

Getting Started with iPlanet ECXpert™

Version 3.5 for Sun Solaris Version 2.6 or 2.7
6 Dec 00

Copyright © 2000 Sun Microsystems, Inc. Some preexisting portions Copyright © 2000 Netscape Communications Corporation. All rights reserved.

Sun, Sun Microsystems, the Sun Logo and all other Sun trademarks, service marks, slogans, and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries. Netscape and the Netscape N logo are registered trademarks of Netscape Communications Corporation in the U.S. and other countries. Other Netscape logos, product names, and service names are also trademarks of Netscape Communications Corporation, which may be registered in other countries. Other product and brand names are trademarks of their respective owners.

Portions of this product are based upon copyrighted materials of Oracle Corporation, Inc. and Netscape Communications Corporation, RSA Data Security, Inc. copyright © 1994, 1995 RSA Data Security, Inc. Portions copyright © 1996 BMC Software, Inc. All rights reserved. Portions copyright © 1996 TSI International, Inc. Portions copyright © 1996-1997 Actuate Software Corporation. All rights reserved.

This file drive contains licensed technology from Receipt.com, formerly known as Differential. More information on Receipt.com products and services can be found at www.receipt.com. The following Third Party Encumbrances have been incorporated into this application: SSLeay SSL toolkit received from Eric Young; Perl5 for the sever administration scripts received from Free Software Foundation; gzip utility for decompression agent for the server received from Free Software Foundation (free and provided upon request); FTP server software received from University of California, Berkeley; wu FTP extensions to server software (FileDrive is a derivative work), received from University of Washington, Saint Louis; Apache Web server for server admin system received from Apache Group; and Apache SSL enhancements received from Ben Laurie.

Federal Acquisitions: Commercial Software -- Government Users Subject to Standard License Terms and Conditions.

The product described in this document is distributed under licenses restricting its use, copying, distribution, and decompilation. No part of the product or this document may be reproduced in any form by any means without prior written authorization of the Sun-Netscape Alliance and its licensors, if any.

THIS DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

Contents

Before You Begin	5
Downloading Updated ECXpert Documentation	6
Installing ECXpert Documentation	8
Audience	9
What You Need to Know	9
Organization	10
Related Documentation	10
Conventions	12
Chapter 1 Preinstallation Tasks	13
Installation Overview	14
Hardware and Software Requirements	14
Solaris Patches Required	15
Solaris 2.6 Patches	16
Solaris 2.7 Patches	17
TCP/IP Connectivity Required	18
Installation Checklist	20
Planning Your Configuration	21
ECXpert Directory Structure	21
Disk Space Requirements	25
Firewall Considerations	27
Preparing the System for Installation	27
Creating the ECXpert Administrator Account	27
Enabling Sendmail	28
Installing the iPlanet Web Server, Enterprise Edition	29
Oracle Installation/Migration	29
Preinstallation Tasks for Oracle 8.1.6 Enterprise Server	30
Installing Oracle 8.1.6	35

Creating the Oracle User ECX35	37
Setting Up and Testing Database Connectivity	38
Chapter 2 Installing ECXpert	43
Overview	44
Setting Up Required Environment Variables	44
Complete the Configuration Worksheet	46
Accessing the ECXpert Distribution Media	50
Mounting the CD-ROM Manually	50
Starting the ECXpert Installer	51
Shutting Down Any Running HTTP Servers	54
Running the ECXpert Installer	55
Applying <i>obj.conf</i> File Changes	70
Starting the ECXpert Administration Server	70
Chapter 3 Postinstallation Tasks	75
Testing Your ECXpert Installation	75
What's Next?	93
Enabling Support for AIAG E-5 2000	94
Enabling Support for Expanded Data Fields	95
Appendix A Migrating from ECXpert 3.0 to Current ECXpert	97
Migrating from ECXpert 3.0 to Current ECXpert	98
Upgrading to Oracl e8.1.6	98
Set up and Test Your Database Connectivity	98
Back Up Your Database	101
Shut Down All ECXpert Services	103
Preserve Your Files	105
Upgrade to Current ECXpert	106
Updating Stored Procedures for Billing Code Addition	108
Removing the Previous Installation and Database Backup	109
Appendix B Reinstalling Current ECXpert	111
Reinstalling ECXpert 3.5	111
Shut Down All ECXpert Services	111
Set up and Test Your Database Connectivity	112
Backing Up Your Existing ECXpert 3.5 Database	115
Preserve Your Files	116
Reinstall ECXpert	117
Removing the Previous Installation and Database Backup	118

Index 119

About this Book

This Guide gives instructions for installing iPlanet's ECXpert System. It includes prerequisites, and gives preinstallation and postinstallation tasks you must perform to ensure a successful installation.

ECXpert provides companies with a comprehensive software solution for setting up and operating a cost-effective and easy-to-use electronic commerce system built upon Internet technologies.

The following topics are covered in this section:

- Before You Begin
- Audience
- Organization
- Related Documentation

ECXpert is subject to the terms detailed in the license agreement accompanying it.

Before You Begin

It is essential that you retrieve and read the ECXpert 3.5 Release Note from the iPlanet Technical Support web site before you install ECXpert. Release Notes contain documentation errata, software patches, and a list of known bugs. The site link is:

http://iplanet.com/support/technical_resources/ecxpert.

Downloading Updated ECXpert Documentation

We continuously update the ECXpert documentation. Follow the steps below to do the following:

- Determine whether you have the latest version of any ECXpert document
 - Download a copy of any ECXpert document
1. Obtain a user ID and password for iPlanet ProductTracker by SubscribNet.

If you do not know where to start, display the iPlanet ProductTracker by SubscribNet home page at the URL below:

`http://home.netscape.com/support/producttracker/index.html`

The information provided on this page should let you determine the contact person at your company who can provide you with the user ID and password. If that person is you, and you have not received this information, call the iPlanet Customer Support phone number that is provided.

2. Display the iPlanet ProductTracker by SubscribNet web page at the following URL:

`http://subscribnet.netscape.com/`

3. Enter your Subscribnet user ID and password.

The main Subscribnet page is displayed.

4. Click the link in Click here to access your software.

An index of the iPlanet software products registered for your user ID is displayed.

5. Click the iPlanet ECXpert link.

A page is displayed that asks you to select the version and platform. It looks something like Figure 1.

Figure 1 Version and platform selection

New Versions	Release Archive	Date Available	New Download
Version 3.0			
Netscape ECXpert V3.0 Documentation		Oct 8, 1999	
Netscape ECXpert V3.0 for Solaris 2.5.1/2.6 - Export		Jul 1, 1999	
Netscape ECXpert V3.0 for Solaris 2.5.1/2.6 - US/CAN		Jul 1, 1999	
Netscape ECXpert V3.0 for Windows NT - Export		Oct 11, 1999	
Netscape ECXpert V3.0 for Windows NT - US/CAN		Oct 11, 1999	

6. Locate the heading for the version you want.
7. Click the documentation link below that heading.

A list of all the documentation downloads available for that ECXpert version is displayed. The top of the list looks something like Figure 2.

Figure 2 Documentation Listing for iPlanet ECXpert

	File Name/Size	Important Notes!
Download Advanced Options	Netscape ECXpert 3.0 Developer's Handbook (7/2/99) File size: 1,575,027 bytes Estimated Times and Details	 Decryption Key You will need this to unzip your software
Download Advanced Options	Netscape ECXpert 3.0 Developer's Handbook for Windows NT (10/07/99) File size: 1,575,049 bytes Estimated Times and Details	If your firewall blocks FTP, use HTTP in our Advanced Options. Due to file size, we recommend you use Advanced Options.
Download Advanced Options	Netscape ECXpert 3.0 Getting Started Documentation for Solaris (7/2/99) File size: 814,428 bytes Estimated Times and Details	

8. Locate the document title that you want.

9. Compare dates.

Compare the date for that document title with the date in the footers in your copy of the same document.

If these dates are the same, you already have the latest version of the documentation.

10. If your documentation is outdated, click the download link.

If the date in the footers of the documentation you have is earlier than the date for the same document on the screen, download the updated version.

NOTE For information on download options, click the “Download Information and Instructions” link just above the list of document titles.

Installing ECXpert Documentation

ECXpert Documentation is available in Adobe Acrobat (PDF) format.

These files are provided on the ECXpert CD as follows:

- **Getting Started Guide**
`/cdrom/Documentation/ECX35-GetStarted-Sol.pdf`
- **Administrator’s Handbook**
`/cdrom/Documentation/ECX35-Admin.pdf`
- **Developer’s Handbook (3.5 version available around late December 2000)**
`/cdrom/Documentation/ECX35-Developer.pdf`
- **Getting Started Guide for ECXpert Partner Agent**
`/cdrom/Documentation/ECX35-GSPartnerAgent.pdf`
- **Site Administrator’s Handbook for iPlanet Partner Agent Server**
`/cdrom/Documentation/ECX35-SAPartnerAgent.pdf`
- **User’s Guide for iPlanet Partner Agent - Windows Client**
`/cdrom/Documentation/ECX35-UGWCPartnerAgent.pdf`

After installing ECXpert, copy these files to your ECXpert directory structure, following these steps:

1. Put the CD in the CD drive and go to the directory where these `.pdf` files are located:

```
# cd /cdrom/Documentation
```

2. Copy these books into the manuals directory in the ECXpert directory structure:

```
# cp / cdrom/ Documentation/ *.pdf  
$NSBase/ NS-apps/ ECXpert/ UI/ html/  
manuals
```

where `$NSBase` is the directory into which ECXpert was installed.

A link to each book's `.pdf` file should appear in the left frame of the Support > Help > Manuals screen.

Audience

This Guide is written for the system administrator who installs and administers ECXpert.

What You Need to Know

The documentation is written with the assumption you have some basic background including:

- a general understanding of the Internet and the World Wide Web
- experience in setting up and managing web services
- site administrator experience with iPlanet Web Server, Enterprise Edition (formerly Netscape Enterprise Server)
- UNIX administration experience as a superuser
- experience in setting up and administering relational databases as an Oracle Database Administrator
- experience in setting up data communications systems
- an understanding of your company's electronic commerce system architecture, including in-depth knowledge of Electronic Data Interchange (EDI).

Organization

The main body of this Guide is divided into three parts:

- Chapter 1 - “Preinstallation Tasks,” describes system hardware and software requirements and preinstallation planning
- Chapter 2 - “Installing ECXpert,” describes the installation process step by step
- Chapter 3 - “Postinstallation Tasks,” describes additional configuration and client-side installation tasks.

Appendixes provide the following supplementary information:

- Appendix A, “Migrating from ECXpert 3.0 to Current ECXpert,” describes the process of migrating from ECXpert version 3.0.
- Appendix B, “Reinstalling Current ECXpert,” describes the special steps required to reinstall Version 3.0 over an existing installation of ECXpert 3.0.

Related Documentation

Refer to the following related documents for additional detailed information about your software:

iPlanet documentation:

- *iPlanet ECXpert Administrator’s Handbook*
- *iPlanet ECXpert Developer’s Handbook*
- *Getting Started with iPlanet TradingXpert*
- *iPlanet ECXpert Operations Reference Manual*
- The iPlanet Messaging Server documentation included on separate media in your ECXpert package
- The iPlanet Directory Server documentation included on separate media in your ECXpert package

For Oracle users:

- Oracle Documentation Library on CD ROM

For Other Third-party Products:

- *Mercator Getting Started*
- *Mercator Design Guide*
- *Mercator Execution Commands Reference Guide*
- *Mercator EDI Mapping Guide*
- *Mercator Building and Using an Application Adapter*
- *Mercator Reference Guide*
- *Mercator Type Tree Maker Reference Guide*
- *Mercator Type Editor Reference Guide*
- *Mercator Functions and Expressions Reference Guide*
- *Mercator Map Editor Reference Guide*
- *Mercator Using a Command Execution Engine*
- *Actuate Reporting System User's Guide*

Conventions

Typographic conventions are used throughout this manual to help you recognize special terms and instructions. These conventions are summarized in the following table.

Convention	Meaning	Example
numbered steps	higher level descriptions of tasks you perform (more detailed instructions follow)	1. Enter the group information. Enter the name in the Group Name field, and a short description in the Description field.
<i>italics</i>	key words, such as terms that are defined in the text	“If the transaction is authorized, a <i>capture</i> takes place.”
	names of books	“For more information, see the <i>iPlanet ECXpert Administrator’s Handbook</i> .”
	emphasis	“Under <i>no</i> circumstances reveal your password.”
	variables for which you supply a valid value	“Type <i>hostname password</i> and press Enter.”
Courier font	command line input or output	“Change to the ECXpert configuration directory.” <pre>\$ cd \$NSBASE/NS-apps/ECXpert/config</pre>
	text file content, such as HTML templates and configuration files	<pre><HTML> <TITLE>iPlanet ECXpert</TITLE></pre>
	code samples	<pre>ecx = new ECXpert(); term = new Terminal();</pre>
	file names and URLs	“Refer to the <code>ecx.ini</code> file.” “See <code>www.iplanet.com</code> for information about other iPlanet e-commerce products.”

Preinstallation Tasks

This chapter describes planning and tasks you must perform before you can install ECXpert Version 3.0. It includes installation and configuration tasks for the RDBMS which stores the ECXpert information.

The following topics are discussed in this section:

- Installation Overview on page 14
- Planning Your Configuration on page 21
- Preparing the System for Installation on page 27
- Creating the ECXpert Administrator Account on page 27
- Installing the iPlanet Web Server, Enterprise Edition on page 29
- Oracle Installation/Migration on page 29
- Creating the Oracle User ECX35 on page 37
- Setting Up and Testing Database Connectivity on page 38

Installation Overview

This section provides an overview of the tasks required before you install ECXpert.

Hardware and Software Requirements

NOTE	<p>Licensing Note: All other iPlanet Products and third party components (iPlanet Web Server, Enterprise Edition, iPlanet Directory Server, iPlanet Messaging Server, Oracle Server, Actuate Reporting System, and Mercator Authoring System) are licensed for use only in conjunction with the ECXpert system.</p> <p>Any use separate from ECXpert is not permitted.</p>
-------------	---

Table shows the minimum hardware and software requirements for installing and using ECXpert in the Sun Solaris operating environment.

Table 1-1 Hardware and Software Requirements

Hardware Platform:	<ul style="list-style-type: none"> • Sun workstation with CD-ROM for the ECXpert software • Intel-based workstation running Windows95, 98 or WindowsNT for the Mercator's Mercator Map Authoring System
Operating System:	<ul style="list-style-type: none"> • Sun Solaris 2.6 (OS version 5.6) plus the patches listed in Table 1-2. <p style="text-align: center;">-or-</p> <ul style="list-style-type: none"> • Sun Solaris Version 2.7 (OS version 5.7) plus the patch cluster listed in Table 1-3. • Sun Solaris Version 2.8 (OS version 5.8) - Optional, no patches are required
Memory:	256 MB RAM (recommended) for the Sun workstation for each ECXpert machine.

Table 1-1 Hardware and Software Requirements

Software Requirements:	<ul style="list-style-type: none"> • JDK 1.2.2 (to live in /share/builds/component/jdk/1.2.2_05a/SunOS) • iPlanet Web Server, Enterprise Edition, Version 4.1, with Service Pack 2 (NES 4.1 SP2)† • iPlanet Messaging Server Version 5.0†° • iPlanet Directory Server Version 4.1 Series †° • Netscape Navigator 4.7 † • Mercator's Mercator Version 5.0 † • Oracle 8.1.6 Enterprise Server (and related products, notably SQLNET and Net8) • Actuate Reporting System (version 3.2 or higher)†
Disk Space:	<p>Approximately 2.5 GB for installed software (500MB each for ECXpert, 1 GB for Oracle), plus disk space for data and incoming documents, calculated according to the formula:</p> $2.5\text{KB} * (\# \text{ of documents received daily}) * (\# \text{ of days retained})$ <p>(See "Planning Your Configuration" on page 21 for more information on this formula.)</p>
† bundled with ECXpert	
° optional	

NOTE iPlanet Web Server, Enterprise Edition, Netscape Communicator, and iPlanet Messaging Server are on separate media.

iPlanet Directory Server is included in the iPlanet Messaging Server package.

Solaris Patches Required

Depending on the version of Solaris you are using, you must apply different Solaris patches. Solaris patches are available from Sun Microsystems' SunSolve home page:

<http://sunsolve.sun.com/>

The following sections contain specific URLs where you can download the particular patches you must apply to the different versions of Solaris.

To find out what operating system patches have been applied to your system, use the following command:

```
# showrev -p
```

If you see the following output, patches have been applied which enable the ECXpert Java user interface to function properly.

```
# showrev -p
Patch: 103663-08  Obsoletes: 103683-01, Requires:,
Incompatibles:, iss_sparc-01  Packages: SUNWcsu, SUNWcsr, SUNWhea
Patch: 103594-10  Obsoletes: , Requires:, 103663-01,
Incompatibles:  Packages: SUNWcsu
Patch: 103680-01  Obsoletes: , Requires:, 103663-01  Packages:
SUNWcsu
Patch: 103686-02  Obsoletes: , Requires:, 103663-01,
Incompatibles:  Packages: SUNWnisu
```

If you see the following output, it means that no patches at all have been applied:

```
# showrev -p
showrev: opendir
```

Solaris 2.6 Patches

If you are using Solaris 2.6, iPlanet recommends you apply the following patches shown in Table 1-2: Refer to the following README file link for more information on the patch cluster that includes these patch IDs.

http://sunsolve.Sun.COM/pub-cgi/retrieve.pl?doctype=patch&doc=2.6_Recommended.README

You may instead choose to apply the latest Solaris recommended patch cluster for Solaris 2.6. The Solaris recommended patch cluster is updated every 15 days, so it will be a later version than the iPlanet-recommended patch cluster and will **not** have been tested with ECXpert.

Download the latest Solaris recommended 2.6 patch cluster from:

`ftp://sunsolve.Sun.COM/pub/patches/2.6_Recommended.tar.Z`

Refer to the following README file for instructions on applying this patch cluster:

`ftp://sunsolve.Sun.COM/pub/patches/2.6_Recommended.README`

Table 1-2 Solaris Version 2.6 (OS 5.6) Patches

Patch ID	Note	Description
105490-07	required	Linker Patch
105568-16	required	Libthread Patch
105210-27	required	LibC Patch
106040-13	required	X Input and Output Method Patch
105633-36	required (1)	Open Windows 3.6 Xsun Patch
106409-01	required (2)	Fixes the Chinese True Type Fonts
108091-03	required (3)	SunOS 5.6: ssJDK1.2.1_03 fails with fatal error in ISO8859-01 Locales.
105181-19	recommended	Kernal Update (socket close/hang)
105669-10	recommended	CDE 1.2 libDTSvc Patch (dtmail)
105284-31	recommended	Motif 1.2.7 Runtime Library Patch

Solaris 2.7 Patches

If you are using Solaris 2.7, iPlanet recommends you apply the following patches shown in Table 1-3: Refer to the following file link for each base patch ID on the <http://sunsolve.Sun.COM> site (e.g., 106980, 107636, and so forth). Alternatively, you can search for the patch ID using the Search SunSolve text entry box.

