

# CA Identity Manager r12

## Option Pack 1 Installation Guide



This documentation and any related computer software help programs (hereinafter referred to as the "Documentation") are for your informational purposes only and are subject to change or withdrawal by CA at any time.

This Documentation may not be copied, transferred, reproduced, disclosed, modified or duplicated, in whole or in part, without the prior written consent of CA. This Documentation is confidential and proprietary information of CA and may not be used or disclosed by you except as may be permitted in a separate confidentiality agreement between you and CA.

Notwithstanding the foregoing, if you are a licensed user of the software product(s) addressed in the Documentation, you may print a reasonable number of copies of the Documentation for internal use by you and your employees in connection with that software, provided that all CA copyright notices and legends are affixed to each reproduced copy.

The right to print copies of the Documentation is limited to the period during which the applicable license for such software remains in full force and effect. Should the license terminate for any reason, it is your responsibility to certify in writing to CA that all copies and partial copies of the Documentation have been returned to CA or destroyed.

TO THE EXTENT PERMITTED BY APPLICABLE LAW, CA PROVIDES THIS DOCUMENTATION "AS IS" WITHOUT WARRANTY OF ANY KIND, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. IN NO EVENT WILL CA BE LIABLE TO THE END USER OR ANY THIRD PARTY FOR ANY LOSS OR DAMAGE, DIRECT OR INDIRECT, FROM THE USE OF THIS DOCUMENTATION, INCLUDING WITHOUT LIMITATION, LOST PROFITS, LOST INVESTMENT, BUSINESS INTERRUPTION, GOODWILL, OR LOST DATA, EVEN IF CA IS EXPRESSLY ADVISED IN ADVANCE OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE.

The use of any software product referenced in the Documentation is governed by the applicable license agreement and is not modified in any way by the terms of this notice.

The manufacturer of this Documentation is CA.

Provided with "Restricted Rights." Use, duplication or disclosure by the United States Government is subject to the restrictions set forth in FAR Sections 12.212, 52.227-14, and 52.227-19(c)(1) - (2) and DFARS Section 252.227-7014(b)(3), as applicable, or their successors.

Copyright © 2009 CA. All rights reserved. All trademarks, trade names, service marks, and logos referenced herein belong to their respective companies.

---

## CA Product References

This document references the following CA products:

- CA Identity Manager

## Contact CA

### Contact Technical Support

For your convenience, CA provides one site where you can access the information you need for your Home Office, Small Business, and Enterprise CA products. At <http://ca.com/support>, you can access the following:

- Online and telephone contact information for technical assistance and customer services
- Information about user communities and forums
- Product and documentation downloads
- CA Support policies and guidelines
- Other helpful resources appropriate for your product

### Provide Feedback

If you have comments or questions about CA product documentation, you can send a message to [techpubs@ca.com](mailto:techpubs@ca.com).

If you would like to provide feedback about CA product documentation, complete our short [customer survey](#), which is also available on the CA Support website, found at <http://ca.com/docs>.



# Contents

---

<b>Chapter 1: Option Pack Introduction</b>	<b>7</b>
Overview .....	7
Support Matrix .....	7
Prerequisites .....	7
Before Installing the Option Pack .....	8
<b>Chapter 2: Installing the Option Pack</b>	<b>9</b>
How to Install the Option Pack .....	9
Create a New Database .....	9
Gather Information for the Installation .....	10
Run the Installer .....	12
Perform Post-Installation Manual Steps .....	13
Add the log4j Properties File to the Classpath (WebLogic Only) .....	13
Map Option Pack Attributes .....	13
Import Environment Settings .....	14
Import Roles and Tasks .....	15
Import Option Pack WorkPoint Processes .....	15
Create the Approval User .....	16
Configure the Option Pack on the Provisioning Server .....	16
Log Files .....	18
Silent Installation .....	19
<b>Chapter 3: Option Pack in Production</b>	<b>23</b>
Install the Option Pack on a JBoss Cluster .....	23
Install the Option Pack on a WebLogic Cluster .....	24
Install the Option Pack on a WebSphere Cluster .....	25
Configure the Option Pack in a Production Environment .....	28
Migrating your Environment .....	29
Changing Your Data .....	30
<b>Chapter 4: Upgrading the Option Pack</b>	<b>33</b>
Upgrade from ACE 2.0 for IM r12 CR3 .....	33
<b>Chapter 5: Uninstalling the Option Pack</b>	<b>35</b>
How to Uninstall the Option Pack .....	35

---

Delete Run-Time Data .....	35
Remove Identity Manager Components .....	36
Remove Provisioning Components .....	39
Reverse Installation Changes (JBoss) .....	40
Reverse Installation Changes (WebLogic) .....	43
Reverse Installation Changes (WebSphere) .....	46
<b>Appendix A: Troubleshooting</b> .....	<b>49</b>
Application Server Fails at Startup .....	49
NAMESPACE_IMPORTER Error .....	50
<b>Index</b> .....	<b>51</b>

# Chapter 1: Option Pack Introduction

---

This section contains the following topics:

[Overview](#) (see page 7)

[Support Matrix](#) (see page 7)

[Prerequisites](#) (see page 7)

[Before Installing the Option Pack](#) (see page 8)

## Overview

This document describes the steps required to install the Option Pack on servers running CA Identity Manager r12. After the Option Pack is successfully installed and verified, you will be able to configure your own scenarios and business logic.

## Support Matrix

For a complete list of supported platforms and versions, see the CA Identity Manager r12 Option Pack 1 Support Matrix on the [CA Identity Manager support site](#).

## Prerequisites

Before installing the Option Pack, install CA Identity Manager and configure it as follows:

- Enable and configure WorkPoint workflow.

**Note:** For more information about importing workflow scripts, see the *CA Identity Manager Administration Guide*.

- Install and configure the Provisioning Server with CA Identity Manager.
- Enable notifications (connectivity between CA Identity Manager and the Provisioning Server).

**Note:** For more information about enabling notifications, see the *CA Identity Manager Administration Guide*.

- Run the CA Identity Manager Setup (previously called ETACALLBACK) in the Provisioning Manager.

## Before Installing the Option Pack

Validate the following before installing the Option Pack:

1. Create a user in CA Identity Manager using workflow, and supply a provisioning role to the user.
  - a. Be sure that a relevant work item is created that requires an approval before user creation.
  - b. Be sure that the user is created in the Provisioning Directory.
2. Log into CA Identity Manager using the system manager credentials.
3. Search for existing Provisioning Roles. Go to Roles and Tasks, Provisioning Roles, View Provisioning Role. If you can retrieve your existing Provisioning Roles, Identity Manager is able to communicate successfully with Provisioning Server.

# Chapter 2: Installing the Option Pack

---

This section contains the following topics:

[How to Install the Option Pack](#) (see page 9)

[Create a New Database](#) (see page 9)

[Gather Information for the Installation](#) (see page 10)

[Run the Installer](#) (see page 12)

[Perform Post-Installation Manual Steps](#) (see page 13)


[Configure the Option Pack on the Provisioning Server](#) (see page 16)

[Log Files](#) (see page 18)

[Silent Installation](#) (see page 19)

## How to Install the Option Pack

Use the following checklist to install the Option Pack:

 Step
1. Create a new database.
2. Gather information for the installation.
3. Run the installer.
4. Complete the manual steps.
5. Configure the Option Pack on the Provisioning Server.

## Create a New Database

The Option Pack requires a new database, different from the CA Identity Manager database. Set the database owner to be the same user as the owner of the CA Identity Manager database.

