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Image Services Resource Adapter

Installation and Deployment Guide

For Oracle 10g Application Server

Release 3.2.1

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About This Manual

This manual provides information about installing and configuring Image Services Resource Adapter (ISRA) version 3.2.1 on Oracle 10g platform.

Conventions Used in the Document

The table lists the formatting conventions used in this document.

Convention	Description
Fixed Size font	Used for commands entered at the system command prompt.
Arial font	Used for important notes
Bold	Occasionally used to refer to portions of user interface, such as the Next button or the Install button

Education

FileNet provides various forms of instruction. Please visit the Global Learning Services in FileNet's Service & Support area at <u>www.filenet.com</u>.

Related References

For all ImageViewer parameters please refer to the FNImageViewer documentation provided with ISRA installation media.

<ISRA-home>\ISRA321\FNImageViewer\docs

For all P8 System Manager related information, please refer to P8 System Manager documentation provided with ISRA installation media.

<ISRA-home>\ISRA321\SystemManager\docs

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1 ISRA Installation

This document describes how to install, deploy and configure FileNet Image Services Resource Adapter (ISRA) version 3.2.1 on Oracle 10g Application Server platform.

ISRA Overview

Integration with existing Enterprise Information Systems (EIS) is the key to success, in business moving towards an e-business strategy.

The Java 2 Enterprise Edition (J2EE) Connector Architecture defines a standard architecture to connect the J2EE platform with the heterogeneous EIS's.

ISRA is a system-level software driver compliant with the J2EE Connector Architecture v1.0. It is used by a Java application component or client to connect to FileNet Image Services (IS).

ISRA provides an alternative to IDM Web Services for IS customers. In addition, it provides a Web solution that does not require Microsoft technology or product support.

ISRA Package Overview

ISRA is bundled into a single package called the Resource Adapter Module, which contains all necessary files and information for the correct deployment, on supported Application Server.

ISRA is available in two editions:

- View edition: Supports ISRA Read-only interactions
- Enterprise edition: Supports additional interactions that allow creation of documents and folders, and update of their properties. User can also print/fax the documents.

Resource Adapter Module

The contents of the Resource Adapter Module are:

- Jar file that consists of ISRA class library.
- Deployment descriptor (XML file) that defines the run-time behavior of ISRA.

Structure of the ISRA Package



The following figure illustrates a listing of files in the ISRA package:

Installing ISRA

Note The screen shots shown in this guide (taken on Windows Server, which includes both 2000 and 2003 Servers) may look slightly different on the system, depending on the platform version or settings etc.

ISRA is installed from an executable installer file. The steps for installation are:

1. Mount CD-ROM

On UNIX:

Perform this step only if CD-ROM device is not already mounted. Note that you must have the root user privileges to perform these tasks. Load the ISRA CD into the drive, open a terminal window and create the /cdrom directory using the following command:

mkdir /cdrom

On Sun Solaris 9:

Using a preferred editor (for example, vi), edit the /etc/vfstab file by adding an entry /vol/dev/dsk/c0t2d0/cdrom - /cdrom hsfs 4 - ro

where, /vol/dev/dsk/c0t2d0/cdrom is the CD-ROM device file path, /cdrom is the mount point for the CD and hsfs is the file system format of the CD. Refer to Solaris system manual for more details on mounting devices. On the system prompt, enter # mount /cdrom to mount the CD-ROM.

On IBM AIX 5.1 and 5.2:

At the system prompt enter the following command to mount the CD-ROM: # mount -rv cdrfs /dev/cd0 /cdrom

where /dev/cd0 is the CD-ROM device file path, /cdrom is the mount point for the CD and cdrfs is the file system format of the CD.

On HPUX:

 Using a preferred editor (for example, vi), edit the /etc/pfs_fstab file by adding an entry similar to the following:

/dev/dsk/c2t2d0 /cdrom pfs-rrip xlat=unix 0 0

where /dev/dsk/c2t2d0 is the CD-ROM device file path and /cdrom is the mount point for the CD.

- On the system prompt, enter:

```
# pfs_mountd &
```

pfsd &

• On the system prompt enter the following command to mount the CD-ROM: # pfs_mount /cdrom.

To ensure that CD-ROM is mounted correctly, on a terminal window, enter # mount.

This lists the CD-ROM device.

On Linux:

Open a terminal window and enter # mount /dev/hdc /mnt/cdrom where, /dev/hdc is the CD-ROM device file path and /mnt/cdrom is the mount point for the CD. Refer to the Linux system manual for more details on mounting devices.

To ensure that CD-ROM is mounted correctly, on a terminal window, enter # mount

This lists the CD-ROM device.

On Windows:

Open the explorer and select the CD-ROM drive that contains the ISRA CD.

- 2. Launch the ISRA installer by executing **setup.bin** on HPUX, Linux, IBM AIX and Solaris or **setup.exe** on Windows Server.
 - On HPUX, Solaris, IBM AIX or Linux server, open a terminal, change directory to the respective folders on CD-ROM drive for locating setup.bin. To do this, enter the following commands on the command prompt:

- # cd cdrom/<HPUX, Solaris, AIX, Linux>
- # ./setup.bin
- On Windows Server, locate setup.exe in the Windows folder of the CD-ROM drive. Double-click setup.exe to launch the ISRA installer.

The installation screen appears.



3. If user clicks **Cancel**, the following dialog box appears:



Click No to go back to the previous screen.

4. Click Next to proceed. The following screen appears:

Image Services Resources	ce Adapter 3.2.1 Patch1	<u> </u>
	ISRA 3.2.1 Patch1 User Software License Notice	
	FileNet Notice to End User - A Software License is Required Prior to Use. BEFORE COMPLETING INSTALLATION OR USING THIS SOFTWARE, CAREFULLY READ THIS NOTICE. THIS SOFTWARE IS THE PROPRIETARY INTELLECTUAL PROPERTY OF FILENET CORPORATION (OR ITS SOFTWARE SUPPLIERS) AND USE OF ANY PORTION OF THE SOFTWARE IS ONLY PERMITTED IF YOU HAVE A VALID WRITTEN LICENSE AGREEMENT WITH FILENET. You may have a valid FileNet software license agreement if: 1. Your EMPLOYER and FileNet have entered into a written license agreement; or 2. Your EMPLOYER and an authorized FileNet partne have entered into a written license agreement. If you do not have a valid license agreement to use the software, then terminate the installation of this software, promptly delete any FileNet software files from your computer, and return the software media and all other related items to: FileNet Corporation O I have read and understand this software license notice	
	I do not accept the terms of this software license notice	
InstallShield		
	- Book Months Com	
	<u> Back</u> <u> Mext</u>	Cer

5. Accept the license agreement and click **Next** to proceed.

Image Services Resources	ce Adapter 3.2.1 Patch1	_O×
Printiping 1	Please enter the serial number.	
	< <u>B</u> ack <u>Next></u> Can	cel

6. Enter the serial number and click **Next** to proceed.

Depending on the serial number, either View edition or Enterprise edition of ISRA will be installed.

• The View edition screen appears as below:



• The Enterprise edition screen appears as below:



7. Click **Next** to proceed with the installation.

Image Services Resources	ce Adapter 3.2.1 Patch1	<u> </u>
	Setup will install ISRA into the following folder, if you want to install in a differ folder and/or drive, type the name of the folder below: Directory Name: C:tfnswlISRA321 Brow	ent se
InstallSmeid -	< <u>B</u> ack <u>N</u> ext > <u>C</u> ar	ncel

8. Choose the directory to install ISRA and click **Next** to proceed. On UNIX/Linux systems, the default path shown is /fnsw/ISRA321.

Image Services Resources	ce Adapter 3.2.1 Patch1	<u> </u>
	Please Review the Following Before Continuing:	
	Image Services Resource Adapter will be installed in the following location: C:\fnsw\ISRA321	
	for a total size:	
	57 МВ	
InstallShield		
	< <u>Back</u>	cel

9. Verify the information. If there are any errors, click **Back** to make the necessary changes. Else, click **Next** to proceed with the installation of ISRA. The following screen appears:

Image Services Resources	e Adapter 3.2.1 Patch1	_ 🗆 X
	Installing Image Services Resource Adapter. Please wait	
	C:tfnswlISRA321\Sample\FNImageViewer.ear 34%	-
InstallShield	< <u>B</u> ack <u>N</u> ext ≻ <u>C</u> a	ncel

10. When ISRA installation completes, the following screen appears:

Image Services Resource	e Adapter 3.2.1 Patch1
	Congratulations ! The InstallShield Wizard has successfully installed Image Services Resource Adapter. Choose Finish to exit the wizard.
InstallShield	
	≤ Back Next > Finish

11. Click Finish.

For UNIX platforms, login as root user and execute the following command to unmount the CD-ROM:

umount /cdrom

For Linux, enter # umount /mnt/cdrom

Remove the CD from the drive.

Silent Installation of ISRA

For Silent Installation of ISRA, perform the following steps:

1. Execute the following command on the command prompt to generate a template file:

```
java -cp setup_ISRA321Patch1.jar run -options-
template <Real Path>/<name of template file>,
e.g. fnsw\ISRASilent\ISRASilent.txt
```

- 2. Copy the template file and **setup_ISRA321Patch1.jar** to a desired location.
- 3. Set the following values in template file:
 - -P installLocation = <value> variable to
 -P ISRAProductBean.installLocation = <value>.
 - LicenseBean.selection variable as 1 to accept the license agreement
 - SerialNumberFieldBean.SerialNumber variable to the specific serial number for Enterprise or View edition
 - ISRAProductBean.installLocation variable to the directory under which the installation has to take place in the template file.
- 4. Set the path to location containing **setup_ISRA321Patch1.jar** file on command prompt. Execute the following command to start the Silent installation:

java -cp setup_ISRA321Patch1.jar run -silent -options
<Real Path>/ISRASilent.txt

2 ISRA Deployment

ISRA can be deployed on a J2EE 1.3 compliant Application Server. This manual describes the deployment of ISRA on the Oracle 10g Application Server platform.

Note The installation procedure for Oracle 10g Application Server is outside the scope of this document. This guide assumes that the required settings and configurations have already been made.

