Host name : port number/context path/certification?im_user=(user name)&im_password=(password)&im_url=
```



Warning

As disabled in default, by changing this setting, you can log-in by URL argument or POST request and can execute arbitrary applications. Therefore, please make sure there is no problem in security when you use it for operations.

jsspRpc, and Setting to Do Test of Business Screen using deprecated form Tag

In jsspRpc, token check that uses normal session is made every time, and so the value of parameter necessary for the token check is changed for every log-in. Thus, it will cause an error even if you pass the same request parameter when the load test scenario was generated. Please edit WEB-INF/web.xml and change the value of servlet parameter "security" in SecureJSSPServlet and jsspRpcServlet in order to avoid this problem.

WEB-INF/web.xml

```
<servlet>
<servlet-name>SecureJSSPServlet</servlet-name>
<servlet-class>jp.co.intra_mart.system.servlet.jssp.SecureJSSPServlet</servlet-class>
<init-param>
<param-name>security</param-name>
<param-value>>false</param-value>
</init-param>
</servlet>
<servlet>
<servlet-name>jsspRpcServlet</servlet-name>
<servlet-class>jp.co.intra_mart.system.servlet.jssp.jsspRpcServlet</servlet-class>
<init-param>
<param-name>security</param-name>
<param-value>>false</param-value>
</init-param>
</servlet>
```

Setting for the Test that assumes Multiple Accesses

Following values should be set to do the test in which multiple accesses are assumed.

- Request Control

intra-mart Accel Platform has a function to limit the number of concurrent executions for the request. If a test in which multiple users do concurrent access is conducted, error may occur because of this limitation, and hence the limit number is adjusted. "0" is specified to max attribute of thread tag in request control setting to release server concurrent access limitation.

WEB-INF/conf/request-control-config.xml

```
<request-control-config>
<thread max="0">
...
</thread>
</request-control-config>
```

Please refer to [[Setting File Reference](#)] - [[Server Concurrent Process Control](#)] for request control setting.

- Maximum connection number for data source

Numbers that can be connected to the database may be controlled depending on the application server. Please confirm that the numbers that can be connected concurrently are appropriate values in data source setting on application server.
If Resin is used for the application server, it can be changed by editing resin-web.xml.

Please refer to [[Setting File Reference](#)] - [[Maximum Connection Number Setting](#)] for setting method and details.

- Number of threads in Resin

If you increase the number of threads in Resin, please change relevant part of the following file.

<%RESIN_HOME%>/conf/resin.properties

```
# Throttle the number of active threads for a port
port_thread_max : 256
accept_thread_max : 32
accept_thread_min : 4
# keepalive_max : 512
```



Warning

Settings above are the necessary setting items when you do load test. Please make the appropriate settings according to the actual operations environment.

Backup

- In order to do the normal restore, rest point of intra-mart Accel Platform and that of Database should match. It is recommended to do cold backup.

intra-mart Accel Platform Data

- Database data (tablespace where intra-mart Accel Platform is connected)
- File directory under <%STORAGE_PATH%> directory
- File directory under <%PUBLIC_STORAGE_PATH%> directory
- File directory under <%WEB_PATH%> directory
- WAR file (and project file on im-Juggling)
- Apache Cassandra backup | Please refer to [[IMBox Cassandra Administrator Guide](#)]-[[Cassandra Operations](#)].
- Apache Solr backup
- It executes backup such as application (program source) which was created originally.

Middleware Product

- Resin
It backs up under <%RESIN_HOME%> directory.
- Database
Please refer to Database manual that you use.
- Web Server
Please refer to Web Server manual that you use.
- Apache Cassandra
It backs up under the directory which sets up Apache Cassandra.
- Apache Solr
It backs up under the directory which sets up Web Application Server (Jetty, Resin, tomcat) operates Apache Solr.

Uninstallation

- In this chapter, uninstallation of all the files and data that are related to intra-mart Accel Platform are described. With regard to the uninstallation of middleware products, please refer to the manuals of the respective products.



Warning

In case you need to delete any tenant which was created in Multiple Tenants by Virtual Tenant, please refer to [[System Administrator Guide](#)]-[[Update Tenant Information](#)].

Topics

- [WAR File Undeployment](#)

- Applications Deletion
- Storage Region Deletion
- Middleware Products Deletion

WAR File Undeployment

1. Please execute the commands below.

In case of Windows (Start Command Prompt)

```
# cd <%RESIN_HOME%>
# resin undeploy Application Name(<%RESIN_HOME%>/Directory name that has the same name with the WAR file expanded under webapps)
```

In case of Linux

