



Infor Distribution FACTS Storefront  
Integration Layer  
Installation Guide & Supplement

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# Contents

<b>About this guide</b> .....	<b>5</b>
Intended audience.....	5
Organization.....	5
Related documents .....	6
Contacting Infor.....	6
<b>Chapter 1 Requirements, Terms &amp; Values</b> .....	<b>7</b>
FACTS Storefront Integration Layer Requirements, Terms & Values .....	7
Minimum Requirements .....	7
Terms and Values.....	8
<b>Chapter 2 Storefront Installation Guide Supplement</b> .....	<b>10</b>
Storefront Installation Guide Supplement Overview.....	10
JAVA_PATH Recommendation for creating new Storefront databases.....	11
Enabling secured login in Tomcat.....	12
Native Libraries and SSL .....	13
log4j file setup issues.....	14
<b>Chapter 3 Installing on Tomcat</b> .....	<b>17</b>
Installing the Infor Distribution FACTS Storefront Integration Server on Tomcat .....	17
<b>Chapter 4 Installing on Webshpere</b> .....	<b>19</b>
Installing the the Infor Distribution FACTS Storefront Integration Server on Websphere.....	19
<b>Chapter 5 Configuring the Integration Server</b> .....	<b>29</b>
Configuring the Integration Server Overview .....	29
Update facts.properties file .....	32
Update facts.properties file <continued ...> .....	33
Using fail over hosts .....	34
Update server status.....	37
Optional settings in the storefront-integration-limit.properties file .....	37
Using the Extended Classes.....	37

<b>Chapter 6 Troubleshooting &amp; Installation Tips.....</b>	<b>39</b>
FACTS Storefront Integration Layer Troubleshooting and Installation Tips Overview .....	39
Editing the JDBC.properties file in storefrontAppServer\WEB-INF .....	40
To correct the Logging errors in storefrontCommerce: .....	40
When setting up accounts in Storefront Admin .....	40
EasyAsk Services and IndexBuilder.properties Configuration .....	40
How to configure the storefront version specific adapter layer.....	42
Storefront Integration Server and Adapter Layer Compatibility Matrix .....	43

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## About this guide

This guide describes workflow, concepts and procedures for installing Infor Distribution FACTS Storefront Integration Layer, Version 3.2.0.

## Intended audience

This guide is for Infor Distribution FACTS Storefront Integration Layer system administrators and other users who are responsible for system installation, configuration or who provide support to users.

## Organization

This table shows the chapters of the guide:

Section	Description
1	Requirement - Requirements information and a single page you can fill in with the actual information from your install and refer back to regularly. This is intended to help you stay organized during your install.
2.	Storefront Installation Guide Supplement – This section should be used in conjunction with the Storefront Installation Guide. It is not step-by-step instructions, but refers to the step found in the Storefront Install Guide.
3.	Installing the FACTS Integration Layer on Tomcat – This section contains the actual installation instructions for the FACTS Integration Layer on Tomcat.

Section	Description
4.	Installing the FACTS Integration Layer on WebSphere – This section contains the actual installation instructions for the FACTS Integration Layer on WebSphere.
5.	Configure the FACTS Integration Layer
6.	Troubleshooting and Installation Tips

## Related documents

You can find the documents in the product documentation section of Infor365, as described in "Contacting Infor" on page 6.

You can find the documents in the product documentation section of the Infor Xtreme Support portal, as described in "Contacting Infor" on page 6.

All Incremental Update documentation now consists of the following:

- [Read\\_me3\\_2\\_0.pdf](#) – Release notes and latest updates in Adobe Acrobat pdf format.
- [Read\\_me3\\_2\\_0.txt](#) – Release notes and latest updates in Text format

*For information about other Infor Distribution FACTS modules or basic usage information, see the other users guides in the Infor Distribution FACTS PDF Library. Access these documents from the bookmarks of this document: [FACTSDocNavigation.pdf](#).*

## Contacting Infor

If you have questions about Infor products, go to the Infor Xtreme Support portal at [www.infor.com/inforxtreme](http://www.infor.com/inforxtreme).

If we update this document after the product release, we will post the new version on this Web site. We recommend that you check this Web site periodically for updated documentation.

If you have comments about Infor documentation, contact [documentation@infor.com](mailto:documentation@infor.com).

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# Chapter 1

## Requirements, Terms & Values

1

### FACTS Storefront Integration Layer Requirements, Terms & Values

#### Minimum Requirements

The minimum requirements for using the Infor Distribution FACTS Storefront Integration Server 3.2 and above:

- 
- Apache Tomcat 6.0 and above
- Java(TM) Platform, Standard Edition Runtime Environment Version 6 (JRE 1.6.0\_30) and above

Failing to install the above minimum required feature sets, will result in problems starting and running the storefront integration server.

Neither Infor Distribution FACTS nor the Integration Server 3.1 has adopted any of the new features of Storefront 2.0, including:

1. Order Entry Options
  - a. Allow Item Warehouse
2. System Options - Locale Options
  - a. Allow multi-currency
  - b. Allow Product Restrictions

These features are not supported for use with Infor Distribution FACTS.

## Terms and Values

These are some useful name references you may need to refer to several times during the installation process. Fill these in as you work through the installation.

**Server Name:** \_\_\_\_\_

Used by: `sf_hostname` in `{Kettle} storefront-newdb-properties.xml`

`{changeMeServerName}` in `{Storefront Appserver} storefront-jdbc.properties`

`{changeMeEasyAskServerName}` in `{Storefront Appserver} storefront-jdbc.properties`

**Storefront DB Name:** \_\_\_\_\_

Used by: `Sf_db` in `{Kettle} storefront-newdb-properties.xml`

`{changeMeDatabaseName}` in `{Storefront Appserver} storefront-jdbc.properties`

**Storefront DB User Name:** \_\_\_\_\_

Used by: `Sf_username` in `{Kettle} storefront-newdb-properties.xml`

`{changeMeUserName}` in `{Storefront Appserver} storefront-jdbc.properties`

**Storefront DB Password:** \_\_\_\_\_

Used by: `Sf_password` in `{Kettle} storefront-newdb-properties.xml`

`{changeMeUserPassword}` in `{Storefront Appserver} storefront-jdbc.properties`

**Java Path:** \_\_\_\_\_

Used by: `SET JAVA_PATH` in `{Kettle} kitchen.bat`

**EasyAsk Server Name:** \_\_\_\_\_

Used by: `{changeMeEasyAskServerName}` in `{Storefront Appserver} storefront-jdbc.properties`

**EasyAsk Index Builder Port:** \_\_\_\_\_

Used by: `{changeMePortNumber}` in `{Storefront Appserver} storefront-jdbc.properties`

EasyAsk IndexBuilder Response Port: \_\_\_\_\_

8080 (Tomcat), 9080 (Websphere)

Used by: {SetYourResponsePort} in {Storefront Appserver} storefront-jdbc.properties

**EasyAsk Root Directory:** \_\_\_\_\_

Used By: EA\_ROOT=<EasyAskRoot> in IndexBuilder.properties within index-builder.jar  
{EasyAsk}\server\EasyAsk\WEB-INF\lib

**EasyAsk Dictionary:** \_\_\_\_\_

Used By: EA\_DICTIONARY in IndexBuilder.properties

**EasyAsk Staging Directory:** \_\_\_\_\_

Used By: EA\_STAGING\_DIR in IndexBuilder.properties

**EasyAsk Production Index:** \_\_\_\_\_

Used By: EA\_DEPLOY in IndexBuilder.properties

**EasyAsk Classpath:** \_\_\_\_\_

Used By: EA\_CLASSPATH in IndexBuilder.properties

**EasyAsk Log File:** \_\_\_\_\_

Used By: LOG\_FILE in IndexBuilder.properties

### Storefront Installation Guide Supplement Overview

This section is intended to be a supplement to the Storefront Installation Guide when installing for ERP FACTS 7.7 and later with the Apache Tomcat application server or with the IBM Websphere application server. It is advised to read through this guide in it's entirety before starting the installation.

The following refers to the "Installation Process Overview" section of Chapter 2 of the Storefront Installation Guide

The information in this section simply clarifies or provides additional information to the Storefront Installation Guide – it is not a replacement for the Storefront Installation Guide.

1. For Storefront 1.5.x and prior versions, using StorefrontIntegrationServer 3.0 and prior versions to integrate with Infor Distribution FACTS

It can sometimes be confusing to locate the proper JRE. This information may be helpful: Download and install the Java 1.5 Runtime from:

[http://java.sun.com/products/archive/j2se/5.0\\_18/index.html](http://java.sun.com/products/archive/j2se/5.0_18/index.html)

Note: the "\_018" is the latest version of the JRE 1.5 at the time of this document and may be different when actually performing these steps.

- Part of installing Java 1.5 that can easily be missed is setting the system environment variable in System Properties (Control Panel > System > Advanced > Environment Variables or Control Panel > Performance and Maintenance > System > Advanced > Environment Variables) to your Java directory

Variable name: JAVA\_HOME

Variable value: {path to your Java installation, ex. C:\Program Files\Java\jre1.5.0\_18}

- It can sometimes be confusing where to get the Tomcat files. This information may be helpful: Download and install the Tomcat 5.5 “Windows Service Installer” from:

<http://tomcat.apache.org/download-55.cgi>

2. For Storefront 2.0 & above versions, using StorefrontIntegrationServer 3.2 and above versions to integrate with Infor Distribution FACTS

Download and install the Java 1.6.0 Runtime from:

<http://www.oracle.com/technetwork/java/javase/releasenotes-136954.html>

Note: the “\_030” is the latest version of the JRE 1.6 at the time of this document and may be different when actually performing these steps.

- Part of installing Java 1.6 that can easily be missed is setting the system environment variable in System Properties (Control Panel > System > Advanced > Environment Variables or Control Panel > Performance and Maintenance > System > Advanced > Environment Variables) to your Java directory

Variable name: JAVA\_HOME

Variable value: {path to your Java installation, ex. C:\Program Files\Java\jre1.6.0\_30}

- It can sometimes be confusing where to get the Tomcat files. This information may be helpful: Download and install the Tomcat 6.0 “Windows Service Installer” from:

<http://tomcat.apache.org/download-60.cgi>

The following refers to the “Load Default Data – New Installation” section of Chapter 3 of the Storefront Installation Guide

## JAVA\_PATH Recommendation for creating new Storefront databases

The Storefront Installation Guide states to copy the Java JRE from the Program Files directory (if that is where it is installed) to the root directory then use that directory in the JAVA\_PATH setting in the storefront-newdb-properties.xml file.

We recommend that you leave the JRE installed in the standard Program Files directory and simply update the JAVA\_PATH setting to point to it there. You will need to enclose the path in quotes in order for the space in “Program Files” not to cause problems.