Table 1-3 Solaris Version 2.7 (OS 5.7) Patches

Patch ID	Note	Description
106980-10	required	Libthread Patch
107636-03	required	X Input and Output Method Patch
107081-11	required	Motif 1.2.7 and 2.1.1: Runtime Library Patch for Solaris 7.
108376-03	required	Open Windows 3.6.1 Xsun Patch

To find out which, if any, patch cluster has been applied to your machine, use either of the following commands:

```
showrev

uname -a
```

If the iPlanet-recommended patch cluster has been applied, the `showrev` command produces output similar to the following:

```
# showrev
Hostname: myhost
Hostid: 80859468
Release: 5.6
Kernel architecture: sun4u
Application architecture: sparc
Hardware provider: Sun_Microsystems
Domain: myserver.com
Kernel version: SunOS 5.6 Generic 105490-07 September 2000
```

If the iPlanet-recommended patch cluster has been applied, the `uname - a` command produces output similar to the following:

```
# uname -a
SunOS myhost 5.6 Generic_105181-05 sun4u sparc SUNW,Ultra-1
```

TCP/IP Connectivity Required

To be sure you have TCP/IP networking properly installed, the following must be in effect:

- a permanent IP address is assigned to your machine (*not* a DHCP IP address)
- TCP/IP is bound to the actual network card

- DNS is configured (your machine's hostname and domain names are valid DNS entries)

NOTE The iPlanet ECXpert Installer uses the domain name in `/etc/resolv.conf`, *not* an NIS domain name.

To verify that your system is properly configured, follow the steps below.

1. Open an xterm window.
2. Determine what your IP address is.

type the command,

```
# ifconfig -a
```

you should see something like this:

```
lo0: flags=849<UP,LOOPBACK,RUNNING,MULTICAST> mtu 8232
```

```
    inet 127.0.0.1 netmask ff000000
```

```
hme0: flags=863<UP,BROADCAST,NOTRAILERS,RUNNING,MULTICAST>
mtu 1500
```

```
    inet 192.18.112.147 netmask fffffe00 broadcast 192.18.113.255
```

```
    ether 8:0:20:d1:2c:2f
```

for the example reply above, the internet address for the machine is 192.18.112.147.

3. Determine what your hostname is.

type the command:

```
# /bin/hostname
```

the name for this machine's host is displayed.

4. Determine what your domain name is.

type the command:

```
# /bin/domainname
```

the name for your machine's domain is displayed.

5. Ping your hostname.

type the command,

```
# /usr/sbin/ping hostname
```

where *hostname* is the host of your host computer.

If your TCP/IP connectivity is working properly, the feedback from the `ping` command is:

hostname is alive

Installation Checklist

Be sure to perform each task in the order presented on this checklist.

Refer back to this checklist as you complete each stage of your installation.

- q Plan your ECXpert site and if necessary coordinate with other sites in the same domain.
- q Arrange a trading partnership agreement with one or more trading partners.
- q Make sure your system meets hardware and software requirements. See “Installation Overview” on page 14 for more information. See “Planning Your Configuration” on page 21 for important sizing and configuration scenarios.
- q Familiarize yourself with the ECXpert directory structure. See “Directory tree for the ECXpert system” on page 22 for more information.
- q Make sure you have sufficient disk space, and have filled out the information required in the Configuration Worksheet on page 46. See “Disk Space Requirements” on page 25 for more information.
- q If you intend to use the iPlanet Messaging Server, see “What’s Next?” on page 93 for more information. Also, iPlanet recommends you use the ECXpert Administrator userid, generally “actraadm,” as the sendmail userid.
- q Prepare your system for installation. See “Preparing the System for Installation” on page 27 for more information.
- q Create the ECXpert Administrator account. See “Creating the ECXpert Administrator Account” on page 27 for more information.

- q Install OracleRefer to the included Oracle 8.1.6 document for Oracle 8.1.6 Installation or your site installation and configuration documentation for Oracle 8.1.6 for more detailed information.
Install iPlanet Web Server, Enterprise Edition. See “Installing the iPlanet Web Server, Enterprise Edition” on page 29.
- q Install ECXpert. See “Installing ECXpert” on page 43 for more information.
- q Test your installation to verify database connectivity and ECXpert operation. See “Testing Your ECXpert Installation” on page 75 for more information.
- q Install additional software. See “What’s Next?” on page 93 for more information.

Planning Your Configuration

When planning your ECXpert site, carefully consider your resource requirements, based on the type of business you expect to do.

The central functionality of ECXpert is supported by Oracle. For ECXpert 3.5, Oracle 8.1.6 has been certified for use only.

iPlanet assumes you have your own site Database Administrator to handle routine database operations such as the following:

- database full backup
- database incremental (or transaction log) backup
- database tablespace management

iPlanet recommends the following formula to estimate the **Oracle tablespace size** needed:

$$2.5\text{KB} \times [\text{number of documents received daily}] \times [\text{number of days retained}]$$

For example, if you have 5000 documents daily and you retain them for thirty days, the calculation is:

$$2.5\text{KB} \times 5000 \times 30 = 375,000 \text{ KB}$$

For the **rollback segment size**, estimate 1.5 - 2 times the largest tablespace.

ECXpert Directory Structure

Figure 1-1 shows the ECXpert installation directory tree.

Refer to this diagram to identify where files and executables are located.

Figure 1-1 Directory tree for the ECXpert system

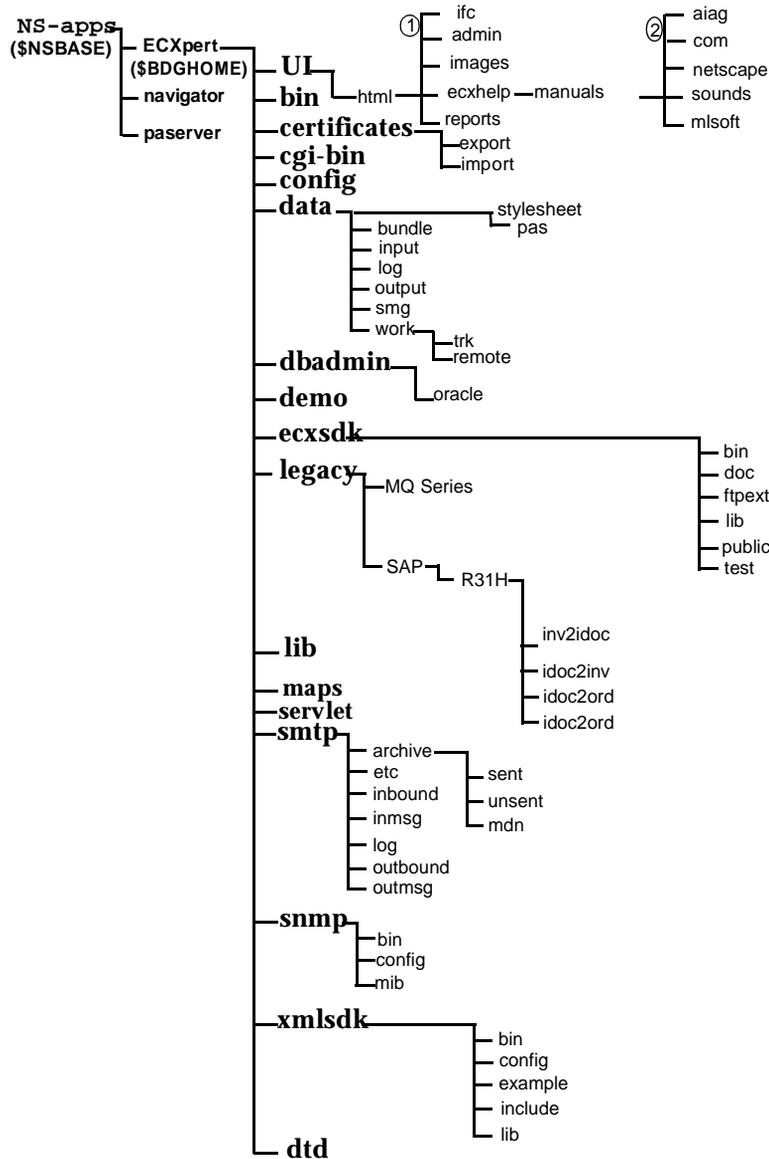


Table 1-4 describes the contents of the \$NSBASE/NS-apps/ECXpert directory.

Table 1-4 Description of the \$SNSBASE/NS-apps/ECXpert directory

Subdirectory	Description of Contents
UI/html	user interface HTML components
UI/html/reports	ECXpert reports
UI/html/help/manuals	ECXpert documentation
UI/html/com	tools lib classes for com
UI/html/admin	admin screen UI files
UI/html/aiag	aiag related UI files
UI/html/netscape	ifc classes
UI/html/ifc	to check that IFC is with Netscape Navigator
UI/html/mlsoft	MVE classes
bin	ECXpert binaries
data/stylesheet	example file for xls
data/pas	Partner Agent related, member and partner information
certificates/export	location of secure transaction authority certificate files. If you do not specify a path when generating or exporting a certificate, the cert files are written by default to the directory /certificates/export/
certificates/import	location of secure transaction authority certificate files. If you do not specify a path when importing a certificate, by default the cert file is looked up from /certificates/import/
cgi-bin	ECXpert CGI binaries
config	configuration files, such as the <code>ecx.ini</code> file
data/bundle	temporary location of files to be transmitted to recipients
data/input	auxiliary input files needed for mapping
data/log	Administration Server function log files
data/output	post translation files, both translation and functional acknowledgment files
data/paserver	files for Partner Agent for ECXpert
data/work	temporary location where work files are created and then deleted
data/work/trk	location of files upon being submitted to ECXpert
dbadmin/oracle	Oracle SQL scripts
ecxsdk/bin	software development kit binary files

Table 1-4 Description of the \$NSBASE/NS-apps/ECXpert directory (*Continued*)

Subdirectory	Description of Contents
ecxsdk/doc	documentation files
ecxsdk/ftpevt	FTP extension files
ecxsdk/lib	API library files
ecxsdk/public	user-accessible files
ecxsdk/test	user-accessible test files
legacy/SAP/R31H	mapping files for use integrating with SAP
legacy/SAP/R31H /inv2idoc	map source files
legacy/SAP/R31H /inv2idoc	map source files
legacy/SAP/R31H /inv2idoc	map source files
lib	ECXpert libraries
maps	Mercator's Mercator mapping files. Note that many of the files in this directory have a <code>.map</code> extension, as opposed to a <code>.sun</code> extension.
mib	entity information
smtp/archive/sent	storage for information of sent outbound messages including received message disposition notifications
smtp/archive/unsent	storage for information of outbound messages that can't be sent or are sent with message disposition notification requested but not received
smtp/archive/mdn	storage for mdn information
smtp/etc	used as a temporary directory for all the temp files created when processing incoming messages
smtp/inbound	temporary storage for inbound messages
smtp/inmsg	temporary storage of inbound messages' SMTP information, such as sender, recipient, and date-time before messages are submitted to the recipient
smtp/log	log files for unrecognized inbound messages
smtp/outbound	temporary storage for formatted outbound messages
smtp/outmsg	temporary storage for outbound messages' SMTP information: docs, files, MDNs
ecxsdk/bin	ECXpert software development kit (SDK) binary files

Table 1-4 Description of the \$NSBASE/NS-apps/ECXpert directory (*Continued*)

Subdirectory	Description of Contents
ecxsdk/doc	ECXpert SDK documentation files
ecxsdk/lib	ECXpert SDK API library files
ecxsdk/public	ECXpert SDK user-accessible files
ecxsdk/test	ECXpert SDK user-accessible test files
snmp/bin	user-accessible binaries and location of servers
snmp/config	configuration files
snmp/mib	management information base files
xmlsdk/bin	XML software development kit (SDK) binary files
xmlsdk/config	XML SDK documentation files
xmlsdk/example	XML SDK sample programs
xmlsdk/include	XML SDK header files
xmlsdk/lib	XML SDK API library files
dtd	dtd and xml files related to aiag functionality

Disk Space Requirements

Verify that you have sufficient disk space available.

Use the following command to see the available volumes and their disk usage:

```
# df -k
```

The resulting output is similar to the following:

Filesystem	kbytes	used	avail	capacity	Mounted on
/dev/dsk/c0t3d0s0	401389	12499	348760	4%	/
/dev/dsk/c0t3d0s6	105486	87205	7741	92%	/usr
/proc	0	0	0	0%	/proc
fd	0	0	0	0%	/dev/fd
/dev/dsk/c0t3d0s4	106012	21457	73955	23%	/var

Filesystem	kbytes	used	avail	capacity	Mounted on
/dev/dsk/c0t3d0s7	419319	9	377380	1%	/export/home
/dev/dsk/c0t3d0s5	1253167	72516	1155341	92%	/opt
/dev/dsk/c0t3d0s3	236816	106458	106678	50%	/usr/openwin
/dev/dsk/c0t0d0s2	1952573	1137822	619501	65%	/disk00
/dev/dsk/c0t1d0s2	14631	10595	2576	81%	/disk01
/dev/dsk/c0t2d0s2	1952573	1625123	132200	93%	/disk02
swap	414240	248	413992	1%	/tmp

Make a note of the volumes you plan to use in the installation process.

The ECXpert directory structure requires that the directories be created on a local device (hard drive) or an NFS-mounted device (hard drive).

The initial installation of ECXpert creates all of the subdirectories below the installation location you specify (referred to as \$NSBASE).

After installing ECXpert, you may change the configuration to move certain directories to other device locations, for performance reasons and to provide better fault tolerance.

-
- NOTE** Remember that you need a minimum of:
- m 500 MB for the ECXpert software.
 - m Sufficient space on the same system as the ECXpert software to store transaction data. Calculate the space required for your anticipated transaction volume according to the formula in “Planning Your Configuration” on page 21.
 - m 1GB for the Oracle database installation. This does *not* have to be on the same system as the ECXpert software.
-

Firewall Considerations

ECXpert uses the following protocols during file processing:

- SMTP (port 25)
- FTP (port 21)
- HTTP (port 80, or user-defined port #)

Additionally, ECXpert uses SQL*Net/Net8 connections (or local IPC connections based on configuration) and OCI client connections to the Oracle8i database where its tables are located.

If you want to install ECXpert through a firewall, you will need to check first with the Firewall Administrator to determine if these protocols are allowed to pass through your firewall.

Preparing the System for Installation

Prepare your system for installing ECXpert by doing the following:

- Creating the ECXpert Administrator Account
- Installing the iPlanet Web Server, Enterprise Edition
- Oracle 8.1.6 Install/Upgrade Decisions
- Creating the Oracle User ECX3.5
- Setting Up and Testing Database Connectivity

The following sections of this Guide describe these tasks.

Creating the ECXpert Administrator Account

NOTE If you are upgrading an earlier installation of ECXpert, skip this section.

Create the ECXpert Administrator user and directory. (This user's home directory must be on the installation volume *only* if you are running the database on the same machine as ECXpert.)

If you are confused about which user you are at any time during the installation (*database_user*, *actraadm*, *root*), use the `id` command to identify yourself before proceeding.

1. Set up the ECXpert Administrator account. For example:

```
# /usr/sbin/groupadd actra
# /usr/sbin/useradd -d /export/home/actraadm -g actra \
-s /bin/csh actraadm -u 1120
# passwd actraadm
```

Then enter `actraadm` twice as the password.

CAUTION You may use any username you wish for the ECXpert administrator user; however, for simplicity, iPlanet recommends the userid `actraadm` with a group of `actra`. iPlanet recommends a user ID of 1120 for the `actraadm` user and a group ID of = 500 for the `actra` group. These are the default values the Installer expects.

If you choose to use an ECXpert Administrator user with a different user ID or group ID, *you must enter the correct values during Installer STEP TWO* (see page 56). If you do not, you will be unable to log into the ECXpert user interface.

NOTE Write down the ECXpert Administrator user's User ID and Group ID values in Configuration Worksheet items "3. User ID:" on page 47 and "4. Group ID:" on page 47.

Enabling Sendmail

If you plan to use Sendmail, use the `touch` command and specify the user (`actraadm`) to make sure the mail file can be read/written to by user `actraadm`. For example:

```
# touch /var/mail actraadm
```

NOTE Using the `touch` command is also indicated in Step 4 of the Installation.

Installing the iPlanet Web Server, Enterprise Edition

Install the iPlanet Web Server, Enterprise Edition and Netscape Communicator by following the instructions enclosed with the software.

NOTE After ECXpert installation, you must make changes in the iPlanet Web Server's `obj.conf` file so that the document root and `cgi-bin` point to the `html` and `cgi-bin` directories of ECXpert.

NOTE When you install the iPlanet Web Server, Enterprise Edition, be sure to create an Enterprise Server instance with Server User set to the same user ID as the one you are using to install ECXpert—for example, `actraadm`.

Oracle Installation/Migration

iPlanet ECXpert 3.5 is certified to run with Oracle 8.1.6 Enterprise Server edition (also known as Oracle 8i). If you have an earlier installed version of Oracle, refer to the Oracle 8.1.6 Installation documentation or contact Oracle for instructions on upgrading to version 8.1.6. Once upgraded to 8.1.6, continue with the section “Creating the Oracle User ECX35 on page 37.” If you do not have any version of Oracle installed, proceed to the section below, “Preinstallation Tasks for Oracle 8.1.6 Enterprise Server” on page 30.

NOTE The instructions and guidelines given for the sections that follow and for sizing your tablespace and rollback segment mentioned earlier may not fit your production environment. Consult your Oracle dba or equivalent Database Administrator to verify that the suggested settings herein apply to your environment.

Preinstallation Tasks for Oracle 8.1.6 Enterprise Server

Before you install Oracle 8.1.6, you must first:

- Configure shared memory. See “Configuring Shared Memory and Semaphores” on page 30.
- Create the `oracle` user. See “Creating the Oracle User” on page 31.
- Prepare the environment for installation. See “Preparing the Environment” on page 32.