The ISRA module is a set of Java interfaces/classes that implements J2EE Connector Architecture specified contracts and the EIS specific functionality. ISRA plugs into a J2EE 1.3 compliant Application Server in a modular manner.

Deployment Requirements

This section lists the minimum software and hardware requirements for successful deployment of ISRA on Oracle 10g Application Server.

Hardware Requirements

- Please refer to the Oracle 10g Application Server system requirements section at: <u>http://otn.oracle.com</u>
- ISRA installation will require at least 80MB of free disk space.

Software Requirements

- Oracle 10g Application Server installed on HPUX 11i, Sun Solaris 8 and 9, IBM AIX 5.1 and 5.2, LINUX or Microsoft Windows 2000 and 2003 Servers
- FileNet IS 3.6 SP2 and above

Deploying ISRA

ISRA is deployed using the Oracle 10g Application Server console. The Resource Adapter can be deployed on Oracle 10g Application Server by deploying **ISRA.rar** file.

Deploying ISRA.rar

After the installation is complete, the ISRA software and documentation installed is in C:\fnsw\ISRA321, deploy the ISRA connector on OC4J.

To deploy the ISRA.rar file:

- 1. Start OC4J server by executing the command on the DOS prompt \Oracle_Directory\bin\oc4j -start.
- 2. Launch a Web browser and enter the URL as

http://localhost:<Port Number>/em in the Address bar to start the Oracle 10g Application Server console. The following screen appears:

🔊 Login to Oracle Application Server Control - Netscape
👞 Eile Edit View Go Bookmarks Tools Window Help
Co. O Co Co http://localhost:8888/em/console/ias/oc4j/home
A Home My Netscape Search Scustomize
😢 New Tab 🛛 🛇 Login to Oracle Application Server Control
ORACLE Enterprise Manager 10g Application Server Control
Login
★ User Name ★ Password Login
Copyright © 1996, 2005, Oracle. All rights reserved.

3. Enter the **User Name** and **Password**. Click **Login**. The following screen appears:

🕲 Oracle Enterprise Manager (oc4jadmin) - OC43: home - Netscape	_ B ×
_ Elle Edit View Go Bookmarks Iools Window Help	
Co C	
🙏 / 🖽 Home 🕅 Netscape 🔍 Search 🛇 Customize	
🕘 New Tab 🛇 Oracle Enterprise Manager (oc4jadmin) - O	×
ORACLE Enterprise Manager 10g	Setup Loas Help Loaout
OC4J: home	
Page Refreshed Feb 21, 2006 5:33:53 PM GMT+	•05:30 • View Data Manual Refresh 💽
Home Applications Web Services Performance Administration	
General Response and Load	
Status Up Stop Restart Start Time Feb 21, 2006 11:45:10 AM 4 4 Oracle E:Noracle 1 1 Home Home 0.050 0.025 Notifications 0 0.033 4.00 4.20 Feb 21, 20 Request Processi Feb 21, 20 Request Processi	5:00 5:20 Ing Time (seconds)
Home Applications Web Services Performance Administration	ond
Setup Logs <u>Help</u> Logout Copyright @ 1996, 2005, Cracle. All rights reserved.	

4. Click the **Applications** tab and select **Standalone Resource Adapter** in the **View** dropdown box. The following screen appears:

🕲 Oracle Enterprise Manager (oc4jadmin) - OC4J: home - Netscape			
Eile Edit View Go Bookmarks Tools Window Help			
🔍 🚱 🚳 🚳 [http://ocahost:8888/em/console/ias/oc4//applications?viewName=ras			
A Customize			
Netscape - Enter Search Terms	ht 🕺 Pop-Ups Blocked: 0 🥜 Form Fill 🔹 🥜 Clear Browser History 👼 News 🛸		
🕑 New Tab 🛇 Oracle Enterprise Manager (oc4jadmin) - O			
ORACLE Enterprise Manager 10g Application Server Control	Setue Loas Hele Loaout		
OC4J: home			
	Page Refreshed Eeb 18, 2006 12:52:03 PM GMT+05:30		
Home Applications Web Services Performance Admin	nistration		
This page shows the J2EE applications and application components (EJB M instance. View Standalone Resource Adapters 💌	odules, WAR Modules, Resource Adapter Modules) deployed to this OC4J		
(Start) (Stop) (Undeploy) (Redeploy)			
Select Resource Adapter A Resource Adapter Module	Status EIS Type		
OracleASjms OracleASjms	☆ OracleAS JMS		
Home Applications Web Services Performance Admin	nistration		
Copyright @ 1996, 2005, Oracle. All rights reserved.	Help Logout		

5. Click **Deploy**. The following screen appears:

🔊 Oracle Enterprise Manager (oc4jadmin) - Deploy: Select Archive - Netscape 💶 🗙
🚫 🕥 🚳 🖉 http://localhost:8888/em/console/ias/j2ee/deploy/deploySelectArchive?command=startWizardbappWewWame= 🗊 🖉 🕵
🔺 / 🖽 Home 💹 Netscape 💊 Search 🛇 Customize
🗙 🕲 Netscape 👻 Enter Search Terms 🔍 🔍 Search 🖋 Highlight 🕺 Pop-Ups Blocked: 0 🥜 Form Fill 🔹 🔗 Clear Browser History 👼 News 🛸
😢 New Tab 🛇 Oracle Enterprise Manager (oc4jadmin) - D
Application Server Control
Select Archive Application Attributes Deployment Settings
Cancel Step 1 of 3 Negt
Archive
The following types of archives can be deployed: J2EE application (EAR files), Web Modules (WAR files), EJB Modules (EJB JAR files) and Resource Adapter Modules (RAR files).
Archive is present on local host. Upload archive to the server where Application Server Control is running. Archive Location Browse
C Archive already present on server where Application Server Control is running. Location on Server The location on server must be the absolute path or the relative path from j2ee/home
Deployment Plan
The deployment plan is a file which allows you to customize deployment settings for an application. If you do not have a deployment plan, one will be automatically created during this process. In the Deployment Settings step you can optionally edit the deployment plan, and you can optionally save it for reuse with a future deployment of this application.
Automatically create a new deployment plan. The deployment plan settings will be based on OC4J defaults and information contained in the archive
C Deployment plan is present on local host. Upload Deployment Plan to the server where Application Server Control is running.

6. Click **Browse.** Navigate to the directory where ISRA 3.2.1 is installed. Select the **ISRA.rar** file from the jar folder of ISRA installation directory. Click **Next**. The following screen appears:

🚯 Oracle Enterprise Manager (oc4jadmin) - Deploy: Application Attributes - Netscape	
Eile Edit View Go Bookmarks Iools Window Help	
Concentration Concentration Concentration Concentration	• 4. 1
🔺 🖉 Home 🕅 Netscape 🔍 Search 🛇 Customize	
🔊 Netscape 👻 Enter Search Terms 💽 🔍 Search 🦻 Highlight 🕺 Pop-Ups Blocked: 0 🧳 Form Fill 🗸	🧭 Clear Browser History 👼 News 🛛 🔌
😪 New Tab 🛇 Oracle Enterprise Manager (oc4jadmin) - D	
ORACLE Enterprise Manager 10g	
Application Server Control	Setup Logs Help Logout
Select Archive Application Attributes Deployment Settings Deploy: Application Attributes Archive Lyge Resource Adapter Module (RAR file) Archive Location I SRA.rar Deployment Plan Creating a new plan	Cancel Back Step 2 of 3 Negt
* Resource Adapter Name RAdapter1	
	Cancel Back Step 2 of 3 Next
Setup Logs Help Logout	
(b) (c) & Of (c) http://localhostis888/em/console/sat/Dee/deploy/deploy/AppAttributes/#	

7. Enter the **Resource Adapter Name** and click **Next**. The following screen appears:

Oracle Enterprise Manager (oc4jadmin) - Deploy: Deployment Settings - Netscape 📃 🗌 🗙		
Elle Edit Yew Go Bookmarks Iools Window Help		
6.000	http://loc	alhost:8888/em/console/ias/j2ee/deploy/deploymentSettings
/ 🖽, 🗌 🛣 Home 🕅 Netscape	🔍 Search 🛇	Customize
Netscape - Enter Search Ter	ms	💌 🔍 Search 🖋 Highlight 🕺 Pop-Ups Blocked: 0 🥜 Form Fill 🔹 🥜 Clear Browser History 👼 News 🔹 👻
New Tab 🛇 Oracle Enterprise Man	ager (oc4jadmin))-D
DRACLE Enterprise Manag Application Server Control	jer 10g	Setue Loas Hele Loaout
Select Archive Application Altribules Deployment Settings eploy: Deployment Settings Cancel Back Step 3 of 3 Deploy Archive Type Resource Adapter Module (RAR file) Archive I concerning ISRA rar		
Deployment Plan Creating a ne	w plan	
The table below lists common	tasks that you	u might want to do before deploying your application.
Task Name	Go To Task	Description
Map Environment References	Ø	Map any environment references in your application (e.g. data sources) to physical entities currently present on the operational environment.
Select Security Provider	Ø	A security provider acts as the source for available users and groups when mapping security roles.
Map Security Roles	Ø	Map any security roles exposed by your application to existing users/groups. Users and groups will be obtained from your choice of security provider.
Configure EJBs	Ø	Configure the Enterprise JavaBeans in your application.
Configure Clustering	D	Configure clustering of your application.
Configure Class Loading	P	Manipulate the classpath of your application.