(if you are using JRE 1.5.x)

```
SET JAVA_PATH="C:\Program Files\Java\jre1.5.0_18\bin"
```

(if you are using JRE 1.6.x)

```
SET JAVA_PATH="C:\Program Files\Java\jre1.6.0_30\bin"
```

The following refers to the “Configure server.xml” section of Chapter 5 of the Storefront Installation Guide

## Enabling secured login in Tomcat

During the setup of secure login for Tomcat, we encountered some problems. This information may help you avoid configuration problems:

The following steps are required to configure the server.xml and enable SSL (secured login) on Tomcat installations.

You will need to generate a .keystore file in order to use an SSL Connector in Tomcat. To create a keystore, do the following:

- 1 On a Windows machine, the default location of the keystore file is:  
c:\Documents and Settings\*<login name>*\.keystore

If you already have a .keystore file in this directory, delete it before running the command below.

- 2 Open a command prompt: Start > Run > cmd
- 3 Change directory to the .\bin folder where your Java JRE was installed:  
cd %JAVA\_HOME%\bin
- 4 Run the following command:

```
keytool -genkey -alias tomcat -keyalg RSA
```

You will receive the following prompts on the command line (answers in red).

Note: If the keystore password is changed from “changeit”, you will have to modify the server.xml file to specify the new password.

The other questions can have answers of your choosing.

Enter keystore password: changeit

What is your first and last name?

[Unknown]: <enter name>

What is the name of your organizational unit?

[Unknown]: <enter organizational unit>

What is the name of your organization?

[Unknown]: <Enter organization>

What is the name of your City or Locality?

[Unknown]: <Enter City>

What is the name of your State or Province?

[Unknown]: <Enter state>

What is the two-letter country code for this unit?

[Unknown]: <Enter country code>

Is CN={name},OU={unit},O={organization},L={locality},T={state},C={country} correct?

[no]: yes

Enter key password for <tomcat>

(RETURN if same as keystore password): <return>

#### 1 Copy the .keystore file into Tomcat

Copy the .keystore file *from* c:\Documents and Settings\*<login name>*\.keystore

to <Tomcat install directory>

## Native Libraries and SSL

By default, installing Storefront on Tomcat assumes that the Tomcat native libraries (tcnative-1.dll) are not being used. There is an option in the Tomcat installation to use native libraries that is not checked by default.

The Storefront installation on Tomcat does not support using OpenSSL. But, when the Tomcat native libraries have been installed anywhere on the server, Tomcat will attempt to use OpenSSL unless specifically instructed not to. The SSL Connector defaults to an APR (Apache Portable Runtime) connector that uses OpenSSL but the server.xml file does NOT have a default section to configure it.

To force the connector to use SSL instead of OpenSSL, the following line needs to be added to the Connector parameters for the SSL HTTP/1.1 Connector in the server.xml file:

```
protocol="org.apache.coyote.http11.Http11Protocol"
```

Note: If the tcnative-1.dll file is found anywhere on the search path, Tomcat will attempt to use it. Therefore, it is our recommendation that you always include the protocol parameter.

The Connector section of the server.xml file should look like something like this:

```
<Connector acceptCount="100" clientAuth="false" disableUploadTimeout="true"
enableLookups="false" maxHttpHeaderSize="50000" maxSpareThreads="75" maxThreads="150"
minSpareThreads="25" port="8443" protocol="org.apache.coyote.http11.Http11Protocol"
scheme="https" secure="true" sslProtocol="TLS" keystoreFile="/.keystore" keystorePass="changeit"
/>
```

If the keystorePass= element is not included in the Connector settings above, Tomcat expects the keystore password to be "changeit", otherwise the value for the keystorePass= element must match what was entered when creating the .keystore file.

After completing the edits to the server.xml file, restart the Tomcat server, and open up a web browser with the following address: <https://localhost:8443>

You will probably get a message saying that there is a problem with the website's security certificate. This is ok, just click on the link to "Continue to this website".

If you see the default Tomcat home page, the SSL configuration is correct.

The following is supplemental information for Chapter 5 of the Storefront Installation Guide

## log4j file setup issues

Tomcat, Storefront, and the Infor Distribution FACTS Storefront Integration Server utilize Java's log4j logging capabilities. This is useful when installing, configuring and troubleshooting your Tomcat installation. The log4j.properties file is used to control what is logged and where.

If this file is not setup, everything will be logged, but messages will be included in the log instructing you to "Initialize the log4j properly". To do so, follow the instructions below:

Copy the following text to Notepad, and save the file as "log4j.properties". Add this file to the {Tomcat}\common\classes directory:

```
log4j.rootLogger=ERROR, R
```

```
log4j.appender.R=org.apache.log4j.RollingFileAppender
```

```
log4j.appender.R.File=tomcat.log
```

```
log4j.appender.R.MaxFileSize=10MB
```

```
log4j.appender.R.MaxBackupIndex=10
```

```
log4j.appender.R.layout=org.apache.log4j.PatternLayout
```

```
log4j.appender.R.layout.ConversionPattern=%d %t [%-5p] %c - %m%n
```

```
log4j.logger.org.apache=ERROR, R
```

```
log4j.appender.C=org.apache.log4j.ConsoleAppender
```

```
log4j.appender.C.layout=org.apache.log4j.PatternLayout
```

```
log4j.appender.C.layout.ConversionPattern=%d{ABSOLUTE} %-5p [%c{1}] %m%n
```

```
log4j.logger.org.apache=ERROR, C
```

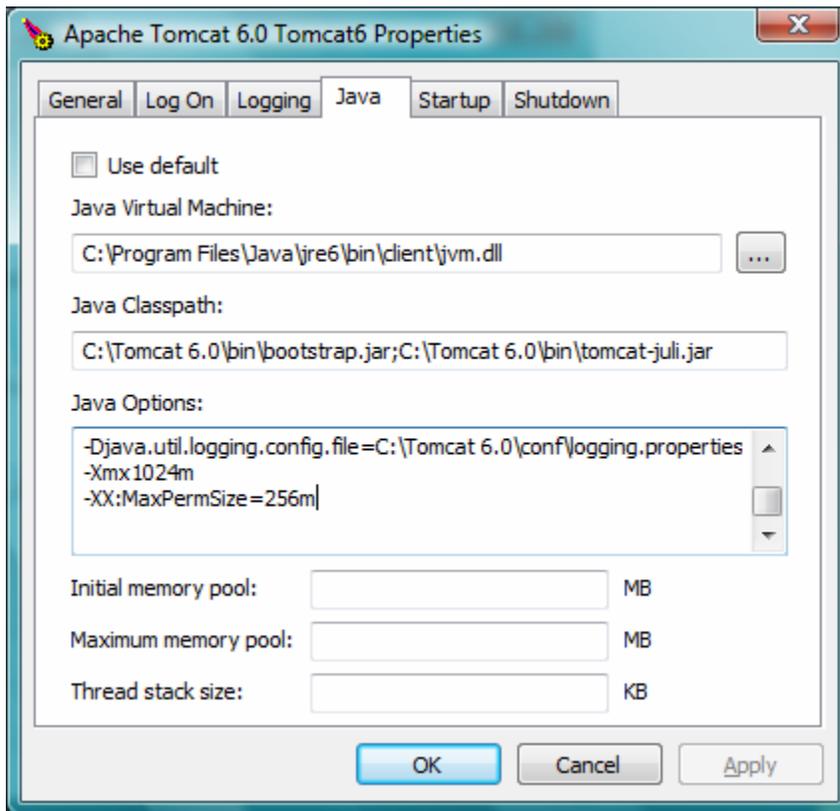
## Tomcat PermGen errors

During our installs, we frequently encountered java PermGen (max heap size) errors. To resolve these errors requires specific memory settings detailed below:

Add the following line to the Java Options section in the Tomcat application:

-Xmx1024m

-XX:MaxPermSize=256M



If you continue to receive PermGen errors you may need to increase this amount. If the Tomcat server does not start after increasing this amount, you will have to reduce this amount until it does.

Also, the Initial memory pool should be set to 256 and the maximum memory pool should be set to 1024



## Chapter 3 Installing on Tomcat

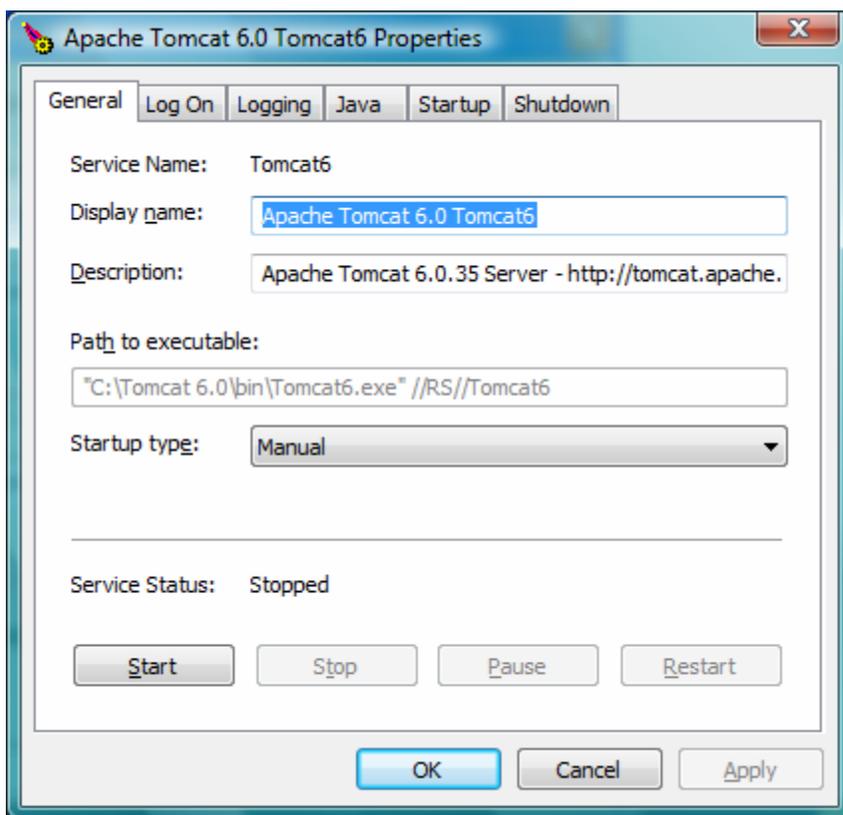
# 3

### Installing the Infor Distribution FACTS Storefront Integration Server on Tomcat

A working installation of Storefront involves several components working together: the Storefront product itself which communicates with the FACTS Integration Server, which uses HTTP protocol to communicate with the ProvideX or PxPlus WebServer, which uses the FACTS API Toolkit to communicate with FACTS.

To install and configure the Infor Distribution FACTS Storefront Integration Layer, follow these steps:

- 1 Stop the Tomcat application server if it is currently running.