## Gather Information for the Installation

The Option Pack installation package consists of two files:

- Option\_pack\_1\_(1.0.0.xx-xxx).exe
- Option\_pack\_1\_(1.0.0.xx-xxx).sh

Record the following information that you need during the Option Pack installation:

Field Name	Description	Response
Destination Directory	The folder where you want the Option Pack installed. <b>Default:</b> C:\program files\CA\Option pack	
Application Server Type	The same application server used in the CA Identity Manager installation.	
(WebLogic) Identity Manager Domain Home	The installation folder path for WebLogic.	
(JBoss) Install Directory	The installation folder path for JBoss.	
WebSphere home folder	The installation folder path for WebSphere.	
(WebSphere) Server Name	The name of the system on which the application server is running.	
(WebSphere) Profile name	The name of the profile used for CA Identity Manager.	
(WebSphere) Node Name	The name of the node in which the application server is located.	
(WebSphere) Cell Name	The name of the cell in which the application server is located.	
Database Provider	The database type, either Oracle or MS SQL Server.	

Field Name	Description	Response
(Oracle) Database User Name & Password	Enter a user which has the Option Pack schema created for it. The user should have the same privileges as the user for the CA Identity Manager databases.	
Database Host	The hostname where the database server is installed. The default is localhost, which assumes that the database server is installed on the same system as CA Identity Manager.	
Database Port	The database port to connect to. <b>Default:</b> Oracle listens on port 1521, and MS SQL listens on port 1433.	
(Oracle) Service	The Oracle SID or network service name.	
(SQL) Database Name	The name of the database you created.	
(SQL) Database User Name & Password	Enter a user that is an owner of the database. Ensure it has permissions to create a new database; alter, create, drop, and update tables; and execute scripts. <b>Note:</b> The default user selected in the installation is sa, however it may expose a potential security breach. If possible, create a new user with appropriate permissions.	

Field Name	Description	Response
Application Server Port	The port number the application server uses to communicate with the web server. <b>Default:</b> 7001 for WebLogic, 8080 for JBoss, 9080 for WebSphere.	
Callback Environment Name	The name of the Identity Manager environment with provisioning enabled. This is the first environment listed in the inbound configuration of the Provisioning Manager. <b>Note:</b> Do not use the alias of the environment but the environment name itself.	

## Run the Installer

**Important!** If you are using JBoss or WebLogic, shut down the application server before installation. For WebSphere, the application server must be running.

### To run the installer

- Run the installation file as follows:
  - For Windows, run the following file:  
Option\_pack\_1\_(1.0.0.xx-xxx).exe
  - For Solaris, set executable mode and run the following file:  
Option\_pack\_1\_(1.0.0.xx-xxx).sh

**Note:** On Solaris, you may get an exception while running the installer. This exception is only a warning and should be ignored. The exception starts with the following lines:

```
com.idfocus.common.encryption.StringEncrypter$EncryptionException:  
javax.crypto.IllegalBlockSizeException: Input length must be multiple of 8 when decrypting with padded
```

- Follow the installation wizard.  
Click Help for information on procedures and parameters in the wizard.

**Note:** After completing the automatic installation, perform the manual steps necessary to complete installation.

## Perform Post-Installation Manual Steps

This section deals with the manual steps required to complete the Option Pack installation.

**Important!** Perform the following steps in the order listed.

### Add the log4j Properties File to the Classpath (WebLogic Only)

#### To add the log4j properties file to the classpath

1. Edit the startWebLogic.cmd file in the *domain/bin* folder.
2. Locate the following line:  
`set CLASSPATH= %CLASSPATH%;%MEDREC_WEBLOGIC_CLASSPATH%`
3. Add the following line as the first entry in the CLASSPATH:  
`%DOMAIN_HOME%/applications/identityminder.ear/config;`

Now the CLASSPATH should be as follows:

```
set
CLASSPATH=%DOMAIN_HOME%/applications/identityminder.ear/config;%CLASSPATH%;%MEDREC_
WEBLOGIC_CLASSPATH%
```

4. When you start WebLogic, be sure that the previous entry is in the CLASSPATH on your console.

### Map Option Pack Attributes

The Option Pack requires a few attributes be added to the user store mapping. If no available attributes exist in the user store, create new attributes and map them in the directory.xml import.

**Note:** The names of the attributes are case sensitive.

#### To map Option Pack attributes

1. (RDB only) Locate the RDB scripts in *Option\_Pack\_home/Manual\_steps/RDBMS\_scripts*, and run the appropriate script against your user store.
2. Start your application server.
3. Update the directory.xml, as follows:
  - a. In the Management Console, click Directories.
  - b. Click the directory you want to edit.
  - c. Click Export.
  - d. Open the exported directory.xml file for editing.

- e. Copy definitions to the directory XML file, as follows:
  - For RDB: Copy the table and attribute definitions from *Option\_Pack\_home/manual\_steps/corp\_directory\_mssql/oracle.xml* and add them to the Table section and User object respectively.
  - For LDAP: Copy the attribute definitions from *Option\_Pack\_home/manual\_steps/corp\_directory\_ldap.xml* and add them after the last attribute in the User object. The physical attributes contain `##`. Verify that the attribute names are correct and remove the `##`.

You can change the physical name, if necessary, before importing the new directory XML file. Also, attributes that are marked as multi-valued in the XML must have a multi-valued physical attribute.

**Important!** Be sure that the physical attribute name exists in your environment and that it is free, meaning that it is not mapped to any other attribute.

- f. Import the edited directory XML file back into CA Identity Manager by clicking Update in the Management Console.

The new Option Pack attributes are added to the directory.

- g. Validate that all attributes are showing in your configuration after the import.

**Note:** If you need to change the physical name of a well-known attribute, go to Option Pack, System, Manage Global Settings, Schema. If you change the physical name of the Reverse Trigger attribute, be sure that you also change it in the Provisioning Manager program exit.

## Import Environment Settings

### To import environment settings

1. In the Management Console, click Environments.
2. Select the environment and click Advanced Settings.
3. Click Import and select the *Option\_Pack\_home/manual\_steps/Advance\_Setting.xml* file.
4. Click Finish.
5. Repeat Steps 2 through 4 for each environment.

## Import Roles and Tasks

Import the roles and tasks for each environment. Be sure that the Provisioning Server is working properly before attempting this procedure.

### To import roles and tasks

1. In the Management Console, click Environments.
2. Select an Environment and click Role and Task Settings.  
If your tasks must appear in a foreign language, select the file corresponding to the desired language.
3. Click Import and select the *Option\_Pack\_home/Manual\_steps/Tasks\_ and\_Roles.xml* file.  
This imports new Option Pack tasks into the environment.  
**Note:** Use the No Organization XML file if the directory used by the environment is not configured with organizations.
4. Repeat Steps 2 and 3 for each environment.
5. Restart the application server.

## Import Option Pack WorkPoint Processes

### To import the Option Pack WorkPoint processes

1. Under */IAMSuite/IdentityManager/tools/Workpoint/conf*, edit the *workpoint-client.properties* file and uncomment the lines referring to your web server, for example, if you are using WebLogic, uncomment the following lines:  

```
java.naming.factory.initial=weblogic.jndi.WLInitialContextFactory
java.naming.provider.url=t3://localhost:7001
java.naming.security.principal=IDM
java.naming.security.credentials=password
```
2. Run the WorkPoint Archive tool - *Archive.bat* (typically located under *C:/Program Files/CA/IAM Suite/Identity Manager/tools/Workpoint/bin*).
3. Click Import.
4. Select the *WorkPoint processes.zip* file located under *Option\_Pack\_home/Manual\_steps*.
5. Click Select All.
6. Click Import.
7. When asked "Are you importing into empty database tables?", click No.
8. Click Next.

9. When prompted "Treat all objects as new objects" or "overwrite existing objects", click to treat all objects as new objects.
10. Click Next.
11. When asked if a duplicate name is encountered, click the rename option.
12. Click Finish.
13. Click Go.
14. When the import is complete, click OK and exit the WorkPoint Archive tool.
15. Restart the application server.