Configuring Shared Memory and Semaphores

For a new installation of Oracle 8.1.6, you must edit the `/etc/system` file to properly configure shared memory and semaphores. Following this, your machine must be rebooted. Perform the following steps:

1. Log in as, or become, the `root` user:

```
# su - root
```

2. Change to the `/etc` directory

```
# cd /etc
```

3. Create a backup copy of your system file:

```
# cp system system.backup
```

4. Carefully edit the `system` file as needed to include the following lines.

These lines should appear at the end of the file, immediately the comments regarding “set.”

NOTE The values for shared memory and semaphores below are the recommended minimum values from Oracle. *They are intentionally low.* If you set your shared memory parameters too high for your operating system, you may not be able to reboot your machine. Refer to your operating system documentation for parameter limits

```

set shmsys: shminfo_shmmax = 134217728
set shmsys: shminfo_shmmin = 1
set shmsys: shminfo_shmmni = 100
set shmsys: shminfo_shmseg = 50
set semsys: seminfo_semmns = 1750
set semsys: seminfo_semmni = 70
set semsys: seminfo_semmsl = 200
set semsys: seminfo_semmmap = 100
set semsys: seminfo_semmnu = 300
set semsys: seminfo_semume = 100
set semsys: seminfo_semopm = 100

```

5. Reboot your machine.

For the changes to take effect, you must reboot your machine using the following two commands:

```

# sync
# init 6

```

Creating the Oracle User

NOTE If you want to set up Oracle in a remote client configuration you must create an `oracle` user ID on each machine.

1. Log on as or become the `root` user:

```
# su - root
```

2. Create the `dba` group.

If the machine you are using does not already have a `dba` group, you must create one:

```
# groupadd dba
```

3. Create a home directory for the Oracle user. For example:

```
# mkdir /disk1/oracle
```

where `/disk1/oracle` is the `oracle` user's UNIX home directory.

4. Add the `oracle` user. For example:

```
# useradd -g dba -d /disk1/oracle -s /bin/csh oracle
```
5. Transfer ownership of the `oracle` user's home directory. For example:

```
# chown oracle /disk1/oracle
```
6. Change the group association of the `oracle` user's home directory:

```
# chgrp dba /disk1/oracle
```
7. Set the `oracle` user's password

NOTE The `oracle` user's password is typically set to `oracle`.

```
# passwd oracle
New password: password
Re-enter new password: password
```

where *password* is the new password for the `oracle` user.

Preparing the Environment

1. Log on as or become user Oracle:

```
# su - oracle
```

2. Set up the environment for the installation.

Set the appropriate environment variables in the Oracle user's `.profile` or `.login` file before starting the Installer.

- Use the following syntax to set the environment variables:

For the C shell:

```
setenv variable_name value
```

For the Bourne shell:

```
set variable_name value
export variable_name
```

- Use the information in Table 1-5 to determine how to set up each environment variable.

NOTE Refer to your Oracle documentation for additional information about these and other potentially important environment variables.

Table 1-5 Environment Variables

Environment Variable	Configuration Details
DISPLAY	<p>Set to the name and monitor of the machine from which you are installing the Oracle software.</p> <p>Example: <code>myhost:0.0</code></p>
LD_LIBRARY_PATH	<p>Set to include <code>\$ORACLE_HOME/lib</code> and the directory containing your Motif libraries.</p> <p>Important: When you set up your environment prior to installing or upgrading, make sure that the <code>\$ORACLE_HOME/lib</code> directory appears as the first value in the <code>\$LD_LIBRARY_PATH</code> environment variable. If you do not do this, you will get errors when you later use SQL*Plus.</p> <p>Note: The default location for Motif libraries on Solaris 2.x is <code>/usr/openwin/lib</code> or <code>/usr/dt/lib</code>.</p>
ORACLE_BASE	<p>Set to the directory at the top of the Oracle software.</p> <p>Example: <code>/export2/oracle8i/app/oracle</code></p>
ORACLE_HOME	<p>Set to the directory containing the Oracle software for a given Oracle Server release. The OFA-recommended value is:</p> <p><code>\$ORACLE_BASE/product/release</code></p> <p>Example: <code>/export2/oracle8i/app/oracle/product/8i</code></p> <p>Important: Write this value in item 9 of the Configuration Worksheet on page 46.</p>

Table 1-5 Environment Variables (*Continued*)

Environment Variable	Configuration Details
ORACLE_SID	<p>Set to the Oracle <i>SID</i>, which is the name of the Oracle Server instance.</p> <p>Note: If you are installing Oracle as a remote client, set this value to the database on the server machine.</p> <p>Example: ECX35</p> <p>Important: Write this value in item 10 of the Configuration Worksheet on page 46.</p>
ORACLE_TERM	<p>Set to the terminal definition resource file to be used with the Installer. Refer to your Oracle documentation for a complete list of terminal definition resource files.</p> <p>Example: xterm</p>
NLS_LANG	<p>Set to the correct NLS_LANG character set.</p> <p>The character set is named according to the following convention:</p> <p><language>_<territory>.<number></p> <p>Example: american_america.US7ASCII</p> <p>Important: Enter this value in item 11 of the Configuration Worksheet on page 46.</p>
oratab	<p>Create an oratab file as follows:</p> <p>Example:</p> <pre>#cd / var</pre> <p>where \$ORACLE_HOME is the \$ORACLE_HOME of the new Oracle 8i, release 8.1.6 installation.</p> <p>Note: This environment variable <i>must</i> be properly set if you plan to use a non-US7ASCII character set.</p>

Table 1-5 Environment Variables (*Continued*)

Environment Variable	Configuration Details
PATH	Set to include: <ul style="list-style-type: none"> • <code>\$ORACLE_HOME/bin</code> • <code>/bin</code> • <code>/usr/bin</code> • <code>/usr/ccs/bin</code> <p>Example: <code>/export2/oracle8i/app/oracle/product/8.1.6/bin:/bin:/usr/bin:/usr/ccs/bin:\$PATH</code></p>
TERM	Set this to the same value as the <code>ORACLE_TERM</code> environment variable. <p>Example: <code>xterm</code></p>
USER	Set this to the <code>oracle</code> user. <p>Example: <code>oracle</code></p>

Installing Oracle 8.1.6

1. Log on as or become the `oracle` user.

```
# su - oracle
```

2. Run the Oracle Universal Installer.

Warning: *Do not* run the Installer as `root` user. You must be logged in as user `oracle`.

Insert your Oracle8i, release 8.1.6 CD-Rom in the CD drive

Change to the CD installation directory:

```
# cd /cdrom/oracle8i/
```

To start the installer, enter the following two command:

```
# ./setup /
```

The Oracle Universal Installer will lead you through the Oracle installation process. The typical installation type option will suffice for most installations. When asked about installing the Multi-threaded Server option (MTS), accept installation using that option. Other custom installation option should be handled by an experienced Oracle DBA.

During installation, you will be prompted for some of the environment variables set according to the guidelines presented in Table 1-5. You will also be instructed to open another terminal window and log in as root to run the `root.sh` script.

Running the root.sh Script

1. Log on as or become the `root` user.

```
# su root
```

2. Change to the `$ORACLE_HOME/orainst` directory:

```
# cd $ORACLE_HOME/orainst
```

3. Run the `root.sh` script:

```
# ./root.sh
```

If you run `root.sh` from a directory other than `ORACLE_HOME`, you get the following message:

```
ORACLE_HOME does not match the home directory for oracle.
Okay to continue? [N]:
```

If you indicate *Yes*, the `root.sh` script continues, using the `ORACLE_HOME` environment variable you specified.

Depending on the products you installed, you may be prompted for user names and may be given additional instructions. Refer to your Oracle documentation for more information on these messages.

NOTE The message

```
Please raise the ORACLE owner's ulimit per the
IUG.
```

is purely informational and does *not* require action.

Recommended Settings for initECX.ora File

iPlanet recommends that you open (and edit, as needed) the `initECX.ora` file to verify the use of the LARGE default values generated during the Oracle Enterprise Server installation process. These default values are indicated by the parameters shown in Table .

Table 1-6 LARGE Values for Parameters in the `initECX.ora` File

Parameter	Recommended LARGE Value
<code>db_file_multiblock_read_count</code>	32
<code>db_block_buffers</code>	3200
<code>shared_pool_size</code>	9000000
<code>processes</code>	200
<code>dml_locks</code>	500
<code>log_buffer</code>	163840
<code>sequence_cache_entries</code>	100
<code>sequence_cache_hash_buckets</code>	89

Creating the Oracle User ECX35

Follow these steps create the Oracle user ECX35, who will own the ECXpert tables.

1. Log onto Solaris with your Oracle account. For example:

```
login: oracle
password: oracle
```

2. Launch the Oracle Server Manager utility.

```
# svrmgrl
SVRMGR> connect system/manager
```

NOTE The default password is `manager`; yours may differ.

3. Create user `ECX35`.

```
SVRMGR> create user ECX35 identified by ECX35
default tablespace USERS temporary tablespace TEMP;
SVRMGR> grant connect, resource to ECX35;
SVRMGR> grant unlimited tablespace to ECX35;
SVRMGR> exit
Server Manager Complete
#
```

Setting Up and Testing Database Connectivity

Before you install ECXpert, set up and test your database to be sure that user `root` has access to the database, so that you can successfully install ECXpert. If user `root` doesn't have access to the database, you will get error messages during the ECXpert installation.

1. Log in as user `root`.

```
# su - root
```

2. Determine the shell that `root` uses.

```
# echo $SHELL
```

The output of this command identifies the shell that `root` uses, which determines its associated environment file:

Output	Shell Being Used	Environment File
<code>/sbin/sh</code>	Bourne	<code>.profile</code>
<code>/sbin/csh</code>	C	<code>.cshrc</code>
<code>/sbin/ksh</code>	Korn	<code>.profile</code> or <code>.kshrc</code>

Output	Shell Being Used	Environment File
/usr/bin/sh	Bourne	.profile
/usr/bin/csh	C	.cshrc
/usr/bin/ksh	Korn	.profile or .kshrc

- Determine the shell that `oracle` uses.

```
# cat /etc/passwd | grep oracle
```

The output of this command lists the shell at the end, as in the sample below:

```
oracle:x:50004:10003::/export/home/oracle:/bin/csh
```

where the shell is `csh`.

- Get into the `oracle` shell.

Locate the shell in the “Output” column of the table in Step 2 above, then look up the entry in the “Environment File” column for the same row.

- If you are using the C shell, type the following command:

```
# source ~oracle/.cshrc
```

- If you are using the Korn shell or the Bourne shell, type the following command:

```
# . ~oracle/your_environment_file
```

- Check the environment settings.

```
# env
```

The following sample output of this command lists the environment variables that must be set:

NOTE Refer to the Configuration Worksheet on page 46 for your `$ORACLE_HOME` (worksheet item 10).

```
$ORACLE_HOME=$ORACLE_HOME from worksheet
$ORACLE_SID=ECX
$LD_LIBRARY_PATH=$ORACLE_HOME/lib:$LD_LIBRARY_PATH
$PATH=$ORACLE_HOME/bin:$ORACLE_HOME:$PATH
$DISPLAY=hostname:0.0
```

6. Correct environment variable definitions as necessary.

If any of the above environment variables are not properly defined:

- m Change to user `oracle` (`su - oracle`).
- m Open the environment file that you referenced in Ste p4 above in a text editor and add or modify the definitions as necessary.
- m Save the environment file and exit the text editor.

7. Enable changes in environment variable definitions.

If you made changes in the environment file in Ste p6 above, enable those changes now by switching to another user and then switching back:

```
# su - root
# su - oracle
```

Alternatively, you could restart your system and log in as `oracle`.

8. Check your `tnsnames.ora` file.

Check your `tnsnames.ora` file to make sure it contains the correct information, as follows:

```
SX = ECX35
(DESCRIPTION =
(AADDRESS = PROTOCOL = TCP)(Host=bobo)(Port=1521)
(CONNECT_DATA = (SID = ECX35)
```

9. Connect to the database from the UNIX commandline.

```
# sqlplus ECX35/ECX35@your_connect_string
```

If this test fails, skip to Step 11.

10. Repeat the test from inside SQL*Plus:

```
SQL> connect ECX35/ECX35@your_connect_string
SQL> exit
```

11. Correct any connectivity problems.

If the test at either Step 9 or Step 10 failed, check the `tnsnames.ora` and `listener.ora` file to validate the settings, such as hostname and SID.

After making any necessary changes, go back to Step 9 above.

If you have successfully connected to the database using SQL*Plus, you will be able to connect during the ECXpert installation. If you cannot connect to the database using this method, you definitely will not be able to connect during the ECXpert installation.

For additional Oracle troubleshooting tips, refer to the *iPlanet ECXpert Operations Reference Manual*.

Installing ECXpert

This chapter describes how to use the iPlanet ECXpert Installer to install ECXpert.

The following topics are discussed in this section:

- Overview on page 44
- Setting Up Required Environment Variables on page 44
- Complete the Configuration Worksheet on page 46
- Accessing the ECXpert Distribution Media on page 50
- Starting the ECXpert Installer on page 51
- Running the ECXpert Installer on page 55
- Starting the ECXpert Administration Server on page 70

Overview

After you have installed Oracle and dependent software, and created the ECXpert Administrator account, described on page 27, you can install ECXpert. This chapter provides detailed instructions on how to install ECXpert.

Refer to the Configuration Worksheet on page 46 as you perform the steps in this chapter.

All the instructions in this manual are written for a new install of ECXpert. It is assumed ECXpert has never been installed on the target system or you have deleted all files and directories from any previous installation.

Setting Up Required Environment Variables

Parts of the installation process, as well as the routine operation of the ECXpert system, require the `$NSBASE` and `$BDGHOME` environment variables be properly set.

1. Change to the ECXpert Administrator user. For example:

```
# su - actraadm
```

2. Determine the environment file to edit.

```
# echo $SHELL
```

The output of this command determines which environment file you must edit:

Output	Shell Being Used	Environment File
/sbin/sh	Bourne	.profile
/sbin/csh	C	.cshrc
/sbin/ksh	Korn	.profile or .kshrc

3. Edit the definition of `$NSBASE` into the shell startup file.

NOTE For additional information, refer to the ECXpert Configuration Worksheet item “1. Install Directory:” on page 47.

Open the appropriate startup file in a text editor (e.g., *vi*) and edit it according to the following instructions:

- m If you are using the C shell, add the following line:

```
# setenv NSBASE your_NSBASE_path
```

where *your_NSBASE_path* is the path to the directory where you will install the ECXpert software.

- m If you are using the Bourne or Korn shell, add the following line:

```
# set NSBASE=your_NSBASE_path
```

where *your_NSBASE_path* is the path to the directory where you will install the ECXpert software.

- m Edit the definition of *\$BDGHOME* into the shell startup file.

according to the following instructions:

- m If you are using the C shell, add the following line:

```
# setenv BDGHOME $NSBASE/NS-apps
```

where *\$NSBASE* is the path you set in Step 3 as your *\$NSBASE* environment variable.

- m If you are using the Bourne or Korn shell, add the following line:

```
# set NSBASE=$NSBASE/NS-apps
```

where *\$NSBASE* is the path you set in Step 3 as your *\$NSBASE* environment variable.

4. Save the file and exit the text editor.
5. Enable the *\$NSBASE* and *\$BDGHOME* environment variables.

Adding *\$NSBASE* and *\$BDGHOME* to the environment file for the ECXpert Administrator user ensures that they are enabled every time the ECXpert Administrator user logs in. You can enable *\$NSBASE* and *\$BDGHOME* now by switching to another user and then switching back. For example:

```
# su - root
# su - actraadm
```

Alternatively, you could restart your system and log in as the ECXpert Administrator user.

Complete the Configuration Worksheet

During the ECXpert installation, you will be prompted to supply certain information to the ECXpert installer. Fill out the Configuration Worksheet in order to have the values easily accessible when prompted during the ECXpert installation process.

While in most cases you can use default configuration values provided by the iPlanet ECXpert Installer, there are some settings you must provide.

Important. Hints for how to find the information you need to fill out this worksheet appear below each numbered item. However, if you have difficulty determining the values for the items listed on the Configuration Worksheet, consult your operating system documentation, your Oracle documentation, or your System Administrator.

Figure 2-1 Configuration Worksheet

ECXpert Configuration Information

Use the values in items 1 and 2 below to complete **ECXpert Installation Commandline Tasks**. For details, see “Accessing the ECXpert Distribution Media” on page 50.

1. Install Directory:

Enter the full pathname for *\$NSBASE* where *\$NSBASE* is the environment variable you set up as the complete path to where you will install ECXpert. See “Setting Up Required Environment Variables” on page 44 for instructions on setting up the *\$NSBASE* environment variable.

Example: /disk1

2. Temporary installation port #:

Enter the temporary installation port number. **Do not use port 80.** This can be any available port except 80, which is the permanent port number.

To see what port numbers are already in use, enter the following command:

```
# netstat -an | grep -i 'listen'
```

Port numbers currently in use are listed in the first column of output from this command (preceded by “*.”), as shown in the following 5-line sample:

Choose a port number that does not appear on the list that appears when you enter the *netstat* command.

Use the values in items 3 and 4 below to complete ECXpert Installation

STEP TWO. For a picture of what the screen looks like at this point, see Figure 2-3 on page 56.

3. User ID:

If you used *actraadm* as your ECXpert Administrator userid, the User ID might be 1120. To determine the User ID for the ECXpert administrator user (typically *actraadm*), log in as the ECXpert administrator user and use the *id* command. You may alternately type the command:

```
# cat /etc/passwd
```

to view the contents of the */etc/passwd* file. Look for a line beginning with the ECXpert Administrator userid. Counting the ECXpert Administrator userid as the first value, the User ID is the third colon-separated value from the left.

Example: *actraadm:x:1120:500::/export/home/actraadm:/bin/csh*

See “Creating the ECXpert Administrator Account” on page 27 for instructions on setting up the ECXpert Administrator user.

4. Group ID:

If you used **actraadm** as your ECXpert Administrator userid and **actra** as your ECXpert Administrator group, the Group ID might be 500. To determine the Group ID for the ECXpert administrator group (typically **actra**), log in as the ECXpert administrator user and use the **id** command.

You may alternately type the command:

```
# cat /etc/group
```

to view the contents of the */etc/group* file. Look for a line beginning with the ECXpert Administrator group name. Counting the ECXpert Administrator group name as the first value, the Group ID is the third colon-separated value from the left.

Example: *actra: :500:actraadm*

See “Creating the ECXpert Administrator Account” on page 27 for instructions on setting up the ECXpert Administrator user.