- 2 Download and copy the storefrontIntegrationServer.war file included with the Infor Distribution FACTS Storefront Integration Server installation to the Web application folder "webapps" of the

Apache Tomcat instance (e.g. C:\Program Files\Apache Software Foundation\Tomcat 5.5\webapps)

- 3 Start Tomcat, which will deploy the Web application. You can monitor the server to verify that the .war file was deployed by looking at the webapps directory. The contents of the .war file will be copied into a new “storefrontIntegrationServer” folder which is created when Tomcat starts.
- 4 Proceed to the **Configuring the Integration Server** section for instructions on configuring the Storefront Integration Server.

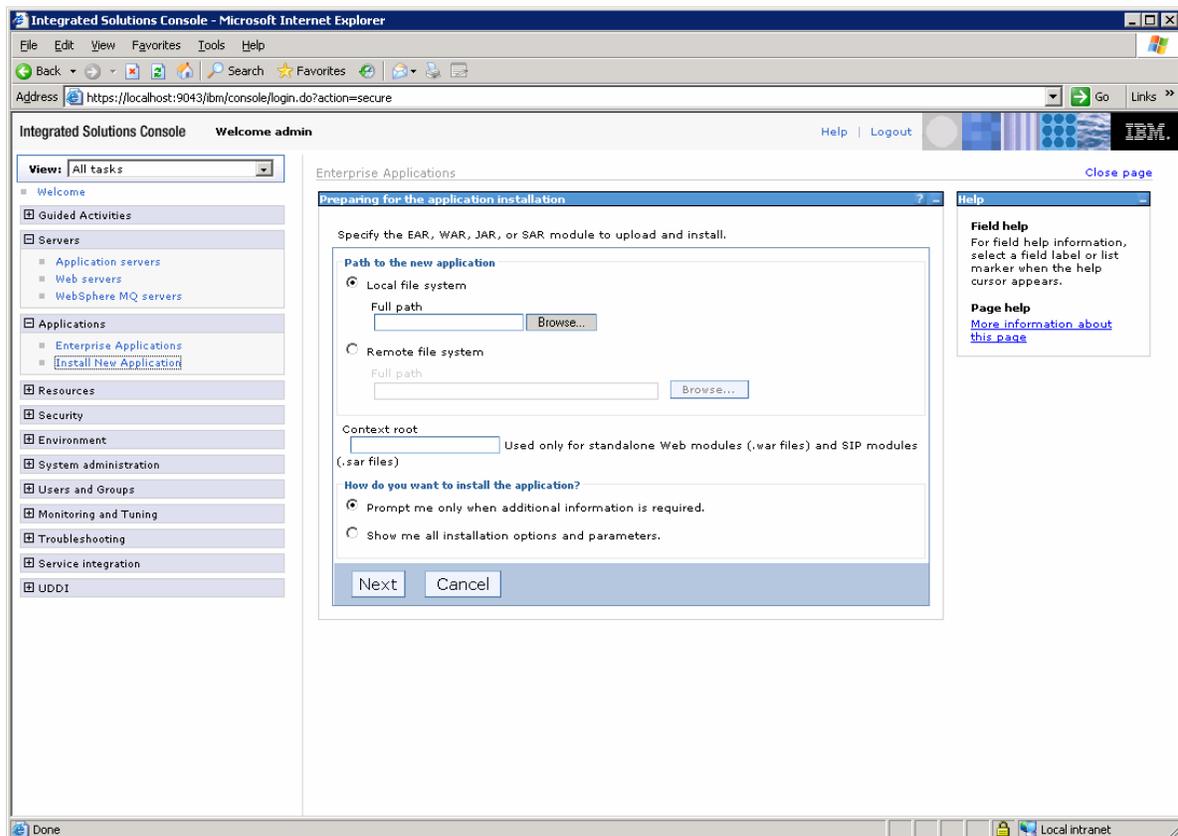
**Note: Storefront 2.0 is not supported on Websphere and the below section applies only for using Storefront Integration Server 3.0 and prior versions only.**

## Chapter 4 Installing on Websphere

# 4

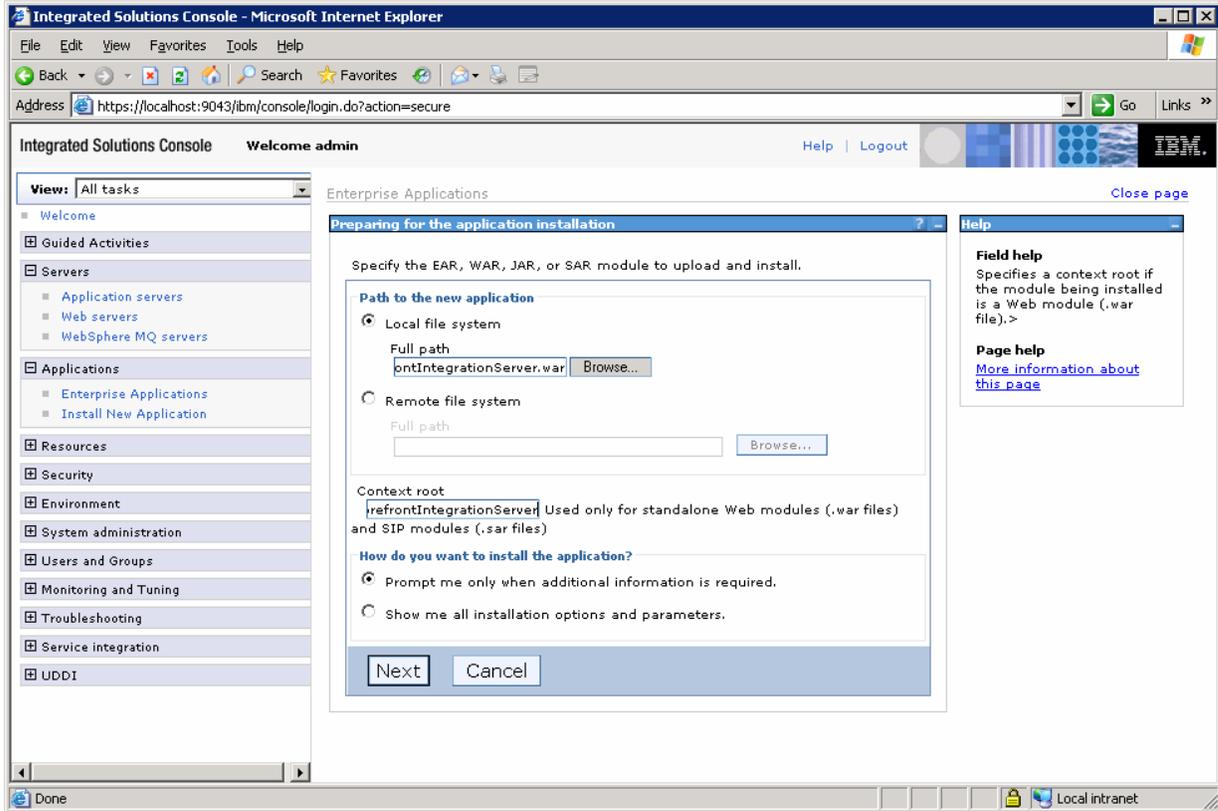
### Installing the Infor Distribution FACTS Storefront Integration Server on Websphere

- 1 Copy the storefrontIntegrationServer.war file included with the Infor Distribution FACTS Storefront Integration Server installation to a local folder, for example, c:\sfwars.
- 2 Open the Websphere v6.1 Administrative console and log in.
- 3 Expand the Applications node on the left hand side of the window, and then click Install New Application.



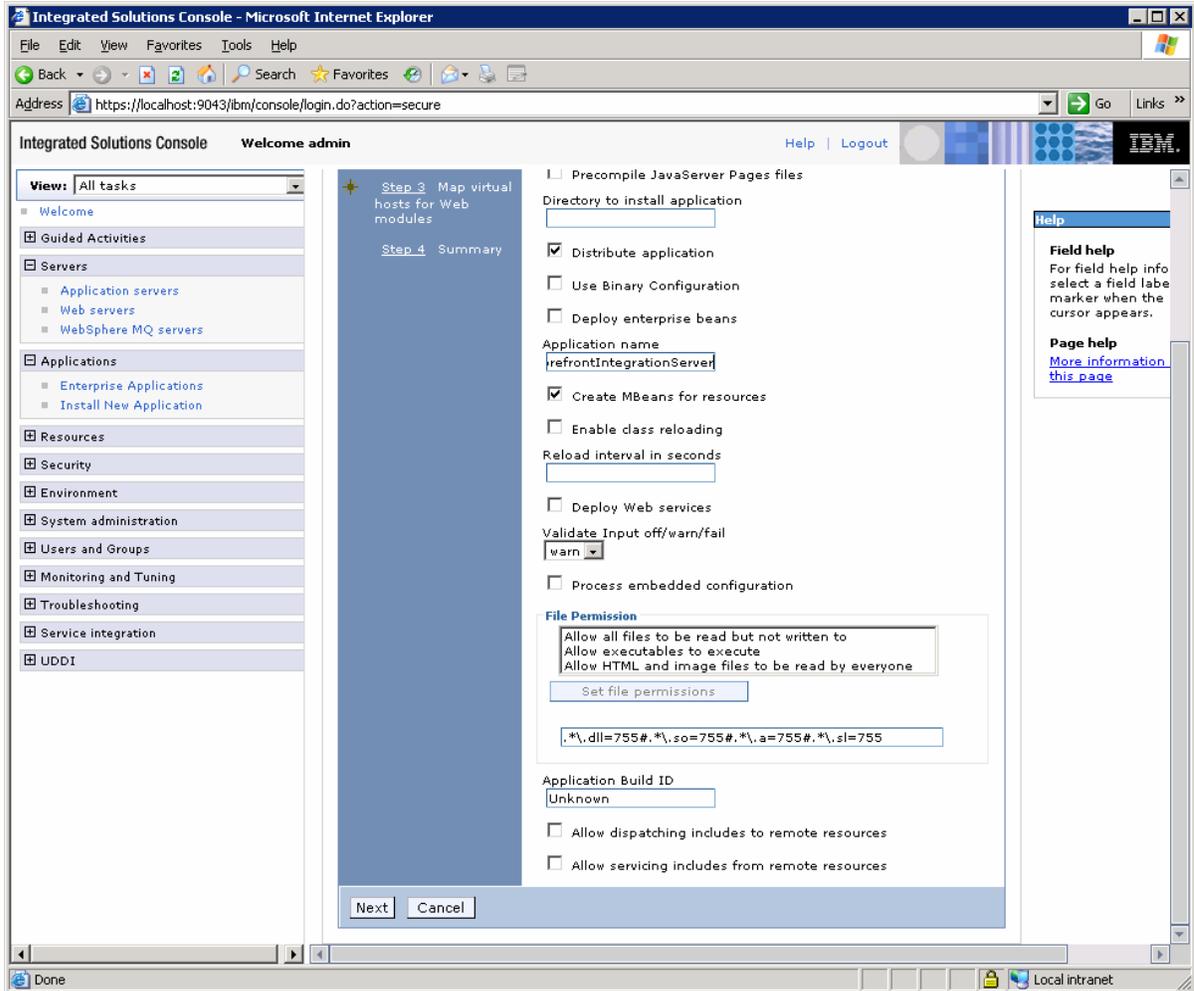
- 4 Click Browse and find the storefrontIntegrationServer.war file in the local folder created in step number 1.