8. Click **Deploy**. The Confirmation screen appears:

Charle Encerprise Planager (oc+jaunin) - Deproy. Deproyment Settings - Netscape	
Elle Edit View Go Bookmarks Iools Window Help	
Co C	
🗼 / 🖽 Home 🔤 Netscape 🔍 Search 🛇 Customize	
Netscape - Enter Search Terms 🔍 🔍 Search 🖋 Highlight 🕺 Pop-Ups Blocked: 0 🧷 Form Fill -	🥒 Clear Browser History 📃 News 🛛 🚿
🕑 New Tab 🛇 Oracle Enterprise Manager (oc4jadmin) - D	
ORACLE Enterprise Manager 10g	<u> </u>
Application Server Control	Setup Logs Help Logout
圓, Confirmation	
	Return
The Resource Adapter "RAdapter1" has been successfully deployed.	
Prograce Maceanae	
Feb 18, 2006 1:42:19 PM] Connector Module Deployer for RAdapter1 STARTS. [Feb 18, 2006 1:42:19 PM] No previous deployment for connector: RAdapter1 [Feb 18, 2006 1:42:19 PM] Copy the archive to EVOracleV2eeVhome\connectors\RAdapter1\RAdapter1.rar [Feb 18, 2006 1:42:19 PM] Done unpacking RAdapter1.rar [Feb 18, 2006 1:42:19 PM] Done unpacking RAdapter1.rar [Feb 18, 2006 1:42:00 PM] Starting unresource adapter [Feb 18, 2006 1:42:20 PM] Starting unresource adapter [Feb 18, 2006 1:42:20 PM] Connector Module Deployer for RAdapter1 COMPLETES. Operation time: 381 msecs	

9. Click Return. The following screen appears:

🖻 Oracle Enterprise Manager (oc4jadmin) - OC43: home - Netscape 📃 🗖 🗙			
. Ele Edit View Go Bookmarks Iools Window Help			
🚱 🕥 🚳 🐘 http://localhost:8888/em/console/ias/oc4/japplications			
👞 / 🖽 🖌 🏫 Home 🌆 Netscape 🔍 Search 🛇 Customize			
Netscape - Enter Search Terms	Highlight SPop-	Ups Blocked: 0 🥜 Form Fill 👻 👍	🖌 Clear Browser History 📃 News 🛛 🚿
New Tab 🛇 Oracle Enterprise Manager (oc4jadmin) - O			×
Application Server Control Setue Loss Hele Lossout			
OC4J: home			
		Page Refreshed Feb	18, 2006 2:07:18 PM GMT+05:30
Home Applications Web Services Performance	Administration		
This page shows the J2EE applications and application components (EJB Modules, WAR Modules, Resource Adapter Modules) deployed to this OC4J instance. View Standalone Resource Adapters Deploy			
Select Resource Adapter A Resource Adapter Modu	le Status	EIS Type	
RA1	ISRA RA1		
O OracleASjms OracleASjms	企	OracleAS JMS	
Home Applications Web Services Performance Administration Copyright © 1996, 2005, Oracle. All rights reserved. Setup Logs Help Logout			
🕲 🖂 🔏 🖭 Done			

10. Click **Home** tab. The following screen appears:

🕲 Oracle Enterprise Manager (oc4jadmin) - Resource Adapter: ISRA - Netscape		
Elle Edit View Go Bookmarks Iools Window Help		
Co C	p=default&ra=ISRA	
🔺 / 🖽, 🔪 🏦 Home 🌆 Netscape 🔍 Search 🛇 Customize		
Netscape - Enter Search Terms 🗨 🔍 Search 🥩 Highlight 🕺 Pop-Ups Blocked: 0		
🕗 New Tab 🛇 Oracle Enterprise Manager (oc4jadmin) - R		
ORACLE Enterprise Manager 10g Application Server Control Setue Logs Hele Logout		
<u>OC4J:home > Application: default ></u> Resource Adapter: ISRA		
Page Refreshed Feb 18, 2006 2:08:04 PM GMT+05:30 Home Connection Factories Administered Objects Administration		
General	Resource Adapters	
Stop Undeploy Redeploy Name ISRA Status Up Resource Adapter Module RA1 Path E:\Oracle\j2ee\home\connectors\RA1\RA1 Description Unavailable Vendor Name FileNet EIS Type FileNet Image Services Adapter Version 3.2.1 JCA Specification Version 1.0 License Required False	A resource adapter is a driver that an application server uses to connect to a specific Enterprise Information System (EIS). A resource adapter implements system level contracts (such as connection management, transaction management and security) to integrate the application server and the EIS. A resource adapter can be used by the application server for both outbound and inbound communication with the EIS. Click the following links for information	
Communication with EIS bidirectional Connection Definitions	on completing common resource adapter management tasks:	
Interpret NoTransaction		

11. Click **Connection Factories** tab to configure the connection factory for the deployed resource adapter. The following screen appears:

🕸 Oracle Enterprise Manager (oc4jadmin) - Resource Adapter: ISRA - Netscape	
∠ Elle Edit View Go Bookmarks Iools Window Help	
Co C	3. 🔊
🔺 / 🖽 Home 🌆 Netscape 💊 Search 👒 Customize	
📡 💽 Netscape 👻 Enter Search Terms 🔍 🔍 Search 🖋 Highlight 🕺 Pop-Ups Blocked: 0 🥜 Form Fill 👻 🕝 Clear Browser History 💈	News >>
🕑 New Tab 🛇 Oracle Enterprise Manager (oct)admin) - R	X
ORACLE Enterprise Manager 10g Application Server Control Setue Loas He	ilp Loqout
OC4J: home > Application: default >	
Resource Adapter: ISRA	
Page Refreshed Feb 18, 2006 2:08:33 PM (GMT+05:30
Home Connection Factories Administered Objects Administration	
Connection factories exposed by the resource adapter are used by application components to obtain connections to the EIS. This table lists the factories currently configured for this resource adapter.	e connection Create
JNDI Location Connection Factory Interface Connection Pool Used Monitor Connection Factory	Delete
No connection factories found	
Shared Connection Pools	
Shared connection pools are connection pools configured for this resource adapter, that can be shared amongst connection factories that us connection factory interface. A shared connection pool that's currently being used by a connection factory cannot be deleted.	se the same
Name In Use Monitor Connection Pool Cleanup Connections	Delete
No shared connection pools found	
Home Connection Eactories Administered Objects Administration	-
Copyright @1996, 2005, Cracle. All rights reserved.	
🕲 🔜 🔏 💇 🔲 Done =	II: • • •

12. Click **Create**. The following screen appears:

🚯 Oracle Enterprise Manager (oc4jadmin) - Create Connection Factory: Select Interface - Netscape 📃 🗖 🗙	
_ Elle Edit View Go Bookmarks Iools Window Help	
Co C	
🔔 / 🛱, 😭 Home 💹 Netscape 🔍 Search 🛇 Customize	
🔍 Netscape 👻 Enter Search Terms 🔍 🔍 Search 🥓 Highlight 🚫 Pop-Ups Blocked: 0 🥜 Form Fill 👻 🖉 Clear Browser History 🗐 News 🔅 🔅	
😧 New Tab 🛇 Oracle Enterprise Manager (oc4jadmin) - C	
ORACLE Enterprise Manager 10g Application Server Control Setue Loas Hele Loaout	
OC4J; home > Application: default > Resource Adapter: ISRA >	
Create Connection Factory: Select Interface	
To configure an instance of a connection factory, you must select the connection factory interface to be used. The connection factory interfaces supported by this resource adapter are shown below. Select the interface you wish to have this connection factory instance use, and then click on Continue. Connection Factory Interfaces [javax.resource.cci.ConnectionFactory]	
(Cancel) (Continue) Setup Logs Help Logout Copyright © 1996, 2005, Oracle. All rights reserved.	
8 - # 8 D	

13. Select the **Connection Factory Interface** and click **Continue**. The following screen appears:

🕸 Oracle Enterprise Manage	er (oc4jadmin) - Create	Connection Factory - Netscape	
Ele Edit. View Go Bookmarks Iools Window Help			
G. O ()	http://loca	host:8888/em/console/las/ac4i/cf/cfCreateTwo?raModule=RA18class=javax.resource.cci.Connectio	
🔺 / 🖽 🖌 🏦 Home My Net	tscape 🔍 Search 🛇 (Lustomize	
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ORACLE Enterprise Application Server Cont	ORACLE Enterprise Manager 10g Application Server Control Setue Loss Help Logout		
OC4J: home > Application	: default > Resource /	Adapter: ISRA >	
Create Connection	Factory		
		(Back) (Cancel) (Finish)	
		Page Refreshed Feb 18, 2006 2:09:43 PM GMT+05:30	
Connection Factory Inte	erface javax.resourc	ce.cci.ConnectionFactory	
* JNDI Loc	cation		
Connection Pooling	9		
Connection pooling allo exclusive connection po	ws a set of connectior ool or use one of the s	is to the EIS to be reused within an application. An application can choose to either create its own hared connection pools available for this resource adapter.	
No Connection Pool			
C Use Private Connec	tion Pool		
Use Shared Connec	tion Pool 📃 💌		
Configuration Prop	erties	tany are listed below. You can encode an appride the values for these preparties	
Name (Tyme	Value	
AllowAnonymousUser	iava lang Boolean	true	
CacheRefreshInterval	java, lang, Integer	30	
CacheUser	iava lang String	SvsAdmin	
Cachel learPaceword	java lang String	SveAdmin	
	Java.rang.otning		

14. Specify the **JNDI Location** and click **Finish**. The following screen appears with the list of configured connection factories:

) Oracle Enterprise Manager (oc4jadmin) - R	esource Adapter: ISRA - I	Netscape		
Eile Edit View Go Bookmarks Tools Wind	ow <u>H</u> elp			
	//localhost:8888/em/console/i	as/oc4j/ra/raFact?raModule=RA1&app=de	fault&ra=ISRA&infoKey=1140252	Z. (
/ El, 🖄 Home My Netscape 🔏 Search	Customize	I Michael I -		
Netscape - Enter Search Terms	Search	Highlight SPop-Ups Blocked: 0	Form Fill	News
New Tab 🛇 Oracle Enterprise Manager (oc4ja	dmin) - R			
DRACLE Enterprise Manager 10g			<u>Setup Logs He</u>	l <u>p Loqout</u>
C4J: home > Application: default >				
 Information 				
Connection factory ISCF has been cre	ated.			
esource Adapter: ISBA				
obour do staapter : forot		Bogo B	freehod Eeb 19, 2006 2,10,22 DM	°MT.05.20
Home Connection Factories	Administered Objects	Administration	eneshed Feb 10, 2000 2.10.22 FW	3101 -03.30
onnection factories exposed by the resour onnection factories currently configured for	ce adapter are used by a this resource adapter.	pplication components to obtain cor	nections to the EIS. This table lists	the (Create
NDI Location 🛆 Connection Facto	ry Interface	Connection Pool Used	Monitor Connection Factory	Delete
CF javax.resource.cci.(ConnectionFactory	None		Î
Shared Connection Pools Shared connection pools are connection same connection factory interface. A sh	pools configured for this ared connection pool that	resource adapter, that can be share 's currently being used by a connec	d amongst connection factories that tion factory cannot be deleted.	use the
Namo	In Ileo	Monitor Connection Bool	Cleanun Connections	Delete
No shared connection pools found	in Use	Montor Competion 1 001	Ciculup Connections	Derete
Home Connection Factories	Administered Objects	Administration	h	
			T.	