Oracle Configuration Information

Use the values in items 5-14 below to complete **ECXpert Installation Step Four**. For a picture of what the screen looks like at this point, see Figure 2-8 on page 62.

5. ORACLE HOME:

Enter the directory that contains the Oracle software. This is the \$ORACLE_HOME pathname. The OFA-recommended value is:

\$ORACLE_BASE/product/ release

Example:

6. ORACLE SID:

Enter the Oracle *SID*, which is the name of the Oracle Server instance. If you do not know what this value is, see your \$ORACLE_HOME/dbs/init *SID* .ora file.

Note: If you are installing Oracle as a remote client, set this value to the *SID* on the server machine.

Example: ECX

7. NLS Language (NLS_LANG):

The NLS_LANG character set is named according to the following convention:

language _ territory . number

To query the database character set, you need the privileges to see the table `V$NLS_PARAMETERS`. Typically, only system/manager can see this table.

- Use the following SQL statement to check the character set language:

```
select * from V$NLS_PARAMETERS where parameter = 'NLS_LANGUAGE';
```

- Use the following SQL statement to check the character set territory:

```
select * from V$NLS_PARAMETERS where parameter = 'NLS_TERRITORY';
```

- Use the following SQL statement to check the character set number:

```
select * from V$NLS_PARAMETERS where parameter = 'NLS_CHARACTERSET';
```

Example: american_america.US7ASCII

Note: The character set name is case sensitive.

8. SQL*Net TNS Alias:

Enter the SQL*Net TNS Alias. You can find this value in your `tnsnames.ora` file. This value is also known as the “SQL*Net Connect String.”

9. Database User:

Enter the name of the user who owns the ECXpert tables in the database—ECX35. This is the user you set up as part of “Creating the Oracle User ECX35” on page 37.

10. Database Password:

Enter the password of the user who owns the ECXpert tables in the database. This is the user you set up as part of “Creating the Oracle User ECX35” on page 37.

Example: ECX35

11. Mail Host:

Enter your mail host name. If you are using sendmail, this is the name of the machine you are receiving mail on. If you are using POP3, this is the name of the SMTP server.

Example: myhost.myserver.com

12. Mail Spool File (sendmail only):

Enter the path to your mail directory. Note that this value is not required if you are using POP3. This value is typically `/var/mail/ username`, but it does not have to be.

Example: `/var/mail/actraadm`

13. POP3 User:

Enter the userid for the POP3 user. Note that this value is not required if you are using sendmail.

14. POP3 Password:

Enter password for the POP3 user. Note that this value is not required if you are using sendmail.

Notes:

Accessing the ECXpert Distribution Media

The ECXpert version 3.5 software is distributed on one CD-ROM. When you insert a CD-ROM into the CD-ROM drive, it is usually automatically recognized and mounted onto the file system. If, for some reason, the automatic mounting utility is not functioning, manual mounting instructions follow.

Mounting the CD-ROM Manually

In the following instructions, the mount point is referred to as */cdrom*. If your mount point has a different name, substitute that name for all references to */cdrom*.

To mount your CD-ROM manually, perform the following steps:

1. Log in as the `root` user:

```
# su root
Password: root_password
#
```

2. Create the *mount_point* directory for mounting the CD-ROM:

```
# mkdir /cdrom
```

3. Mount the CD-ROM to the mount point:

```
# mount -r -F hfsfs device_name /cdrom
```

You must have `root` user privileges to mount or unmount the CD-ROM.

Be sure to unmount the CD-ROM before removing it from the drive.

Starting the ECXpert Installer

1. You should already be logged in as `root`.

CAUTION Do *not* perform the command `$ su - root` because this wipes out the database connectivity test settings described in “Setting Up and Testing Database Connectivity” on page 38.

2. If you are installing ECXpert remotely, from a C shell window, set your remote host to display on your local host.

On the local host, enter:

```
# setenv DISPLAY hostname:0
```

where *hostname* is the name of the machine on which you are physically located.

On the remote host, enter:

CAUTION If you have a iPlanet Enterprise server or other HTTP server already running it may interfere with the ECXpert installer. To ensure that the ECXpert installer can successfully complete its tasks, *shut down all HTTPD server processes*.

3. Make sure you have a valid hostname and domain name.

To verify this, enter:

```
# /bin/hostname
# /bin/domainname
```

Consult your system administrator if either your hostname or domain name does not have a valid value.

4. Change to the `/cdrom` directory.

```
# cd /cdrom/ECXpert
```

If this command doesn't work, enter the following command:

```
# cd /cdrom/cdrom0
```

5. Start the ECXpert Installer by running the `setup_exe` executable.

```
# ./setup_exe
```

NOTE Do **not** run `setup_exe` as a background process. This program requires you to enter information to configure ECXpert.

The program starts up and immediately displays the following licensing agreement:

```
BY INSTALLING THIS SOFTWARE YOU ARE CONSENTING TO BE BOUND BY
AND ARE BECOMING A PARTY TO THE AGREEMENT FOUND IN THE
LICENSE.TXT FILE. IF YOU DO NOT AGREE TO ALL OF THE TERMS
OF THIS AGREEMENT, PLEASE DO NOT INSTALL OR USE THIS SOFTWARE.

Do you agree to the license terms? [no]:
```

Type `y` and press Enter to accept the licensing terms, or type `n` and press Enter, or just press Enter, to reject them.

If you type `n` and press Enter, or just press Enter, the program aborts, returning you to the command prompt.

If you type `y` and press Enter, the program immediately prompts you for a path to the installation directory.

```
*****
*      Netscape ECXpert 3.5 Installation      *
*****

Please enter the fully qualified path of the directory where
you would like to install ECXpert.

Enter quit to end.

Directory :
```

6. Enter the install directory (*\$NSBASE* value).

Enter the full path of your installation directory from the Configuration Worksheet and, when prompted, type **y** to confirm. If the directory you enter doesn't already exist, the program creates it for you.

After you supply the required information, the Installer:

- m builds the `/NS-apps/ECXpert` directory structure
- m configures *\$NSBASE*

NOTE Whatever you entered for the `Directory :` prompt is used to define the *\$NSBASE* environment variable.

Keep this definition handy so that you can supply it in later installation steps where the *\$NSBASE* environment variable definition is not available.

7. Enter the ECXpert temporary installation port number. This HTTP port number is from item 2 of your Configuration Worksheet on page 46. It will be replaced by the one used by the iPlanet Web Server. An example port number not in use might be: 11111. When prompted, enter **y** to confirm.

Please enter the port that you want the installation http server to listen on.

NOTE: It is recommended that you DO NOT USE port 80, it is generally the default port for most http servers.

Enter quit to end.

Port :

The files are unpacked into the destination directory you specified, and the Installer runs internal processes that:

- m configure a temporary version of the HTTP server (removed automatically by installer upon completion of installation)
- m start the temporary HTTP server
- m start the Netscape Navigator web browser and display step One of the installation, as shown in Figure 2-2.

NOTE The above processes take several minutes.

NOTE If you have an HTTP server running that uses the same port specified above, the installation fails.

Shutting Down Any Running HTTP Servers

Before proceeding to running the ECXpert Installer, follow these steps to shut down any running HTTP servers:

1. Exit the browser.
2. Shut down all HTTP server processes.
3. Make sure no other processes are using the port you selected:

```
# netstat -an | grep -i 'listen'
```
4. Restart the installation per Step 5 on page 52.

Running the ECXpert Installer

The rest of the installation process is browser-driven. Enter the information that you recorded in the Configuration Worksheet on page 46 when you are prompted to do so in the screens that follow.

Information in each Installer screen tells you the prerequisites, if any, for that step and what each step in the process is doing.

CAUTION Before proceeding, make sure that you have filled in your Configuration Worksheet *completely* and *accurately*. Refer to “Complete the Configuration Worksheet” on page 46. Then enter the information from that worksheet into the ECXpert Installer screens very carefully.

NOTE The ECXpert Installer does not provide Back or Next buttons. If you wish to return to navigate between screens, you must use your browser’s Back and Next buttons. On any ECXpert Installer screen, click the appropriate button at the bottom of the page to continue on to the next step.

Figure 2-2 ECXpert Installer Step One



1. Click Install ECXpert to begin the installation. Step Two of the Installation will be displayed as shown in Figure e2-3.

Figure 2-3 ECXpert Installer Step Two

iPlanet
ECXpert 3.5

ECXpert Installation

STEP TWO

The default Operating System User ID will be 'actraadm'.
If you want to install under a different account, enter the User ID/Group ID below:

User ID

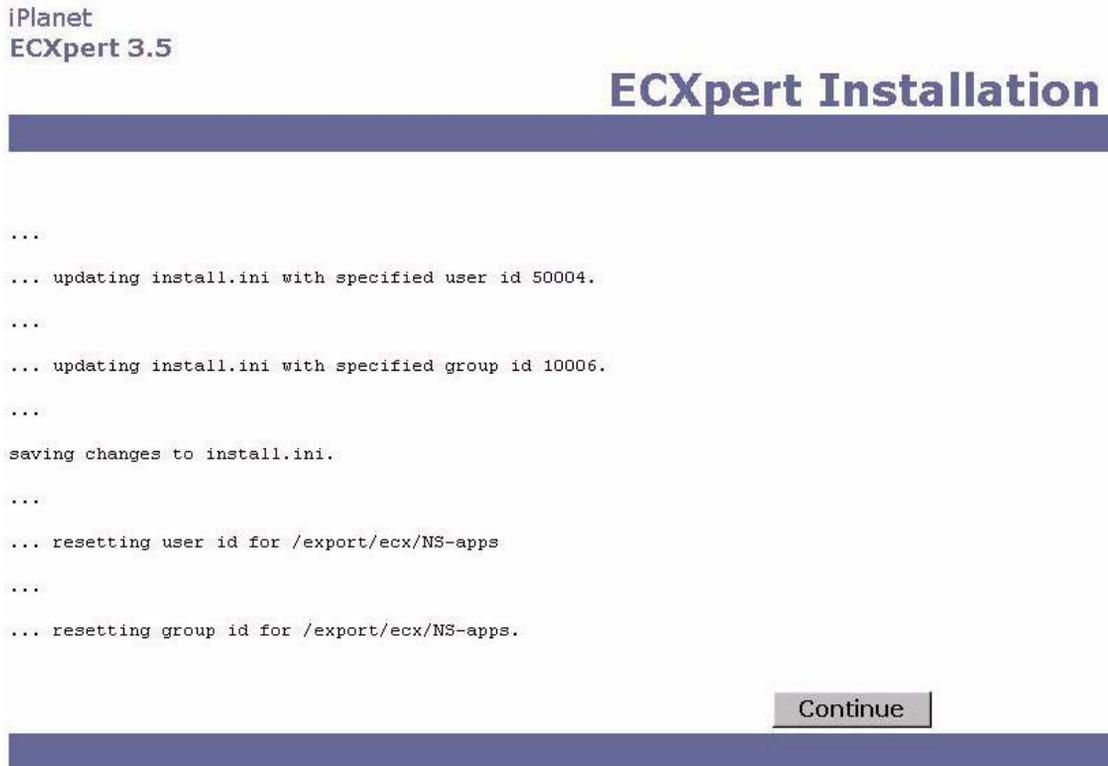
Group ID

2. Enter the User ID and Group ID for the ECXpert Administrator user (typically **actraadm**). The screen provided shows the use of an alternate User and Group ID with both expressed as numeric values.

This is the user you created in “Creating the ECXpert Administrator Account” on page 27. The ECXpert administrator User ID and Group ID are the values you recorded in the Configuration Worksheet, items “3. User ID:” on page 47 and “4. Group ID:” on page 47

When you have entered the User ID and Group ID values, click Continue.

NOTE If the default groupId created was not actra and the default userId created was not actraadm, verify that the ids used are in the local /etc/passwd and /etc/group files to avoid using a known NIS userId and groupId.

Figure 2-4 Updating/Resetting Messages for UserId/GroupId

ECXpert will modify the configuration files to update the UserID and GroupID values. As the process proceeds, the Installer displays progress status messages, as shown in Figure 2-4. When the process has completed, click Continue at the bottom of the screen to go to step 3 shown in Figure 2-5.

Figure 2-5 ECXpert Installer Step Three

iPlanet
ECXpert 3.5

ECXpert Installation

STEP THREE

Settings required to configure ECXpert's Partner Agent Server: Port # Should > 1024

PAS Admin Port	<input type="text" value="10020"/>
PAS Agentd Port	<input type="text" value="10025"/>
PAS FTPD Port	<input type="text" value="10030"/>
PAS HTTPD Port	<input type="text" value="10035"/>
PAS HTTPSD Port	<input type="text" value="10040"/>

3. Enter the ECXpert Partner Agent Server port information as shown in Figure 2-5. As shown, the port number should be greater than 1024. Press the Continue button when the message postings have finished.

Figure 2-6 Post Step Changing Permissions Messages

```
... changing permissions for file /export/ecx/NS-apps/paserver/bin/subject
...
... changing permissions for file /export/ecx/NS-apps/paserver/bin/x509text
...
... changing permissions for file /export/ecx/NS-apps/ECXpert/bin/ecxpa
...
... changing permissions for file /export/ecx/NS-apps/ECXpert/config/ecx.ini
...
... changing permissions for file /export/ecx/NS-apps/ECXpert/dbadmin/oracle/ora_createdb
```

Continue

A series of messages will be displayed. Near the end of the message list will be numerous 'changing permissions' messages, as shown in Figure e2-6.

Figure 2-7 ECXpert Installer Step Four

iPlanet
ECXpert 3.5

ECXpert Installation

STEP FOUR

Database parameters required for ECXpert

Oracle Home	<input type="text" value="/export/oracle/8.1.6"/>
Oracle SID	<input type="text" value="ECX"/>
NLS Language (NLS_LANG)	<input type="text" value="american_america.US7&ASCII"/>
SQL*Net TNS Alias	<input type="text" value="ECX"/>
Database User	<input type="text" value="ECX"/>
Database Password	<input type="text" value="***"/>
Confirm Database Password	<input type="text" value="***"/>

Settings required to configure ECXpert's use of a Mail Server

<input checked="" type="radio"/> SENDMAIL	Mail Host	<input type="text" value="/var/mail/ecxadmin"/>
<input type="radio"/> POP3	Mail Spool File	<input type="text"/>
	POP3 User	<input type="text"/>
	POP3 Password	<input type="text"/>
	Confirm POP3 Password	<input type="text"/>

4. As shown in Figur e2-7, Step Four of the ECXpert installation requires entries for your Oracle database and Mail Server parameter settings.

These are the values you recorded in Configuration Worksheet items “5. ORACLE HOME:” on page 48 through “14. POP3 Password:” on page 49. These values may be the same as shown above.

When using SendMail instead of POP3, the Mail Server entry is required. The Mail Spool file will default to the Mail Server directory if it is not specified. However, make sure that the ECXpert Administrative user (actraadm) is part of the “mail” group, so that this user can send and receive mail. See the following note.

NOTE If you plan to use Sendmail, use the touch command to make sure the mail file can be read/written to.

For example:

```
# touch /var/mail/actraadm
```

NOTE The value you enter in the Database Server field should be the same value you specified in the “Setting Up and Testing Database Connectivity” on page 38.

Press Continue when finished.

Figure 2-8 ECXpert Installer Step Five

iPlanet
ECXpert 3.5

ECXpert Installation

STEP FIVE

This step executes ECXpert SQL database scripts to drop existing database tables. It may be skipped if it is not needed.

Below are the tasks that will be performed in this step of the installation.

- Run ECXpert database SQL scripts to drop existing tables.

Continue

Skip

5. As shown in Figure e2-8, Step Five automatically runs the SQL scripts that drop the database schema for the ECXpert database.

If this is the first time you are configuring the database, click Skip to skip this step and go on to Step Six on page 64. If you execute this step before you have configured the database, you get error messages because the SQL script attempts to drop tables that do not exist. These error messages do not impact your installation and may be ignored.

CAUTION If you are performing a re-install of ECXpert, stop here and proceed to the appropriate continuation point indicated below.
If you Click Continue, your existing database will be overwritten.

Figure 2-9 ECXpert Database Tables Dropped and Related MessagesiPlanet
ECXpert 3.5

ECXpert Installation

STEP FIVE

This step executes ECXpert SQL database scripts to drop existing database tables. It may be skipped if it is not needed.

Below are the tasks that will be performed in this step of the installation.

- Run ECXpert database SQL scripts to drop existing tables.

As the process runs, the Installer displays progress status messages, as shown in Figure 2-9. When the process has completed, click Continue to go to the next step.

WARNING: If you are *overwriting* an earlier installation of ECXpert (*not* preserving your ECXpert database), you may get the following error when dropping the Certificates table:

```
ORA-02266: unique/primary keys in table reference by enabled
foreign key
```

To proceed, complete the following steps either before or after Step Five:

- m In an xterm window, log in to `svrmgr1` as `system/manager`.
- m Enter the following command sequence to drop and re-add user ECX35“:

```
SVRMGRL> drop user ECX35 cascade

SVRMGRL> create user ECX35 identified by ECX35
default tablespace USERS temporary tablespace TEMP;

SVRMGRL> grant connect, resource to ECX35;
```

NOTE The above commands assume you created Oracle user ECX35 exactly as specified in Step 5 on page 52. If you made any modifications to the commands in Step 5 on page 52, you must make the corresponding modifications to the commands above.

- m Resume the ECXpert 3.5 installation where you left off (either Step Five or Step Six).

Figure 2-10 ECXpert Installer Step Six

iPlanet
ECXpert 3.5

ECXpert Installation

STEP SIX

This step executes ECXpert SQL database scripts to create and load the ECXpert database tables. It may be skipped if it is not needed. The Encryption and Insertion will be performed even if the Skip option is chosen.

Below are the tasks that will be performed in this step of the installation.

- Run ECXpert database SQL scripts to create and load the tables.
- Encrypt and Insert the default Member Passwords into the ECXpert Members Table.

Continue

Skip

6. As shown in Figure 2-10, Step Six creates and loads a new ECXpert Database. This step automatically runs the SQL scripts that create the database schema for the ECXpert database in the Oracle RDBMS, and encrypts and inserts Member passwords.