## Create the Approval User

Reverse Synchronization requires a user called accountforapproval. This user should not be deleted, as this will cause Reverse Synchronization and Workflow to fail.

### To create the approval user

1. In the User Console, create a user with the username accountforapproval (case sensitive).
2. Set the user's organization to any organization.
3. If the Password (or any other field, like Full Name) is mandatory in your environment, enter any value.  
Only the username is important for this user.
4. Be sure that the user is also synchronized to the Provisioning Server and exists in the Provisioning Manager.

## Configure the Option Pack on the Provisioning Server

To configure the Option Pack on the Provisioning Server, set the custom user field display name and configure the program exits.

### To configure the Option Pack on the Provisioning Server

1. In the Provisioning Manager, go to System, Global Properties, Custom User Fields tab, and provide the name of the attribute mapped to the user attribute %ReverseSyncTrigger% in CA Identity Manager. **Default:** CustomField 09.
2. Double-click Custom User Field 09 and type Reverse Sync.
3. Apply the changes.

4. Go to Endpoints, select Common Program Exit from the Object Type drop-down, and click New.
5. Create a Program Exit named OPSoapExit.
6. Under Common Parameters, do the following:
  - a. Select the SOAP option as the exit type.
  - b. Be sure Location points to `http://server_name:port/ACEWeb/services/AceSoapExit?wsdl`  
**Note:** Use the same application port you specified in the automatic installer. The default is 7001 for WebLogic, 8080 for JBoss, and 9080 for WebSphere. To validate, copy the value of the Location field and paste it into a browser window on the same server. An XML file should appear in the browser.
  - c. Be sure that Method is set to InvokeExit (case-sensitive)
7. Under Authentication, no authentication is required.
8. Open all acquired directories for all endpoints managed by the Option Pack. For each directory, go to the Program Exits Reference tab. Click Add and select OPSoapExit with priority 1 for the following events:
  - POST\_ADD\_ACCOUNT
  - POST\_MODIFY\_ACCOUNT
  - PRE\_DELETE\_ACCOUNT
9. Click Apply.
10. Go to System, Program Exits. In the Program Exits Configuration tab, select the following options:
  - Common Program Exit Config
  - Role
11. Click Apply.
12. For *all* endpoints that require Reverse Synchronization or Account Management, select the Policy and Directory options. For example, for Active Directory, select the following options:
  - Active Directory Endpoint
  - Active Directory Account Template

## Log Files

If you encounter any issues with the Option Pack, refer to the following log locations for more information.

**Note:** In a high-availability environment with multiple application servers, the logs are written under the server executing the current task. Open the log files on all servers to find information about a specific task.

### Application Server Log

The application server log, such as `server.log` for JBoss, contains the following information (assuming the `ims.tasktrack.custom` log level is set to `DEBUG`):

- Option Pack Workflow and Segregation of Duties
  - Workflow/SOD approvers by value
  - Workflow/SOD processes started
  - Workflow/SOD delegations
- Policy Xpress and Email Management
  - Matching policies
  - Data element values
  - Matching action rules
- Scheduled Tasks
  - Debug information about what user was affected by the task after the Quartz 1.5.2 scheduler starts

**Note:** Scheduled Tasks are Identity Manager tasks, therefore, the log information is like any other task, such as `Modify User`.

### Reverse Synchronization Log

Reverse Synchronization information is in the `Option_Pack_home/Logs/reverseSync.log` file. This information includes the parameters of Reverse Synchronization, such as endpoint and container. This information is also stored in the Reverse Synchronization audit table.

**Note:** Useful information can be found in the log under the section titled `REPORT`.

The following exceptions are warnings and can be ignored:

- Duplicate key in recovery table
- Cannot find IDM user

### Initialize Endpoint Accounts

Endpoint account initialization information is in the *Option\_Pack\_home/Logs/initialLoad.log* file.

The following errors are warnings and can be ignored:

- Failed to retrieve user *username*. Failed to find user in all environments.
- No accounts from the requested endpoint type/endpoint, for user *username*.

**Note:** For WebSphere, all Option Pack logs are located in the WebSphere profile folder instead of the Option Pack home folder.

## Silent Installation

To install the Option Pack silently, perform the following steps.

1. On the Option Pack media, locate the silent folder.
2. Prepare the `silent_install.properties` file.
 

**Note:** This step is only necessary if installing from scratch.
3. Run the `install.bat` (or `install.sh`) file. Note the following when running this script:
  - Be sure to provide the destination when running this script. For example, `install.bat "C:/Program Files/CA/Option Pack"`
  - If the destination path contains spaces, surround the path with double-quotes.
  - When you specify the database type, comment out all other database parameters. For example, if you select MSSQL, the Oracle section must be commented out.
4. Perform the post-installation [manual steps](#) (see page 13).

### Example of `silent_install.properties` file

```
#####
##### SILENT INSTALLATION PARAMETERS #####
#####
#####
# For solaris only !!! Remove the comment if needed
# example for java.home: /export/home/smuser/j2sdk1.4.2_19
# For solaris only !!! Remove the comment if needed
#####
```

```
#java.home=
#####
# Application Server Type:
#
# 1 - WebLogic Application Server
# 2 - Websphere Application Server
# 3 - JBoss 4.2.3 Application Server
#
#####
app.server.type=
#####
# JBoss 4.2.3
#
# example for app.jboss423.home: c:/jboss-4.2.3
#####
app.jboss.home=
app.jboss423.home=
#####
#####
# Weblogic
#
# example for app.server.wlidm.domain.home: C:/bea/user_projects/domains/IdentityManager_domain
#####
#####
app.server.wlidm.domain.home=
#####
# Websphere
#
# example for app.server.ws.home: c:/Websphere/AppServer
# example for ws.server.name: server1
# example for ws.profile.name: AppSrv01
# example for ws.node.name: serverNameNode01
# example for ws.cell.name: serverNameNode01Cell
#####
app.server.ws.home=
ws.server.name=
ws.profile.name=
ws.node.name=
ws.cell.name=
#####
# Database Type:
#
# 0 - Oracle
# 1 - MS SQL Server
#
#####
```

```
db.provider=
#####
#   MSSQL

#

# db.password: should be in clear text
#
# IMPORTANT! If you are using MSSQL, make sure the Oracle
# section is under remarks
#
#####
db.host=localhost
db.port=1433
db.name=
db.user=sa
db.password=
#####
#   Oracle

#

# db.password: should be in clear text
#
# IMPORTANT! If you are using Oracle, make sure the MSSQL
# section is under remarks
#
#####
#db.host=
#db.port=1521
#db.name=
#db.user=
#db.password=
#db.oracle.service=
#####
# IDM Parameters
# idf.prop.idm.app.server.port(Default value):
# 8080 - Jboss
# 7001 - Weblogic
# 9080 - Websphere
#
#####
```

```
idf.prop.idm.app.server.port=  
idf.prop.idm.im.env.name=  
#####  
# Internal properites. DO NOT Modify !  
#####  
#install.file=install.properties  
im.primary.version=r12  
installer.first.time=1  
db.mssql.version=0
```

# Chapter 3: Option Pack in Production

---

This section contains the following topics:

[Install the Option Pack on a JBoss Cluster](#) (see page 23)

[Install the Option Pack on a WebLogic Cluster](#) (see page 24)

[Install the Option Pack on a WebSphere Cluster](#) (see page 25)

[Configure the Option Pack in a Production Environment](#) (see page 28)

[Migrating your Environment](#) (see page 29)

[Changing Your Data](#) (see page 30)

## Install the Option Pack on a JBoss Cluster

To install the Option Pack on JBoss applications servers in a clustered environment, perform the following process.