```
# <%RESIN_HOME%>/bin/resinctl undeploy Application Name(<%RESIN_HOME%>/Directory name that has the same name with the WAR file e
```

2. After the undeployment, please delete the following file manually.

Directory that has the same name as the WAR file under <%RESIN_HOME%/webapps>



Note

In case of multi-tenant environment, please execute it for each WAR file that is subject for undeployment.



Warning

For the WAR files to be undeployed, it is necessary that Resin has already been started.

Applications Deletion

1. Files and directories that are expanded on Resin should be deleted.

Files and directories under <%RESIN_HOME%/resin-data>

Directories under <%RESIN_HOME%/webapps>



Warning

It is necessary that Resin has been stopped.
Please refer to [Web Application Server Startup/Stop](#) for the method to stop it.

Storage Region Deletion

1. Files and directories under <%STORAGE_PATH%> should be deleted.
2. Files and directories under <%PUBLIC_STORAGE_PATH%> should be deleted.

Middleware Products Deletion

- Resin
<%RESIN_HOME%> directory should be deleted.
- Database
Please refer to the manuals of Database that is being used.
- Web Server
Please refer to the manuals of Web Server that is being used.



Warning

Files and directories under <%WEB_PATH%> directory to which static files are placed should be deleted.

- Apache Cassandra
Directory that has set up Apache Cassandra should be deleted.
- Apache Solr

Directory that has set up Web Application Server (Jetty, Resin, tomcat) where Apache Solr operates should be deleted.

Sample Data Input

Please execute following procedures when you use sample data.



Warning

Execute sample setup immediately after tenant environment setup is done.
If master data such as user or role is changed before the sample setup,
you may fail to execute sample setup.

1. Menu screen of system administrator will be displayed.
Click [Tenant Environment Setup] from Menu.



2. Click [Sample Data Setup].



Note

In case you failed during the procedure of tenant environment setup or sample data setup,

Delete Databasedata at connection destination, and do tenant environment setup again.