Alternatively, the JNDI name can also be specified using the **oc4j-ra.xml** file located at:

```
<drive>:\your_directory\j2ee\home\application-
```

deployments\default\ISRA\oc4j-ra.xml

Open the **oc4j-ra.xml** file and edit the connection factory tag to include the location value. This is the JNDI name that the Sample Application will use to find the connector. The Sample Application, by default, uses ISCF. For example, <connector-factorylocation="ISCF" connectorname="ISRA">

- Before stopping and restarting the OC4J server, modify the descriptor xml files by changing the property names to begin with lower case. (*Please see <u>Appendix B</u> for examples of these files after the changes have been made.*)
- 2. Using Windows Explorer, navigate to the following directory:

```
<drive>:\your_directory\j2ee\Home\connectors\ISRA\MET
A-
```

INF

User is required to have a backup of these XML files, in case, an error occurs.

3. Edit all the property names in **ra.xml** file to start with a lower case, for example,

<config-property-name>DomainName</config-property-name>

is changed to

<config-property-name>domainName</config-propertyname>

4. Modify the property value of both the Domain Name and Organization Name to match the domain and Organization name of the IS Server, which is being connected. For example,

```
<config-property-value>YOUR_DOMAIN</config-property-
```

value>

<config-property-value>YOUR_ORG</config-propertyvalue>

5. Change the server setting in the **oc4j-ra.xml** file at the following location:

```
<drive>:\your_directory\j2ee\home\application-
```

deployments\default\ISRA\

- 6. Open the file oc4j-ra.xml in a text editor.
- 7. Edit all the property names to start with a lower case. For example:

<config-property name="DomainName" value="DemoIS" />

is changed to

<config-property name="domainName" value="DemoIS" />

- **8.** Edit the value of the DomainName and OrganizationName to match the IS environment.
- **9.** Stop the OC4J server by executing the following command at the DOS prompt:

\Oracle_directory\bin\ oc4j -shutdown -port <port no> password <pwd>

Or

Press ^c (Ctrl+c) in the window, where the process was started.

10. After the shutdown is complete, restart the OC4J server.

The server should start without errors. If there are case sensitive errors in any of the configuration files edited above, correct them, stop the server and again restart the server. If the server initializes without errors then the connector is deployed.

This completes the ISRA deployment.

Mandatory Requirements for ISRA 3.2.1

The mandatory requirements for ISRA 3.2.1 include:

- 1. Include the folder in which **WinPerfMon.dll** is present in the system path in case of Windows operating system. In UNIX/Linux, this file is not required.
- 2. The files listener.jar and log4j-1.2.8.jar are not present in ISRA.rar. For Oracle 10g, the listener.jar and log4j-1.2.8.jar need to be bundled in the ISRA.rar file before deploying ISRA.rar on the Application Server.

3 ISRA Configuration

This chapter describes the configuration of ISRA deployed on oracle 10g Application Server.

Configuring Deployed ISRA

This section describes how to edit the ISRA deployment descriptor before deployment.

ISRA uses the J2EE Connector Architecture deployment descriptor, called **ra.xml**, to define its operational parameters. The deployment descriptor is defined by Sun Microsystems in the J2EE Connector Architecture 1.0 specification. It describes the Resource Adapter related attributes, types, and deployment properties, using a standard Document Type Definition (DTD).

To edit the ISRA deployment descriptor:

1. Click the Connection Factory created (Refer to <u>Deploying ISRA.rar</u> section for details). The following screen appears:

🚯 Oracle Enterprise Manage	r (oc4jadmin) - Edit Conn	ection Factory: ISCF - Netscape	_ _ ×
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	http://localhos	t:8888/em/console/ias/oc4j/cf/cfGen?cf=ISCF&raModule=RAda	apter 18app=default8r
🔺 🖽 🖌 🚮 Home 🔤 Net	scape 🔍 Search 🛇 Cust	iomize	
🚬 🚇 Netscape 👻 Enter Se	arch Terms	▼ 🔍 Search 🖋 Highlight 🔊 Pop-Ups Blocked: 0	🖉 Form Fill 👻 🧭 Clear Browser History 🛛 🚿
😢 New Tab 🔍 Oracle Enterp	rise Manager (oc4jadmin) - E.		
ORACLE Enterprise Application Server Cont	ORACLE Enterprise Manager 10g Application Server Control Setue Loas Hele Loadut		
OC4J: home > Application:	: default > Resource Ada	pter: ISRA >	
Edit Connection Fac	tory: ISCF		
			Revert Apply =
		Page Refreshed	Mar 3, 2006 5:13:33 PM GMT+05:30
General Securi	ty <u>Options</u>		
JNDI Loc Connection Factory Inte Connection Inte	JNDI Location ISCF Connection Factory Interface javax.resource.cci.ConnectionFactory Connection Interface javax.resource.cci.Connection		
Connection	Pool None		
Configuration Prop	for this connection factor	v are listed below. You can specify or override the va	lues for these properties
Name 🛆	Туре	Assembled Value	Deployed Value
AllowAnonymousUser	java.lang.Boolean	true	true
CacheRefreshInterval	java.lang.lnteger	30	30
CacheUser	java.lang.String	SysAdmin	SysAdmin
CacheUserPassword	java.lang.String	SysAdmin	SysAdmin
DeploymentInstance	java.lang.lnteger	1	1
DomainName	DomainName java.lang.String FileNetIS FileNetIS		

2. Modify the required property and click **Apply**. Restart the server for settings to take place.

Alternatively,

1. Remove all files from ISRATemp directory and copy **ISRA.rar** in it. Change directory to ISRATemp.

In the ISRATemp directory, run the command jar -xvf ISRA.rar

This command will cause the **ISRA.rar** file to extract in the current directory.

- Select the ra.xml file in the META-INF folder and edit the ra.xml file in a preferred text editor. The configurable properties that may be set (modified) in ra.xml are:
 - DomainName
 - OrganizationName
 - LogFileName
 - LoggingLevel
 - LoggingMode
 - LogFileSize
 - PageBufferSize
 - CacheRefreshInterval
 - LdapImplClassName
 - LdapImplClassString

For more details, refer <u>Configurable ra.xml entities</u> and <u>Changing ISRA</u> <u>Specific Parameters for LDAP</u>.

- Note It is mandatory to configure DomainName and OrganizationName properties, as the ISRA needs these properties to access the IS. The other properties are optional. DomainName and OrganizationName are the second and third part of the three-part IS library name (for example: DefaultIMS:FileNetIS:FileNet).
- 3. After making the modifications, save the **ra.xml** file in the same folder.
- 4. To reconstruct the **ISRA.rar** file, enter the command from ISRATemp directory:

jar -cvf ISRA.rar *

This command will create **ISRA.rar** file with modified **ra.xml** bundled into it.

Changing ISRA Specific Parameters

Configurable ra.xml Entities

The configurable properties to be set (modified) in **ra.xml** are:

- DomainName
- OrganizationName
- LogFileName
- LoggingLevel
- LoggingMode
- LogFileSize
- PageBufferSize
- CacheRefreshInterval
- <u>CacheUser/CacheUserPassword</u>
- DeploymentInstance
- PCHLogging
- <u>AllowAnonymousUser</u>
- RPCLogging

DomainName

This is the domain name of the IS server. The default value of DomainName is FileNetIS. It should be set according to the operational environment. Change this property to the domain name of the IS.

OrganizationName

This is the FileNet IS organization name. The default value for OrganizationName is FileNet. It should be changed according to the operational environment.

LogFileName

The LogFileName is a string containing the name and path of the log file. The default Value of LogFileName is **ISRA.log**. A complete or relative path can be provided to create the log file at a specific location on disk.

LoggingLevel

This is an integer representing the amount of log information to be generated. The valid values are:

Logging Level	Description
0	Only Error and Warning messages will be logged by ISRA
1	Informative messages will also be logged by ISRA
2	Prints debug messages in the log

The default value of LoggingLevel is 0. It can be modified to other valid Logging Levels. It is recommended to keep the logging level to 0. LoggingLevel can be increased if user encounters a problem while accessing ISRA through the application.

LoggingMode

This is an integer representing the logging mode. The valid values are:

Logging Mode	Description
0	No Logging
1	Only console logging
2	Only file logging
3	Both console logging and file logging

The default Value of LoggingMode is 3. It can be changed to other valid values according to the operational environment.

LogFileSize

This is an integer representing the maximum size of the log file in Megabytes (MB). When the size of the file reaches this maximum limit, the log file is renamed, and a new file is created with the same name. For example, **ISRA.log** is renamed to **ISRA.log_1**, and a new file **ISRA.log** is created. The default value of LogFileSize is 5MB.

PageBufferSize

This is an integer value specified in kilobytes (KB). PageBufferSize specifies the chunk size that ISRA will use to transfer page data to and from IS. The default value is 64 KB. Specifying a higher value will require more memory for the Application Server process, and a low PageBufferSize will mean more trips to IS. The value should be set to an average page size on the target IS.

CacheRefreshInterval

This is an integer value specified in minutes. ISRA stores meta-data information, such as Document class, Indices and menu details in a local cache for faster retrieval. ISRA refreshes the cache information based on the CacheRefreshInterval value. The default value is 30 minutes.

CacheUser/CacheUserPassword

This is the name of the user that will be used to configure ISRA Cache. If there is no value set for this parameter then ISRA will use the name and password of the first user who logs into IS through ISRA to build its Cache.