**Note:** For Windows, if you are running your application server in service mode, modify the Jakarta redirector to include the filter /ACEWeb/ .

1. Perform an [install of the Option Pack](#) (see page 9) on one CA Identity Manager application server instance.
2. For other application server instances, do the following:
  - a. Run the Option Pack installer and provide the information required.  
Once you provide the database information, the wizard screens are populated for you.
  - b. Validate the default values and finish the installation.  
Running the Option Pack installer creates a new, local Option Pack installation folder.
  - c. If you have logo or skin changes, edit the compile\_jsp.bat and add the optionpack.jar to the classpath.
3. Restart your application server.
4. Verify that the server port in the IDF\_Properties table is the same port you use to access the Identity Manager environment on the cluster.
5. Update the web server plug-in file by adding the string "ACEWeb" as a path for redirection.
6. Restart the web server.
7. Update the quartzScheduler.properties file under the identityminder.ear/ACEWeb.war folder, by setting org.quartz.jobStore.isClustered to true.
8. Repeat Step 5 for all managed nodes.

## Install the Option Pack on a WebLogic Cluster

To install the Option Pack on WebLogic applications servers in a clustered environment, perform the following process.

1. Perform an [install of the Option Pack](#) (see page 9) on the manager.
2. Copy the Option Pack home directory from the manager to each of the managed nodes under `c:\any_folder`.
3. In the WebLogic console, under JVM Arguments, add the following line for each managed node:  
`-DidFocusHomeDir=c:\any_folder`
4. In the WebLogic console, change the target of `idfocus-ds` to cluster.
5. Verify that the server port in the `IDF_Properties` table is the same port you use to access the Identity Manager environment on the cluster.
6. Update the web server plug-in file by adding the string "ACEWeb" as a path for redirection.

For example, if you are using a Microsoft IIS web server, add `/ACEweb` to the `WLForwardPath` parameter in the `iiproxy.ini` file, as follows:

```
# This file contains initialization name/value pairs
# for the IIS/WebLogic plug-in.
# WebLogicHost=localhost
# WebLogicPort=7001
WebLogicCluster=WL9-Node1:7001,WL9-Node2:7001
ConnectTimeoutSecs=20

ConnectRetrySecs=2
WIForwardPath=/idm/idmmanage/castylesr5.1/ACEWeb
WLLogFile=c:\bea\proxy.log
DebugConfigInfo=ON
```

7. Restart the web server.
8. Update the `quartzScheduler.properties` file under the `identityminder.ear/ACEWeb.war` folder, by setting `org.quartz.jobStore.isClustered` to `true`.
9. Repeat Step 7 for all managed nodes.
10. For all managed nodes in the cluster, do the following:
  - a. From the WebLogic console, stop the managed nodes.
  - b. Stop both node managers.
  - c. Edit the `startNodeManger.cmd` file under: `C:\bea\weblogic92\server\bin` and locate `SETLOCAL`.

- d. Add the following line below:  
Set  
IM\_EAR=C:\bea\weblogic92\common\nodemanager\servers\server\_name\stage\IdentityMinder\IdentityMinder.ear
- e. Locate set CLASSPATH= .;%WEBLOGIC\_CLASSPATH%;%CLASSPATH% and add the following line as the first entry:  
%IM\_EAR%\config;  
  
for example:  
set CLASSPATH=%IM\_EAR%\config;.:%WEBLOGIC\_CLASSPATH%;%CLASSPATH%
- f. Start both node managers.
- g. Verify that the CLASSPATH includes the following:  
\\bea\weblogic92\common\nodemanager\servers\server\_name\stage\IdentityMinder\IdentityMinder.ear\  
config

11. In the WebLogic console, start the managed nodes.

## Install the Option Pack on a WebSphere Cluster

To install the Option Pack on WebSphere applications servers in a clustered environment, perform the following process.

1. Start the cluster (all servers in the cluster must be in a Started status).
2. Perform an [install of the Option Pack](#) (see page 9), providing the manager details in the installation wizard.

**Note:** For the Application Port, do *not* use the default port 9080. Instead, provide the port you use to access the Identity Manager environment on the cluster.

3. In the WebSphere Administrative Console, check the IDFocusDataSource connection. If the connection fails, try the following:
  - Verify that you do not use localhost for the server name.
  - Add the following two properties under Custom Properties:
    - user (the owner of the database)
    - password

The user name and password are case-sensitive.

**Note:** Be sure not to change the data source JNDI name.

4. Deploy the Option Pack on the cluster, as follows:
  - a. From the WebSphere Administrative Console, go to Applications, Enterprise applications, IdentityMinder, Manage Modules.
  - b. Select the Option Pack module.
  - c. Select all items from the Clusters and Servers drop-down list.

- d. Click Apply.
  - e. Click OK.
  - f. Click Save.
  - g. Save changes to the master repository, and synchronize the changes with the nodes.
5. Copy the Option Pack folder from the manager to each server in the cluster.
  6. Add the path to the Option Pack folder on each server in the cluster, as follows:
    - a. From the WebSphere Administrative Console, go to Servers, Application Servers, *first\_server\_in\_cluster*, Java and Process Management, Process Definitions, Java Virtual Machine.
    - b. Add the following line to Generic JVM arguments:

```
-DidFocusHomeDir=path_to_option_pack_folder
-Didfocus.jboss.cache=false
```

**Note:** If the path to the Option Pack folder contains a space, use the URI format for the folder's path, such as:  

```
-DidFocusHomeDir=file:///c:/program%20files/CA/Option%20Pack
```
    - c. Click Save.
  7. Save changes to the master repository, and synchronize changes with the nodes.
  8. For every server in the cluster, edit the *WebSphere\_home*\AppServer\profiles\*profile\_name*\installedApps\*cell\_name*\IdentityMinder.ear\user\_console.war\ui\skin\idm\stylesheet\task.css file and add the following after the .im-medFormField section:

```
.imACE-medFormField{
    Width: 450px;
    overflow: scroll
}
```

9. For every server in the cluster, add the log4j configuration, as follows:
  - a. Edit the `WebSphere_home\AppServer\profiles\profile_name\installedApps\cell_name\IdentityMinder.ear\config\com\netegrity\config\log4j_websphere.properties` file and add the content of the following files:
    - `Option_Pack_home\install\Configuration\ACE_reverse_sync_logger_WebSphere.txt`
    - `Option_Pack_home\install\Configuration\ACE_initial_load_logger_WebSphere.txt`
    - `Option_Pack_home\install\Configuration\ACE_csv_correlation_logger_WebSphere.txt`
  - b. Add the following line to the previous file:  
`log4j.category.javafx.faces=WARN`
10. From each server in the cluster, open the `quartzScheduler.properties` file from `WebSphere_home\profiles\profile_name\installedApps\cell_name\IdentityMinder.ear\ACEWeb.war\WEB-INF\classes` and change `org.quartz.jobStore.isClustered` to `true`.
11. Save the file.
12. Restart the web server.
13. Restart the cluster as follows:
  - a. Using the WebSphere console, stop all servers in the cluster.
  - b. Stop the node agents.
  - c. Stop the manager.
  - d. Restart WebSphere components in the following order:
    - Manager
    - Node agents
    - Servers

## Configure the Option Pack in a Production Environment

The following process describes the actions required when implementing the Option Pack in production.

1. Using the CA Identity Manager Password Encryption tool, encrypt the Option Pack data source password, using the standard security-domain for JBoss, and the equivalent for WebLogic and WebSphere.
2. Connect to existing endpoints. Perform the following tasks for each endpoint you want the Option Pack to manage, as follows:
  - a. In the Provisioning Manager, configure the Option Pack program exits for POST\_ADD\_ACCOUNT, POST\_MODIFY\_ACCOUNT, and PRE\_DELETE\_ACCOUNT for the configured endpoints.
  - b. In the Provisioning Manager, under Domain Configuration, set Enable Notifications to No.