Please refer to **Uninstallation** for data deletion.

After the data deletion, restart Resin and do tenant environment setup again.

If you use Apache Cassandra, do data deletion and startup too.

Please refer to **In case of tenant environment setup / sample data setup failed** for setup log.

When you have trouble setting up...

- Please refer to the following for trouble shooting during setup.

Web Server

.NET Framework Setup

- In Windows Server which operates intra-mart Accel Platform, necessary version [.NET Framework] should be set up.
 - Resin : [.NET Framework 3.5(which includes .NET 2.0 and 3.0)] is required
 - Internet Information Services (IIS) : [.NET Framework 4(include 4.5)] is required

Setup Method

Following setup method is the example to set up [.NET Framework 3.5(which includes .NET 2.0 and 3.0)] to Windows Server 2012.

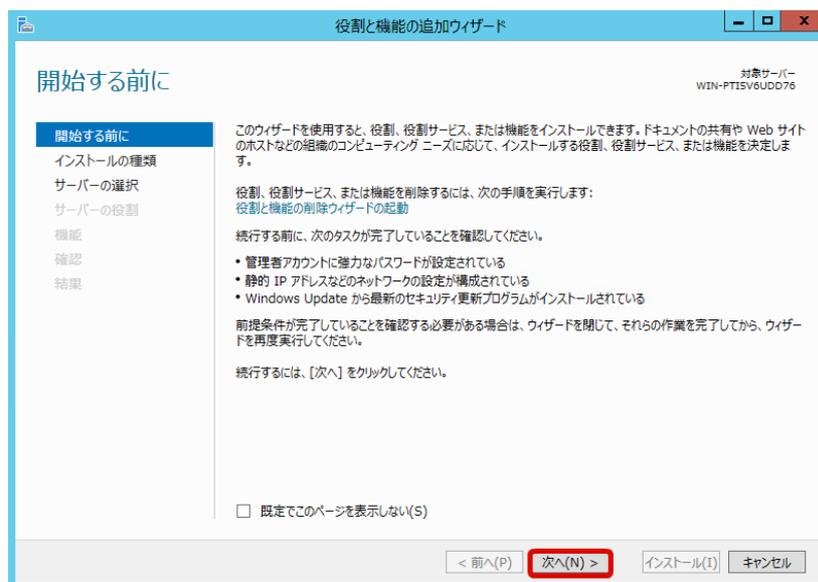
1. Open [Server Manager] belongs to Windows Server.



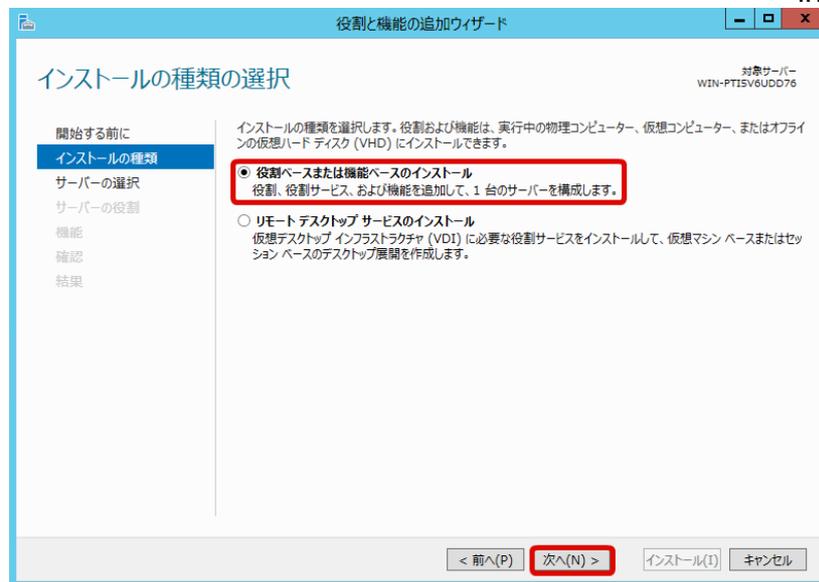
2. Click [Add Role and Function] from right pane.



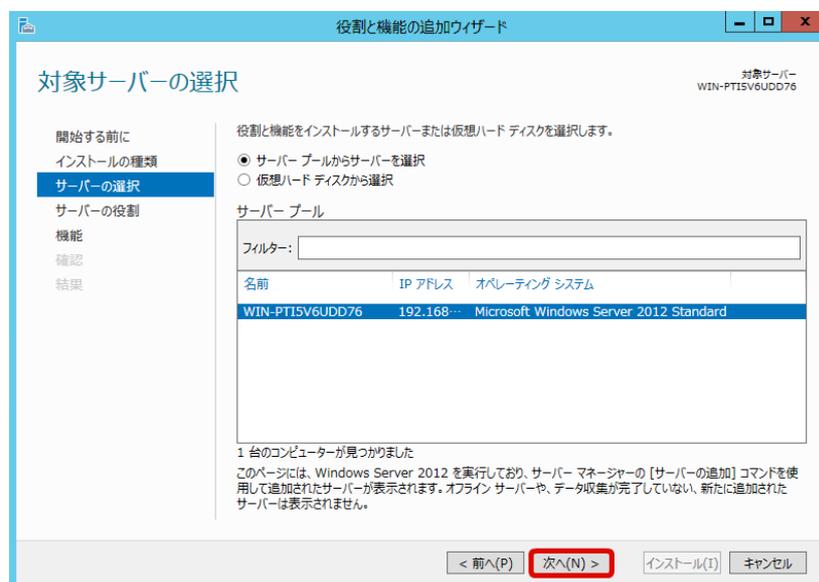
3. Proceed on .NET Framework setup according to the [Role and Function Addition Wizard] which is displayed on another window.
→Click [Next(N)]>



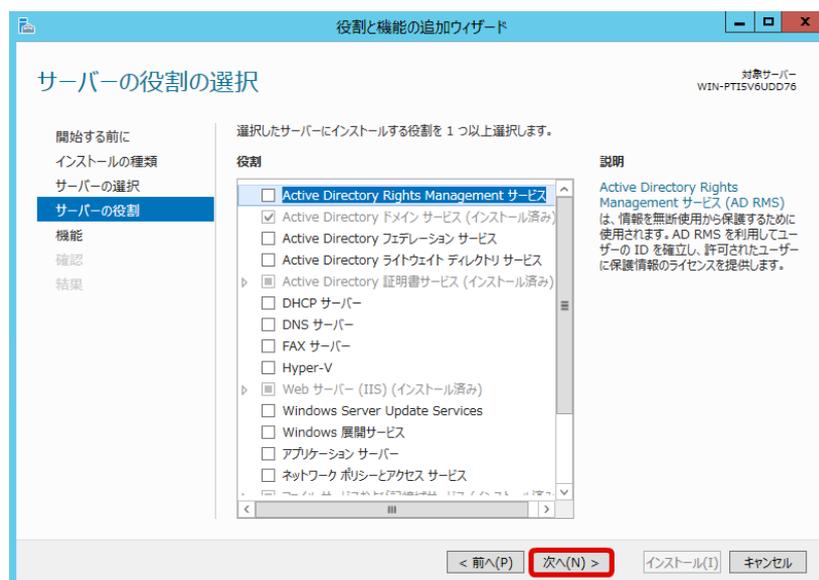
4. Select [Role Base or Function Base Installation] from [Install Type Selection].
→Click [Next(N)]>



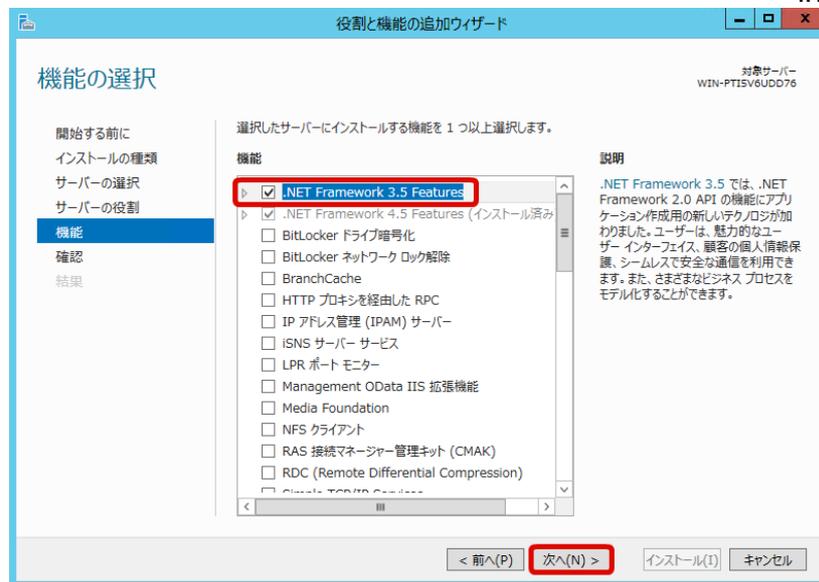
5. Select target server.
→Click [Next(N)>]



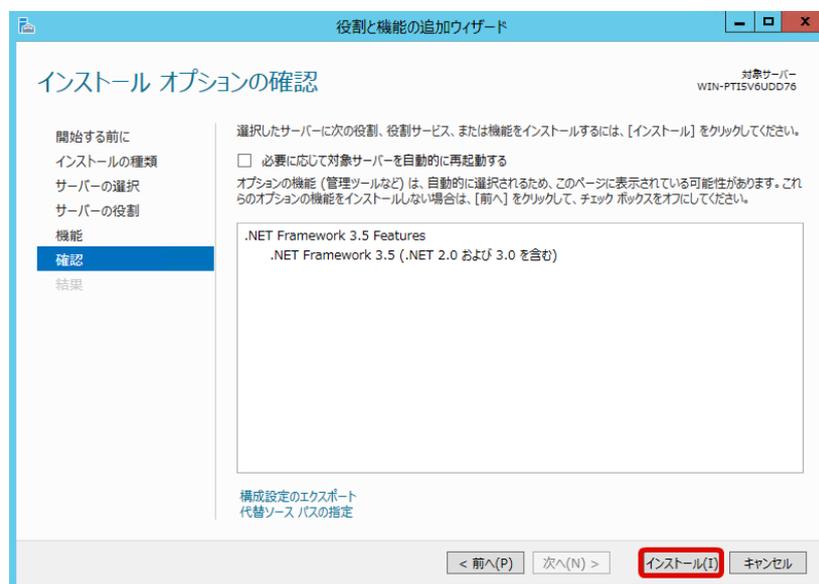
6. No need to select [Server Role].
→Click [Next(N)>]



7. Select [.NET Framework 3.5 Features] from [Function Selection].
→Click [Next(N)>]



8. Confirm install option.
→Click [Install(I)].



9. Click [Close] after installation is completed.
Please restart OS if necessary.



im-Juggling (obtaining moudle and creating WAR)

In case error occurs when im-Juggling is used

- Reasons and countermeasures for the errors which are generated when im-Juggling is used are described.

im-Juggling should be the latest version

- If error occurs when you obtain the latest module, im-Juggling tool may not be updated to the latest status.