5 Change the Context root to **storefrontIntegrationServer** and click Next

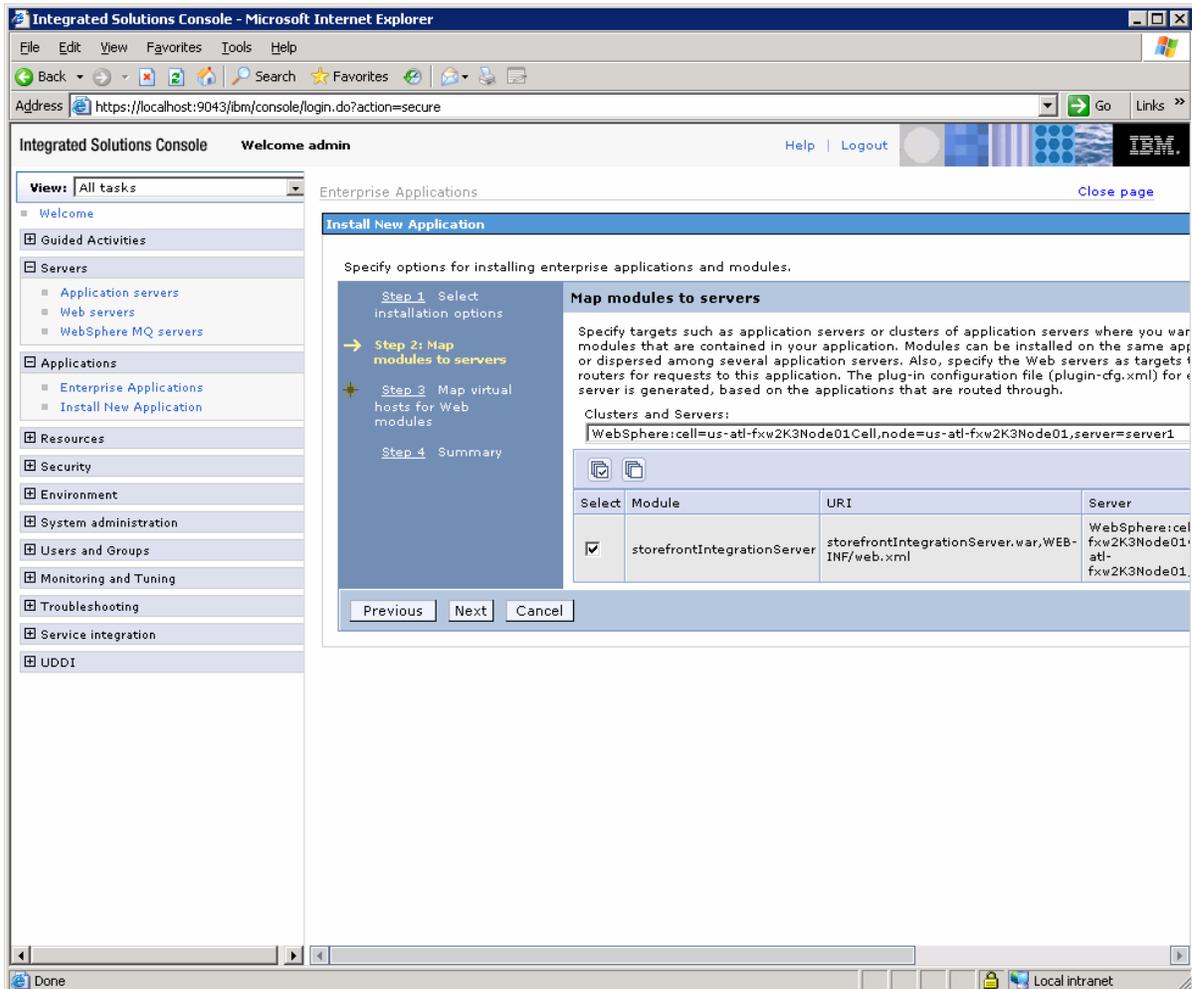


6 For each of the following steps, select the indicated values and click Next to continue:

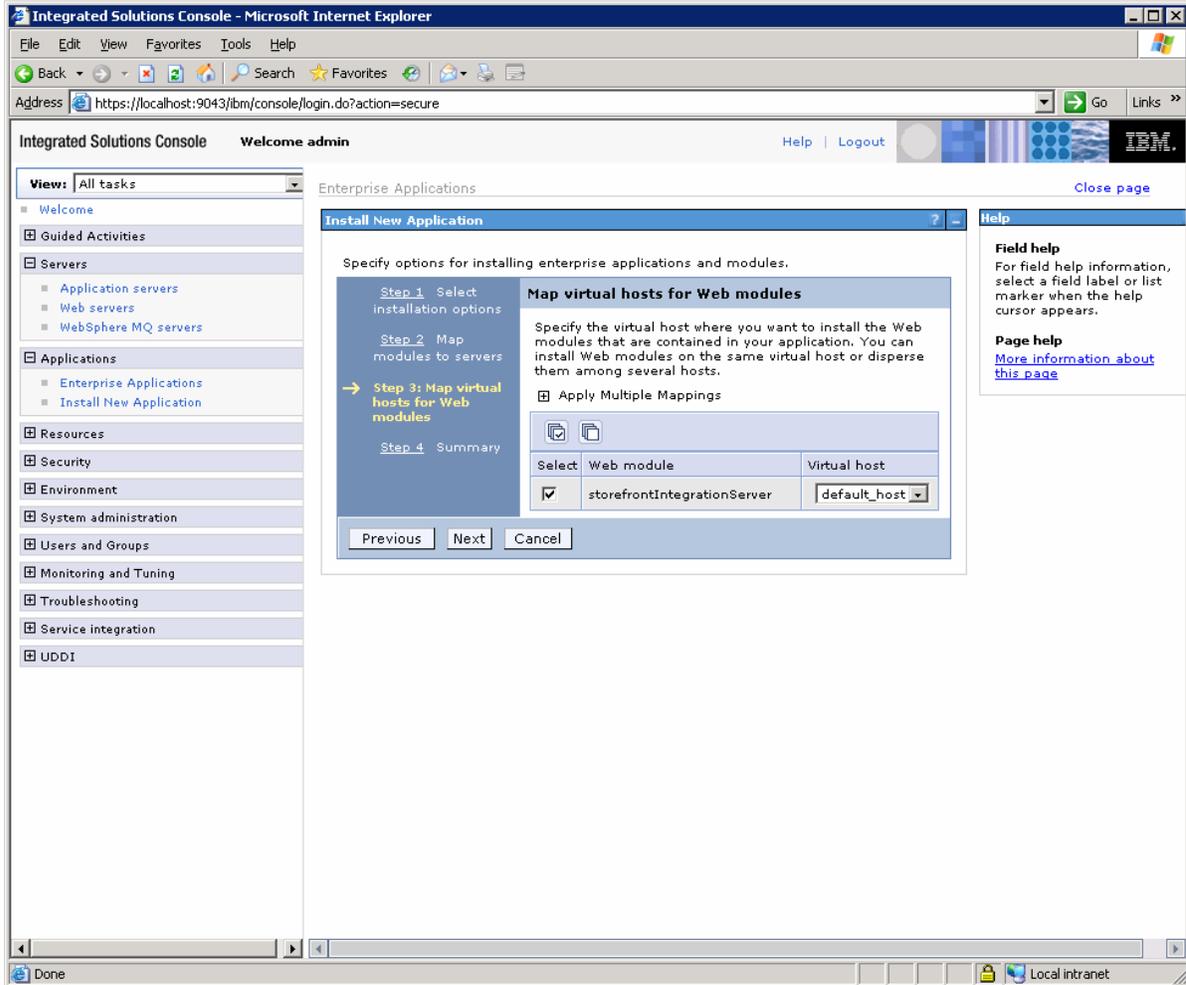
### Step 1: Change the Application Name from storefrontIntegrationServer\_war to: storefrontIntegrationServer



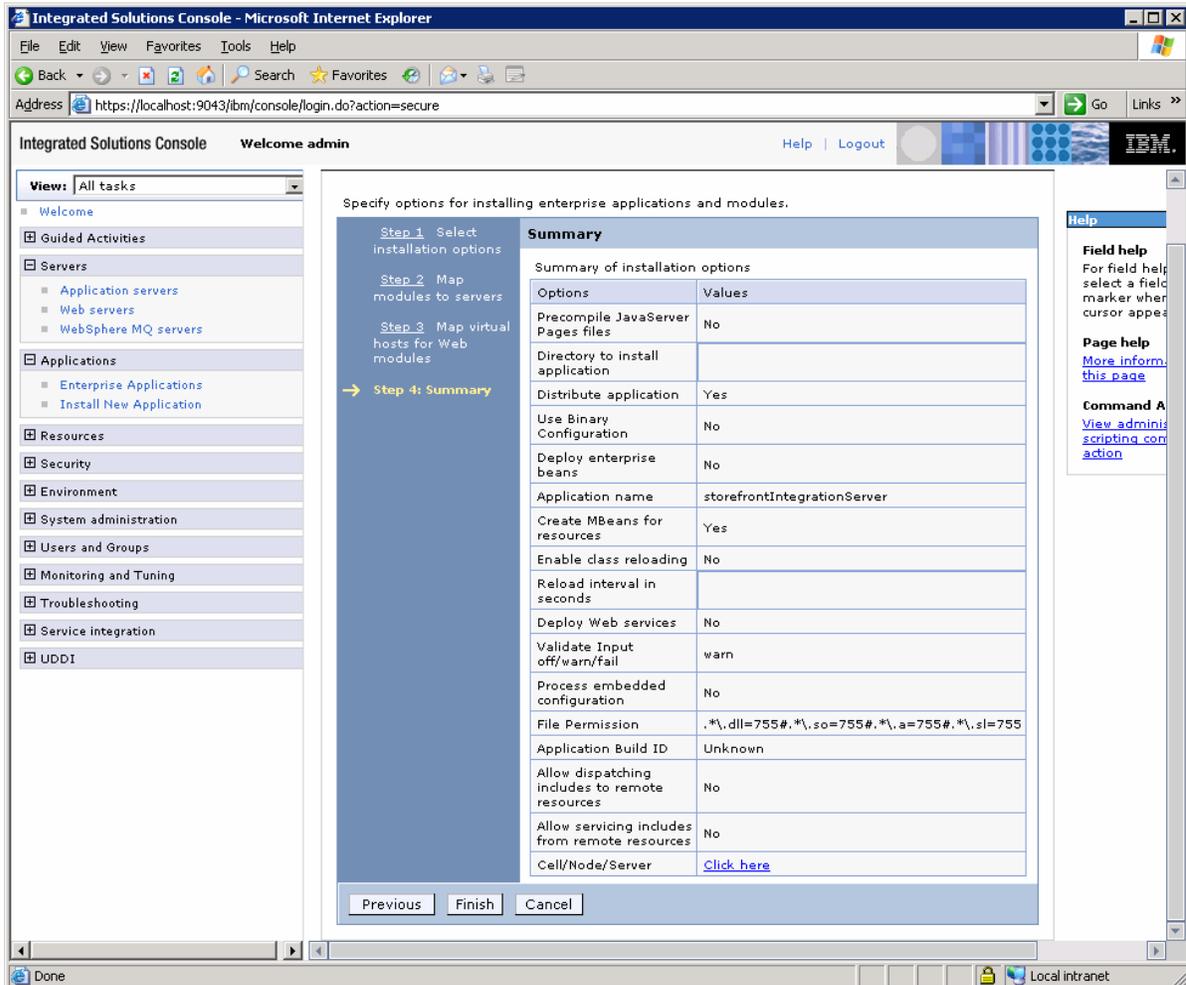
Step 2: Map modules to Servers by checking the Select checkbox.