CAUTION If you are performing a re-install of ECXpert, make sure you have read the instructions at the appropriate continuation point indicated below. You should be clicking **Skip** on this step. **If you Click Continue your existing database will be overwritten.**

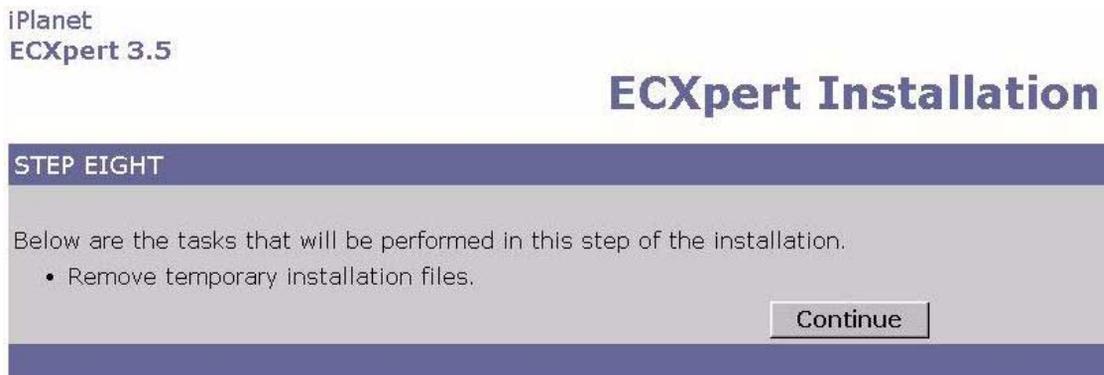
The Installer initializes VeriSign certificate files. If you want to use certificates from other certificate authorities (CAs), add them in manually after installation.

Figure 2-13 ECXpert Installer Step Seven Messages

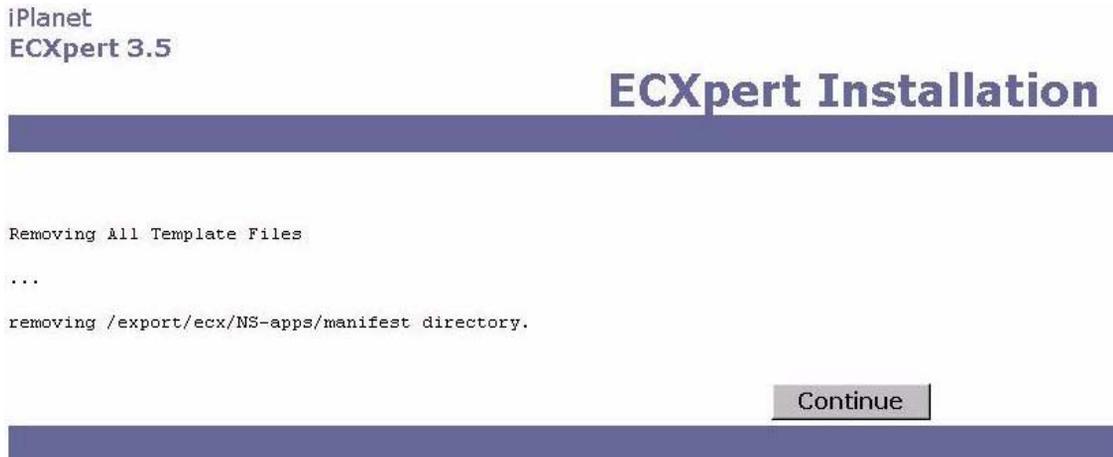


As the process runs, the Installer displays process status messages, as shown in Figure 2-13. When the process has completed, click Continue to go to the next step.

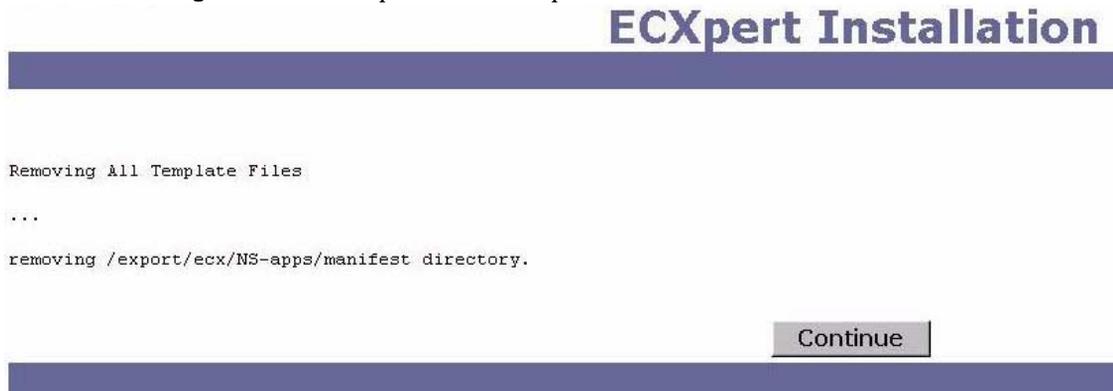
Figure 2-14 ECXpert Installer Step Eight



8. As shown in Figure 2-14, Step Eight cleans up the files from the temporary installation directory. Click Continue to perform this process.

Figure 2-15 ECXpert Installer Step Eight Message

After the Installer completes its cleanup process, a message is displayed regarding the removal of all Template Files, as shown in Figur e2-15. Press Continue to advance to the next step.

Figure 2-16 ECXpert Installer Step Nine

9. As shown in Figur e2-16, Step Nine finishes and cleans up the ECXpert 3.5 installation. Click Continue to perform this process.

Figure 2-17 ECXpert Installer Step Nine Messages

iPlanet
ECXpert 3.5

ECXpert Installation

```

...
ECXpert INSTALLATION IS COMPLETE.
...
Please add the following lines to your Netscape Enterprise Server's obj.conf:

Right above <Object name=default>:
Init fn="init-cgi" LD_LIBRARY_PATH="/export/ecx/NS-apps/ECXpert/lib" BDGHOME="/export/ecx/NS-apps/ECXpert" timeout="600"

Right below NameTrans fn=NSServletNameTrans name=servlet:
NameTrans fn="pfx2dir" from="/servlet" dir="/export/ecx/NS-apps/ECXpert/servlet" name="ServletByExt"
NameTrans fn="pfx2dir" from="/images" dir="/export/ecx/NS-apps/ECXpert/UI/html/images"
NameTrans fn="pfx2dir" from="/bin" dir="/export/ecx/NS-apps/ECXpert/cgi-bin" name="cgi"
NameTrans fn="document-root" root="/export/ecx/NS-apps/ECXpert/UI/html"

NOTE: Make sure that you delete or comment out any other lines that start with NameTrans fn="document-root",
and also any line starting with NameTrans fn="pfx2dir" from="servlet".

...
Please also add the following lines to your Netscape Ent. Server's jvm12.conf:

At the end of jvm12.conf, add:
BDGHOME=/export/ecx/NS-apps/ECXpert

NOTE: You can reference these modifications in /export/ecx/NS-apps/ECXpert/config/obj.mod

...
stopping installation http server.

```

The ECXpert Installer displays the message **INSTALLATION IS COMPLETE**, as shown in Figure 2-17. Also displayed are instructions to modify two configuration files: `obj.conf`, for the iPlanet Web Server (Netscape Enterprise Server) and the `jvm12.conf`, for the Web Server's version 1.2 of Java Virtual Machine. In order for these changes to take effect, you will need to shut down and restart the Enterprise Server. See step 12 below to start the Enterprise Server. See the section "Applying `obj.conf` File Changes" on page 70 to apply the configuration changes to the Enterprise Server.

NOTE The `bdghome/config/obj.mod` file has same values as shown in Figure 2-17; you can look at this file as well to modify the `obj.conf` file. Also, the directory paths shown for the servlets, `NameTrans fn....` may not be representative of the path for your installation implementation.

The information on this screen is written to a file for you to use in Ste p12 to modify the Netscape Enterprise Server's *obj.conf* file.

10. Exit the browser.

11. Eject the installation disk.

Otherwise, you may have been in the `/cdrom` or `/cdrom0` directory when you issued the `su` command and the previous terminal session is still using the CD-ROM's directory as its current working directory. If so, issue the `exit` command to leave the shell for the new userid and go back to the previous userid's shell.

If you are still unable to eject the ECXpert 3.5 CD from the CD-ROM drive, you may need to have your Unix System Administrator stop and restart the Volume Manager.

12. Start the HTTP server.

After you have ejected the ECXpert 3.5 CD from the CD-ROM drive, start the HTTP server with the following command sequence:

```
su root
cd $NSBASE/ https- machine_name
./ start
```

CAUTION Do *NOT* enter the first command above as

```
su - root
```

Using a hyphen (-) wipes out environment settings that are needed below.

Applying *obj.conf* File Changes

NOTE If you plan to enable support for AIAG E-5 2000 communications protocol, you must include the noted change to the *obj.conf* file for the `NameTransfn =` statement, as shown in Figure 2-17 on page 68. The need for this statement is also described in the `Configuring the Servlets` section of Appendix E :AIAG Administration in the Site Administrator’s Handbook.

1. Start your web browser and go to the following URL.

`http://machine_name:port#/admin-serv/bin/index`

2. Enter the user ID and password.

Enter a user ID and password for a Netscape Enterprise Server user with administrative privileges.

3. Apply any changes you made to the *obj.conf* file.

A message window appears telling you that you must apply your changes. Click OK.

In the Netscape Enterprise Server bar at the top of the screen, click Apply. The Apply Changes screen appears.

Click Load Configuration Files for the iPlanet Web Server (Netscape Enterprise Server).

If the changes are successfully applied, a “success” message window appears. Click OK to continue.

4. Exit your web browser.

Starting the ECXpert Administration Server

Follow the steps below to start the ECXpert Administration Server.

1. Start up the browser.

Make sure you are still user root, then enter the following commands:

```
$ cd $NSBASE/NS-apps/navigator
$ ./netscape &
```

NOTE The `$DISPLAY` environment variable must be set at this point in order for the browser to run. For more information on setting this environment variable, refer to “Accessing the ECXpert Distribution Media” on page 50, step 2.

2. Display the ECXpert Administration home page.

Enter the URL:

`http://hostname:port#`

NOTE If you used port 80 when you installed ECXpert, you do not need to enter a port number.

Figure 2-18 iPlanet ECXpert main menu



iPlanet
ECXpert 3.5

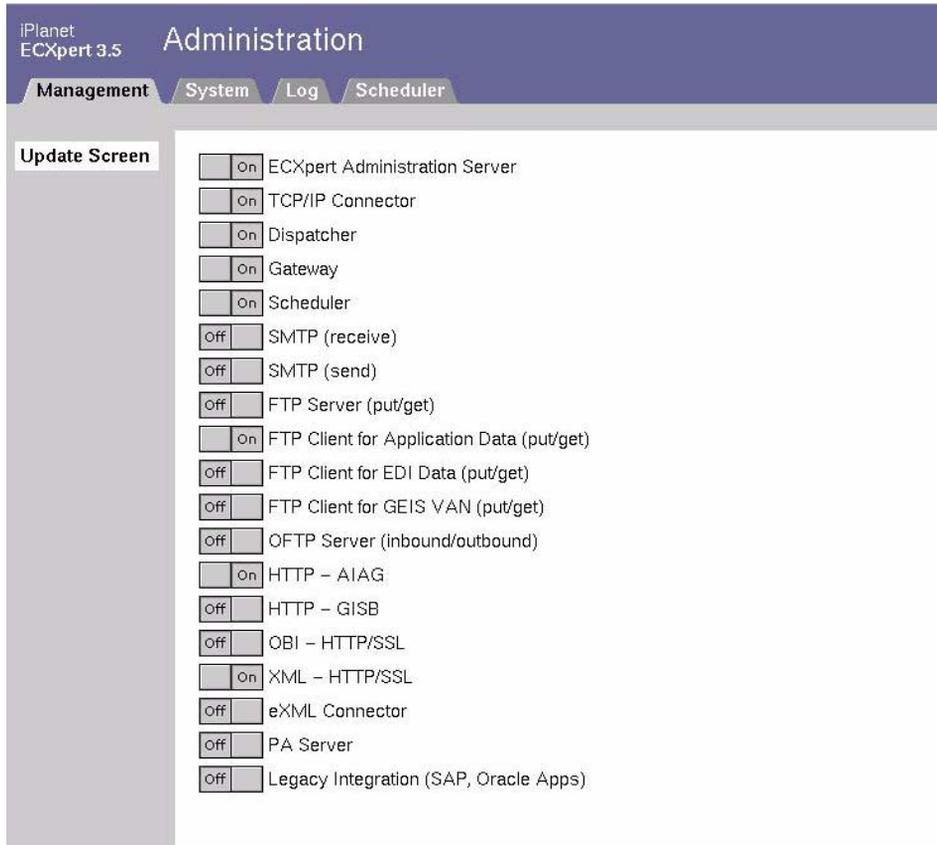
- **Admin** User interface for controlling the configuration and operation of the ECXpert system.
- **Support** User interface for member administration and activity tracking within the ECXpert system.
- **Utilities** Utilities provided with the ECXpert system.

The ECXpert Main Screen appears, as shown in Figure 2-18.

3. Save the URL to the ECXpert Main Menu as a bookmark.
4. Start the ECXpert Administration Server.
Click Admin in the ECXpert Main Menu.

NOTE ECXpert 3.5 Administration Server is not pre-configured with password protection. Use the NES Administration interface to enable this feature, if desired.

Figure 2-19 ECXpert Management screen main menu



The Management screen appears, as shown in Figure 2-19 when the ECXpert Administration Server is On. If your screen shows the ECXpert Administration Server Off, click the On portion of the button's toggle to turn on the server. Then click the '....Updating....' prompt to the left of the On button to refresh the screen.

Click the ECXpert Administration Server toggle switch to the On position to start the server.

5. Continue to the next chapter, Postinstallation Tasks, to test your installation and additional post-installation tasks.

Postinstallation Tasks

This chapter explains how to test your ECXpert installation to be sure it worked, and helps you decide what your next step should be.

The following topics are discussed in this section:

- Testing Your ECXpert Installation
- What's Next?
 - m Enabling Support for AIAG E-5 2000
 - m Enabling Support for Expanded Data Fields
 - m Updating Stored Procedures for Billing Code addition

Testing Your ECXpert Installation

After you have installed ECXpert, it is a good idea to submit a test document to make sure you have installed and configured Oracle and ECXpert correctly.

Follow the steps below to submit a test document using the 810 document from the ECXpert demo data. For more information on the ECXpert demo, refer to Chapter 1, "Preinstallation Tasks."

1. Create a backup copy of the test document.

Enter the following commands:

```
# cd $NSBASE/NS-apps/ECXpert/maps
# cp Input_810.txt Input810.txt.bak
```

2. If you have not already done so, start up your web browser now.

You can be logged on as user `root`, `actraadm`, or your system user ID. Then, enter the following commands:

```
$ cd $NSBASE/NS-apps/navigator
$ ./netscape
```

NOTE The `$DISPLAY` environment variable must be set correctly or the browser does not run.

3. If you have not already done so, display the ECXpert Administration home page now.

Open the bookmark to the ECXpert Administration home page, or enter the URL:

```
http://hostname:port#
```

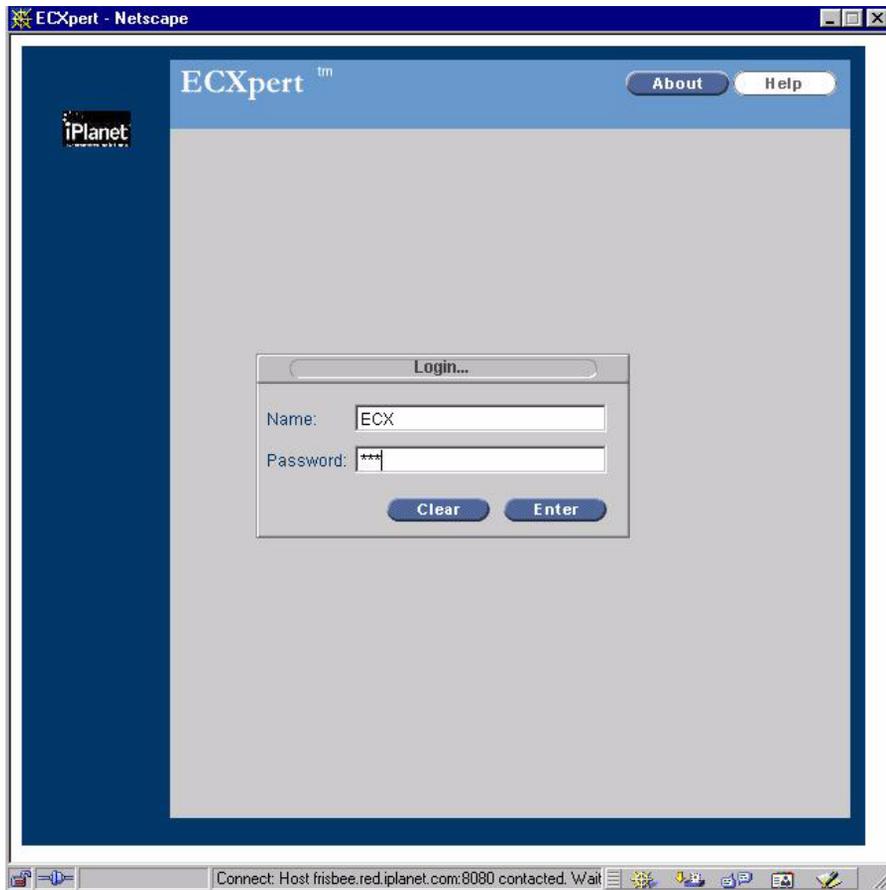
The ECXpert main menu screen is displayed as shown in Figure e3-1.

Figure 3-1 iPlanet ECXpert Main Menu

The logo for iPlanet ECXpert 3.5, featuring the text "iPlanet" above "ECXpert 3.5" in a white serif font on a dark blue rectangular background.

- **Admin** User interface for controlling the configuration and operation of the ECXpert system.
- **Support** User interface for member administration and activity tracking within the ECXpert system.
- **Utilities** Utilities provided with the ECXpert system.