- In case the status is online
 Message to do the automatic update for the latest status is displayed when im-Juggling is started.
 Please update im-Juggling to the latest version based on this message.
- In case the status is offline
 Since you cannot do the automatic update of im-Juggling, please download the latest im-Juggling from the environment in which the internet can be connected.
 Latest version of im-Juggling can be downloaded from the product latest information download page
 (<http://www.intra-mart.jp/download/product/iap/index.html>)

Files on the Local may be old.

If error such as obtaining repository occurs when you create project or WAR file using im-Juggling, it might be error because the old information has not been deleted.
 Please delete the data in the directory below and try again starting im-Juggling.

%OS user directory%/juggling/workspace/.repository directory

By deleting this old file, the latest data will be obtained again and you can avoid this issue.

WAR File Deployment

In case file input/output error occurs during Linux environment WAR file deployment

- Causes and actions when IOException, FileNotFoundException and so on occurred during war file deployment in Linux environment are described.

Check Web Application Server error log

- If the number of files that can use Web Application Server process is limited by OS, IOException or FileNotFoundException may be output in the error log and deployment may fail.
- Error contents reference source by Web Application Server

Web Application Server	Reference source of error contents
Resin	Console information when starting
WebSphere Application Server 8.5.5	%WEBSPPHERE_ROOT%/profiles/AppSrv01/logs/server1/SystemErr.log %WEBLOGIC_ROOT%/USER_PROJECT%/domains/base_domain/servers/AdminServer/logs/AdminServer.log
Oracle WebLogic Server 12c (12.1.1)	

Change the limit of file descriptors

Number of OS file descriptors which are set in /etc/system/limits.conf or /etc/security/limits.conf can be circumvented by adding the following numbers for the environment. Please change them to the appropriate value.