Step 3: Map virtual hosts for Web modules by checking the Select checkbox:

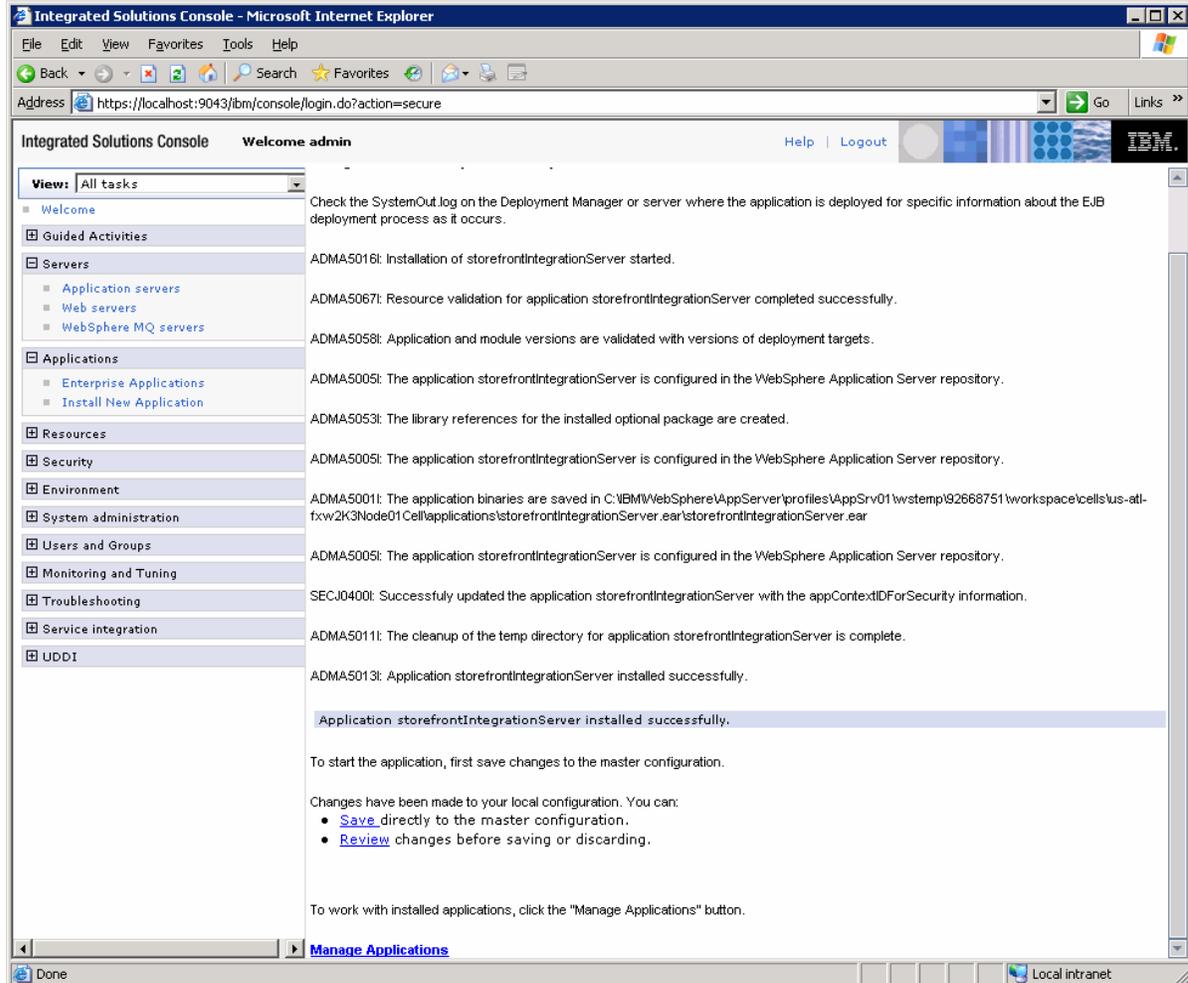


Step 4: Review the summary for Web modules

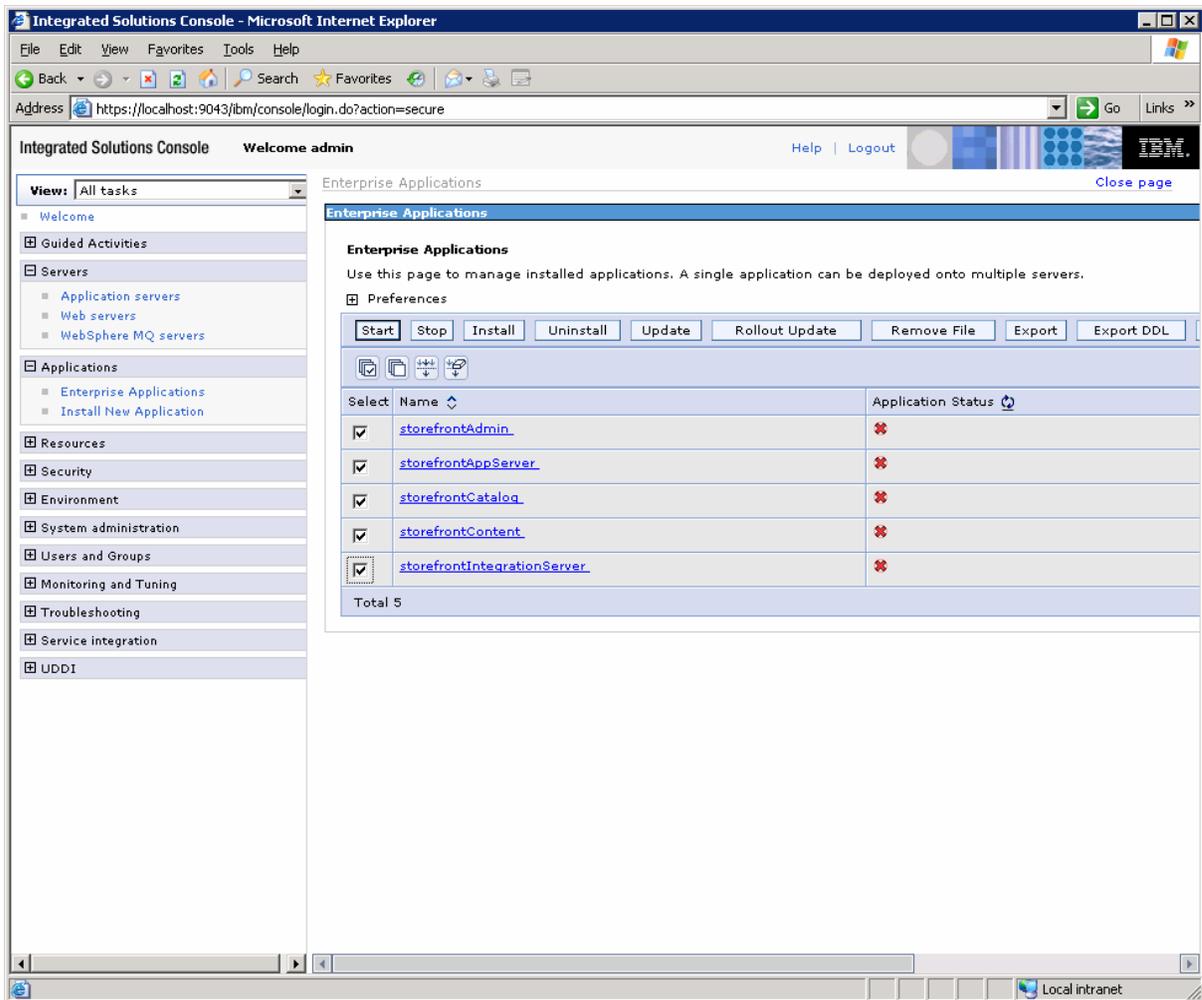


7 Click Finish. Wait until the installation process has completed.

## 8 Scroll to the end of the window and select “Save directly to the master configuration.”



- 9 When you have finished installing the application, expand the Applications node on the left-hand side column, and click Enterprise Applications. You should see the application listed, with a red X in the Application Status column.



- 10 Complete the steps to configure the Integration Server as found in the “**Configuring the Integration Server**” section of this document (below).
- 11 After completing the configuration, start the “**storefrontIntegrationServer**” Application by clicking on the Start button.





---

## Chapter 5 Configuring the Integration Server

# 5

### Configuring the Integration Server Overview

NOTE: As of version 2.1.2 and above, config.bat is no longer used to configure the Integration Server.

Before changing or updating the Integration Server configuration, make sure the Web Application server (i.e. Tomcat or WebSphere) is running.