4. Click the Support link to open the Product Administrative Interface Login window as shown in Figure 3-2.

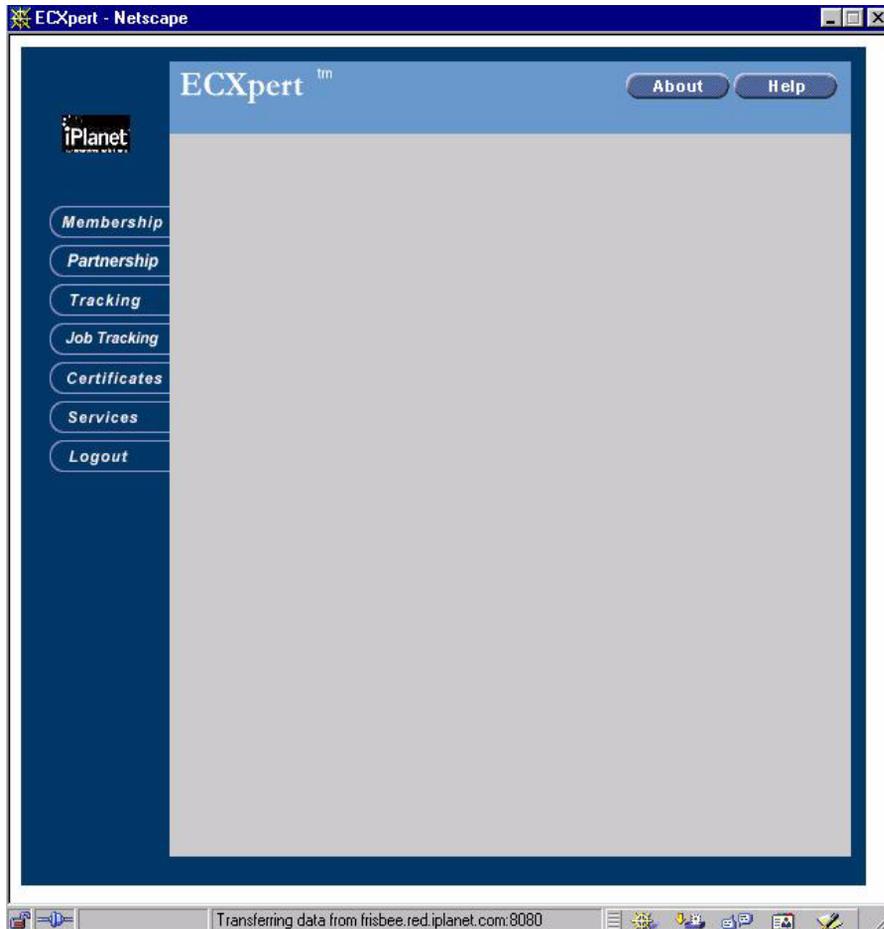
Figure 3-2 Product Administrative Interface Login Window

5. Enter the default user name/password: ECX/ECX.

NOTE If you are using a browser on Windows NT or Windows 95 to interact with ECXpert, the user interface may not display with the correct colors if your video display settings are at 256 colors.

To correct this problem, set your video display to use more colors (for example, High Color - 16 bit, True Color - 24 bit).I

Figure 3-3 ECXpert Support User Interface Main Screen



When you have entered your login information, click Enter. The ECXpert Support Administrative screen is displayed as shown in Figure 3-3.

Figure 3-4 ECXpert Partnership Administration Screen

6. Retrieve the demo trading partnership.

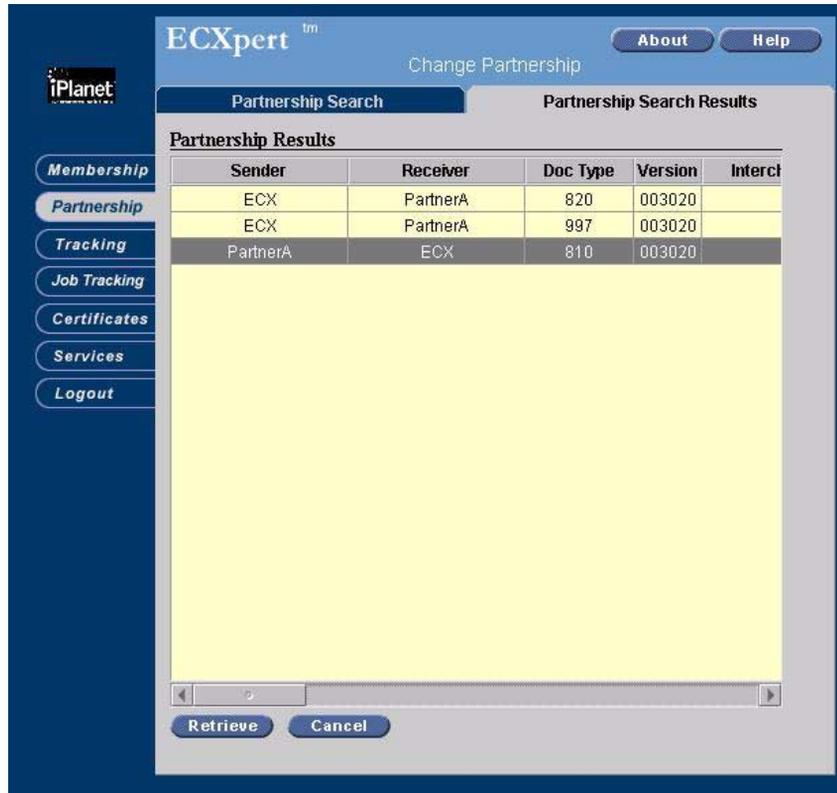
Click the Partnership tab. The Partnership Administration screen appears, as shown in Figure 3-4.

Figure 3-5 ECXpert Partnership Search Screen



Click Change. The Partnership Search screen appears, as shown in Figure e3-5.

Figure 3-6 Partnership Search Results Screen



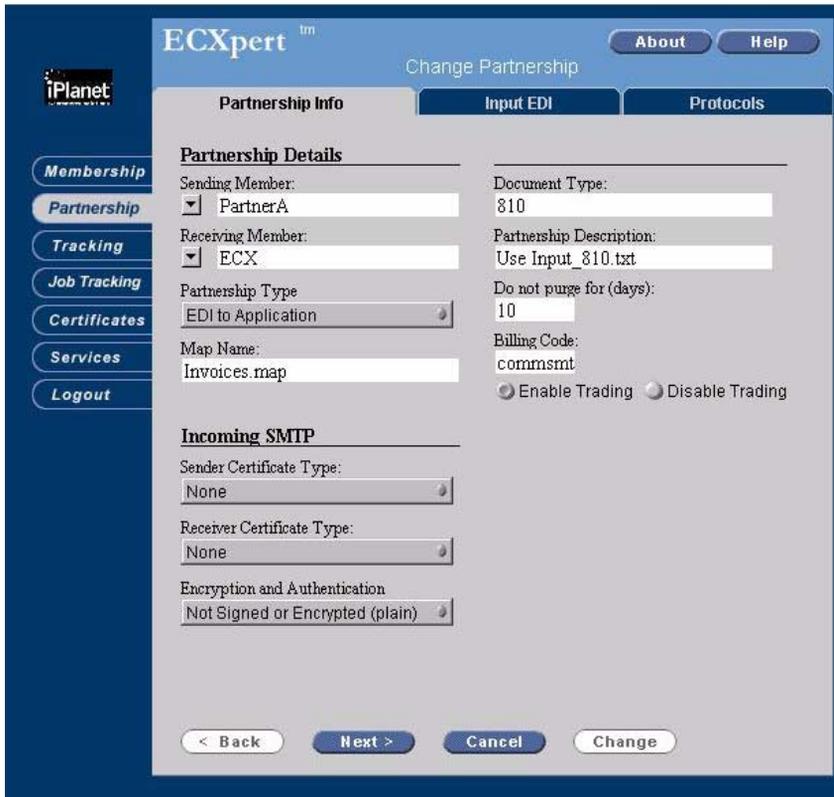
Click Search. The Partnership Results screen appears as shown in Figure 3-6.

All of the available partnerships appear in the Partnership Results screen. Select the following partnership:

- m Sender - PartnerA
- m Receiver - ECX
- m Doc Type - 810
- m Version - 003020

Then click Retrieve (or double-click the highlighted partnership).

Figure 3-7 ECXpert Demo Partnership Info Tab



After a short duration with the message 'Please Wait.....' displayed, the Partnership Info tab is displayed with the partnership details, as shown in Figure 3-7.

Figure 3-8 ECXpert Demo Partnership Outgoing Protocols Page

The screenshot shows the ECXpert web interface. The top navigation bar includes the ECXpert logo, the text 'Change Partnership', and 'About' and 'Help' buttons. A left sidebar contains navigation links: Membership, Partnership (selected), Tracking, Job Tracking, Certificates, Services, and Logout. The main content area has three tabs: Partnership Info, Input EDI, and Protocols (selected). Under the 'Protocols' tab, the 'Outgoing Protocol' section is visible. It contains a dropdown menu currently showing 'FTP'. Below this are several input fields: 'Pre-Communications Service' (set to '<NONE>'), 'Delivery Timing' (set to 'Immediate'), 'Host Name' and 'Port' (empty), 'User Name' and 'Account' (empty), 'Password' and 'Confirm Password' (empty), 'Outbound Transfer Mode' (set to 'BINARY'), and pairs of 'Outbound Dir'/'Outbound Pattern' and 'Inbound Dir'/'Inbound Pattern' (empty). At the bottom, there are four buttons: '< Back', 'Next >', 'Cancel', and 'Change'.

7. Click the Protocols Tab to display the Outgoing Protocol page, as shown in Figure 3-8. The default protocol you will see is SMTP.
8. Set up the demo trading partnership to use the FTP Protocol. From the Outgoing Protocol drop-down list, change the default value of SMTP and select FTP.

Enter the following values, shown in Table 3-1, for the other fields on this page:.

Table 3-1 Demo Partnership Protocol Values

Field Name	Field Description	Enter This Value
Outgoing Protocol	The protocol used to send the outgoing message	FTP
Pre-Communications Service	A custom service to invoke before using this protocol	No value
Delivery Timing	Specifies when messages should be delivered. <ul style="list-style-type: none"> • Immediate - all messages are sent as soon as they are ready to be sent. • Scheduled - messages are sent at the time(s) specified via the ECXpert Scheduler 	Immediate
Host Name	The name of the FTP server	<i>The name of your FTP server</i>
Port	The IR port number for the FTP server—typically 21	<i>The port number of your FTP server</i>
User Name	User Name for the member	<i>Your username</i>
Account	Account ID for the member	No value
Password	The password for the member's user number or account ID	<i>Your Password</i>
Confirm Password	The password for the member's user number or account ID, entered again for verification	<i>Your Password</i>
Outbound Transfer Mode	The transfer mode used when sending outgoing files	Binary
Outbound dir	The directory where ECXpert's ftp-local-application comm agent will ftp the final, bundled file.	\$NSBASE/NS-apps/ECXpert/dat a/output

Table 3-1 Demo Partnership Protocol Values (*Continued*)

Field Name	Field Description	Enter This Value
Outbound Pattern	The filename that will be used for the final, bundled file, not including the filename extension. This filename will be given an <i>A##</i> extension which will increment each time the Partnership is used to process a file. For example, if you use <i>invoice.data</i> as the outbound pattern, ECXpert will create: <i>invoice.data.A1</i> <i>invoice.data.A2</i> <i>invoice.data.A3</i> and so on	invoice.data
Inbound Dir	A fully qualified pathname for the directory from which ECX will retrieve inbound documents (ftp get)	<i>No value</i>
Inbound Pattern	A pattern (any set of characters) to search for in the Inbound directory. Files matching the pattern are retrieved into ECX; other files are left in the directory. If you leave the field blank, no files are retrieved. You can use any wild-card supported by FTP (like *, for example 'PO.*') to pick up multiple files	<i>No value</i>
Inbound File Type	The file type of inbound files. This must match the data type specified in the Service List.	<i>No value</i>

Figure 3-9 Completed Partnership Protocols tab

The screenshot displays the 'ECXpert' web interface for 'Change Partnership'. The 'Protocols' tab is active, showing the 'Outgoing Protocol' section. The form includes the following fields and values:

- Outgoing Protocol:** FTP
- Pre-Communications Service:** <NONE>
- Delivery Timing:** Immediate
- Host Name:** myhost
- Port:** 21
- User Name:** myuser
- Account:** myaccount
- Password:** [Redacted]
- Confirm Password:** [Redacted]
- Outbound Transfer Mode:** BINARY
- Outbound Dir:** \$NSBASE/N
- Outbound Pattern:** invoice.dat
- Inbound Dir:** [Redacted]
- Inbound Pattern:** [Redacted]
- Inbound File Type:** [Redacted]

Navigation buttons at the bottom include '< Back', 'Next >', 'Cancel', and 'Change'.

When you have finished filling in the Protocols tab, it should look similar to Figure 3-9 (with your values for host, port, and user name and account).

9. Click Change. On the verification window that appears, click Yes to verify the change. The change has been made when the Partnership Administration screen is displayed.

Figure 3-10 ECXpert Utilities Window

- [Document Submission Form](#)
- [Download ECXpert reports](#)
- [Verify Version of IFC installed in current Browser](#)

10. Submit the test document.

Go to the ECXpert Main Menu, and click the Utilities link.

The Utilities screen appears, as shown in Figure e3-10.

Figure 3-11 ECXpert Utilities Document Submission Screen

Submission Information

Sending Member

Password

Receiving Member

File Name

File Type

Click the Document Submission Form link. The Submission Information form appear, as shown in Figure 3-11.

Enter the following information in the Submission Information form:

Table 3-2 Submission Information

Field Name	Field Description	Enter this Value
Sending Member	The name of the member sending the file.	PartnerA
Password	The sending member's password. No value is needed if the sending member is trusted.	<i>No value</i>
Receiving Member	The name of the member receiving the file.	ECX
File Name	The fully qualified pathname for the file you wish to send.	\$NSBASE/NS-apps/ECXpert/maps/Input_810.txt

Table 3-2 Submission Information (*Continued*)

Field Name	Field Description	Enter this Value
File Type	The file type of the file you wish to send.	EDI

Figure 3-12 Completed Submission Information screen

**iPlanet
ECXpert 3.5**

Submission Information

Sending Member

Password

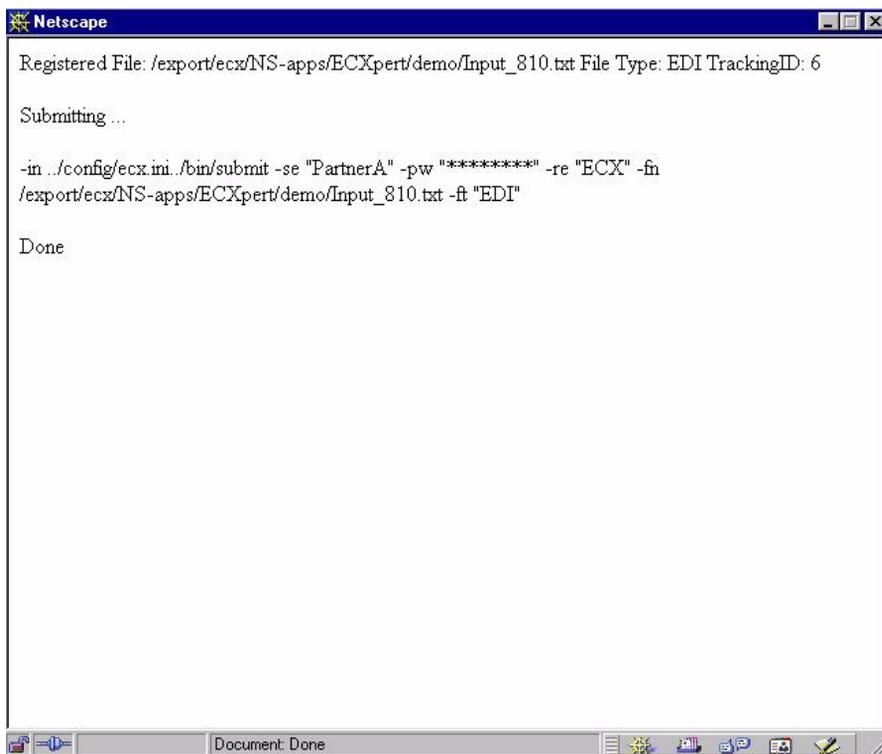
Receiving Member

File Name

File Type

When you have finished filling in the Submission Information form, it should look similar to that shown in Figure 3-12.

Figure 3-13 Completed Submission Information screen



Click **Submit**. When the file has been submitted, a screen appears, shown in Figure 3-13, indicating registration of the file for submission and confirmation that the submission is done. If an error appears, proceed to step 11.

NOTE The screen showing completed submission utilized an internal working data path to the demo data versus the production data path specified in Table 3-2.

11. Resolve any error messages.

For any error messages that appear on the submittal screen, use the error and resolution descriptions provided in Table 3-3 to resolve common error messages. Once the document has been successfully submitted, continue with step 12.:

Table 3-3 Common Errors

Error	Resolution
Submission failed. [Error# 6012]	Go to ECXpert Main Menu > Admin > Management and make sure that the ECXpert Administration Server, FTP Server for Application Data, and TCP/IP Connector On/Off switches are in the On position.
Size of input file happens to be zero. [Error# 6024]	You have either incorrectly entered the file name in the Submission Information form, or the file does not exist. Check the \$NSBASE/NS-apps/ECXpert/maps directory to make sure the file Input_810.txt file is there. If it is not, copy it from the backup version you created in step 1 and try submitting again.
Invalid trading partnership. [Error #603]	The Input_810.txt file contains an invalid trading partner, or the test data and the partnership do not match. Open the Support UI and verify the Trading Partnership has the correct sender and receiver. For example, "ZZ/PartnerA" and "ZZ/ECXmember".

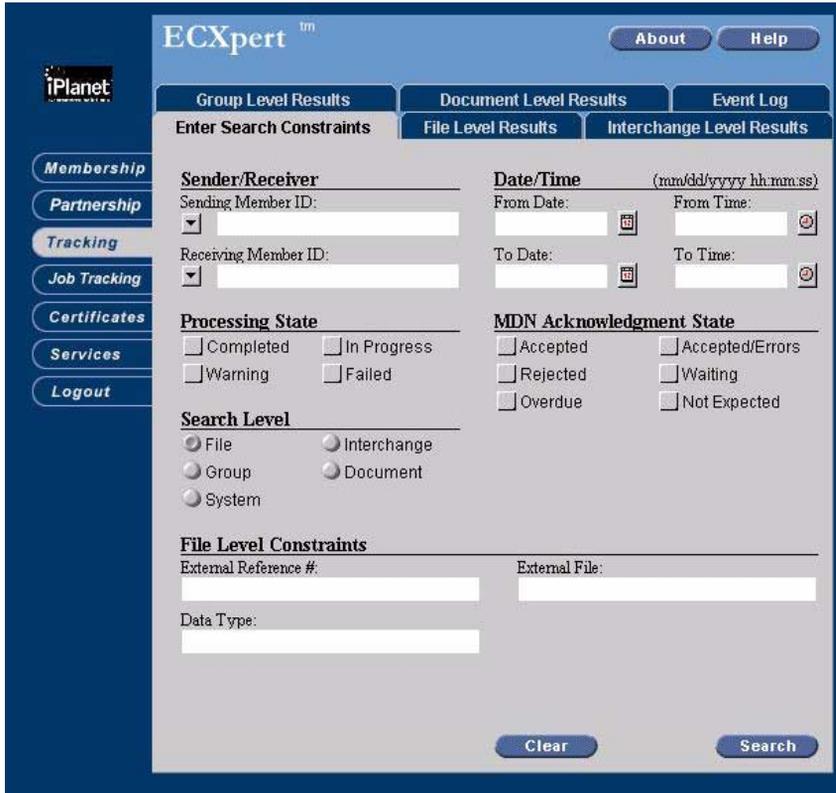
12. Log onto the Product Administrative Interface again.

