Release Notes for iPlanet TradingXpert

Version 3.5 SP 1 for Solaris 2.6 or 2.7

May 18, 2001

These release notes contain important information available at the time of the version 3.5 SP 1 release of iPlanet TradingXpert. New features and enhancements, installation notes, known problems, and other late-breaking issues are addressed here. Read this document before you begin using this release of iPlanet TradingXpert.

An electronic version of these release notes can be found at the iPlanet documentation web site: `http://docs.iplanet.com/docs/manuals/`. Check the web site prior to installing and setting up your software and then periodically thereafter to view the most up-to-date release notes and manuals.

These release notes contain the following sections:

- What's New in TradingXpert, Version 3.5 SP1
- Hardware and Software Requirements
- Installation Notes
- Known Problems and Limitations
- How to Report Problems
- For More Information

What's New in TradingXpert, Version 3.5 SP1

This section describes the changes to the following product components*:*

- FX Properties Changes
- User Interface Enhancements
- Java Enhancements for Developers

FX Properties Changes

Several new fields have been added to the FX Properties file, as shown in Table 1. These fields have been added to allow user modifications to them as needed, in the same way as existing fields can be modified as specified in the "Getting Started with iPlanet TradingXpert, version 3.5 for Solaris 2.6" guide. The FXproperties file is located in the following directory:

```
$NASDIR/APPS/FX/common
```

```
Example:
```

```
/opt/iplanet/nasserver/nas/APPS/FX/common
```

Table 1 Added Fields in FXproperties

Field	Description
FX.basedir	The base directory name in the FX.basehref field. For example, if FX.basehref is 'http://tree.red.iplanet.com:5050/TX', the FX.basedir should be indicated as 'TX'.
FX.dateFormat	Specifies the date setting. For details on how to set the date format, please refer to: http://java.sun.com/j2se/1.3/docs/api/java/text/SimpleDateFormat.html Some examples: MM.dd.yyyy => 12.06.1966 MM/dd/yyyy at HH:mm:ss => 12/06/1966 at 23:59:59 hh:mm:ss a => 11:59:59 PM
FX.logDocEvents	Enables or disables detailed document tracking information. Valid values are true or false.
FX.unreadFilter	Determines type and status of documents to retrieve depending upon which behavior button is pressed by the user. Refer to Table 2 for the details on how this field can be used. Valid values are true or false.
FX.verboseTracking	Extends tracking information screen to include all event log information for a given tracking ID.

Table 2 FX.unreadFilter Flag Value and Button Behavior Descriptions

Flag Value	Button Behavior Description		
	Get Documents	Inbound	Outbound
true	All inbound (both read and unread) and outbound documents are retrieved	Inbound documents (read) will not be retrieved until the Get Doc button is pressed. After Get Doc button is pressed, this button will retrieve both read and unread inbound documents.	All outbound documents will be retrieved.
false	All inbound (both read and unread) and outbound documents are retrieved.	Both read and unread inbound documents are retrieved.	All outbound documents are retrieved.

User Interface Enhancements

Table 3 describes the enhancements to the user interface for this release.

Table 3 Enhancements to the User Interface

Component	Existence	Functionality Description
Welcome page	New to this release	Following user login, TradingXpert will not load documents until one of the document load buttons is pressed (i.e., either the Get Documents, Inbound, or Outbound buttons)
Get Documents Button	New to this release	When pressed, TradingXpert will load both inbound and outbound document information from the ECXpert database into the TradingXpert memory cache.
Inbound Button	Exists in TX 3.5	When initially pressed, TX will get inbound documents from the ECXpert database, including the latest received documents. When subsequently pressed, TX will get inbound documents from the TX server cache.