Note The CacheUser name has to be either empty or a valid IS user name otherwise access to the IS via ISRA will fail.

DeploymentInstance

This is the instance number of ISRA that is being deployed. It is a user defined number between 1 and 10. The default value for this parameter is 1 when none is specified. The maximum is 10, which means that 10 different instances of ISRA can be deployed on a single machine.

Each deployment/JNDI of ISRA on the same Web/Application server requires its own instance number. For example, you have 2 ISRA applications deployed on the same Web/Application server. Each deployment would require its own instance number and JNDI name. This number is used on the IS server to differentiate between multiple connections from the same IP address of the Web/Application server.

PCHLogging

This is a String parameter to enable/disable PCH logging in ISRA. The default value for this is disabled.

AllowAnonymousUser

It's a Boolean value to allow Anonymous user logon through LDAP, when blank password is passed from user/client. The default value of this parameter is false.

RPCLogging

This is an integer representing the RPC logging level. The valid values are:

RPCLogging	Description
0	Exceptions and Warnings
1	Info
2	Debug Level

Click **RPCLogging**. The default Value of RPCLogging is 1. It can be changed to other valid values according to the operational environment.

Configuring Oracle 10g-Specific Parameters (Optional)

Once the configurable properties are set for ISRA, the Application Serverspecific parameters can be configured. In case of Oracle 10g server, the properties that can be specified are:

- maxConnections
- minConnections
- scheme
- waitTimeout

To configure the above properties modify the **oc4j-ra.xml** file present in the location <drive>:\your_directory\j2ee\home\applicationdeployments\default\ISRA\. Set the maxConnections, minConnections, scheme, and waitTimeout

maxConnections

This property represents the maximum number of managed connections that can be created by the ManagedConnectionFactory. After this number is reached, no new connections are created. If no value is specified then the number of connections can grow indefinitely.

minConnections

This parameter represents minimum number of managed connections maintained by the Application Server. If minConnections is greater than 0, the specified number of connections are opened on initialization of OC4J. OC4J may not be able to open the connections, if necessary information is unavailable at initialization time. For instance, if the connection requires a JNDI lookup, it cannot be created because JNDI information is not available until initialization is complete. The default value is 0.

scheme

This property specifies how OC4J handles connection requests after the maximum permitted number of connections is reached. The user must specify one of the following values:

• dynamic: OC4J always creates a new connection and returns it to the application, even if this violates the maximum limit. When these limit-violating connections are closed, they are destroyed instead of being returned to the connection pool.

Note OC4J does not destroy pooled connections upon close of connection unless the pool size is above the maximum limit specified in the maxConnections property.

- fixed: OC4J raises an exception when the application requests a connection and the maximum limit has been reached.
- fixed wait: OC4J blocks the application's connection request until an in-use connection is returned to the pool. If waitTimeout is specified, OC4J throws an exception in case no connection becomes available within the specified time limit.

waitTimeout

This property represents the maximum number of seconds that OC4J waits for an available connection if maxConnections has been exceeded and the fixed_wait scheme is in effect. In all other cases, this property is ignored.

Note If the user makes no waitTimeout specification, the default behavior is not to time out.

Configuring Multiple IS Servers with ISRA

To configure ISRA to access multiple IS servers:

- Deploy a new ISRA instance for each IS that you want to connect. Before deploying the second (and subsequent) ISRA, rename the ISRA.rar file. Observe that the new ISRA will overwrite the previously deployed ISRA configuration settings if the .rar file is not renamed.
- 2. Ensure that the renamed ISRA.rar has the .rar file extension.
- Configure the new ISRA and enter a DomainName and OrganizationName in ra.xml before deployment for connecting to the target IS.

4 Configuring and Deploying ISRA Sample Application

The ISRA Sample Application is packaged as an Enterprise Application Archive File (**ISRASample.ear**). It consists of:

- A Web module (SampleWEB.war)
- Deployment Descriptor (Web.xml)

The ISRA Sample Application can be deployed on a J2EE 1.3 compliant Application Server. This chapter illustrates the deployment and configuration of the Sample Application on Oracle 10g Application Server platform.

Note ISRA product media contains FileNet Image Viewer, which can be used to display the TIFF, JPEG, BMP, and other supported file formats on a Java-enabled browser.

This Sample Application is intended solely for illustrative purposes, and it should not be expected to perform useful work, or be used for production deployment. This Sample Application is to be used strictly as reference material.

Configuring Sample Application

This section describes how to deploy the Sample Application on Oracle Server to access ISRA in a managed environment. It is assumed that ISRA is deployed and configured for the target IS.

- 1. Extract ISRASampleWEB.war from ISRASample.ear.
- 2. Extract web.xml from ISRASampleWEB.war
- 3. Change param-value for "LIBRARY_NAMES" to

<param-value>ISCF</param-value>

Note The LIBRARY_NAMES property is mandatory and it should be the same as the **JNDI Binding Path** specified for the configured ISRA ConnectionFactory.

LIBRARY_NAMES is the name of the ConnectionFactory. Provide the JNDI name of the ISRA Connection Factory that the ISRA Sample Application uses to access IS resources.

The default value of LIBRARY_NAMES is ISCF. It can be changed according to the operational environment. Multiple Connection Factory names can be specified by using comma (,) as a separator. For example: ISCF, ISCF2.

- 4. To enable extended annotation functionality modify the following parameters in **web.xml**:
 - i. Change env-entry-value for "DOCCLASSNAME" to the document class configured in the IS for digital signatures.

<env-entry-value>digDocClass

ii. Change env-entry-value for "MAXROWS" to the number of records to be fetched from the given document class.

<env-entry-value>200</env-entry-value>

- 5. To enable Remote Printing functionality modify the following parameters in **web.xml**:
 - i. Change env-entry-value for "USEPRINTVIEWOPTION" to either Yes or No. This value will determine whether to honor the print/view preference set in the **web.xml** or to take the value returned by ViewOne. Default value is No.

<env-entry-value>No</env-entry-value>

ii. Change env-entry-value for "PRINTVIEWOPTION" to either View Only =1, Print Only =2, Print/View =3. This value indicates the value of Print/View. The default value is 3.

<env-entry-value>3</env-entry-value>

Note If the PRINTVIEWOPTION is set to 3 (default) then the sticky note would be saved as a normal sticky note. If PRINTVIEWOPTION value is specified as 1 or 2 then the annotations will be saved as an extended annotation (*Extended annotations are non-standard annotations which are saved with a class name parameter (F_CLASSNAME) of "Proprietary", a class id property (CLASS_ID) of {A91E5DF2-6B7B-11D1-B6D7-00609705F027} and a subclass name property (F_SUBCLASS) that describes the annotation).*

The value of PRINTVIEWOPTION would be honored for each sticky note individually, and not for all the sticky notes on a document as a whole.

Thus, the setting for PRINTVIEWOPTION would be processed for either a new annotation being added or an existing annotation being modified.

- 6. Update web.xml in ISRASampleWEB.war
- 7. Update ISRASampleWEB.war in ISRASample.ear

Deploying the Sample Application

Deployment of the Sample Application allows testing the connectivity and functionality of the ISRA connector. This step is optional. Developers can review the source code of the Sample Application to see how certain portions of the ISRA interface are used by the Sample Application. The source code can be found in the following location:

<Drive>:\fnsw\isra321\sample\source

To deploy the ISRA Sample Application, perform the following steps:

- 1. Launch a Web browser and enter the URL as http://localhost:<Port number>/em in the Address bar to start the Oracle 10g Application Server console.
- 2. Login to the Oracle 10g Application Server console.
- 3. Click Applications tab. The following screen appears:

🔊 Oracle Enterprise Manager (oc4jadmin) - OC43:	home - Ne	tscape					<u>_ ×</u>			
Eile Edit View Go Bookmarks Tools Window !	<u>H</u> elp									
G S S http://localhost:8888/em/console/ias/oc4i/applications										
│ 元, 🚳 Home Netscape 🔍 Search 💊 Customize										
Netscape - Enter Search Terms	-	🔍 Search 🛛 🖋 Higl	hlight 🚺 💇 P	op-Ups Blocked	0 🧷 Fo	rm Fill 👻 🥜 Cl	ear Browser History 🗾 News 🛛 😽			
👻 New Tab 🛇 Oracle Enterprise Manager (oc4jadmin)	- 0						X			
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OC4J: home										
				Pa	je Refresh	ed Feb 18, 20	06 12:32:39 PM GMT+05:30			
Home Applications Web Service	<u>Perf</u>	ormance Adı	ministration							
View Applications				Request	Active	(Deploy)	=			
Select Name	Status	s Start Time	Active Requests	Time (seconds)	EJB Methods	Defined MBeans				
	Û	Feb 18, 2006 11:59:50 AM GMT+05:30	0	0.00	0	2				
C ascontrol	仓	Feb 18, 2006 11:59:50 AM GMT+05:30	1	0.00	0	<u>1</u>				
Home Applications Web Service	<u>Perf</u>	ormance <u>Ad</u>	ministration							
		Setup Logs	<u> Help </u>	_ogout						
Copyright @1996, 2005, Oracle. All rights reserved.							-m- 💿 🛋			

4. Click Deploy.

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🕑 New Tab 🛇 Oracle Enterprise Manager (oc4jadmin) - D
Application Server Control Setue Loas Hele Loaout
Select Archive Application Attributes Deployment Settings
Cancel Step 1 of 3 Negt
Archive
The following types of archives can be deployed: J2EE application (EAR files), Web Modules (WAR files), EJB Modules (EJB JAR files) and Resource Adapter Modules (RAR files).
Archive is present on local host. Upload archive to the server where Application Server Control is running. Archive Location Browse
C Archive already present on server where Application Server Control is running. Location on Server
The location on server must be the absolute path or the relative path from j2ee/home
Deployment Plan
The deployment plan is a file which allows you to customize deployment settings for an application. If you do not have a deployment plan, one will be automatically created during this process. In the Deployment Settings step you can optionally edit the deployment plan, and you can optionally save it for reuse with a future deployment of this application.
Automatically create a new deployment plan. The deployment plan settings will be based on OC4J defaults and information contained in the archive
C Deployment plan is present on local host. Upload Deployment Plan to the server where Application Server Control is running.