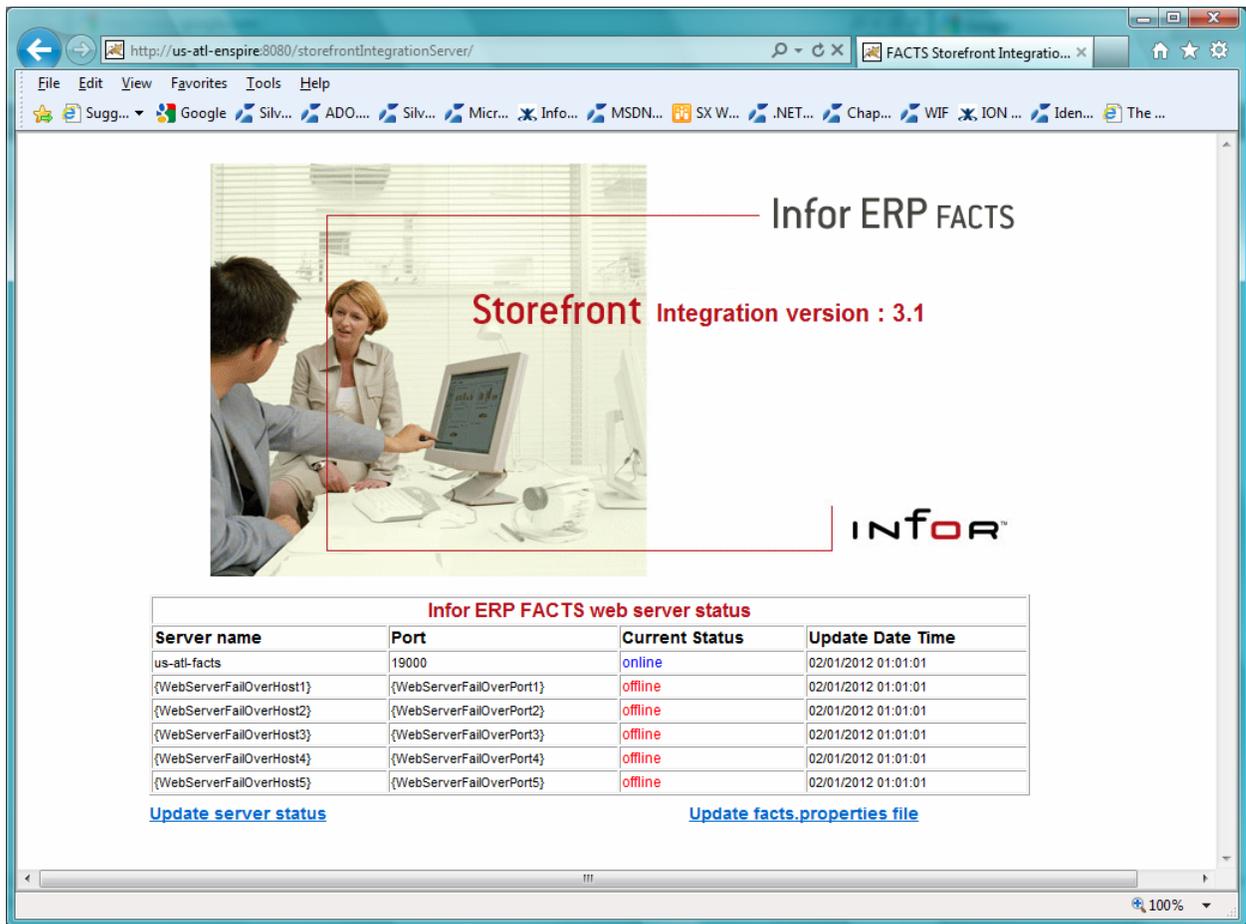
All of the Infor Distribution FACTS - specific configuration settings for the Integration Server are stored in the facts.properties file. This file should not be edited with a text editor, because the Password field used to communicate with is encrypted and must be changed through the Integration Server web page.

Navigate to the following url in the web browser to update the configuration settings in the fact.properties file:

`http://{myAppServerName}:{myPortNumber}/storefrontIntegrationServer`

{myAppServerName} is the name of your application server

{myPortNumber} is the port number your application server is monitoring



This base page shows the status of the ProvideX or PxPlus web server, and provides access to two primary tasks, “Update server status,” and “Update facts.properties file.”

There is now one primary and up to 5 fail-over server definitions for the ProvideX web server. There are multiple uses for this feature, including the following:

- The server that is running the ProvideX web server could have multiple IP addresses (e.g. internal vs. external, multiple LAN cards, etc). If a router or a network card fails, you may be able to communicate with the server on one IP address but not the other – the fail over feature allows the integration server to automatically switch to an alternate, available IP address.
- You may establish multiple ProvideX web servers on your FACTS server, monitoring different port numbers – fail over would allow you to bring down one of the web servers and have the integration layer automatically switch to communicate on the alternate port number.
- In the future, we may optionally implement load balancing between the defined IP addresses and ports.
- If the fail over feature is activated (by setting UseFailOverHosts=true in the facts.properties file), the Integration Layer will automatically switch to the next available host if/when the current host goes offline. The primary host will periodically be checked

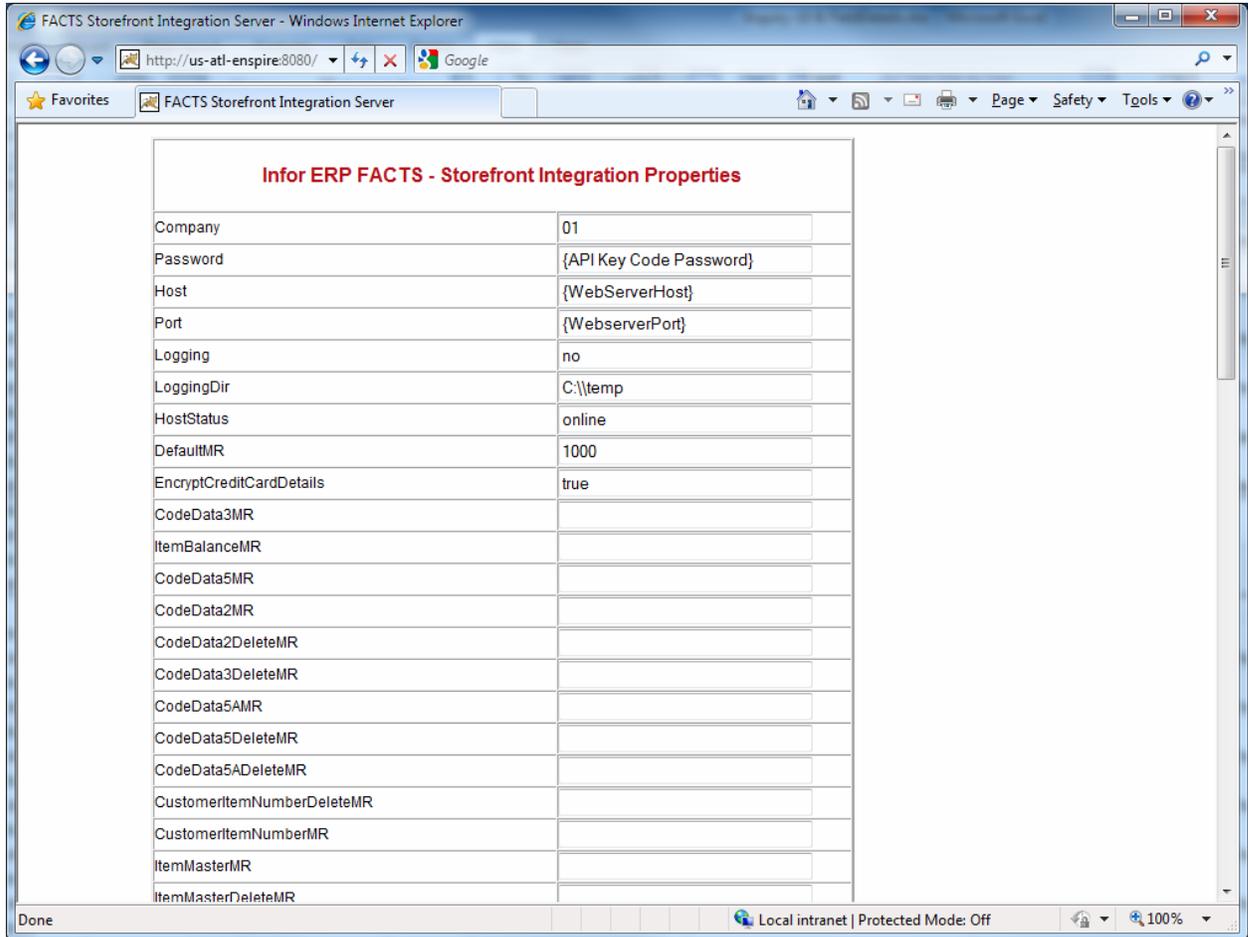
to see if it is back online based on the number of minutes identified in the `TimeIntervalToUpdateConnectionStatus` setting.

- If the system administrator knows that the primary server is back online, they can manually reset its status to online with either the “Update server status” link or by updating the proper setting in the `facts.properties` file with the “Update facts.properties file” link.

Use the “**Update server status**” link, when you need to manually update the primary or the fail over host status. The status can be set to either “online” or “offline”.

Use the “**Update facts.properties file**” link to access the FACTS-specific configuration settings.

## Update facts.properties file

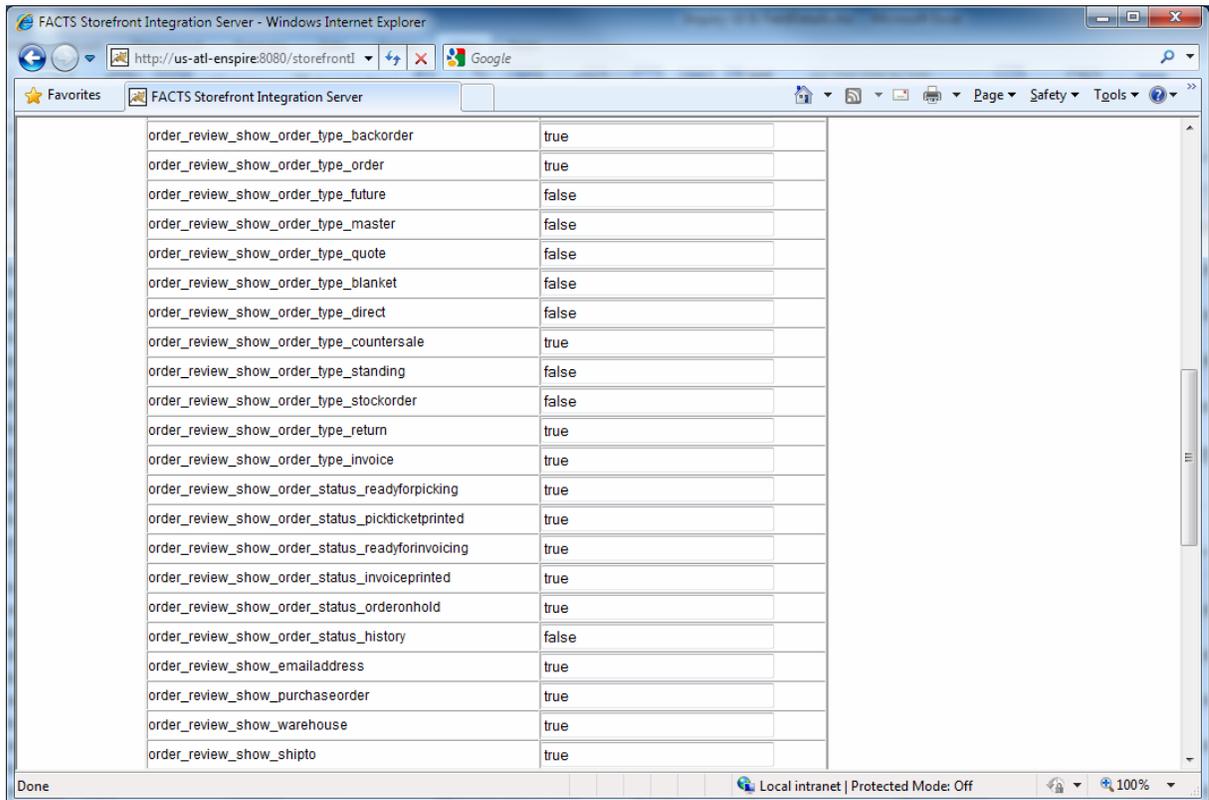


Enter the value for the following parameters and update them as needed:

Parameter	Value
Company	FACTS company number
Password	Password used to authenticate requests from Storefront to FACTS. This must match the password specified in API Key Code Entry for the [eStoreFr] key code in FACTS.
Host	The server where your ProvideX webserver is located
Port	The port the ProvideX webserver is monitoring
Logging	Turns on logging for the Integration Server (values: <b>on</b> or <b>off</b> )
LoggingDir	Path to the location of the integration_log.txt file

EncryptCreditCardDetails Option to enable the encryption of credit card information before logging or sending data to FACTS web server (values: **true** or **false**)

## Update facts.properties file <continued ...>



The screenshot shows a web browser window displaying a table of order review options. The table has two columns: the option name and its value. The values are either 'true' or 'false'. The options listed are:

order_review_show_order_type_backorder	true
order_review_show_order_type_order	true
order_review_show_order_type_future	false
order_review_show_order_type_master	false
order_review_show_order_type_quote	false
order_review_show_order_type_blanket	false
order_review_show_order_type_direct	false
order_review_show_order_type_countersale	true
order_review_show_order_type_standing	false
order_review_show_order_type_stockorder	false
order_review_show_order_type_return	true
order_review_show_order_type_invoice	true
order_review_show_order_status_readyforpicking	true
order_review_show_order_status_pickticketprinted	true
order_review_show_order_status_readyforinvoicing	true
order_review_show_order_status_invoiceprinted	true
order_review_show_order_status_orderonhold	true
order_review_show_order_status_history	false
order_review_show_emailaddress	true
order_review_show_purchaseorder	true
order_review_show_warehouse	true
order_review_show_shipto	true

### Order Review options in the facts.properties file

Storefront 1.5.120 added an enhancement to allow better sorting and filtering on the Review Orders screen. The following fields in the facts.properties file determine what options are shown and which ones are not. Fields that are defaulted here to false are not supported by FACTS and should not be changed to true. They are included here for reference and for potential future use only:

#These are for the Review Order Screen. Set any to false that you would like to hide in the UI.

order\_review\_show\_order\_type\_backorder=true

order\_review\_show\_order\_type\_order=true

order\_review\_show\_order\_type\_future=false

order\_review\_show\_order\_type\_master=false

order\_review\_show\_order\_type\_quote=false

order\_review\_show\_order\_type\_blanket=false

order\_review\_show\_order\_type\_direct=false

```
order_review_show_order_type_countersale=true
order_review_show_order_type_standing=false
order_review_show_order_type_stockorder=false
order_review_show_order_type_return=true
order_review_show_order_type_invoice=true
order_review_show_order_status_readyforpicking=true
order_review_show_order_status_pickticketprinted=true
order_review_show_order_status_readyforinvoicing=true
order_review_show_order_status_invoiceprinted=true
order_review_show_order_status_orderonhold=true
order_review_show_order_status_history=false
order_review_show_emailaddress=true
order_review_show_purchaseorder=true
order_review_show_warehouse=true
```

Update facts.properties file <continued ...>

## Using fail over hosts

The fail over option within the Infor Distribution FACTS Storefront Integration Server allows you to configure access to the ProvideX webserver using alternate host / ip addresses and ports. When an error occurs during the communication with the primary host, the Integration Server will automatically switch to an available fail over host, if any.

The timer interval establishes the number of minutes before the Integration Server will retry the connection to the primary server. When it is again available, its status will be reset to online, allowing future calls to be routed back to the primary host.

This feature can be enabled by setting the “UseFailOverHosts = true” and by deploying the factswebserver.html file provided with the integration layer deliverables. This file should be placed on the FACTS server, in the main FACTS directory. This file is used to verify the availability of the primary and the fail over hosts.

order_review_show_shipto	true
UseFailOverHosts	false
FailOverHost1	{WebServerFailOverHost1}
FailOverPort1	{WebServerFailOverPort1}
FailOverHost2	{WebServerFailOverHost2}
FailOverPort2	{WebServerFailOverPort2}
FailOverHost3	{WebServerFailOverHost3}
FailOverPort3	{WebServerFailOverPort3}
FailOverHost4	{WebServerFailOverHost4}
FailOverPort4	{WebServerFailOverPort4}
FailOverHost5	{WebServerFailOverHost5}
FailOverPort5	{WebServerFailOverPort5}
TimeIntervalToUpdateConnectionStatus	60
FailOverHost1Status	offline
FailOverHost2Status	offline
FailOverHost3Status	offline
FailOverHost4Status	offline
FailOverHost5Status	offline
HostStatusUpdateDateTime	09/01/2010 01:01:01
FailOverHost1StatusUpdateDateTime	09/01/2010 01:01:01
FailOverHost2StatusUpdateDateTime	09/01/2010 01:01:01
FailOverHost3StatusUpdateDateTime	09/01/2010 01:01:01
FailOverHost4StatusUpdateDateTime	09/01/2010 01:01:01
FailOverHost5StatusUpdateDateTime	09/01/2010 01:01:01
FailOverResetCounter	0

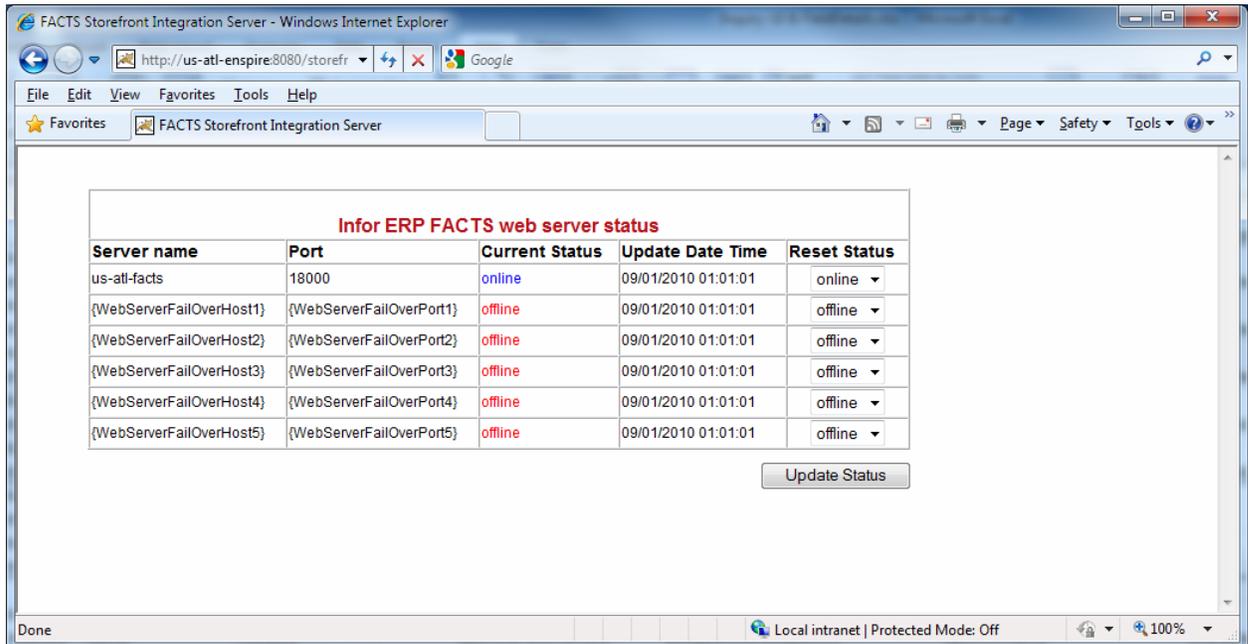
Enter the value for the following parameters, and update them as needed:

Parameter	Value
UseFailOverHosts	Option to enable the fail over host access to the ProvideX web server (values: <b>true</b> or <b>false</b> )
FailOverHost1	The fail over host name or ip address of the server where your ProvideX webserver is located
FailOverPort1	The fail over port number for the ProvideX webserver
FailOverHost2	The fail over host name or ip address of the server where your ProvideX webserver is located
FailOverPort2	The fail over port number for the ProvideX webserver
FailOverHost3	The fail over host name or ip address of the server where your ProvideX webserver is located
FailOverPort3	The fail over port number for the ProvideX webserver
FailOverHost4	The fail over host name or ip address of the server where your ProvideX webserver is located
FailOverPort4	The fail over port number for the ProvideX webserver
FailOverHost5	The fail over host name or ip address of the server where your ProvideX webserver is located
FailOverPort5	The fail over port number for the ProvideX webserver

HostStatus	The current status of the primary ProvideX webserver (values: <b>online</b> or <b>offline</b> )
FailOverHost1Status	The current status of the fail over server (values: <b>online</b> or <b>offline</b> )
FailOverHost2Status	The current status of the fail over server (values: <b>online</b> or <b>offline</b> )
FailOverHost3Status	The current status of the fail over server (values: <b>online</b> or <b>offline</b> )
FailOverHost4Status	The current status of the fail over server (values: <b>online</b> or <b>offline</b> )
FailOverHost5Status	The current status of the fail over server (values: <b>online</b> or <b>offline</b> )
TimeIntervalToUpdateConnectionStatus	60 (integer value entered represent time interval in minutes)
HostStatusUpdateDateTime	[for internal use only]
FailOverHost1StatusUpdateDateTime	[for internal use only]
FailOverHost2StatusUpdateDateTime	[for internal use only]
FailOverHost3StatusUpdateDateTime	[for internal use only]
FailOverHost4StatusUpdateDateTime	[for internal use only]
FailOverHost5StatusUpdateDateTime	[for internal use only]
FailOverRestCounter	[for internal use only]

**IMPORTANT:** When you are done editing this file, click the “**update properties**” button at the bottom. DO NOT USE THE CLOSE BUTTON IN THE TITLE BAR, AS THIS WILL NOT SAVE YOUR CHANGES.