```
* soft nofile 32768
* hard nofile 32768
root soft nofile 32768
root hard nofile 32768
```

[*] User and the value are samples. Please set an appropriate value according to the environment.



Note

Current setting value of file discripiter can be confirmed

```
ulimit -n
```

as shown above.

In case error occurs during WAR file deployment in Resin

- Causes and Actions when [Time Out] message is displayed during war file deployment are described.

Console Information Confirmation and its Actions when Resin is started

It confirms if the next message is output when Resin is deployed.

```
java.lang.IllegalStateException: future timeout
```

Causes and Actions

In case this message is confirmed, this error occurs if the size of deployed war file is big and consumes more time than

[web-app-deploy dependency-check-interval] specified in [%RESIN_HOME%/conf/resin.xml] (default 2 seconds).

Please make the value of [%RESIN_HOME%/conf/resin.xml] of [dependency-check-interval] bigger.

```
<dependency-check-interval>300</dependency-check-interval>
```

[*] Setting value may be different depending on Environment.

Or please set [redeploy-mode="manual"] to [web-app-deploy] of [%RESIN_HOME%/conf/resin.xml].

```
<host-default>
<!-- creates the webapps directory for .war expansion -->
<web-app-deploy path="webapps" redeploy-mode="manual"
expand-preserve-fileset="WEB-INF/work/**"
multiversion-routing="{webapp_multiversion_routing}"
path-suffix="{elastic_webapp?resin.id:}" />
</host-default>
```



Note

Since the update check for war file is not performed by setting [redeploy-mode="manual"], above message will not be displayed.

In case WAR file cannot be re-deployed normally in Resin

- If symptom that added module (resource) is not reflected to deployment destination even though re-deployment is made in **WAR File Re-Deploy** (update applied) and **WAR File Re-deploy** (patch applied).

Causes

- Files inside %RESIN_HOME%/resin-data directory may not be consistent if the security software is resident on the server OS being operated.

Actions

- It deletes the file under [resin-data] directory.

After undeploy is deleted (undeploy command and <%RESIN_HOME%/webapps/under the directory of WAR file to be re-deployed> file group under the next directory will be deleted.

```
<%RESIN_HOME%/resin-data/*>
```



Warning

Resin should be performed when it is stopped.

After deletion, please execute re-deploy.



Warning

In case of Multiple Tenants by WAR file, all tenants outside the subject of re-deployment should be undeployed and the file should be deleted.



Warning

If multiple Resin environments are built as distributed configuration, please take same actions in all Resin environments.

In case you cannot log-in (cannot connect to database) after Web Application Server started

- There may be some errors in the database to be connected. Confirmation method of causes in this case is described.

Console Information Confirmation when Web Application Server is started

It confirms if the next message is output when Web Application Server is started.

```
[WARN] c.c.s.w.WebApp - [] java.lang.RuntimeException: resource: iwp/platform/schema/exists_table.sql is not found.
java.lang.RuntimeException: resource: iwp/platform/schema/exists_table.sql is not found.
```

If this message is confirmed, there is error in database setting.

To check causes in detail, [Database Log Setting] described below should be changed.

Database Log Setting

In case of Resin, directory /WEB-INF/conf/log/im_logger_database.xml file with the same same as war file under <%RESIN_HOME%/webapps> should be opened by the editor and L.43rd should be changed as below.