5. Click **Browse**. Navigate to the **ISRASample.ear** file under the ISRA installed directory.

File Edit View Go Bookmarks Tools Window Help	
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🔺 🖾 Home 🕅 Netscape 🔍 Search 🛇 Customize	
🔨 💽 Netscape 👻 Enter Search Terms 🔍 🤤 🔍 Search 🎾 Highlight 🕺 Pop-Ups Blocked: () 🧳 Form Fill 🔹 🥒 Clear Browser History 👼 News 🛛 🔅
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ORACLE Enterprise Manager 10g	
Application Server Control	Setup Loas Help Loaout
C	
Select Archive Application Attributes Deployment	Settings
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	Cancel Back Step 2 of 3 Next
Archive Type J2EE Application (EAR file)	
Archive Location ISRASample.ear Deployment Plan Creating a new plan	
* Application Name ISRA	
* Application Name ISRA Parent Application default 💌	
* Application Name ISRA Parent Application default Bind Web Module to Site default-web-site	
* Application Name ISRA Parent Application default ▼ Bind Web Module to Site default-web-site ▼	Cancel Back Stop of New (
* Application Name ISRA Parent Application default ▼ Bind Web Module to Site default-web-site ▼	Cancel Back Step 2 of 3 Next
Application Name ISRA Parent Application default Bind Web Module to Site default-web-site Setup Logs Help Logout	Cancel Back Step 2 of 3 Next
* Application Name SRA Parent Application default ▼ Bind Web Module to Site default-web-site ▼ Setup Logs Help Logout Copyright © 1996, 2005, Oracle. All rights reserved.	Cancel Back Step 2 of 3 Next
Application Name SRA Parent Application default Bind Web Module to Site default-web-site Setup Logs Help Logout Copyright © 1996, 2005, Oracle. All rights reserved.	Cancel Back Step 2 of 3 Next
Application Name SRA Parent Application default Bind Web Module to Site default-web-site Copyright @1996, 2005, Oracle. All rights reserved.	Cancel Back Step 2 of 3 Negt
Application Name ISRA Parent Application default default default Copyright © 1996, 2005, Oracle. All rights reserved.	Cancel Back Step 2 of 3 Next

6. Click Next. The following screen appears:

7. Enter the Application Name and click Next.

🔊 Oracle Enterprise Manager (oc4j	admin) - Deplo	y: Deployment Settings - Netscape
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🔺 / 🖽, 🖍 Home 🕅 Netscape	💊 Search 🛇	Customize
Netscape - Enter Search Te	rms	💽 🔍 Search 🤇 Highlight 🕺 Pop-Ups Blocked: 0 🥜 Form Fill 🗸 🥜 Clear Browser History 👼 News 🛸
🥙 New Tab 🛇 Oracle Enterprise Mar	nager (oc4jadmin)	-D
ORACLE Enterprise Manage Application Server Control	ger 10g	Setue Loas Hele Loaout
Deploy: Deployment Set	s	elect Archive Application Attributes Deployment Settings
Archive Type J2EE Applica Archive Location ISRASample Deployment Plan Creating a m	tion (EAR file .ear ew plan	Cancel Back Step 3 of 3 Deploy = Application Name ISRA Parent Application default Bind Web Module to Site default-web-site
Deployment Tasks		
The table below lists common	tasks that you	u might want to do before deploying your application.
Task Name	Go To Task	Description
Map Environment References	Ø	Map any environment references in your application (e.g. data sources) to physical entities currently present on the operational environment.
Select Security Provider	Ø	A security provider acts as the source for available users and groups when mapping security roles.
Map Security Roles	Ø	Map any security roles exposed by your application to existing users/groups. Users and groups will be obtained from your choice of security provider.
Configure EJBs	D	Configure the Enterprise JavaBeans in your application.
Configure Clustering	Ø	Configure clustering of your application.
Configure Class Loading	Ø	Manipulate the classpath of your application.
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8. Click **Deploy**. The Confirmation screen appears:

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E. Confirmation	
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The Application "ISRA" has been successfully deployed.	
Progress Messages	-
[Feb 18, 2006 12:36:51 PM] Application Deployer for ISRA STARTS.	
[Feb 18, 2006 12:36:52 PM] Copy the archive to E:\Oracle\j2ee\home\applications\ISRA.ear	
[Feb 18, 2006 12:36:52 PM] Initialize E:\Oracle\j2ee\home\applications\ISRA.ear begins	
[Feb 18, 2006 12:36:52 PM] Unpacking ISRA ear	
[Feb 18, 2006 12:36:52 PM] Done unpacking ISRA ear	
Feb 18, 2006 12:36:52 PMI Uppacking ISRASampleWEB.war	=
Eeh 18, 2006 12:36:53 PMI Done unpacking ISRASampleWEB war	
Eeh 18, 2006 12:36:53 PMI Initialize E-VOracleV2eeVhome\applications\ISRA ear ends	
Feb 18, 2006 12:36:53 PMI Starting application : ISBA	
Eeb 18, 2006 12:36:53 PMI Initializing Classi order(s)	
Eeb 18, 2006 12:36:53 PMI Initializing E.B. container	
Eeb 18 2006 12:36:53 PMI Loading connector(s)	
[Feb 18, 2006 12:36:54 BM] Starting un resource adapters	
Feb 18, 2006 12:36:54 PMI Initializing EIB sessions	
[Feb 18, 2006 12:35:54 BMI Committing Classification]	
Feb 18, 2006 12:36:54 BMI Initialize SPASampleWEB begins	
Feb 18, 2006 12:36:54 PMI Initialize ISBASampleWEB ends	
[Feb 18, 2006 12:36:54 PM] Started application : ISRA	
No R & Off Done	-II- 🔊 🗗

9. Click Return. The following screen appears:

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This page instance. View	e shows the J2EE applications	and application co	mponents (EJB	Modules, Vv	AR Modules	, Resource	Adapter Mo	dules) deployed to this OC4J		
	pproduction						Deploy			
Start	Stop Undeploy Redepl	oy)								
Expand .	All <u>Collapse All</u> Name	Status	Start Time	Active Requests	Request Processing Time (seconds)	Active EJB Methods	Application Defined MBeans			
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0	ascontrol	仓	Feb 18, 2006	1	0.39	0	1	-		
	8 @ D			d						

This completes the deployment of the Sample Application

Deployment of the FileNet Image Viewer

This section describes how to deploy the FileNet Image Viewer. This viewer is used by the ISRA Sample Application to display documents of specific mime types (TIFF, JPEG and BMP). Skip this section, if you do not want the FileNet Image Viewer configured with the ISRA Sample Application.

To deploy FileNet Image Viewer:

- Launch a Web browser and enter the URL as http://localhost:<Port number>/em in the Address bar to start the Oracle 10g Application Server console.
- 2. Login to the Oracle 10g Application Server console.
- 3. Click Applications tab. The following screen appears:

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ORACLE Enterprise Manager 10g Application Server Control						Setup Logs Help Logout			
OC4J: home									
			Pag	e Refreshe	d Feb 18, 200	06 12:32:39 PM GMT+05:30			
Home Applications Web Services	Performance Ad	ministration							
This page shows the J2EE applications and applic instance.	ation components (EJB	Modules, W	AR Modules	Resource	Adapter Mod	ules) deployed to this OC4J			
View Applications									
(Start) (Stop) (Undeploy) (Redeploy)					(Deploy)				
Expand All Collapse All									
Select Name	Status Start Time	Active Requests	Request Processing Time (seconds)	Active / EJB Methods	Application Defined MBeans				
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4. Click Deploy.

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🛃 New Tab 🛇 Oracle Enterprise Manager (oc4jadmin) - D		\mathbf{X}
ORACLE Enterprise Manager 10g Application Server Control		Setup Logs Help Logout
Select Archive Application Attributes	Deployment Settings	
Archive		Cancel Step 1 of 3 Negt
The following types of archives can be deployed: J2EE application (EAR files), We Resource Adapter Modules (RAR files).	eb Modules (WAR files), EJB M	fodules (EJB JAR files) and
	n Server Control is running.	
C Archive already present on server where Application Server Control is running. Location on Server The location on server must be the absolute path or the relative p	ath from j2ee/home	
Deployment Plan		
The deployment plan is a file which allows you to customize deployment settings automatically created during this process. In the Deployment Settings step you ca it for reuse with a future deployment of this application.	for an application. If you do not an optionally edit the deployme	have a deployment plan, one will be nt plan, and you can optionally save
• Automatically create a new deployment plan. The deployment plan settings will be based on OC4J defaults and information contained in the	archive	
C Deployment plan is present on local host. Upload Deployment Plan to the serv	ver where Application Server Co	introl is running.
Plan Location	Browse	
🕲 🖂 🐰 🖽 📋 Done		

- 5. Click **Browse**. Navigate to the **FNImageViewer.ear** file under the ISRA installed directory.
- 6. Click Next. The following screen appears:

😰 Oracle Enterprise Manager (oc4jadmin) - Deploy: Application Attributes - Netscape	_ _ _×
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ORACLE Enterprise Manager 10g Application Server Control	Setup Loas Help Loaout
Select Archive Application Attributes Deployment Settings	
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Archive Type JZEE Application (EAR file) Archive Location FNImageViewer.ear	Cancel Back Step 2 of 3 Next
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Parent Application default 💌	
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Convided @ 1096_2005_Oracle_All rights reserved	Cancel Back Step 2 of 3 Negt
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7. Enter the Application Name and click Next.