**Note:** This is different from setting notifications to Suspended from the etacallback setting. This step is required to temporarily stop inbound notifications.

- c. In the User Console, under Option Pack, Account Management, select Acquire Endpoint Type and acquire the endpoint.

**Note:** For more information about acquiring an endpoint, see the *Administration Guide*.

- d. If these attributes should be captured by Reverse Synchronization, add them to the attribute mapping for the endpoint type using the Provisioning Manager. This is done in the endpoint type setting.
  - e. In the User Console, Explore and Correlate the endpoint.
  - f. Under Option Pack, Account Management, select Initialize Endpoint Accounts and initialize the endpoint.

The endpoint type attribute is populated for all users with account data. The data populated is the attributes selected in Step i.

**Note:** This task may take significant time to complete.

- g. In the Provisioning Manager, set Enable Notifications to Yes.

**Note:** For more information about endpoints, see the *Administration Guide*.

3. If you want to manage the user's accounts from the User Console, create an Account Management screen for the endpoint. Go to Option Pack, Account Management, Create Account Screen.

**Note:** For more information about creating an account screen, see the *Administration Guide*.

4. Detect changes done on the endpoint system and execute pre-defined business logic on these changes, as follows:
  - If you want to detect orphan accounts for the endpoint, configure Reverse Synchronization for account policies.
  - If you want to detect changes in existing accounts for the endpoint, configure Reverse Synchronization for attribute policies. Then, add the desired attribute in the endpoint mapping using the Provisioning Manager.
  - If you want to send changes in existing accounts from an Account Management screen, or from Reverse Synchronization, to approval workflow, configure an Option Pack Workflow approval process.
  - If you want to send orphan accounts to approval workflow, configure an Option Pack Workflow approval process for Reverse Synchronization.

**Note:** For more information about configuring Reverse Synchronization or Option Pack Workflow, see the *Administration Guide*.
5. Configure Segregation of Duties (SOD) violations.

**Note:** For more information about SOD, see the *Administration Guide*.

## Migrating your Environment

If you want to migrate a development (source) environment to a production (target) environment, perform the following process.

1. Install CA Identity Manager, including the Provisioning Server, clusters, failover, and high availability.
2. Export the database from the source environment.
3. Import the database to the target environment.
4. Perform a database cleanup of obsolete audit information.

Truncate the following tables:

- If you do not need the ACE Audit information, truncate the IDF\_AceDataAudit
- IDF\_InitialLoad\_Recovery
- IDF\_Reverse\_Active\_Approval
- IDF\_Reverse\_Recovery
- IDF\_Reverse\_WF\_Pending
- If you do not need the reverse sync audit info, truncate IDF\_ReverseAudit
- IDF\_Semaphore

- IDF\_SODActive
  - IDF\_SODActiveEntitlements
  - IDF\_SODActiveItem
  - IDF\_SODAudit
  - IDF\_SODAuditEntitlements
  - IDF\_SODAuditItem
  - IDF\_SODCalculationEntitlements
  - IDF\_StateAuditActionParams
  - IDF\_StateAuditActions
  - IDF\_StateAuditPolicies
  - IDF\_UserBatch
  - IDF\_WorkflowActiveApprovals
  - IDF\_WorkpointJobs
5. Perform any data adjustment for the target environment.
  6. Install the Option Pack.

**More Information:**

[Changing Your Data](#) (see page 30)

## Changing Your Data

After importing your data into the Option Pack database, you may need to change the configuration of your environment. If you change your environment, other information may need to be changed within the Option Pack. The impact of data changes that you make is as follows:

**If you change your Environment**

- Program Exits: Point ETACALLBACK to the new environment
- Policy Xpress: Re-import all Policy Xpress policies
- Account Screens: Automatically solved by re-importing Policy Xpress policies
- Option Pack Global Settings: Reset the environment parameter
- Email Notifications: Automatically solved by re-importing Policy Xpress policies
- Scheduled Tasks: Redefine stored scheduled tasks and delete old ones

**If you change your User Store**

- Option Pack Global Settings: Change environment name
- Scheduled Tasks: Redefine stored scheduled tasks and delete old ones

**If you change an Endpoint**

- Reverse Synchronization: Reconfigure account and attribute policies
- Program Exits: Enable the three exit types for the new endpoint
- SOD: Adjust system names
- Account Screens: Run Initialize Endpoint Accounts for the new endpoint
- Policy Xpress: Change any data element or rule that refers to the old endpoint

**If you change your Server IP Address or Name**

- Program Exits: Point ETACALLBACK to the new URL

**If you change your Database Location or User**

- Option Pack Global Settings: Replace data sources



# Chapter 4: Upgrading the Option Pack

---

Option Pack upgrades are *only* supported from ACE 2.0 for Identity Manager r12 CR3. If you have a previous version of ACE, first upgrade to ACE 2.0 for Identity Manager r12 CR3, then proceed with the Option Pack upgrade.

This section contains the following topics:

[Upgrade from ACE 2.0 for IM r12 CR3](#) (see page 33)

## Upgrade from ACE 2.0 for IM r12 CR3

Note the following when upgrading:

- Any ACE account screens (tasks) you created are not moved from the ACE tab to the new Option Pack tab during an upgrade. After the upgrade completes, you can move your account screen tasks to the Option Pack tab.
- If you are upgrading to the Option Pack and have customized ACE tasks (including changed names and categories) in your environment, be sure to back up your customized tasks before running the upgrade. During the upgrade, all ACE tasks are overwritten with the new Option Pack tasks. After the upgrade, we recommend that you *copy* any Option Pack task you want to customize, and then modify the copy. This prevents future upgrades from overwriting your custom tasks.
- To perform silent upgrades, use the upgrade.bat script.
- The Option Pack now sends email using the CA Identity Manager SMTP configuration. If you want to use the Option Pack Email Notifications, be sure to set the CA Identity Manager SMTP settings before the upgrade. For more information about CA Identity Manager SMTP settings, see the *CA Identity Manager Installation Guide*.

### **Upgrading from ACE 2.0 for Identity Manager r12 CR3 to the Option Pack**

1. (JBoss and WebLogic only) Stop the application server.
2. Execute the Option Pack installer and follow the instructions.
3. Restart the application server.
4. In the Management Console, import the Advance\_Settings.xml from *install\_home\Manual\_steps*.

5. In the Management Console, import the Tasks\_and\_Roles.xml from *install\_home*\Manual\_steps.
6. Restart the application server.

# Chapter 5: Uninstalling the Option Pack

---

This section contains the following topics:

[How to Uninstall the Option Pack](#) (see page 35)

[Delete Run-Time Data](#) (see page 35)

[Remove Identity Manager Components](#) (see page 36)

[Remove Provisioning Components](#) (see page 39)


[Reverse Installation Changes \(JBoss\)](#) (see page 40)

[Reverse Installation Changes \(WebLogic\)](#) (see page 43)

[Reverse Installation Changes \(WebSphere\)](#) (see page 46)

## How to Uninstall the Option Pack

Use the following checklist to uninstall the Option Pack:

 Step
1. Delete run-time data.
2. Remove CA Identity Manager components.
3. Remove Provisioning components.
4. Reverse installation changes.

**Important!** We recommend that you back up your environment before uninstalling of the Option Pack. Also, export your tasks and roles, advanced settings, and workflow processes.

## Delete Run-Time Data

Remove any unfinished processes, such as workflow processes waiting for approval, or scheduled tasks waiting to execute.