Click the Support link. Then enter your login information in the Login window that appears. The default user name/password is ECX/ECX.

When you have entered your login information, click Enter.

13. Verify that the document was submitted without an error.

Figure 3-14 ECXpert Support UI Tracking Tab File Constraints



Click the Tracking tab. The Enter Search Constraints tab appears, as shown in Figure 3-14.

In the Date/Time portion of the screen, click the Calendar icon immediately to the right of the From Date: field. Today's date appears in the From Date: field. Click Search.

The File Level Results tab appears, displaying all of today's submissions. You can identify your submission by looking for the appropriate sender, receiver, and doc type.

If there is a green dot in the far left column of your submission, the test document was submitted correctly. Oracle and ECXpert have been installed and configured correctly.

What's Next?

Now that you have successfully installed Netscape ECXpert 3.0, use the information in the following table to determine what your next step should be:

Table 3-4 Post-installation Steps

If you want to...	Refer to...
Enable AIAG Server support	"Enabling Support for AIAG E-5 2000" on page 94
Enlarge data fields to accept 60 characters	"Enabling Support for Expanded Data Fields" on page 95
Change your initial user passwords.	<i>ECXpert Operations Reference Manual</i> (note 3.5 Ecxpert Operations Manual will be released in January 2001).
Learn more about tuning and scaling your ECXpert System	<i>ECXpert Administrator's Handbook</i> , "System Settings" appendix
Set up certificates	<i>ECXpert Administrator's Handbook</i> , Chapter 6, "Working with Certificates"
Enable SNMP support	<i>ECXpert Administrator's Handbook</i>
Enable Automatic Reboot of your ECXpert system	<i>ECXpert Operations Reference Manual</i> , "System Monitoring and Recovery Procedures" chapter. Refer specifically to the following section: "Recovery Following System Failure—Configuring for Automatic Startup on Reboot under Solaris."
Install Actuate Reports and Actuate Premium Package	<i>Actuate Reporting System User's Guide</i>
Install Directory Server and Enable Lightweight Directory Access Protocol (LDAP) Support	The Netscape Directory Server documentation included on separate media in your ECXpert package
Install iPlanet Messaging Server	<i>ECXpert Administrator's Handbook</i> , Chapter 3, "Setting Up Members"
Install iPlanet Messaging Server	The iPlanet Messaging Server documentation included on separate media in your ECXpert package

Table 3-4 Post-installation Steps (*Continued*)

If you want to...	Refer to...
Install Mercator Authoring System and mapping files	<ul style="list-style-type: none"> • <i>ECXpert Administrator's Handbook</i> • <i>Mercator Getting Started</i> guide
Configure ECXpert to work with MSOutlook	<i>ECXpert Administrator's Handbook</i>
Configure Sendmail for use with ECXpert	See the Note under Step 4 of <i>Running the ECXpert Installer</i> in the <i>Installing ECXpert</i> portion of this manual.

Enabling Support for AIAG E-5 2000

ECXpert 3.5 supports the AIAG E-5 2000 protocol standard. If your site uses this standard for business document processing, you will need to install support for documents exchanged with this protocol. To do this, run the script `AIAG_setup.sh`. This script creates or purges AIAGTransaction Table based on the option specified.

The following is the syntax used to run this script from a terminal window as the `actraadm` user:

```
AIAG_setup oracle_username oracle_password tns_alias {create|purge}
```

Where:

`oracle_username` - is the login name used to login to oracle (e.g. `oracle`)

`oracle_password` - is the password used to log in to the oracle database. (e.g. `oracle.iplanet`)

`tns_alias` - is the TNS alias string used to identify the oracle instance (e.g. `ORAINST.IPLANET`)

`{create|purge}`

- consists of the 'create' option to create the AIAGTransaction Table if it doesn't exist, and the

'purge' option deletes all records from AIAGTransaction Table

Execute the run script command as follows:

```
$NSBASE/NS-apps/.....AIAGscriptname
```

The script is self running. When the script has been installed, the prompt is returned.

Enabling Support for Expanded Data Fields

ECXpert 3.5 supports larger data entry fields for the following parameters:

- senderid
- receiverid

In order to use this feature, you will need to run the following script as user Actraadm from the terminal prompt:

```
enlarge_email_addr.sql
```

This script is located in the directory:

```
$/NSBASE/NS-apps/ECXpert/dbadmin/oracle/migration/30_to_35
```

The script is self-running. When the script has been installed, the prompt is returned. The ECXpert tables that are updated for 128 char length are as follows:

1)

Table name: MBADDRESSES

field name : MBAQUALID Desc: member Addr. Qual. Id.

new length : 128

2)

Table name: PARTNERSHIPS

field name : PNSNDRQUALID Dsec: sender Id

field name : PNRCVRQUALID Desc: recvr. Id.

new length : 128

3)

Table name: TRKINTCHG

field name : TISNDRQUALID Dsec: sender Id

field name : TIRCVRQUALID Desc: recvr. Id.

new length : 128

4)

Table name: TRKDOC

field name : TDSNDRQUALID Dsec: sender Id

field name : TDRCVRQUALID Desc: recvr. Id.

new length : 128

Migrating from ECXpert 3.0 to Current ECXpert

This appendix describes the planning and tasks you must perform to upgrade from ECXpert Version 3.0 to current ECXpert.

The following topics are covered:

- Migrating from ECXpert 3.0 to Current ECXpert
- Updating Stored Procedures for Billing Code Addition
- Removing the Previous Installation and Database Backup

NOTE With the release of ECXpert 3.5, support is no longer available for ECXpert 1.1.1 and 2.0 migrations.

Migrating from ECXpert 3.0 to Current ECXpert

This section describes all of the steps you must perform to migrate from ECXpert 3.0 to the current ECXpert version.

Upgrading to Oracle 8.1.6

If you have not already done so, you will need to upgrade to Oracle 8.1.6, Enterprise Edition. See the included Oracle documentation for installing version 8.1.6 or contact your Oracle service provider or dba to assist in this process. Also, the “Oracle Installation/Migration” on page 29 provides preinstallation information for Oracle 8.1.6.

NOTE **Important:** When you upgrade Oracle, *do not* create a new Oracle user to own the ECXpert tables. You must use the existing Oracle user who owns the ECXpert tables.

Set up and Test Your Database Connectivity

Set up and test your database to be sure that user `root` has access to the database, so you can successfully migrate ECXpert. If user `root` doesn't have access to the database, you will get error messages during the ECXpert migration process.

1. Log in as user `root`.

```
# su - root
```

2. Determine the shell that `root` uses.

```
# echo $SHELL
```

The output of this command identifies the shell that `root` uses, which determines its associated environment file:

Output	Shell Being Used	Environment File
<code>/sbin/sh</code>	Bourne	<code>.profile</code>
<code>/sbin/csh</code>	C	<code>.cshrc</code>
<code>/sbin/ksh</code>	Korn	<code>.profile</code> or <code>.kshrc</code>

3. Determine the shell that `oracle` uses.

```
# cat /etc/passwd | grep oracle
```

The output of this command lists the shell at the end, as in the sample below:

```
oracle:x:50004:10003::/export/home/oracle:/bin/csh
```

where the shell is `csh`.

4. Get into the `oracle` shell.

Locate the shell in the “Output” column of the table in Step 2 above, then look up the entry in the “Environment File” column for the same row.

- a. If you are using the C shell, enter the following command:

```
# source ~oracle/.cshrc
```

where *oracle* is your Oracle user, typically `oracle`.

- b. If you are using the Korn shell or the Bourne shell, enter the following command:

```
# . ~oracle/your_environment_file
```

where *oracle* is your Oracle user, and *your_environment_file* is the name of your environment file.

5. Check the environment settings.

```
# env
```

The following sample output of this command lists the environment variables that must be set:

```
$ORACLE_HOME=$ORACLE_HOME from worksheet
$ORACLE_SID=ECX
$NLS_LANG=$NLS_LANG from worksheet
$LD_LIBRARY_PATH=$ORACLE_HOME/lib:$LD_LIBRARY_PATH
$PATH=$ORACLE_HOME/bin:$ORACLE_HOME:$PATH
$DISPLAY=hostname:0.0
$TNS_ADMIN=$ORACLE_HOME/network/admin
```

6. Correct environment variable definitions as necessary.

If any of the above environment variables are not properly defined, do the following:

- a. Log in as or change to your Oracle user, typically `oracle`. For example:**

```
# su - oracle.
```

- b. Open the environment file that you referenced in Step 4 above in a text editor and add or modify the definitions as necessary.**

- c. Save the environment file and exit the text editor.**

7. Enable changes in environment variable definitions.

If you made changes in the environment file in Step 6 above, you can enable those changes now by switching to another user and then switching back to your Oracle user. For example:

```
# su - root
# su - oracle
```

Alternatively, you could restart your system and log in as your Oracle user.

8. Check your `tnsnames.ora` file.

Check your `tnsnames.ora` file to make sure it contains the correct information. The following are likely locations of your `tnsnames.ora` file:

- m `$ORACLE_HOME/network/admin`
- m `/var/opt/oracle`
- m The directory specified by the `$TNS_ADMIN` environment variable

9. Connect to the database from the UNIX commandline:

```
# sqlplus ECX/ECX@your_connect_string
```

where `ECX/ECX` is the username/password of the ECXpert table-owner. If this test fails, skip to Step 11.

10. Repeat the test from inside SQL*Plus:

```
SQL> connect ECX/ECX@your_connect_string
SQL> exit
```

where `ECX/ECX` is the username/password of the ECXpert table-owner.

11. Correct any connectivity problems.

If the test at either Step 9 or Step 10 failed, check the `tnsnames.ora` and `listener.ora` file to validate the settings, such as `hostname` and `SID`.

After making any necessary changes, go back to Step 9 above.

If you have successfully connected to the database using SQL*Plus, you will be able to connect during the ECXpert migration.

If you cannot connect to the database using this method, you definitely will not be able to connect during the ECXpert migration.

Back Up Your Database

NOTE The database backup is a major operation. You should plan carefully for both the disk space that will be required and the time slot in which the backup is executed.

The backup will require as much disk space as the current database and the rollback tablespace in Oracle must be set to as much as 1.5 times the tablespace setting.

The backup process can take 12 hours or more for a large database. Without proper planning, the process may abort part-way through.

Refer to your Oracle documentation for additional guidelines and recommendations.

Follow the steps in this section to back up your existing ECXpert database.

1. Change to the `$ACTRAHOME/Actra-apps/ECXpert/dbadmin/oracle` directory.
2. Open the `exp_ecx_tables.sh` file in a text editor.
3. Change the character string `name/password@dbAlias` in the first line to be the `username/password@dbAlias` of your ECXpert table-owner user.
4. Enter the following command to run `exp_ecx_tables.sh`.

```
# ./exp_ecx_tables.sh
```

If this command is successful, you should see output similar to the following, depending upon your currently installed version of Oracle with the ECXpert database:

```
Export: Release 8.0.4.0.0 - Production on Thu Mar 4 16:21:34
1999
(c) Copyright 1997 Oracle Corporation. All rights reserved.

Connected to: Oracle8 Release 8.0.4.0.0 - Production
PL/SQL Release 8.0.4.0.0 - Production
Export done in US7ASCII character set and US7ASCII NCHAR
character set
About to export specified tables via Conventional Path ...
. . exporting table MEMBERS          10 rows exported
. . exporting table MBADDRESSES      15 rows exported
. . exporting table PARTNERSHIPS      3 rows exported
. . exporting table PNSTD             3 rows exported
. . exporting table PNGROUP          3 rows exported
. . exporting table KEYPAIRS         8 rows exported
. . exporting table CERTIFICATES     8 rows exported
. . exporting table TRACKING         1 rows exported
. . exporting table TRKINTCHG        0 rows exported
. . exporting table SERVICES         7 rows exported
. . exporting table MSGFORMATS      678 rows exported
. . exporting table EVENTLOG         0 rows exported
. . exporting table UNIQUEKEYS      19 rows exported
. . exporting table DTSERVICES       7 rows exported
. . exporting table SCHEDULEINFO     0 rows exported
. . exporting table TRKGROUP         0 rows exported
. . exporting table TRKDOC           0 rows exported
. . exporting table PNDOCS           3 rows exported
. . exporting table TRKDOCDETAILS    0 rows exported
. . exporting table CRL              0 rows exported
. . exporting table PNCARD           0 rows exported
. . exporting table MDNINFO          0 rows exported
. . exporting table BLOBINFO         8 rows exported
. . exporting table CERTTYPEINFO     5 rows exported
Export terminated successfully without warnings.
#
```

If instead you get the following error message:

```
./exp_ecx_tables.sh: Permission denied
```

enter the following command to set the proper permissions on the file:

```
# chmod 775 exp_ecx_tables.sh
```

and repeat this step.

Shut Down All ECXpert Services

If you are using a previous installation of the ECXpert Product Administrative Interface, you must log out and shut it down. Follow these steps to log out and shut down ECXpert.

1. Log out of the ECXpert Product Administrative Interface.

Click the Logout bar, then choose Applet > Quit if using the Applet Viewer.

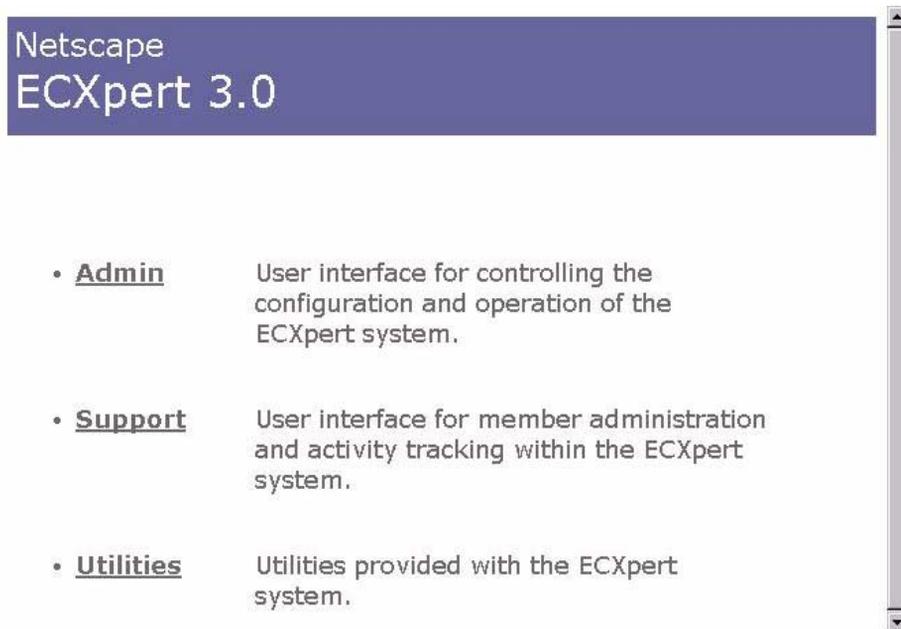
2. Shut down all ECXpert services.

Display the ECXpert Main Menu in your browser as shown in Figure eA-1 by entering the URL:

`http://hostname:port#`

where *hostname* is the name of your ECXpert host and *port#* is the port number it uses.

Figure A-1 ECXpert 3.0 Main Menu



Click the Admin button to display the ECXpert Server Administration menu shown in Figure A-2.

Figure A-2 ECXpert 3.0 Server Administration menu



If any ECXpert services are running, you will see more entries than the ECXpert Administration Server with an ON indication.

Click any service switch icon that is ON to toggle the service OFF and exit your browser window.

3. Shut down the iPlanet FastTrack Server or iPlanet (Netscape) Enterprise Server.

In an xterm window, enter the following commands, replacing *machine_name* with the name of your ECXpert host machine:

```
# cd $NSBASE/NS-apps/ns-home/http_prefix-machine_name
# ./stop
```

NOTE In the above `cd` command, supply a value for *http_prefix* as follows:

- `httpd` for an unsecured Netscape FastTrack Server
 - `https` for a secured Netscape FastTrack Server or Netscape Enterprise Server
-

4. Shut down the iPlanet Administration server.

In an xterm window, enter the following commands:

```
# cd $NSBASE/NS-apps/ns-home/
# ./stop-admin
```

5. Verify that no ECXpert processes are still running.

In an xterm window, enter the following command:

```
# ps -ef | grep actra
```

If additional processes are running, kill them manually.

6. If running SNMP, make sure the SNMP agent is shut down.

Manually kill the process ID for `Program.o`.

Preserve Your Files

Follow the steps in this section to back up the important files from your current ECXpert installation (ECXpert 3.0, 3.0 SP1, and/or 3.0 SP2):

1. Set up a temporary holding directory that is:
 - m outside both the current ECXpert version and any previous ECXpert Version directory trees.
 - m outside the `/tmp` directory
2. Copy the following files into your temporary holding directory:
 - m In all cases, from `NSBASE/NS-apps/ECXpert/config`, copy the file `ecx.ini`.
 - m If your Netscape Enterprise Server is running secured, from `NSBASE/NS-apps/ns-home/httpd-machine_name/config`, copy the files `ServerCert.db`, `ServerCert.nm`, `ServerKey.db`, `magnus.conf`, `obj.conf`, `mime.types` and any `*.acl` (access control list) files
 - m If using SNMP, copy the `NSBASE/NS-apps/ECXpert/SNMP/config/CONFIG` file.
 - m Copy your maps and extra input card files from:
 - `NSBASE/NS-apps/ECXpert/maps/`
 - `NSBASE/NS-apps/ECXpert/data/input/`
 - m Copy your live data—the following complete directories:
 - `NSBASE/NS-apps/ECXpert/data/work/trk`
 - `NSBASE/NS-apps/ECXpert/data/output`
 - `NSBASE/NS-apps/ECXpert/data/bundle`
 - `NSBASE/NS-apps/ECXpert/smtp/inbound`
 - `NSBASE/NS-apps/ECXpert/smtp/outbound`

Upgrade to Current ECXpert

Perform the steps in this section to upgrade to current ECXpert.