Table 3 Enhancements to the User Interface *(Continued)*

Component	Existence	Functionality Description
Outbound Button	Exists in TX 3.5	When initially pressed, TX will get outbound documents from the ECXpert database, including the latest sent documents. When pressed after the first time, TX will get outbound documents from the TX server cache.
Inbound page	Exists in TX 3.5	When '**check for new messages**' checkbox is selected, the 'Search' button will get inbound documents from the ECXpert database, including the latest received documents. Otherwise, the 'Search' button will get inbound documents from the TX server cache.
Outbound page	Exists in TX 3.5	When '**check for new messages**' checkbox is selected, the 'Search' button will get outbound documents from the ECXpert database, including the latest sent documents. Otherwise, the 'Search' button will get outbound documents from the TX server cache.

Java Enhancements for Developers

In this release, the ECX/NAS extension has been replaced by the ECXpert JNI API library. With this enhancement, both the ECXpert 3.0 and 3.5 databases can be accessed. This enhancement will require migration of existing Java files from TradingXpert 3.5. The migration includes the installation of two packages:

- jni.base.* - contains JEcxInit and JEcxBase classes
- jni.db.* - contains ECX DB Access classes

Class Equivalence Diagram

Table 4 represents the class relationships between the NAS/ECX extension and the JNI API library.

Table 4 Class Equivalence Diagram

NAS/ECX Extension	ECXpert Java JNI API
IEcxMgr	not used
IEcxBase	JEcxBase

Table 4 Class Equivalence Diagram

NAS/ECX Extension	ECXpert Java JNI API
IEcxAddresses	JEcxAddresses
IEcxCrypto	JEcxCrypto
IEcxDocId	JEcxDocId
IEcxDocument	JEcxDocument
IEcxLog	JEcxLog
IEcxLogin	JEcxLogin
IEcxMember	JEcxMember
IEcxPartnerId	JEcxPartnerId
IEcxPartnership	JEcxPartnership
IEcxService	JEcxService
IEcxServiceList	JEcxServiceList
IEcxSubmit	JEcxSubmit
IEcxTracking	JEcxTracking
not used	JEcxInit

Enhanced Object Creation

In TradingXpert 3.5, a developer was forced to use the IEcxMgr interface to create other objects. This concept of an 'object factory' does not exist with this release. Instead, all of the Java API objects can be instantiated directly. This amounts to a greater degree of flexibility when customizing TradingXpert.

To illustrate the difference between object creation in TradingXpert 3.5 and TradingXpert 3.5, SP1, please examine the following code fragments (derived from FXProfile.java):

With NAS/ECX extension:

```
(1)IEcxMgr ecxMgr ;
(2)IEcxLogin ecxLogin ;
(3)IEcxMember ecxMember ;
(4)
(5)ecxMember = ecxMgr.createMember(ecxLogin);
```

With JNI API library:

```
(a)JEcxLogin ecxLogin ;
(b)JEcxMember ecxMember ;
(c)
(d)ecxMember = new JEcxMember();
(e)ecxMember.setLogin(ecxLogin);
```

Discussion:

Using the NAS/ECX extension method, the developer uses an instance of IEcxMgr to create the ecxMember object. In order to log in to the database, the `createMember()` method establishes a db context, creating the ecxMember object, and associating the supplied login credentials with that object.

Using the new JNI API library, IEcxMgr is conspicuously absent. Instead, the JEcxMember object is instantiated directly, and the supplied `setLogin()` method is used to bind the login credentials.

Further, the establishment of the db context occurs when the `retrieveFXSession()` method in FXAppLogic is invoked. As with the prior release of TradingXpert, Applogics calls this method to retrieve login info, session data, and so forth. Summarily, additional code was applied to this method to instantiate a JEcxInit object, which in turn establishes a db context via its `ecxInit()` method.

Hardware and Software Requirements

For those who are doing a new installation of this product, refer to the ‘Preinstallation’ section of the ‘Getting Started with iPlanet TradingXpert version 3.5 for Solaris 2.6 ’ for any hardware and software requirements, including such things as cache settings.

Installation Notes

This section provides information on installing TradingXpert 3.5, SP1 as either a new product installation or an upgrade to a pre-existing TradingXpert 3.5 installation.