### To delete run-time data

1. Go to Option Pack, Workflow, View My Work List.
2. Accept or reject any pending work items.

**Note:** Be sure to delete all pending work items for all users.

3. Go to Option Pack, Scheduled Tasks, Manage Scheduled Tasks.
4. Select all tasks and click Delete scheduled jobs.

## Remove Identity Manager Components

To uninstall the Option Pack, remove all CA Identity Manager components related to the Option Pack.

### To remove CA Identity Manager components

1. In the User Console, remove imported Option Pack roles and tasks, as follows:
  - a. For each environment, delete the following tasks:
    - View Workflow Process Status(Administrator)  
(tag=ViewWorkflowProcessStatus)
    - Manage Active Directory Accounts  
(tag=ManageActiveDirectoryAccounts)
    - Manage My Active Directory Accounts  
(tag=MyActiveDirectoryAccounts)
    - Approve default (tag=AceApprovalDefault)  
If you cloned this task while configuring new Option Pack workflows, remove the cloned tasks also.
    - Approve AD groups (tag=ApproveAsDGroups)
    - Approve Reverse new account (tag=ApproveReverseNewAccount)
    - Approve SOD (tag=ApproveSOD)
    - Manage Scheduled Tasks (tag=CancelScheduledTask)
    - View My Work List (tag=MassApproval)
    - Manage Reverse Synchronization (tag=ReverseConfiguration)
    - Schedule Reverse Synchronization (tag=ReverseExec)
    - Initialize Endpoint Accounts (tag=InitialLoadExec)
    - Manage Email Notifications (tag=EmailUtility)
    - Manage Segregation of Duties (tag=SODconfiguration)
    - Manage Global Settings (tag=AceProperties)
    - View Account Management Events (tag=ACEAudit)
    - Create Account Screen (tag=AccountScreenConfiguration)

- CSV Correlation (tag=CSVCorrelation)
  - View Reverse Synchronization Events (tag=ReverseAudit)
  - Submit Scheduled Tasks (tag=SubmitScheduledTask)
  - Manage Workflow (tag=WorkflowConfiguration)
  - Out Of Office (tag=WorkflowDelegation)
  - Manage Policies (tag=PolicyXpressConfiguration)
  - Create Policy (tag=PolicyXpressCreate)
  - Import Policies (tag=PolicyXpressImport)
  - Export Policies (tag=PolicyXpressExport)
  - Search Policy (tag=PolicyXpressSearch)
  - Acquire Endpoint Types (tag=AcquireEndpointType)
- b. For each environment, delete the following screens:
- OP Organization Search (ACEOrganizationSearch)
  - OP User Search (ACEUserSearch)
  - DefaultApprovalScreen (AceDefaultApprovalScreen)
  - SM Manage Active Directory Accounts Screen (SMManageActiveDirectoryAccountsScreen)
  - ReverseNewAccountApprovalScreen (AceReverseNewAccountApprovalScreen)
  - SodApprovalScreen (AceSodApprovalScreen)
  - WorkflowDelegationScreen (WorkflowDelegationScreen)
- c. For each environment, delete the following Identity Policy:
- Push updates to Admin

- d. For each environment, delete the following Provisioning role:

CreateAdminUser

To do so, remove all members of the Provisioning role. In the User Console, go to Roles and Tasks, Provisioning Roles, Modify Provisioning Role Members/Administrators. Clear all members (should only be one user: accountforapproval) and save.

- e. For each environment, delete the following Admin roles:

- Option pack administrator
- Option pack Approver
- Option pack Self Manager

2. In the Management Console, remove imported environment settings, as follows:

- a. For each environment, delete the following EventListeners:

- AccountAccessEventListener
- AdminStartupDataImport
- ReverseAddValueEventListener
- ReverseCreateUserEventListener
- ReverseModifyUserEventListener
- ACECorrelationMatching
- ReverseSyncUserEventListener
- WorkflowCatchApproval
- WorkflowDistributer
- WorkflowDistributer \_Create
- StateMachineListener

- b. For each environment, delete the following BusinessLogicTaskHandler:

StateBLTHListener

- c. For each environment, delete the following LogicalAttributeHandlers:

- AceManageActiveDirectoryAccount
- CreateADAccountAttributes
- ReverseApprovalRequired
- WorkflowApprovalRequiredAttributes
- WorkflowDefaultApproval
- WorkflowDelegationSettings

- WorkflowListOfApprovers
  - WorkflowSessionId
  - WorkflowSODApproval
  - ViewWorkflowStatusLogicalHandler
- d. In addition to the previous list, delete all the LogicalAttributeHandlers with the following description:
- Logical attribute handler for account management screen
- e. For each environment, delete the following WorkflowParticipantResolvers:
- WorkflowResolver
  - WorkflowResolverEscalator
3. In WorkPoint Designer, delete all the Option Pack processes and their related jobs. Delete the jobs first, then the processes. The Option Pack WorkPoint processes are as follows:
- ApproveReverseNewAccount
  - ApproveAD
  - ApproveSOD
  - ACEDefaultProcess
  - Any new processes created as a copy of ACEDefaultProcess
4. (Optional) Remove the accountforapproval user.
5. Delete any Option Pack tasks or account management screens you created.

## Remove Provisioning Components

To uninstall the Option Pack, remove all Provisioning components related to the Option Pack.

### To remove provisioning components

1. (Optional) In the Provisioning Manager, clear the display names for all custom fields used by the Option Pack. **Default:** CustomField09
2. Delete all references to the Program Exit from each endpoint that uses it.
3. Delete the Option Pack's program exit, OPSoapExit

## Reverse Installation Changes (JBoss)

Remove all configuration changes made by the Option Pack installer.

### To reverse the installation changes

1. Stop the application server.
2. Delete the *jboss\server\default\tmp* folder.
3. Delete the *jboss\server\default\work* folder.
4. Delete the Option Pack installation folder.
5. Delete the *jboss\_home\server\default\deploy\ACEWeb.war*.
6. Delete the following files from the *jboss\_home\server\default\lib* folder:
  - *option-pack.jar*
  - *ACE\_TEWS.jar*
7. Delete the data source definition file:  
*jboss\_home\server\default\deploy\IDF-ds.xml*.
8. Delete the following JSP files from  
*jboss\_home/server/default/deploy/IdentityMinder.ear/user\_console.war*:
  - *\app\page\workItemRedirect.jsp*
  - *\app\page\multiSelectWorkList.jsp*
  - *\app\page\multiSelectWorkListAction.jsp*
  - *\ACERedirect.jsp*
  - *\WorkListRedirect.jsp*
9. Remove the *-DidFocusHomeDir* parameter from the JBoss *run.bat/sh* file:
  - For Windows, remove the following line from *run.bat*:  
set  
JAVA\_OPTS=%JAVA\_OPTS% -DidFocusHomeDir="*<path to option pack folder>*"
  - For Solaris, remove the following line from *run.sh*:  
JAVA\_OPTS=\$JAVA\_OPTS -DidFocusHomeDir="*<path to option pack folder>*"
10. Edit  
*jboss\_home/server/default/deploy/IdentityMinder.ear/user\_console.war/ui/skin/idm/stylesheet/task.css* and remove the following section:

```
.imACE-medFormField{  
    Width: 450px;  
    overflow: scroll  
}
```