1. Begin to install the current ECXpert version, as described in ECXpert *Getting Started*, Chapter 2, “Installing ECXpert.”

After the command-line-based installation completes, a browser appears with the browser-based installation steps.

2. Proceed normally through the screens for Installer Step One to Step Four, including Step Four.

Refer to “Running the ECXpert Installer” on page 55 for detailed instructions. Be sure to stop when you reach “ECXpert Installer Step Five.”

At this point, pause and run the migration script as described next.

3. In an xterm window, go to the directory containing the migration script.

Enter the following command:

```
# cd $NSBASE/NS-apps/ECXpert/dbadmin/oracle/migration/30_to_35
```

where *NSBASE* is the directory under which you are installing current ECXpert.

4. Run the migration script.

NOTE When entering the following command, *do not* add a trailing slash character (/) after the environment variables *\$ORACLE_HOME* and *ECX_3.5_HOME*.

```
# ./migrate.pl -h $ORACLE_HOME -s ORACLE_SID -u  
User/ Password[@TNS_alias] -w ECX_3.5_HOME
```

where:

- m *\$ORACLE_HOME* is the path to your Oracle home directory
- m *ORACLE_SID* is your Oracle SID
- m *User* is your Database User ID
- m *Password* is your Database User password
- m *TNS_alias* is the Oracle TNS alias for the ECXpert database (if Oracle is remote)

m *ECX_3.5_HOME* is the directory under which ECXpert is installed

For example:

```
# ./migrate.pl -h /disk1/oracle/wg816 -s ECX -u ECX1/ECX1 -w
/disk1/Netscape/ns-apps/ECXpert
```

5. Return to the browser window and resume the browser-based installation at Step Five.

NOTE You will return to the browser-based installation at step five but *do not execute Step Five or Step Six of the installation* — skip these on-screen installation steps, as instructed in Step 8 and Step 9 which follow on this page.

6. Click Skip on Step Five of the browser-based installation.
7. Click Skip on Step Six of the browser-based installation.
8. Proceed normally through the screens for Installer Step Seven to Step Ten and complete the rest of the tasks in Chapter 2, “Installing ECXpert.”
9. Restore configuration settings from the temporary holding directory for your previous installation.
 - a. If using SNMP, copy the entire `CONFIG` file back to the new `$NSBASE/NS-apps/ECXpert/SNMP/config/` directory.
 - b. Open your previous version of the `ecx.ini` file and the newly installed `ecx.ini` in a text editor and manually update the newly installed file *very carefully* by copying the following items in from the old one:
 - any [...] sections for user-defined comms in their entirety
 - any other parameters, from any [...] sections, where the old settings differ from those in the newly installed file.

NOTE Note that some parameter names have changed slightly in current ECXpert; the new names are similar enough that you should be able to recognize them easily from the old names; be sure to check for a name change and replace any old names with the new names in any parameters that you copy into your new `ecx.ini` file.

CAUTION Always work very carefully when manually editing your `ecx.ini` file.

What appear to be relatively small mistakes can, in this file, have a serious impact on system function and can result in extended time to troubleshoot and correct system problems. In particular, be aware of the following two restrictions:

- Never duplicate a section heading ([. . .]) within the `ecx.ini` file.
 - Never duplicate a parameter assignment within a section.
-

Updating Stored Procedures for Billing Code Addition

The Partnership Info tab of the Support Administrative User Interface has an added field for billing code. This field has not caused a database schema change for ECXpert 3.5. However, there is a stored procedure change. Therefore, for an existing ECXpert 3.0 series installation, the following stored procedure will need to be reloaded: `ora_pkgbody.sql`.

The procedure to update this stored procedure is as follows:

1. As the Oracle user, go to a terminal window and the following directory:

```
cd $ECX3.5_HOME/dbadmin/oracle
```

2. Run the sqlplus program as follows:

```
sqlplus myaccount/mypassword@myserver
```

3. Execute the following sql program to update the stored procedures:

```
sqlplus>@ora_pkgbody.sql
```

Removing the Previous Installation and Database Backup

If you have followed the recommendation to move the earlier ECXpert install directory to a temporary location, leave the archival copy of the previous installation and the Oracle database backup in place until you are certain that the new installation of current ECXpert is working properly.

When the new version of ECXpert has been in production mode for a week or more, you may safely delete the previous installation and the Oracle database backup.

Removing the Previous Installation and Database Backup

Reinstalling Current ECXpert

This appendix provides instructions on reinstalling ECXpert 3.5 over an existing installation of ECXpert 3.5. The following topics are covered:

- Reinstalling ECXpert 3.5 on page 111
- Removing the Previous Installation and Database Backup on page 118

Reinstalling ECXpert 3.5

Shut Down All ECXpert Services

If you are using a previous installation of ECXpert, you must log out of the Product Administrative Interface (Support UI) and shut it down. Follow these steps to log out and shut down ECXpert. For figure references, see the screen shots in Appendix A.

1. Log out of the ECXpert Product Administrative Interface.
Click the Logout link, then choose Applet > Quit if using the Applet Viewer.
2. Shut down all ECXpert services.

Display the ECXpert Main Menu in your browser by entering the URL:

`http://hostname:port#`

where *hostname* is the name of your ECXpert host and *port#* is the port number it uses.

Click the Admin link to display the ECXpert Server Administration menu.

Click any service switch icon that is **ON** to toggle the service **OFF** and exit your browser window.

3. If running SNMP, make sure the SNMP agent is shut down.

Manually kill the process ID for `Program.o`.

Set up and Test Your Database Connectivity

This section tests to make sure that user `root` has access to the database, so that you can successfully reinstall ECXpert. If user `root` doesn't have access to the database, you will get error messages during the ECXpert reinstallation process.

1. Log in as user `root`.

```
# su - root
```

2. Determine the shell that `root` uses.

```
# echo $SHELL
```

The output of this command identifies the shell that `root` uses, which determines its associated environment file:

Output	Shell Being Used	Environment File
/sbin/sh	Bourne	.profile
/sbin/csh	C	.cshrc
/sbin/ksh	Korn	.profile or .kshrc

3. Determine the shell that `oracle` uses.

```
# cat /etc/passwd | grep oracle
```

The output of this command lists the shell at the end, as in the sample below:

```
oracle:x:50004:10003::/export/home/oracle:/bin/csh
```

where the shell is `csh`.

4. Get into the `oracle` shell.

Locate the shell in the “Output” column of the table in Step 2 above, then look up the entry in the “Environment File” column for the same row.

- m If you are using the C shell, enter the following command:

```
# source ~oracle/.cshrc
```

where *oracle* is your Oracle user, typically `oracle`.

- m If you are using the Korn shell or the Bourne shell, enter the following command:

```
# . ~oracle/your_environment_file
```

where *oracle* is your Oracle user, and *your_environment_file* is the name of your environment file.

5. Check the environment settings.

```
# env
```

The following sample output of this command lists the environment variables that must be set:

```
$ORACLE_HOME=SORACLE_HOME from worksheet
$ORACLE_SID=ECX
$NLS_LANG=$NLS_LANG from worksheet
$LD_LIBRARY_PATH=$ORACLE_HOME/lib:$LD_LIBRARY_PATH
$PATH=$ORACLE_HOME/bin:$ORACLE_HOME:$PATH
$DISPLAY=hostname:0.0
$TNS_ADMIN=$ORACLE_HOME/network/admin
```

6. Correct environment variable definitions as necessary.

If any of the above environment variables are not properly defined, do the following:

- a. Log in as, or change to, your Oracle user, typically `oracle`. For example:

```
# su - oracle.
```

- b. Open the environment file that you referenced in Step 4 above in a text editor and add or modify the definitions as necessary.
- c. Save the environment file and exit the text editor.

7. Enable changes in environment variable definitions.

If you made changes in the environment file in Step 6 above, you can enable those changes now by switching to another user and then switching back to your Oracle user. For example:

```
# su - root
# su - oracle
```

Alternatively, you could restart your system and log in as your Oracle user.

8. Check your `tnsnames.ora` file.

Check your `tnsnames.ora` file to make sure it contains the correct information. The following are likely locations of your `tnsnames.ora` file:

- m `$ORACLE_HOME/network/admin`
- m `/var/opt/oracle`
- m The directory specified by the `$TNS_ADMIN` environment variable

9. Connect to the database from the UNIX commandline.

```
# sqlplus ECX/ECX@your_connect_string
```

where `ECX/ECX` is the username/password of the ECXpert table-owner. If this test fails, skip to Step 11.

10. Repeat the test from inside SQL*Plus:

```
SQL> connect ECX/ECX@your_connect_string
SQL> exit
```

where `ECX/ECX` is the username/password of the ECXpert table-owner.

11. Correct any connectivity problems.

If the test at either Step 9 or Step 10 failed, check the `tnsnames.ora` and `listener.ora` file to validate the settings, such as `hostname` and `SID`.

After making any necessary changes, go back to Step 9 above.

If you have successfully connected to the database using SQL*Plus, you will be able to connect during the ECXpert reinstallation.

If you cannot connect to the database using this method, you definitely will not be able to connect during the ECXpert reinstallation.

Backing Up Your Existing ECXpert 3.5 Database

NOTE The database backup is a major operation. You should plan carefully for both the disk space that will be required and the time slot in which the backup is executed.

The backup will require as much disk space as the current database and the rollback tablespace in Oracle must be set to as much as 1.5 times the tablespace setting.

The backup process can take 12 hours or more for a large database. Without proper planning the process may abort part-way through.

Refer to your Oracle documentation for additional guidelines and recommendations.

Follow the steps in this section to back up your existing ECXpert database.

1. Change to the `$NSBASE/NS-apps/ECXpert/dbadmin/oracle` directory.
2. Open the `exp_ecx_tables.sh` file in a text editor.
3. Change the character string `name/password@dbAlias` in the first line to be the *username/password@dbAlias* of your ECXpert table-owner user.
4. Enter the following command to run `exp_ecx_tables.sh`.

```
# ./exp_ecx_tables.sh
```

If this command is successful, you should see output similar to the following:

```
Export: Release 8.1.6.0.0 - Production on Fri Nov 3 16:21:34 2000
(c) Copyright 2000 Oracle Corporation. All rights reserved.

Connected to: Oracle8i Release 8.1.6.0.0 - Production
PL/SQL Release 8.0.4.0.0 - Production
Export done in US7ASCII character set and US7ASCII NCHAR
character set
About to export specified tables via Conventional Path ...
exporting table MEMBERS          10 rows exported
exporting table MBADDRESSES      15 rows exported
exporting table PARTNERSHIPS     3 rows exported
exporting table PNSTD            3 rows exported
exporting table PNGROUP          3 rows exported
exporting table KEYPAIRS         8 rows exported
exporting table CERTIFICATES     8 rows exported
exporting table TRACKING         1 rows exported
```

```

Export: Release 8.1.6.0.0 - Production on Fri Nov 3 16:21:34 2000

. exporting table TRKDOC          0 rows exported
exporting table PNDOCS           3 rows exported
. exporting table TRKDOCDETAILS   0 rows exported
exporting table CRL              0 rows exported
exporting table PNCARD           0 rows exported
exporting table MDNINFO          0 rows exported
exporting table BLOBINFO         8 rows exported
exporting table CERTTYPEINFO     5 rows exported
Export terminated successfully without warnings.
#

```

If instead you get the following error message:

```
./exp_ecx_tables.sh: Permission denied
```

Enter the following command to set the proper permissions on the file:

```
# chmod 775 exp_ecx_tables.sh
```

and repeat this step.

Preserve Your Files

Follow the steps in this section to back up the important files from your current ECXpert installation:

1. Set up a temporary holding directory that is:
 - m outside both the current ECXpertversiondirectory tree and any previous ECXpert installation's directory tree.
 - m outside the /tmp directory
2. Copy the following files into your temporary holding directory:
 - m **In all cases, from \$NSBASE/NS-apps/ECXpert/config, copy the file `ecx.ini`.**
 - m **If your Netscape Enterprise Server is running secured, from \$NSBASE/NS-apps/ns-home/https-*machine_name*/config, copy the files `ServerCert.db`, `ServerCert.nm`, `ServerKey.db`, `magnus.conf`, `obj.conf`, `mime.types` and any `*.acl` (access control list) files**
 - m **If using SNMP, copy the \$NSBASE/NS-apps/ECXpert/SNMP/config/CONFIG file.**

- m Copy your maps and extra input card files from:
 - \$NSBASE/NS-apps/ECXpert/maps/
 - \$NSBASE/NS-apps/ECXpert/data/input/
- m Copy your live data—the following complete directories:
 - \$NSBASE/NS-apps/ECXpert/data/work/trk
 - \$NSBASE/NS-apps/ECXpert/data/output
 - \$NSBASE/NS-apps/ECXpert/data/bundle
 - \$NSBASE/NS-apps/ECXpert/smtp/inbound
 - \$NSBASE/NS-apps/ECXpert/smtp/outbound

Reinstall ECXpert

1. Begin to install the current ECXpert version, as described in Chapter 2, “Installing ECXpert.” The current version also includes the server install of Partner Agent.

After the command-line-based installation completes, a browser appears with the browser-based installation steps.

2. Proceed normally through the screens for Installer Step One to Step Four.

Refer to “Running the ECXpert Installer” on page 55 for detailed instructions. Be sure to stop when you reach “ECXpert Installer Step Five” on page 101. There is a Note there reminding you to return to this Appendix.

NOTE You will return to the browser-based installation at step five but *do not execute Step Five or Step Six of the installation* — skip these on-screen installation steps, as instructed in Step 3 and Step 4 which follow on this page.

3. Click Skip on Step Five of the browser-based installation.
4. Click Skip on Step Six of the browser-based installation.

NOTE **Important Note:** In case you missed it above, *YOU MUST SKIP ON-SCREEN INSTALLATION STEPS FIVE AND SIX.*

5. Proceed normally through the screens for Installer Step Seven to Step Ten and complete the rest of the tasks in Chapter 2, “Installing ECXpert.”

Refer to pages 65-73 for detailed instructions. (Page numbers are approximate)

6. Restore configuration settings from the temporary holding directory for your previous installation.
 - a. If using SNMP, copy the entire `CONFIG` file back to the new `$NSBASE/NS-apps/ECXpert/SNMP/config/` directory.
 - b. Open your old `ecx.ini` file and the newly installed `ecx.ini` in a text editor and manually update the newly installed file very carefully by copying in from the old one:
 - any `[. . .]` sections for user-defined comms in their entirety
 - any other parameters, from any `[. . .]` sections, where the old settings differ from those in the newly installed file.

CAUTION Always work very carefully when manually editing your `bdg.ini` or `ecx.ini` file. What appear to be relatively small mistakes here can seriously impact system function and eat up valuable time in troubleshooting and correcting. In particular, be aware of the following two restrictions:

- Never duplicate a section heading (`[. . .]`) within the `ecx.ini` file.
 - Never duplicate a parameter assignment within a section.
-

7. Re-establish Netscape Enterprise Server security.
8. Restore live data from your full database backup.

Removing the Previous Installation and Database Backup

If you have followed the recommendation to move the earlier ECXpert install directory to a temporary location, leave the archival copy of the previous installation and the Oracle database backup in place until you are certain that the new installation of ECXpert is working properly.

When the current version of ECXpert has been in production mode for a week or so, you may safely delete the previous installation and the Oracle database backup.

Index

A

actraadm user (ECXpert) 44, 47, 48, 56
Administration Server log files 23

B

BDGHOME environment variable 44

C

CD-ROM, mounting 50
certificate files 23, 66
certificates, digital signature 65
checklist, installation 20
configuration planning 21
configuration worksheet 46
conventions, typographic 12
cshrc file 44

D

directory structure
 ECXpert 21
disk space, confirming available 25
distribution, unpacking 50

documentation, related 10

E

ecx.ini file 23
ECX35 user (Oracle) 37, 63
ECXpert
 environment variables 44
 installing 43
 test your installation 75
environment file 38, 40, 45, 98, 100, 112, 114
environment variables 44
 BDGHOME 44
 ECXpert 44
 NLS_LANG 113
 NSBASE 44
 Oracle 32, 113
 ORACLE_HOME 40

F

files
 Administration Server, log 23
 certificate 23, 66
 cshrc 44
 ecx.ini 23
 environment 38, 40, 45, 98, 100, 112, 114
 initECX.ora 37
 listener.ora 41, 101, 114

- Mercator mapping 24
- root.sh 36
- shrc 44
- tnsnames.ora 41, 101, 114

H

- hardware requirements 14

I

- installation
 - checklist 20
 - testing your ECXpert installation 75
- installer, running 55
- installing
 - ECXpert 43
 - command line tasks 51
 - running the installer 55
 - iPlanet Web Server 29
- installing ECXpert version 3.5 over version 3.5 111
- iPlanet Web Server, installing 29

L

- listener.ora file 41, 101, 114

M

- media, unpacking 50
- Mercator mapping files 24
- migrating
 - from version 3.0 97
- Migration 3.0, Oracle 8.1.6 Upgrade 98
- migration script
 - from version 3.0 to 3.5 106

- mounting CD-ROM 50

N

- NLS_LANG environment variable 113
- NSBASE environment variable 44

O

- Oracle
 - installation decisions 29
 - installing Oracle8i, release 8.1.6 30
 - upgrade decisions 29
- oracle user (Oracle) 31, 40, 100, 113
- ORACLE_HOME environment variable 40

P

- planning, configuration 21
- post-installation tasks
 - change initial user passwords 93
 - configure MSOutlook 94
 - enable auto-reboot 93
 - enable SNMP support 93
 - install Actuate 93
 - install LDAP 93
 - install Mercator 94
 - install Netscape Messaging Server 93
 - set up certificates 93
 - tuning ECXpert 93

R

- Reinstalling ECXpert 3.5, Backing Up Your Existing ECXpert Database 115
- reinstalling ECXpert version 3.5 111
- related documentation 10

requirements, hardware and software 14

S

semaphores

 configuring 30

shared memory

 configuring 30

shrc file 44

software requirements 14

Solaris patches required

 Solaris 2.6 16, 17

T

TCP/IP

 connectivity 18

tnsnames.ora file 41, 101, 114

typographic conventions 12

U

users

 actraadm (ECXpert) 44, 47, 48, 56

 ECX35 (Oracle) 37, 63

 oracle (Oracle) 40, 100, 113

users and directories, creating 27

W

worksheet, configuration 46