```
before change <level value="off" />
after change <level value="trace" />
```

After edit, Web Application Server is restarted.

Trace information related to database will be valid by this setting change, and you can confirm log information from JDBC driver on the console.

Note

In case of Web Application Server other than Resin, connection is confirmed by the data source screen in management console in each Web Application Server.

Note

Followings are considered as main causes in this case.

- Error of IP address, port number, database user, or password of database at connection destination.
- Insufficiency of authority of database user (cannot be connected due to insufficiency of authority. Table cannot be created.)

In case error occurs when Web Application Server immediately after deployment is started

Error contents that are output to the top of starting log of Web Application Server should be checked.

- If error occurs when starting Web Application Server immediately after deployment, another error may occur caused by the original error. In such a case, please check the error contents that are output to the top of the starting log of Web Application Server.
- Error contents reference source by Web Application Server

Web Application Server	Reference source of error contents
Resin	Console information when starting
WebSphere Application Server 8.5.5	%WEBSPHERE_ROOT%/profiles/AppSrv01/logs/server1/startServer.log %WEBLOGIC_ROOT%/USER_PROJECT%/domains/base_domain/servers/AdminServer/logs/AdminServer.log
Oracle WebLogic Server (12.1.1)	

Tenant Environment Setup

In case of tenant environment setup / sample data setup failed

- Confirmation method of causes when you failed to set up is described.

Setup Execution Result Log Confirmation

It confirms the execution result log of the tenant environment setup and sample data setup.

Setup execution result log will be output as follows.

- intra-mart Accel Platform 2013 Winter or earlier
 - In case of tenant environment setup


```
<STORAGE_PATH>/system/storage/import_result/basic/import-
result-detail-data_yyyy-MM-dd_HH-mm-ss.xml
```
 - In case of sample data setup


```
<STORAGE_PATH>/system/storage/import_result/sample/import-
result-detail-data_yyyy-MM-dd_HH-mm-ss.xml
```
- intra-mart Accel Platform 2014 Spring or later
 - In case of tenant environment setup


```
<STORAGE_PATH>/system/storage/import_result/basic/<tenant
ID>/import-result-detail-data_yyyy-MM-dd_HH-mm-
ss.xml
```
 - In case of sample data setup


```
<STORAGE_PATH>/system/storage/import_result/sample/<tenant
ID>/import-result-detail-data_yyyy-MM-dd_HH-mm-
ss.xml
```

If you fail to set up, following log will be output in the corresponding process. (only the failure processing part is extracted.)

Process result (**import-result-detail-data@success**) will be false and error message will be output.

```

:
<import-result-detail-data success="false">
  <module-id>im_workflow</module-id>
  <execute-id>36b27536-5a95-46d2-9752-489b261b20a1</execute-id>
  <import-type>DML</import-type>
  <importer-id>jp.co.intra_mart.import.StandardAuthzPolicyXmlImporter</importer-id>
  <target-name>products/import/basic/im_workflow/im_workflow-authz-policy.xml</target-name>
  <message>[E.IWP.IMPORTEXPOR.IMPORTER.10001] you are failed to import data. Execution Class = jp.co.intra
</import-result-detail-data>
:

```

If you want to check more information in detail, please check below [Import Process Result Log]

Import Process Result Log Confirmation

It confirms import process result log.

Import process result log output destination is shown as below.