11. Remove the log4j configuration. Edit the `jboss_home/server/default/conf/jboss-log4j.xml` and remove the following sections (3 appenders, 3 loggers, 1 category):

```
<!-- Reverse Synch DAILY ROLLING FILE APPENDER -->
  <appender name="ReverseSynchDailyRollingFile"
class="org.apache.log4j.DailyRollingFileAppender">
    <param name="datePattern" value=".yyyy-MM-dd" />
    <param name="file" value="${idFocusHomeDir}/Logs/reverseSync.log" />
    <param name="Append" value="true" />
    <layout class="org.apache.log4j.PatternLayout">
        <param name="ConversionPattern" value="%d %-5p [%t] - %m%n" />
    </layout>
  </appender>
  <logger name="reverseSync" additivity="false">
    <level value="debug"/>
  <appender-ref ref="ReverseSynchDailyRollingFile"/>
</logger>

<!-- Initial Load DAILY ROLLING FILE APPENDER -->
  <appender name="InitialLoadDailyRollingFile" class="org.apache.log4j.DailyRollingFileAppender">
    <param name="datePattern" value=".yyyy-MM-dd" />
    <param name="file" value="${idFocusHomeDir}/Logs/initialLoad.log" />
    <param name="Append" value="true" />
    <layout class="org.apache.log4j.PatternLayout">
        <param name="ConversionPattern" value="%d %-5p [%t] - %m%n" />
    </layout>
  </appender>
  <logger name="initialLoad" additivity="false">
    <level value="debug"/>
  <appender-ref ref="InitialLoadDailyRollingFile"/>
</logger>

<!-- CSV Correlation DAILY ROLLING FILE APPENDER -->
  <appender name="CsvCorrelationDailyRollingFile"
class="org.apache.log4j.DailyRollingFileAppender">
    <param name="datePattern" value=".yyyy-MM-dd" />
    <param name="file" value="${idFocusHomeDir}/Logs/csvCorrelation.log" />
    <param name="Append" value="true" />
    <layout class="org.apache.log4j.PatternLayout">
        <param name="ConversionPattern" value="%d %-5p [%t] - %m%n" />
    </layout>
  </appender>
```

```
<logger name="csvCorrelation" additivity="false">  
  <level value="debug"/>  
  <appender-ref ref="CsvCorrelationDailyRollingFile"/>  
</logger>
```

```
<category name="javax.faces">  
  <priority value="WARN"/>  
</category>
```

12. Edit the *jboss\_home*/server/default/conf/jbossjta-properties.xml and remove the following entry:

```
<property name="com.arjuna.ats.jta.allowMultipleLastResources"  
value="true" />
```

13. Delete the Option Pack database.

**Note:** The Option Pack database contains audit information that you may need to back up.

## Reverse Installation Changes (WebLogic)

Remove all configuration changes made by the Option Pack installer.

### To reverse the installation changes

1. Stop the application server.
2. Delete the `WebLogic_home\user_projects\domains\IdentityManager_domain\servers\AdminServer\tmp` folder.
3. Delete the `WebLogic_home\user_projects\domains\IdentityManager_domain\servers\AdminServer\cache` folder.
4. Delete Option Pack installation folder.
5. Delete the `WebLogic_home\user_projects\domains\IdentityManager_domain\applications\IdentityMinder.ear \ACEWeb.war`.
6. Delete the following JAR files from `WebLogic_home\user_projects\domains\IdentityManager_domain\applications\IdentityMinder.ear\APP-INF\lib`:
  - `option-pack.jar`
  - `ACE_TEWS.jar`
7. Delete the following JSP files from `WebLogic_home\user_projects\domains\IdentityManager_domain\applications\IdentityMinder.ear\user_console.war`:
  - `\app\page\workItemRedirect.jsp`
  - `\app\page\multiSelectWorkList.jsp`
  - `\app\page\multiSelectWorkListAction.jsp`
  - `\ACERedirect.jsp`
  - `\WorkListRedirect.jsp`
8. Delete the data source definition file, `WebLogic_home\user_projects\domains\IdentityManager_domain\config\jdbc\IDFocus-DS-jdbc.xml`.
9. Remove the `-DidFocusHomeDir` parameter from the `setDomainEnv.cmd/sh` file, as follows:
  - **For Windows:** Remove the following line from `setDomainEnv.cmd`:  
`set JAVA_OPTIONS=% JAVA_OPTIONS% -DidFocusHomeDir="<path to option pack folder>"`
  - **For Unix:** Remove the following line from `setDomainEnv.sh`:  
`JAVA_OPTIONS = $ JAVA_OPTIONS -DidFocusHomeDir="<path to option pack folder>"`

## 10. Edit the

*WebLogic\_home*\user\_projects\domains\*IdentityManager\_domain*\applications\*IdentityMinder.ear* \user\_console.war\ui\skin\idm\stylesheet\task.css and remove the following section:

```
.imACE-medFormField{
    Width: 450px;
    overflow: scroll
}
```

## 11. Remove the following section from

*WebLogic\_home*\user\_projects\domains\*IdentityManager\_domain*\config\config.xml:

```
<jdbc-system-resource<
<name>IDFocus-DS</name<
<target>AdminServer</target<
<descriptor-file-name>jdbc/IDFocus-DS-jdbc.xml</descriptor-file-name<
</jdbc-system-resource>
```

## 12. Remove the following section from

C:\bea\user\_projects\domains\*IdentityManager\_domain*\applications\*IdentityMinder.ear*\META-INF\application.xml:

```
>module id="WebModule_ACEWEB">
    >web<
        >web-uri>ACEWeb_war</web-uri<
        >context-root>/ACEWeb</context-root<
    />web<
</module>
```

## 13. Remove the log4j configuration. From

*WebLogic\_home*\user\_projects\domains\*IdentityManager\_domain*\applications\*IdentityMinder.ear*\config\com\netegrity\config\log4j\_weblogic.properties, remove the following sections:

```
log4j.appender.ReverseSync=org.apache.log4j.DailyRollingFileAppender
log4j.appender.ReverseSync.DatePattern='yyyy-MM-dd
log4j.appender.ReverseSync.File= ${idFocusHomeDir}/Logs/reverseSync.log
log4j.appender.ReverseSync.layout=org.apache.log4j.PatternLayout
log4j.appender.ReverseSync.layout.ConversionPattern=%d %-5p [%t] - %m%n
log4j.category.reverseSync=DEBUG, ReverseSync
log4j.additivity.reverseSync=false
```

```
log4j.appender.InitialLoad=org.apache.log4j.DailyRollingFileAppender
log4j.appender.InitialLoad.DatePattern='yyyy-MM-dd
log4j.appender.InitialLoad.File= ${idFocusHomeDir}/Logs/initialLoad.log
log4j.appender.InitialLoad.layout=org.apache.log4j.PatternLayout
log4j.appender.InitialLoad.layout.ConversionPattern=%d %-5p [%t] - %m%n
```

```
log4j.category.initialLoad=DEBUG, InitialLoad
log4j.additivity.initialLoad=false
```

```
log4j.appender.CSVCorrelation=org.apache.log4j.DailyRollingFileAppender
```

```
log4j.appender.CSVCorrelation.DatePattern='yyyy-MM-dd  
log4j.appender.CSVCorrelation.File= ${dFocusHomeDir}/Logs/csvCorrelation.log  
log4j.appender.CSVCorrelation.layout=org.apache.log4j.PatternLayout  
log4j.appender.CSVCorrelation.layout.ConversionPattern=%d %-5p [%t] - %m%n
```

```
log4j.category.javax.faces=WARN
```

```
log4j.category.csvCorrelation=DEBUG, CSVCorrelation  
log4j.additivity.csvCorrelation=false
```

14. Delete the Option Pack database.

**Note:** The Option Pack database contains audit information that you may need to back up.

## Reverse Installation Changes (WebSphere)

Remove all configuration changes made by the Option Pack installer.