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Deploy: Deployment Set	s	elect Archive Application Attributes Deployment Settin	35							
Archive Type J2EE Applica Archive Location FNImageVier Deployment Plan Creating a n	tion (EAR file wer.ear ew plan) Application Name Parent Application Bind Web Module to Site	Cancel Back Step 3 of 3 Deploy FNimageViewer default default-web-site							
Deployment Tasks										
The table below lists common	tasks that you	ı might want to do before deploying your application.								
Task Name	Go To Task	Description								
Map Environment References	Ø	Map any environment references in your application (e.g present on the operational environment.	. data sources) to physical entities currently							
Select Security Provider		A security provider acts as the source for available user	s and groups when mapping security roles.							
Map Security Roles	Ø	Map any security roles exposed by your application to e obtained from your choice of security provider.	existing users/groups. Users and groups will be							
Configure EJBs	Ø	Configure the Enterprise JavaBeans in your application.								
Configure Clustering	1	Configure clustering of your application.								
Configure Class Loading	1	Manipulate the classpath of your application.								
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8. Click **Deploy**. The Confirmation screen appears:

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http://localhost:8888/em/console/ias/j2ee/deploy/deploymentSettings	ی 🕙
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Application Server Control	
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E. Confirmation	
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The Application "ENimageViewer" has been successfully deplayed	
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[Feb 16, 2006 12:46:32 FW] initialize E. Coractegizeevitomerapplications in image viewer, ear begins [Feb 19, 2006 12:46:32 FW] Lineacity Expension on the second s	
[Feb 10, 2000 12:40:32 FM] Onpacking Finimage/New Lear	
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(Feb 18, 2006 12.46:05 FM) Committing (Desel padar(c))	
[Feb To, 2000 12.40:00 FM] obtailize ENImacViewer begins	
[Feb 18, 2006 12:46:08 FM] Initialize ENImoneViewer beginter.	
Feb 18, 2006 12:46:08 PM Interfer application : FNimageViewer	-
	-IF ~ 6 //

9. Click Return. The following screen appears:

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C	<u>FNimageViewer</u>	仓	Feb 18, 2006 12:46:08 PM GMT+05:30	0	0.00	0	Q				
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1	A Q Done										

This completes the deployment of FileNet Image Viewer.

Testing Sample Application Deployment

After the ISRA Sample Application is started, the steps to verify the deployment and access the ISRA Sample Application are:

1. Open a Web browser and enter the URL http://<server:port>/context_root.

The Web application context_root is case sensitive. On an Oracle 10g Server, the default port number is 8888. The default context_root of the Sample Application is ISRA.

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FILENET ISRA 3.2.1 Sample Application	÷ي. اي اي ا
Search Browse Queue Maintenance Meta Data	
Please Login to FileNet Library Library : ISCF I UserName : Password : State Login	
Disclaimer. This sample application is intended solely for illustrative purposes, and you should not expect this sample application to for production deployment. This sample application is to be used strictly as reference material.	o perform useful work, or to be used
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2. Enter valid user name and password for the configured IS (check configured ConnectionFactory for IS details) and click Logon.

🔊 ISRA 3.2.1 Sample Application -	- Netscape	
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_ G, O (S) (S)	Nttp://localhost:8888/ISRA/web/SearchWAS.jsp	
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Search for Documents :		Oser, SysAdmin Library, ISCP
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Folder Name :		
Max Rows :	Image: Search Documents	
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3. Click the **Help** icon on the Sample Application page for details on the interaction parameters and options.

5 LDAP Configuration

ISRA 3.2.1 supports LDAP Authentication by third party Servers in addition to direct IS logging.

It is necessary to map users present on the LDAP Server onto the IS, before using LDAP Authentication.

Note The installation of LDAP Server and creation of users on the LDAP machine are out of the scope of this document.

FileNet provides utilities for mapping users existing in the LDAP Server onto the IS. These utilities are part of the IS package and are to be executed on the machines running the LDAP Server and the IS.

FileNet provides two utilities – Idap_export and Idap_import. The Idap_export utility is used to export names of the users on the LDAP Server onto an xml file.

The ldap_import utility imports the names of the users that have been mapped onto the xml file and creates corresponding users on the IS. It is mandatory that the ldap_import algorithm as well as the xml file be present on the same machines where IS exists.

The ldap_import algorithm uses a hashing algorithm to generate the user passwords for the IS.

Mapping Users Existing on LDAP Server onto IS

To configure user IDs in a FileNet IS library:

- 1. Create user entries on the LDAP server. The user attribute "uid" will be used to create a user on IS. The rest of the attributes (including "password") can be assigned any value.
- 2. Use the LDAP_EXP.exe utility to export the user entries created into an XML file.
- 3. LDAP_EXP program has the following parameters options:

Option	Description
s <server></server>	LDAP server name or IP address, required value.
p <port></port>	LDAP port number, optional value, 389 is default.
d <binddn></binddn>	LDAP administrator bind domain name (DN), required
	value.
w <bindpw></bindpw>	LDAP administrator bind password, required value.
b <basedn></basedn>	LDAP Base DN, optional value.
g <grouplist filename=""></grouplist>	Group list file for input, optional value.
o <xml filename="" output=""></xml>	XML output filename, optional value.
l <log filename=""></log>	Log Filename to use, optional value.
x <grouplist filename=""></grouplist>	Group list file name for output, optional value.
V	Verbose log output.
c1 <user class="" object=""></user>	Class type for User, default is 'person'.
c2 <group class="" object=""></group>	Class type for Group, default is 'groupofuniquenames'.
a1 <user attribute=""></user>	Attribute to be used for user; default is 'dn'.
a2 <group attribute=""></group>	Attribute to be used for group; default is 'dn'
a3 <member attribute=""></member>	Attribute to be used for member; default is
	'uniqueMember'.

Note User may use /?, -?, /h or -h to generate help.

Usage of exporting users from LDAP server into the XML file:

C:\>ldap_exp.exe -s filenetsrv -b "dc=cm, dc=filenet,

dc=com" -d "admin" -w ""

4. Use the LDAP_IMPORT.exe for IS libraries to import the user entries from XML file into the specified FileNet IS library.

Parameters:

/?	Help screen.
/h <host>[:organization]</host>	IS host or domain name, organization.
/u <id> (used with /p)</id>	Authorized IS user name
/p" <pwd>" (used with /u)</pwd>	Encrypted IS user password.
/i <file></file>	XML input file.

Example Usage

C:\>ldap_import/hIMGSERV:FileNet/ildap_exp.xml

- **Note** Options are not case sensitive. All the information or error messages are logged to the system log or the file 'ldap_importyyyymmddlog.txt'. If Username and password are not specified in the command, it prompts for username and password.
- **5.** The FileNet users thus created will have a password that is generated from the corresponding user IDs.

Changing ISRA Specific Parameters for LDAP

Configurable ra.xml Entities

The configurable properties to be set (modified) in **ra.xml** are:

- LdapImplClassName
- LdapImplClassString

LdapImpIClassName

It is the name of the Implementation class for LDAP Authentication. This parameter contains the complete path of the LDAP Implementation class to be entered along with the LDAP Implementation Class Name.

The default value is 'com.filenet.is.ra.fnis.FN_IS_IPlanetImpl'

In addition, LDAP implementation has been provided for Microsoft Active Directory Server. The value of the property for this LDAP Server is - com.filenet.is.ra.fnis.FN_IS_ActiveDirImpl.

LdapImpIClassString

This parameter is a general string that accepts all the LDAP Serverspecific parameters required for authentication. It takes the following inputs:

- Server Name Name of the Server/ Machine on which LDAP Server exists.
- Port Number LDAP Server's port number being used for transactions.
- User Path Directory under which the users have been filed in the LDAP Directory Server

The three parameters have to be semicolon separated and in the order server name followed by port number followed by user path. An example of LDAPImplClassString is:

• For Active Directory

filenetserver;389;isra.odc.filenet.com

• For IPlanet

filenetserver;389;uid= user1, ou=ISRA, dc=odc,dc=filenet,dc=com

• For Novell NDS

filenetserver;389;cn=user1, ou= ISRA, o=FileNet

6 UnDeployment

This section describes the undeployment procedure to remove the ISRA and the Sample Application from the Oracle 10g Application Server.

UnDeployment of ISRA

To undeploy ISRA using the Oracle 10g Application Server Console:

- 1. Click Applications tab.
- 2. Select Standalone Resource Adapters value from the View drop down box. The following screen appears:

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OC4J: home							
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Home Applications Web Services Performance Administration							
This page shows the J2EE applications and application components (EJB Modules, WAR	Module Nodule	s, Resource Adapter Modules) deployed t	o this OC4J instance.				
View Standalone Resource Adapters 💌							
		Deploy)				
(Start) (Stop) (Undeploy) (Redeploy)							
Select Resource Adapter Adapter Resource Adapter Module	Statu	EIS Type					
RA1 RA1	Û	FileNet Image Services					
OracleASjms OracleASjms	Û	OracleAS JMS					
Home Applications Web Services Performance Administration							
Copyright © 1996, 2005, Oracle. All rights reserved.	Help L	ogout					

- 3. Select ISRA and click Stop to stop the ISRA resource adapter.
- 4. Click Undeploy. The following message appears

Oracle Enterprise Manager (oc4jadmin) - Undeploy Resource Adapter - Netscape	_ B ×
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🛿 New Tab 🛇 Oracle Enterprise Manager (oc4jadmin) - U	×
ORACLE [®] Enterprise Manager 10g	Setup Logs Help Logout
∖ Undeploy Resource Adapter	
	No Yes
You have chosen to remove Resource Adapter "RA1".	
Do you want to proceed?	
opyright @ 1996, 2005, Oracle, All rights reserved.	No (Yes)

5. Click Yes. The Confirmation screen appears:

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- Castingation		
The Resource Adapter "RA1" has been successfully undeployed.		Return
[Feb 22, 2006 2.07:54 PM] Connector Module UnDeployer for RA1 STARTS. [Feb 22, 2006 2.07:55 PM] Unable to remove RA under connectors directory (in use). Please remove manually after shutdown. [Feb 22, 2006 2.07:55 PM] Connector Module UnDeployer for RA1 COMPLETES. WARNING: Requires default application restart for cha	anges to take effi	ect
Copyright © 1996, 2005, Cracle. All rights reserved. <u>Setup</u> <u>Logs</u> <u>Help</u> <u>Logout</u>		Return
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6. Click **Return** to verify that the selected ISRA application is undeployed.

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Home Applications Web Services Performance Administration	
Copyright © 1996, 2005, Oracle. All rights reserved.	