CAUTION Before running this release of TradingXpert following installation, for an installation of TradingXpert on a machine that does NOT have an installation of ECXpert, the ecx.ini file must exist in the following configuration directory:

/opt/iplanet/nasserver/config/ecx.ini;

Do NOT put the ecx.ini file in a lower directory, example do NOT put the ecx.ini file here:

/opt/iplanet/nasserver/nas/config/ecx.ini;

otherwise, if ECXpert is on the same computer, the ecx.ini file can reside in the $ECX_HOME/config/ecx.ini directory.

New Installation

Follow the installation instructions provided in the 'Getting Started with iPlanet TradingXpert, version 3.5 for Solaris 2.6.' However, there will be one additional prompt requesting you to enter the ECXpert version used with this installation of TradingXpert. For that prompt, enter either 3.0 or 3.5 as appropriate.

Migration

To upgrade an existing installation of TradingXpert 3.5, perform the following steps.

1. If an ECXpert migration is planned, do this before migrating TradingXpert. Refer to the 'Getting Started with iPlanet ECXpert, version 3.5 for Solaris 2.6/2.7' guide for instructions.
2. Back up your customized installation of TradingXpert. As part of this, tar the ecx and fx directories and verify that the reg.dat file is backed up.
3. Shut down NAS. For instructions, refer to the appropriate version of your 'iPlanet Netscape Application Server Administration' or equivalent guide.
4. Verify that the LDAP server is running.
5. Verify the proper setting for the environment variable LD_LIBRARY_PATH = $ECX_HOME/lib
6. As root, or as the ECXpert installation user 'actraadm (or whatever you used), navigate to the directory where the binaries are located. Locate and execute the following command:

   ```
   upgrade_exe
   ```

7. During installation, you will be prompted for the NAS directory. Enter the following path, example:

   `/opt/iplanet/nasserver/nas`

8. You will also be prompted for the version of ECXpert that will run with TradingXpert. Also, the upgrade script will rename directories that are modified to ‘xxxxx.preSP1, where xxxxx is each respective file name. New directories and files will also be copied to the same location.

9. Once the installation completes, as evidenced from the return of the command line prompt, any customized files that were backed up need to be migrated from the ‘xxxxx.preSP1’ files to the newly copied files. The following lists the modified directories and files that are installed with this release:

   - $NASDIR/APPS/FX/common
   - $NASDIR/APPS/FX/document
   - $NASDIR/APPS/FX/events
   - $NASDIR/APPS/FX/login
   - $NASDIR/APPS/FX/maps_etc/Customization
   - $NASDIR/APPS/FX/profile
   - $NASDIR/APPS/FX/templates/en_US/document/listPartners.html
   - $NASDIR/APPS/FX/templates/en_US/document/track.html
   - $NASDIR/APPS/FX/templates/en_US/inbound/inbound_1.html
   - $NASDIR/APPS/FX/templates/en_US/outbound/outbound_1.html
   - $NASDIR/APPS/FX/tradeCenter
   - $NASDIR/APPS/FX/web/en_US/frameset.html
   - $NASDIR/APPS/FX/web/en_US/help.html
   - $NASDIR/APPS/FX/web/en_US/menu/menu.html

10. As part of a final cleanup, the following ECX/NAS extension project files can be removed following installation of this release:

    ecx.gxm

    ecx.gxr

11. And the ecx directory, example:

    rm -R `/opt/iplanet/nasserver/nas/APPS/ecx`

Known Problems and Limitations

Table 5 shows the bug fixes and enhancements that are included with this release of TradingXpert. In addition, the fix for bug ID 530969 is follows the table as this fix is verbose.