```
<STORAGE_PATH>/system/storage/log/import-export/<%process execution ID%>.log
```

In <%process execution ID%>, process execution ID (execute-id) in setup execution result log will be applied.

If you failed to setup, you can confirm detailed information for exception occurrence by specifying import process result log by the failed import process execution ID and accessing the contents.



Note

Please refer to [[Tenant Environment Setup Specifications](#)] for details of setup execution result log.



Note

Please refer to [[Log Specifications - Tracking the cause of import error from log](#)] for the tracking method of exception information.

Transaction Timeout Setting Confirmation

Depending on Web application server, transaction timeout may occur during import processing and tenant environment setup may fail.

In case the transaction timeout occurs, please change the setting to make timeout time longer. Please refer to following guide for the setting method.

- [WebSphere Timeout Setting](#)
- [WebLogic Timeout Setting](#)

In case timeout occurred during tenant environment setup

- Causes and Actions when timeout occurred are described.

Phenomenon/Condition

While tenant environment setup is being executed, although log update on the Web Application Server side has already stopped,
browser remains in in-process status (for example, status has not changed after more than an hour).

**Note**

On Web Server, even though you close the browser regardless of the browser timeout, tenant environment setup process will continue as it is and log update on the Web Application Server side will continue.
In this case, you should wait until log update at Web Application Server side is completed.

Causes

On Web Server, transition to the result screen may not have happened because of the browser timeout.

**Note**

If errors occur at Web Application Server or Database side,
Timeout at Web Application Server or Database side may be the cause.

Please refer to the followings for Web Application Server.

[In case you failed to do tenant environment setup at Oracle WebLogic Server 12c (12.1.1)],

[WebSphere Application Server 8.5.5 - **Transaction/Timeout Setting**]

Please refer to the product document for Database.

Actions

- You should confirm if the tenant environment setup is completed properly.

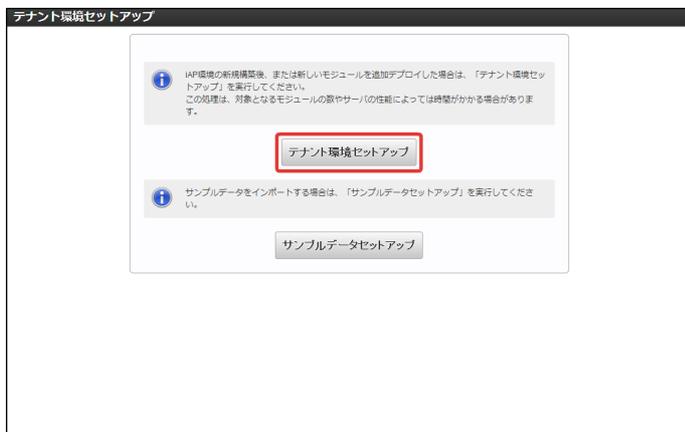
Display menu screen of system administrator.
Click [Tenant Environment Setup] from menu.



If the message tells [Tenant environment is the latest one. No module needs to be set up.] is displayed as below,
tenant environment setup is successfully completed.



If the [Tenant Environment Setup] button is displayed as below,
the tenant environment setup has not yet completed. You should do the setup again by clicking [Tenant Environment Setup] button.



Warning

It is recommended to change timeout setting value of Web Server to avoid reoccurrence of the phenomenon before you do the setup once again or to do the setup via Web Application Server.

Note

The button for the sample setup will always be displayed regardless of the process result. Therefore, if the error occurs during feeding the sample data, uniqueness limit violation on Database would occur when the setup is performed again. In this case, it is recommended to do [**Uninstallation**] and start again from the setup.

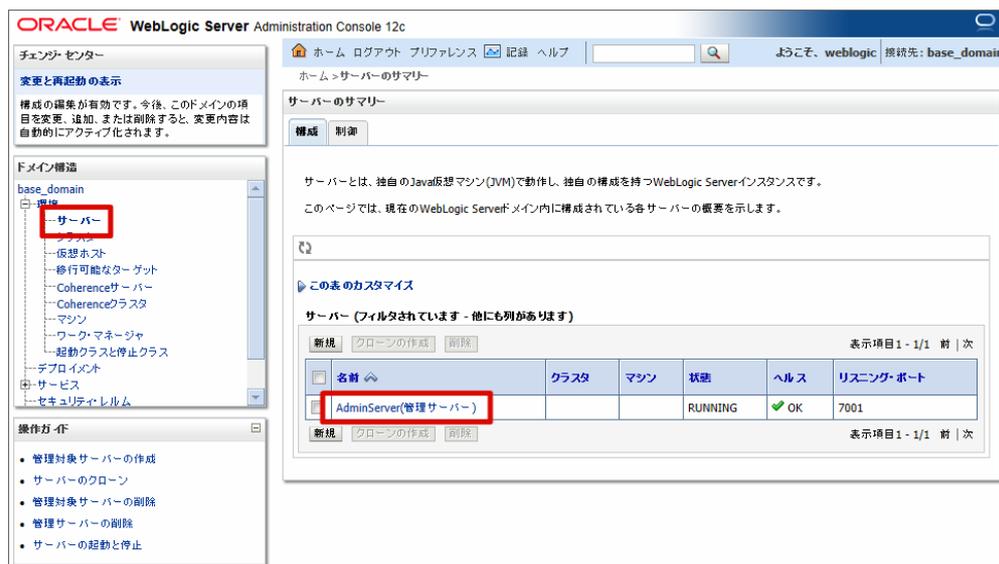
In case you failed to do tenant environment setup at Oracle WebLogic Server 12c (12.1.1)

- Causes and Actions when you failed to do the tenant environment setup in Oracle WebLogic Server 12c (12.1.1) environment are described.

Causes and Actions