This completes the undeployment of ISRA resource adapter.

UnDeployment of ISRA Sample Application

To undeploy ISRA Sample application using the Oracle 10g Application Server Console:

- 1. Click Applications tab.
- 2. Select **Application** value from the **View** dropdown box. The following screen appears:

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- **3.** Select the ISRA Sample application and click **Stop** to stop the selected application.
- 4. Click Undeploy. The following message appears

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	No Yes
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Do you want to proceed?	
Copyright © 1996, 2005, Cracle. All rights reserved.	(No) (Yes)
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5. Click Yes. The Confirmation screen appears:

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Contribution The Application "ISRAsample" has been successfully undeployed.		Return
[Feb 22, 2006 2:24:32 PM] Application UnDeployer for ISRAsample STARTS. [Feb 22, 2006 2:24:33 PM] Removing all web binding(s) for application ISRAsample from all web site(s) [Feb 22, 2006 2:24:59 PM] Application UnDeployer for ISRAsample COMPLETES.		
Copyright © 1996, 2005, Cracle. All rights reserved.		Return
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6. Click **Return** to verify that the selected ISRA Sample application is undeployed.

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This completes the undeployment of ISRA Sample application. The steps to undeploy FileNet Image Viewer are similar to the steps specified above for ISRA Sample Application.

7 Troubleshooting

This section describes how to troubleshoot ISRA.

Disabling NCH Broadcasts

ISRA users (application client) need to access IS libraries across routers on networks where broadcasts are disabled. This is done by creating alias entries for the IS libraries in the hosts file, where ISRA is deployed. ISRA must locate the IP address of the NCH server to find other IS services for an IS setup.

ISRA attempts to find the NCH server by generating broadcast packets, even if the NCH server was not reachable using broadcasts. User can disable NCH server location broadcasts to reduce broadcast traffic on the network.

User may want to disable NCH broadcasts, if:

- Routers are present in between servers,
- Want no broadcast activity on the networks,
- Want to force a multi-homed server to use a specific IP address configured by the operating system network directory search facility.

To specify the alias in the hosts file:

- 1. Locate hosts file on the server. It is located in the /etc folder on UNIX/Linux systems. On a Microsoft Windows Server, it is located in the \system32\drivers\etc under the Windows installation directory.
- **2.** Open the hosts file with a preferred text editor. If a hosts file does not exist, create a new file using a preferred text editor.
- 3. For each FileNet library that user needs to connect through ISRA, entries should be made in the hosts file as <IP address of domain:organization> <domain-organization>-nch-server, where:
 - <IP address of domain:organization> is IP address of a FileNet domain and organization identifying the target FileNet library system (NCH Server).
 - <domain-organization> is domain and organization name. The rules to follow while specifying the domain-organization name are:
 - Delete all characters except ASCII alphanumeric characters and hyphens.

- Convert all upper case characters to lower case.
- Insert a hyphen between the domain and organization names.
- Append nch-server as a literal.

For example, if a FileNet library has a domain, fn_is, and organization, FileNet, and its IP address is 123.45.6.78, the hosts file entry will be:

123.45.6.78 fnis-filenet-nch-server

Note The underscore character is removed from the fn_is domain name and the F and Net in the FileNet organization name are converted to lower case.

Appendix A

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Appendix B

ra.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE connector PUBLIC '-//Sun Microsystems, Inc.//DTD Connector
1.0//EN' 'http://java.sun.com/dtd/connector_1_0.dtd'>
<connector>
  <display-name>ISRA</display-name>
  <vendor-name>FileNet</vendor-name>
  <spec-version>1.0</spec-version>
  <eis-type>FileNet Image Services
  <version>3.2.1</version>
  cense>
    <license-required>false</license-required>
  </license>
  <resourceadapter>
    <managedconnectionfactory-
class>com.filenet.is.ra.spi.FN_IS_SpiManagedConnectionFactory</managedco</pre>
nnectionfactory-class>
    < connection factory-
interface>javax.resource.cci.ConnectionFactory</connectionfactory-
interface>
    <connectionfactory-impl-
class>com.filenet.is.ra.cci.FN_IS_CciConnectionFactory</connectionfactor
y-impl-class>
    <connection-interface>javax.resource.cci.Connection</connection-
interface>
    <connection-impl-
class>com.filenet.is.ra.cci.FN_IS_CciConnection</connection-impl-class>
    <transaction-support>NoTransaction</transaction-support>
    <config-property>
      <description>Domain name of the Image Services
Server</description>
      <config-property-name>domainName</config-property-name>
      <config-property-type>java.lang.String</config-property-type>
      <config-property-value>FileNetIS</config-property-value>
    </config-property>
    <config-property>
      <description>Organization name of the Image Services
Server</description>
      <config-property-name>organizationName</config-property-name>
      <config-property-type>java.lang.String</config-property-type>
      <config-property-value>FileNet</config-property-value>
    </config-property>
    <config-property>
      <description>0-Exceptions and Warnings; 1-Info; 2-
Debug_Level</description>
```

```
<config-property-name>loggingLevel</config-property-name>
      <config-property-type>java.lang.Integer</config-property-type>
      <config-property-value>0</config-property-value>
    </config-property>
    <config-property>
      <description>0-No Logging; 1-Console Logging; 2-File Logging; 3-
Both(File and console) </description>
      <config-property-name>loggingMode</config-property-name>
      <config-property-type>java.lang.Integer</config-property-type>
      <config-property-value>3</config-property-value>
    </config-property>
    <config-property>
      <description>Page data fetch size (in kilo bytes)</description>
      <config-property-name>pageBufferSize</config-property-name>
      <config-property-type>java.lang.Integer</config-property-type>
      <config-property-value>64</config-property-value>
    </config-property>
    <config-property>
      <description>Cache refresh interval(in minutes)</description>
      <config-property-name>cacheRefreshInterval</config-property-name>
      <config-property-type>java.lang.Integer</config-property-type>
      <config-property-value>30</config-property-value>
    </config-property>
    <config-property>
      <description>Name of the Product</description>
      <config-property-name>productName</config-property-name>
      <config-property-type>java.lang.String</config-property-type>
      <config-property-value>FileNet Image Services Resource
Adapter</config-property-value>
    </config-property>
    <config-property>
      <description>Product Version</description>
      <config-property-name>productVersion</config-property-name>
      <config-property-type>java.lang.String</config-property-type>
      <config-property-value>ISRA 3.2.1 Enterprise</config-property-</pre>
value>
    </config-property>
    <config-property>
      <description>ISRA Logfile name (can include path) </description>
      <config-property-name>logFileName</config-property-name>
      <config-property-type>java.lang.String</config-property-type>
      <config-property-value>ISRA.log</config-property-value>
    </config-property>
    <config-property>
       <description>Maximum Size of ISRA LogFile (in mega
bytes)</description>
        <config-property-name>logFileSize</config-property-name>
        <config-property-type>java.lang.Integer</config-property-type>
        <config-property-value>5</config-property-value>
    </config-property>
      <config-property>
               <description>LDAP Authentication Class Name</description>
           <config-property-name>ldapImplClassName</config-property-
name>
           <config-property-type>java.lang.String</config-property-type>
           <config-property-
value>com.filenet.is.ra.fnis.FN_IS_IPlanetImpl</config-property-value>
```

```
</config-property>
    <config-property>
               <description>Server details for LDAP Authentication
</description>
           <config-property-name>ldapImplClassString</config-property-
name>
           <config-property-type>java.lang.String</config-property-type>
           <config-property-
value>filenetserver;389;ou=filenet,ou=people,dc=filenetroot</config-</pre>
property-value>
    </config-property>
    <config-property>
             <description>Inherently login through LDAP authentication
or not 0-Direct IS Login;1-LDAP Authentication</description>
         <config-property-name>inherentLogin</config-property-name>
         <config-property-type>java.lang.Integer</config-property-type>
         <config-property-value>0</config-property-value>
    </config-property>
    <config-property>
       <description>Name of the User that is used to create Cache for
ISRA</description>
        <config-property-name>cacheUser</config-property-name>
        <config-property-type>java.lang.String</config-property-type>
        <config-property-value>SysAdmin</config-property-value>
    </config-property>
    <config-property>
       <description>Password of the User that is used to create Cache
for ISRA</description>
        <config-property-name>cacheUserPassword</config-property-name>
        <config-property-type>java.lang.String</config-property-type>
        <config-property-value>SysAdmin</config-property-value>
    </config-property>
    <config-property>
       <description>ISRA instance that is currently being deployed on a
single machine; Min Value = 1, Max Value = 10</description>
        <config-property-name>deploymentInstance</config-property-name>
        <config-property-type>java.lang.Integer</config-property-type>
        <config-property-value>1</config-property-value>
    </config-property>
    <authentication-mechanism>
      <authentication-mechanism-type>BasicPassword</authentication-
mechanism-type>
      <credential-
interface>javax.resource.security.PasswordCredential</credential-
interface>
    </authentication-mechanism>
    <reauthentication-support>false</reauthentication-support>
  </resourceadapter>
```

```
</connector>
```

oc4j-ra.xml

```
<?xml version="1.0"?>
<!DOCTYPE oc4j-connector-factories PUBLIC "-//Oracle//DTD Oracle
Connector 9.04//EN" "http://xmlns.oracle.com/ias/dtds/oc4j-connector-
factories-9_04.dtd">
<oc4j-connector-factories>
      <connector-factory location="ISCF" connector-name="ISRA">
            <config-property name="domainName" value="DemoIS"/>
            <config-property name="organizationName" value="FileNet"/>
            <config-property name="loggingLevel" value="0"/>
            <config-property name="loggingMode" value="3"/>
            <config-property name="pageBufferSize" value="64"/>
            <config-property name="cacheRefreshInterval" value="30"/>
            <config-property name="productName" value="FileNet Image"
            Services Resource Adapter"/>
            <config-property name="productVersion" value="ISRA3.2.1
            Enterprise"/>
            <config-property name="logFileName" value="ISRA.log"/>
            <config-property name="logFileSize" value="5"/>
      </connector-factory>
</oc4j-connector-factories>
```

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