Table 5 Bug Fixes and Enhancements in TradingXpert 3.5 SP1

iPlanet Bug Tracking #(s)	Description
397571	Performance enhancement includes the addition of the 'Get Document' button to load data base in to memory to decrease data access time and allow users to have more documents in their mailbox.
----	Performance enhancement to quickly call up the log on web page by replacing tradeCenter.html (which makes calls to the database) with a simple welcome webpage.
----	Fix to logon java bug to eliminate the error 'No document found' that arises when the locale is missing from the URL.
----	Fix to allow log in to TradingXpert from within an iPlanet Portal session.
----	Enhancement to add user name to top frame to show which user is logged in to TradingXpert.
347780	Fix to initial entry to inbox or outbox to eliminate TradingXpert Partner selection as empty.
433970	Add the date format parameter setting in the FX properties file to provide internationalization of the way a date is specified and displayed when viewed in a returned Search list.
----	Enhancement that adds the JNI interface to the ECXpert extension, allowing TradingXpert to work with either the ECXpert 3.0 or 3.5 database.
----	Enhancement that prevents users from making invalid selections upon the combination of a Trading Partner and an invalid Document Type (or vice versa) while administering a New Document. The two individual parameters, each represented by a selection list, are now combined in to one pull down list.
----	Fix for incorrect field focus occurring within $FX/web/javascript/function.js. The behavior on Netscape Communicator 4.x was half the page being selected. The behavior on Microsoft Internet Explorer 5.0 gave an error indicating 'cannot give focus to a hidden field.'

Table 5 Bug Fixes and Enhancements in TradingXpert 3.5 SP1

iPlanet Bug Tracking #(s)	Description
396071	Bug fix against a password change that caused NAS to core dump.
387920	Bug fix in turnaroundDocument.java that allows sublineitems to be properly turned around.
370734	Bug fix to allow display of more than one Purchase Order at a time.
387436	Bug fix for 997 FAgen producing a doc type 'null' in the Inbound list.

Refreshing the TradingXpert Connection (Bug ID: 530969)

There are two options that the ECXpert/TradingXpert administrator can use to refresh the TradingXpert connection to ECXpert as follows:

1. Refresh is done from a browser:

   Add a refresh button on the ECXpert Server Management User Interface. See the related section that follows.

2. Refresh is done from command line or in a batch shell program:

   Write a utility Java Class that connects to the refresh Applogic in TradingXpert. See the related section that follows.

Adding a Refresh Button on the ECXpert Server Management User Interface

1. Modify the file `1-1Left.htm` in the ECXpert installation directory:

   `$BDGHOME/UI/html/admin/Management/1-1Left.htm`

   Production directory example:

   `/opt/iplanet/NS-apps/ECXpert/UI/html/admin/Management/1-1Left.htm`

2. Add the following html just after "Update Screen" in the table.

```
<tr>
    <td bgcolor="white"> <font size="-1" face="PrimaSans BT, Verdana,
      sans-serif">
      <a href="http://<hostname>:<port>/cgi-bin/gx.cgi/GUIDGX-
       {7D446663-4E0E-1A8C-FA9D-080020B37846}" target="middle">
      <b>Refresh TradingXpert</b></a></font>
```

```
    </td>
  </tr>
```

where:

```
hostname : The hostname of machine on which TX is installed
port     : Port Configured for TradingXpert
GUID     : The GUID is the one with which the refresh Applogic is
           registered
```

Implementation Example:

<a href="http://txdemo.iplanet.com/cgi-bin/gx.cgi/GUIDGX-{7D446663-4E0E-1A8C-FA9D-080020B37846}" target="middle">

Writing a Utility Java Class to Refresh the TradingXpert Connection to ECXpert

The refresh Applogic can be invoked programmatically from a java program using the following class which sends a http request through a URL Connection.

1. Compile the TXURLConnection class as follows (the source code for the Utility java class follows below):

   javac TXURLConnection.java

2. Execute `TXURLConnection` as follows:

   `java TXURLConnection [http://<host_name>:<port>]`

   Example: TradingXpert is installed on the host `production.red.iplanet.com` at port 8000. In this case, the java TXURLConnection would be initiated by:

   `http://production.red.iplanet.com:8000`

Java Utility Class Source Code

```
import java.net.*;
import java.io.*;
import java.util.*;
```

```
public class TXURLConnection
{
    public static final int SUCCESS = 0;
    public static final int FAILURE = 1;

    private String baseHref, refreshAL;
    private HttpURLConnection urlConn;  // generic connection object
    private URL url;                    // generic URL reference

    public TXURLConnection(Properties props){
            baseHref = props.getProperty("HREF");
            refreshAL = "/cgi-bin/gx.cgi/GUIDGX-{" + props.getProperty("GUID") +
"}";
        }
        public int connect(){
            try {
                url = new URL(baseHref + refreshAL);
                buildConnection(url);
                writeToConnection();
                return SUCCESS;
            }
            catch (Exception e) {
              System.out.println(e.getMessage());
              return FAILURE;
            }
        }

    private void writeToConnection()
                        throws IOException
    {
```

```
        DataOutputStream printout = new DataOutputStream (urlConn.getOutputStream
          ());
        printout.flush ();
        printout.close ();
        urlConn.getResponseCode();  // wait for server response
    }

    private void buildConnection(URL target) throws IOException
    {
        urlConn = (HttpURLConnection)target.openConnection();
        System.out.println(target.toString());
        urlConn.setDoInput (true);
        urlConn.setDoOutput (true);
        urlConn.setUseCaches (false);
    }

}
```

The client program that uses this class uses a properties file `props.txt` to get information such as the `hostname`, `port` and the `GUID` for the refresh Applogic.

The main method of such a client program can have two methods of implementation as shown in the note that follows.

NOTE The determination of the following has two options:

** Is "main()" part of file TXURLConnection.java?

1. This can be a part of TXURLConnection.java (in which case you would do java TXURLConnection), or

2. It can be a part of another Client class say TXClient (in this case it would be java TXClient)

```
public static void main (String args[]) {
        Properties props = new Properties();  // store HTTP parameters
```

```
        try
        {
            FileInputStream fis = new FileInputStream("props.txt");
            props.load(fis);
        }
        catch (IOException e)
        {
            e.printStackTrace();
            return;
        }
        TXURLConnection txURL = new TXURLConnection(props);
        if (txURL.connect() == TXURLConnection.SUCCESS)
           ;
        else
            System.err.println("Failure :: TXURLConnction.init()");
}
```

A sample `props.txt` file for A TX installation on a machine with an IP address of : 192.18.112.184 and a port of 8080 for the Application Server and a GUID for the refresh Applogic is:

```
7D446663-4E0E-1A8C-FA9D-080020B37846
HREF=http://192.18.112.184:8080
GUID=7D446663-4E0E-1A8C-FA9D-080020B37846
```

TradingXpert needs to be refreshed everytime the ECXpert Admin server is restarted. If the Application Server is restarted after ECXpert refreshing TradingXpert is not necessary. TradingXpert should also be refreshed every time the ECXpert TCP/IP connector is restarted.

How to Report Problems

If you have problems with iPlanet TradingXpert 3.5 SP1, contact iPlanet customer support using one of the following mechanisms:

- iPlanet online support web site at http://www.iplanet.com/support/online/

  From this location, the CaseTracker and CaseView tools are available for logging problems.

- The telephone dispatch number associated with your maintenance contract

So that we can best assist you in resolving problems, please have the following information available when you contact support:

- Description of the problem, including the situation where the problem occurs and its impact on your operation
- Machine type, operating system version, and product version, including any patches and other software that might be affecting the problem
- Detailed steps on the methods you have used to reproduce the problem
- Any error logs or core dumps

You may also find it useful to subscribe to the ECXpert newsgroup as TradingXpert issues are sometimes discussed there. The link is:

http://developer.iplanet.com/support/newsgroups/

Once there, look for the iPlanet ECXpert - General link to call up the newsgroup articles. Alternatively, you can enter the following direct link:

news://secnews.netscape.com/iplanet.ecx.general

For More Information

Useful iPlanet information can be found at the following Internet locations:

- iPlanet release notes and other documentation --- `http://docs.iplanet.com/docs/manuals/`
- iPlanet product status --- `http://www.iplanet.com/support/technical_resources/`

- iPlanet Professional Services information --- `http://www.iplanet.com/services/pro_serv/index.html`
- iPlanet developer information --- `http://developer.iplanet.com/`
- iPlanet learning solutions --- `http://www.iplanet.com/learning/index.html`
- iPlanet product data sheets --- `http://www.iplanet.com/products/index.html`