If it takes much time for the tenant environment setup because of the database performance problem etc, the thread may be considered to be stuck, and the setup may fail. Please change the setting by the following procedures.

- Select [Environment]-[Server] at left menu. Select the server to be used shown on the right screen.



- Select [Tuning] tab and enter the time to [Stuck Thread maximum time], which is longer than the default value. Click [Save] button after the value is entered.

AdminServerの設定

構成 プロトコル ログイン デバッグ 監視 制御 デプロイメント サービス セキュリティ ノート

全般 クラスタ サービス キースタ SSL フェデレーション・サービス デプロイメント **チューニング** オペレーション ヘルプ監視

サーバーの起動 Webサービス

保存

このページでは、このサーバーのパフォーマンスおよび機能をチューニングします。

ネイティブIOの有効化 サーバー用にネイティブIOを有効にするかどうかを指定します。 [詳細...](#)

JavaSocketMuxerソケットリダー: ソケットリダーとして使用できるデフォルト・キューの実行スレッドの割合。 [詳細...](#)

ギャザー書き込みの有効化 NIOソケット・チャネル経由のギャザー書き込みを有効にします。この属性を有効にすると、ネットワーク・スループットが高い環境でI/O時の効率が高くなるので、Oracle Exalogic用のWebLogicドメインを構成する場合にのみ使用してください。詳細は、Oracle ExalogicデプロイメントガイドのOracle WebLogic Server 11gリリース1 (10.3.4)のExalogic固有の拡張機能の有効化に関する項を参照してください。 [詳細...](#)

スキュータ読み取りの有効化 NIOソケット・チャネル経由のスキュータ読み取りを有効にします。この属性を有効にすると、ネットワーク・スループットが高い環境でI/O時の効率が高くなるので、Oracle Exalogic用のWebLogicドメインを構成する場合にのみ使用してください。詳細は、Oracle ExalogicデプロイメントガイドのOracle WebLogic Server 11gリリース1 (10.3.4)のExalogic固有の拡張機能の有効化に関する項を参照してください。 [詳細...](#)

最大オープンソケット数: 特定の時点におけるサーバー内のオープンソケットの許容最大数。 [詳細...](#)

スタック・スレッド最大時間: このサーバーが、スレッドをスタック・スレッドであると思わずまでに、スレッドが継続して処理を行っている必要のある秒数。 [詳細...](#)

スタック・スレッド・タイマー間隔: 構成された最大期間の間、スレッドが継続的に動作してきたかどうかを確認するために、WebLogic Serverがスレッドを定期的に

3. Reboot Oracle WebLogic Server 12c (12.1.1).

In case tenant administrator cannot log-in after tenant environment is set up

- Causes and Actions in case log-in cannot be performed by the tenant administrator created at tenant environment setup, or database error occurs even though [License] is made valid in the account setting when updating.

Occurrence Condition

- This phenomenon is observed when Microsoft SQL Server 2008 R2 and Microsoft SQL Server 2012 are used as Database. In case Database other than them is used, the causes listed below may apply.

Causes and Actions

If the error occurs even though the [License] is made to valid in the account setting for updating, you should confirm if the following message is output on the console of Resin.

```
[ERROR] j.c.i.s.j.i.UserLicenseObject - [] [E.IWP.LICENSE.USER.00003] License registration is failed due to the database error.
Exception: [E.IWP.LICENSE.USER.00003] License registration failed due to the database error.
```

When this message is confirmed, the following can be the cause.

- JDBC driver version is old

Please refer to **JDBC Driver**.
JDBC driver needs to be the one in the link described in this chapter.



Warning

For the case of Database other than Microsoft SQL Server 2008 R2 or Microsoft SQL Server 2012, it may not function properly as is the case with the JDBC driver in use is old.

- Matching Sequence Setting of Resin

Please refer to **DatabaseServer**.
You should proceed on the matching sequence setting described in this chapter.

Others

In case SAStruts version portlet cannot be accessed due to 404 error

Symptom

- The symptom in which created/registered SAStruts version portlet cannot be accessed due to 404 occurs.

It will be displayed if you request the URL that can access the registered SAStruts version portlet directly, but the symptom may reoccur, if you restart Web Application Server.

Causes and Actions

- Please refer to [*Configuration File for SAStruts (in case SAStruts version portlet is used)*].

[*] After you took the action above, you need to create WAR again and re-deployment should be executed.

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