### To reverse the installation changes

1. Remove ACEWeb.war from the IdentityMinder.ear, as follows:
  - a. Open the WebSphere console: `http://server_name:9060/ibm/console`.
  - b. Go to Applications, Enterprise Applications, IdentityMinder, Manage Modules and remove the Option Pack module.
  - c. Click Save.
2. Delete the Option Pack data source, as follows:
  - a. Open the WebSphere console.
  - b. Go to Resources, JDBC, Data Sources, and delete IDFocusDataSource.
  - c. Click Save.
3. Delete the JVM parameters that were added by Option Pack installation, as follows:
  - a. Open the WebSphere console.
  - b. Go to Servers, Application servers, *server\_name*, Process Definition, Java Virtual Machine and remove the following string from the Generic JVM arguments field:  
`-DidFocusHomeDir=file:/C:/Program%20Files/CA/Option%20pack/ -Didfocus.jbosscache=false'`
  - c. Click Ok.
  - d. Click Save.
4. Stop the WebSphere application server.
5. Delete the following JAR files from `WebSphere_home\AppServer\profiles\profile_name\installedApps\cell_name\IdentityMinder.ear\library`:
  - Option-pack.jar
  - ACE\_TEWS.jar
6. Delete the ACEWeb.war folder from `WebSphere_home\AppServer\profiles\profile_name\installedApps\cell_name\IdentityMinder.ear`.
7. Delete the ACEWeb.war folder from `WebSphere_home\AppServer\profiles\profile_name\config\cells\cell_name\applications\IdentityMinder.ear\deployments\IdentityMinder`.
8. Delete the `WebSphere_home\AppServer\profiles\profile_name\temp\node_name\server_name\IdentityMinder\ACEWeb.war` folder.

9. Delete the  
*WebSphere\_home*\AppServer\profiles\*profile\_name*\config\temp\download  
 \cells\*cell\_name*\IdentityMinder.ear\deployments\IdentityMinder\ACEWeb.  
 war folder.

10. Delete the following JSP files from  
*WebSphere\_home*\AppServer\profiles\*profile\_name*\installedApps\*cell\_na*  
*me*\IdentityMinder.ear\user\_console.war:

- \app\page\workItemRedirect.jsp
- \app\page\multiSelectWorkList.jsp
- \app\page\multiSelectWorkListAction.jsp
- \ACERedirect.jsp
- \WorkListRedirect.jsp

11. Edit the  
*WebSphere\_home*\AppServer\profiles\*profile\_name*\installedApps\*cell\_na*  
*me*\IdentityMinder.ear\user\_console.war\ui\skin\idm\stylesheet\task.css  
 and remove the following section:

```
.imACE-medFormField{
    Width: 450px;
    overflow: scroll
}
```

12. Remove the log4j configuration. From  
*WebSphere\_home*\AppServer\profiles\*profile\_name*\installedApps\*cell\_na*  
*me*\IdentityMinder.ear\config\com\netegrity\config\log4j\_websphere.prope  
 rties, remove the following sections:

```
log4j.appender.ReverseSync=org.apache.log4j.DailyRollingFileAppender
log4j.appender.ReverseSync.DatePattern='yyyy-MM-dd
log4j.appender.ReverseSync.File=reverseSync.log
log4j.appender.ReverseSync.layout=org.apache.log4j.PatternLayout
log4j.appender.ReverseSync.layout.ConversionPattern=%d %-5p [%t] - %m%n
log4j.category.reverseSync=DEBUG, ReverseSync
log4j.additivity.reverseSync=false
```

```
log4j.appender.InitialLoad=org.apache.log4j.DailyRollingFileAppender
log4j.appender.InitialLoad.DatePattern='yyyy-MM-dd
log4j.appender.InitialLoad.File=initialLoad.log
log4j.appender.InitialLoad.layout=org.apache.log4j.PatternLayout
log4j.appender.InitialLoad.layout.ConversionPattern=%d %-5p [%t] - %m%n
```

```
log4j.category.initialLoad=DEBUG, InitialLoad
log4j.additivity.initialLoad=false
```

```
log4j.appender.CSVCorrelation=org.apache.log4j.DailyRollingFileAppender
log4j.appender.CSVCorrelation.DatePattern='yyyy-MM-dd
log4j.appender.CSVCorrelation.File=csvCorrelation.log
log4j.appender.CSVCorrelation.layout=org.apache.log4j.PatternLayout
```

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

```
log4j.category.javax.faces=WARN
```

```
log4j.category.csvCorrelation=DEBUG, CSVCorrelation
```

```
log4j.additivity.csvCorrelation=false
```

13. Delete the Option Pack installation folder.

14. Delete the Option Pack database.

**Note:** The Option Pack database contains audit information that you may need to back up.

15. Restart the WebSphere application server.

# Appendix A: Troubleshooting

---

This section contains the following topics:

[Application Server Fails at Startup](#) (see page 49)  
[NAMESPACE\\_IMPORTER Error](#) (see page 50)

## Application Server Fails at Startup

Symptom:

The application server is throwing an Option Pack related exception at startup.

Solution:

Try the following:

- The Option Pack database may not be available. Be sure that the database is running and that connectivity parameters have not changed. If the connectivity parameters have changed, open the `IDF_Properties` table and reset them.
- In a clustered environment, set the data source for each node.
- (JBoss and WebLogic only) If the installer was run while the application server was up, some files may not have been copied. Stop the application server and run the installer again.
- If you are running in service mode, be sure that the classpaths are set correctly in your wrapper config file. Specifically, add `/ACEWeb/` in the Jakarta settings.
- There may be a non-existent physical attribute in the `directory.xml` file. Be sure that you map the attribute to the endpoint type *and* that the attribute exists in the user store.

## NAMESPACE\_IMPORTER Error

**Symptom:**

NAMESPACE\_IMPORTER component errors appear in the installation log.

**Solution:**

Be sure that all the Provisioning services are running, and that the Provisioning Directory is running. To validate, open the Provisioning Manager and perform a user search, list the accounts, and open one of the accounts found. Do this validation for all Provisioning Server instances.

Also, check that the environment provided during the install has a working Provisioning Directory.

# Index

---

## A

- Add the log4j Properties File to the Classpath (WebLogic Only) • 12
- Application Server Fails at Startup • 49

## B

- Before Installing the Option Pack • 8

## C

- CA Product References • iii
- Changing Your Data • 30
- Configure the Option Pack in a Production Environment • 28
- Configure the Option Pack on the Provisioning Server • 16
- Contact CA • iii
- Create a New Database • 9
- Create the Approval User • 16

## D

- Delete Run-Time Data • 35

## G

- Gather Information for the Installation • 10

## H

- How to Install the Option Pack • 9
- How to Uninstall the Option Pack • 35

## I

- Import Environment Settings • 14
- Import Option Pack WorkPoint Processes • 15
- Import Roles and Tasks • 15
- Install the Option Pack on a JBoss Cluster • 23
- Install the Option Pack on a WebLogic Cluster • 24
- Install the Option Pack on a WebSphere Cluster • 25
- Installing the Option Pack • 9

## L

- Log Files • 18

## M

- Map Option Pack Attributes • 13
- Migrating your Environment • 29

## N

- NAMESPACE\_IMPORTER Error • 50

## O

- Option Pack in Production • 23
- Option Pack Introduction • 7
- Overview • 7

## P

- Perform Post-Installation Manual Steps • 12
- Prerequisites • 7

## R

- Remove Identity Manager Components • 36
- Remove Provisioning Components • 39
- Reverse Installation Changes (JBoss) • 40
- Reverse Installation Changes (WebLogic) • 43
- Reverse Installation Changes (WebSphere) • 46
- Run the Installer • 12

## S

- Silent Installation • 19
- Support Matrix • 7

## T

- Troubleshooting • 49

## U

- Uninstalling the Option Pack • 35
- Upgrade from ACE 2.0 for IM r12 CR3 • 33
- Upgrading the Option Pack • 33