## Update server status



The user can manually reset the status of the hosts, when required, by changing the status in the reset status column and clicking “update status” button. The status updates are used only when the fail over option is enabled.

There are additional properties that may be configured in the storefront-integration-limit.properties file. This file may be edited with a standard text editor.

## Optional settings in the storefront-integration-limit.properties file

This file stores the number of records returned per batch when data is requested from Infor Distribution FACTS. Each of these is typically set to 1000. If no value is set, the system will default to 100.

### Using the Extended Classes

Some of the API calls to FACTS have been extended to support additional information being transferred between FACTS and Storefront. These are referred to as extended classes.

By default, the Integration Server will not use extended classes. If you would like to enable extended classes, do the following:

- 1 Rename StorefrontIntegrationContext.xml to StorefrontIntegrationContext-no-ext-classes.xml
- 2 Rename StorefrontIntegrationContext-with-extended-classes.xml to StorefrontIntegrationContext.xml

Restart the storefrontIntegrationServer Web application by either restarting the web server (Tomcat or Websphere).

{Note: we will be documenting the extended classes later}

# Chapter 6 Troubleshooting & Installation Tips

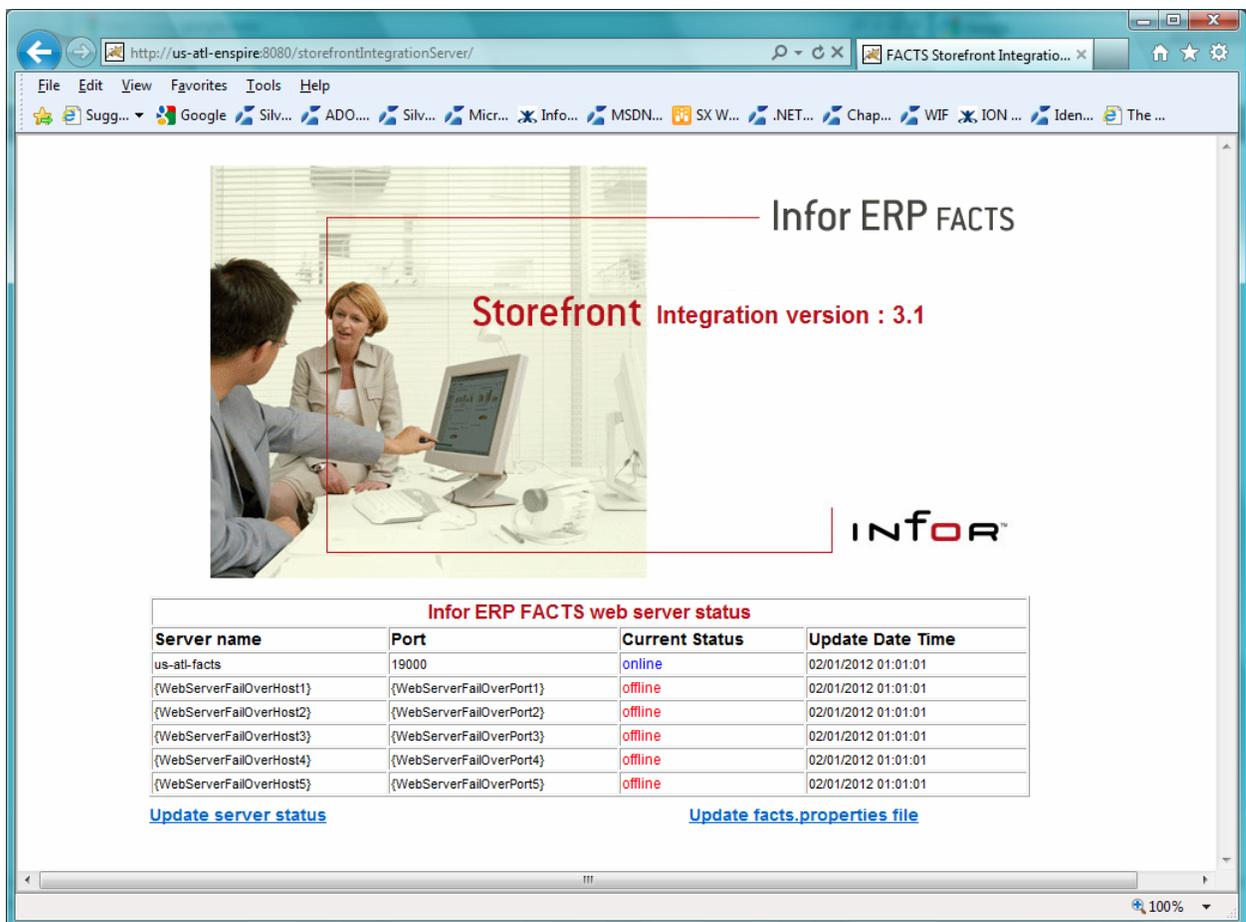


## FACTS Storefront Integration Layer Troubleshooting and Installation Tips Overview

Some of the installation steps can be quite picky, so here are some things to look out for, and other troubleshooting tips.

### Determining Version of the Infor Distribution FACTS Storefront Integration Server:

- In a web browser, point to `http://{servername:serverport}/storefrontIntegrationServer`
- This should show a screen similar to the one below:



## Editing the JDBC.properties file in storefrontAppServer\WEB-INF

Make sure there is no space after the port number for the indexbuilder

### To correct the Logging errors in storefrontCommerce:

This will not generate an error until Storefront tries to write to a log file, and in the default settings, it only tries to do so when an error occurs.

Edit the last section of Storefront-log4j.properties file in storefrontCommerce\WEB-INF as follows, replacing the “R” with a “C” (all lines in this section should end with “ERROR, C”).

```
log4j.logger.com.infor.storefront.ui.commerce=ERROR, C
log4j.logger.org.apache=ERROR, R <--- this “R” should be “C”.
log4j.logger.org.apache.catalina=ERROR, C
log4j.logger.org.apache.struts=ERROR, C
log4j.logger.org.springframework=ERROR, C
```

### When setting up accounts in Storefront Admin

Be sure that the case of the Customer Number entered in storefrontAdmin has the same case as you have entered in the FACTS customer file.

At the initial delivery of Storefront 1.5.120, Storefront would allow you to setup a user with a case that doesn’t match the case in FACTS, but it will fail when doing a Review Orders. This issue will be resolved in a future Storefront patch, so that the case does not have to match.

### EasyAsk Services and IndexBuilder.properties Configuration

Be careful that file paths use the correct syntax. They will either be two backslashes “\\” or one forward slash “/”. You can use either one. For example:

```
EA_ROOT=C:\\EasyAsk
```

```
EA_STAGING_DIR=C:\\EasyAsk\\server\\staging
```

```
EA_DEPLOY=C:\\EasyAsk\\server\\dictionaries
```

```
EA_CLASSPATH=C:/EasyAsk/lib;C:/EasyAsk/lib/eapatch.jar;C:/EasyAsk/lib/
easerver.jar;C:/EasyAsk/lib/ea.jar
```

If an index build fails in Catalog, it is most likely due to one of these settings, or a space in the jdbc.properties file after the port number.

When saving changes to the IndexBuilder.properties file, the EasyAsk services must not be running, or the changes will not be saved

If the index builder fails while building the index, make sure that there are items available for the web in the catalog. Infor Distribution FACTS uses the flag “Allow Web Purchase” = “Y” but Storefront uses “Prevent from Web” = “N” to mean the same thing. In Catalog, this column appears as “Web”. If

all items in catalog have a “Y” in this column, that means they are all prevented from the web, and the index build will fail.

## How to configure the storefront version specific adapter layer

The adapter layer has the storefrontDao and commerceCatalogDao mapped with class names in the **Data Objects Definition section** that will be specific to each storefront version and the adapter layer supports. This new Adapter layer will get delivered with storefront 1.5.300 and above version that will help the users to have a common “Infor Distribution FACTS Storefront Integration Server” that will work with a version specific adapter layer.

**If you are installing Storefront version 2.0.101 and the Storefront Integration Server v3.2 you don't have to make any changes to the adapter layer during your install since the current storefrontIntegrationServer.war for v3.2 contains the adapter layer that is specific to storefront 2.0.101.**

If you are installing Storefront version 2.0 and the Storefront Integration Server v3.1 you don't have to make any changes to the adapter layer during your install since the storefrontIntegrationServer.war for v3.1 contains the adapter layer that is specific to storefront 2.0.

If you are planning to use the Storefront version 1.5.300 and storefront Integration Server v3.0 you don't have to make changes to the adapter layer since the storefrontIntegrationServer.war for v3.0 contains the adapter layer that is specific to storefront 1.5.300.

If you are planning to use the storefrontIntegrationServer.war v3.0 with an earlier version of storefront such as 1.5.210 or 1.5.200 then you need to copy the StorefrontIntegrationContext.xml and the infor-storefront-integration.jar files that are available within the adapter deliverable download (FACTS\_Storefront\_Adapter\_Layer\_1\_5\_300.iso).

The StorefrontIntegrationContext.xml for the specific storefront version should be placed within the tomcat deployment folder. (...storefrontIntegrationServer\WEB-INF).

For example if Tomcat 5.5 is installed by using default folder selection then this location would be:

C:\Program Files\Apache Software Foundation\{Tomcat 5.5 or Tomcat 6.0}\webapps\  
storefrontIntegrationServer\WEB-INF

### **Final required step:**

**The infor-storefront-integration.jar for the storefront specific version should be copied from the downloaded Storefront deployment files to the storefrontIntegrationServer\WEB-INF\lib folder.**

For example if Tomcat is installed by using default folder selection then this location would be:

C:\Program Files\Apache Software Foundation\{Tomcat 5.5 or Tomcat 6.0}\webapps\  
storefrontIntegrationServer\WEB-INF\lib

## Storefront Integration Server and Adapter Layer Compatibility Matrix

Storefront Versions	Tomcat Version (Minimum Required)	Storefront Integration Server Version	Adapter Layer Version
2.0.101	Tomcat 6.0	3.2	2.0
2.0.100	Tomcat 6.0	3.1	2.0
2.0	Tomcat 6.0	3.1	2.0
1.5.310	Tomcat 6.0	3.1	1.5.300
1.5.300	Tomcat 6.0	3.1	1.5.300
1.5.210	Tomcat 6.0	3.1	1.5.210
1.5.200	Tomcat 6.0	3.1	1.5.200
1.5.310	Tomcat 5.5	3.0	1.5.300
1.5.300	Tomcat 5.5	3.0	1.5.300
1.5.210	Tomcat 5.5	3.0	1.5.210
1.5.200	Tomcat 5.5	3.0	1.5.200