CitiDirect® Online Banking File Delivery Guide August 2005



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Table of Contents

Module 1: Introduction to File Delivery	1-1	
Highlighting Changes in Latest Release Affecting File Delivery U	sers <mark></mark> 1-1	
Selecting File Delivery Options		
Businesses with Import/Export Options	1-4	
Benefits		
Selecting File Delivery	1-5	
Delivery Options Library	1-5	
What Types of Data Can Be Exported?		
Export File Formats		
Standard File Export Formats	1-6	
Incremental Exports		
Types of Data That Can Be Imported		
File Delivery Duplication Checks		
Standard Import File Formats	1-7	
Module 2: Introduction to File Delivery Security	2-1	
Three Methods of Security	2-1	
Network Security	2-1	
Client/User Security	2-1	
File Security	2-2	
File Security Two-Step Process	2-3	
Security Exceptions		
Module 3: Secure/Multipurpose Internet Mail Extension	rs (S/MIME) 3	-1
Public Key Certificate		
Requirements for S/MIME	3-1	
S/MIME Certificate Management	3-1	
S/MIME Responsibilities		
Uploading a New Public Key Certificate	3-2	
Modifying an Existing S/MIME Certificate	3-3	
If the Citibank Public Key is Revoked	3-4	
If Citibank Key Pair is Compromised	3-5	
Module 4: Introduction to File Export	4-1	
Benefits of Using File Export	4-1	
Running a File Export: Number of Records in an Export 🔁	4-1	
Running a File Export: Generating an Export Report		
Formats for Payments 2		
Formats for Latin America Receivables CNAB and Letras 🔁		
Standard File Formats		
Custom File Formats	4-10	
Export Service Classes	4-10	
Module 5: Export Profiles		
Creating an Export Profile		
Creating an Export Profile: Entering a Date Range		
Creating an Export Profile: Selecting Information		



Creating an Export Profile: Selecting a Security Method 🗗	
Viewing an Export Profile	
Authorizing an Export Profile	5-6
Rejecting an Export Profile	5-7
Modifying an Export Profile	5-8
Deleting an Export Profile	
Considerations Regarding Modifying or Deleting Export Profiles	5-10
Repairing an Export Profile	
Module 6: Export Custom Formats	
Creating an Export Custom Format	
Creating an Export Custom Format: Editing Elements	
Creating an Export Custom Format: Final Steps	
Viewing a Custom Export Format	
Settings Tab Fields	
Modifying a Custom Export Format	
Deleting an Export Custom Format	
Module 7: Exporting Files	
Running a File Export	
Viewing an Export Profile	
Downloading Details of a Run History	
Module 8: File Import	
Benefits of Using File Import	
Import Formats	8-1
Importing Files: Multi-Regional Payments in a Single File <mark>₧</mark>	8-1
Import Maps	
Standard Naming Convention for Standard File Import Maps 2	
Import Profiles	8-2
Import Profiles: Enhancements to File Import Maps 7	
Import Service Classes	
Module 9: Import Profiles	
Import Profiles Overview &	
Creating an Import Profile	
Creating an Import Profile: Adding Import Maps	
Creating an Import Profile: Selecting File Error Processing, Securit	
Delivery Options	
Viewing Import Profiles	
Submitting an Import Profile with <i>Input</i> Status for Testing	9-5
Testing Import Profiles 2	
Authorizing an Import Profile	
Rejecting an Import Profile	
Modifying an Import Profile 🔁	
Deleting an Import Profile	
Repairing an Import Profile	
Module 10: Importing Files	
Importing Files Overview	
Running a Trial Run File Import	10-1



Running a File Import	10-3
Accessing the Import Run Detail Screen	
Viewing Import Run Results	10-5
Downloading Import Run Results to a File	10-5
Viewing Input Processing Errors	10-5
Viewing Archived Data from Previous Import Runs	10-6



Module 1: Introduction to File Delivery

PLEASE NOTE: The screens in this document are for training purposes only. Actual screens may vary.

The File Delivery services through CitiDirect[®] Online Banking enables clients to perform two main processes:

- File Import: Clients can securely import data files from their own applications into CitiDirect Online Banking for processing.
- **File Export:** Clients can package CitiDirect Online Banking data sets as files and transfer such files over secure Internet connections to a location or system they specify.

Highlighting Changes in Latest Release Affecting File Delivery Users 2

New functionality and new regional formats comprise the changes and enhancements to the File Delivery services through CitiDirect Online Banking. The CitiDirect application now lets you export up to 15,000 records. Single import files can contain funds transfer payments for multiple regions and countries.

Expanded file formats permit more flexibility and convenience. For File Import, there are five new Direct Debit formats to support *Latin America Direct Debits*, one new Receivable format to support *Latin America Receivables-CNAB*, and one new Direct Debit format for the *Direct Debits-Instructions* business service. For File Export, there are three new formats to support the Payments business service, and there are the required formats to support a new business service – *Latin America Receivables CNAB and Letras*.

At various places throughout this document, you will note the use of the $\frac{1}{100}$ icon to indicate that the current release of services through CitiDirect Online Banking may have implemented some changes with which you may be unfamiliar.

Selecting File Delivery Options

Options for File Delivery Service Classes can be found under the main navigation bar in CitiDirect Online Banking.

Introduction to File Delivery

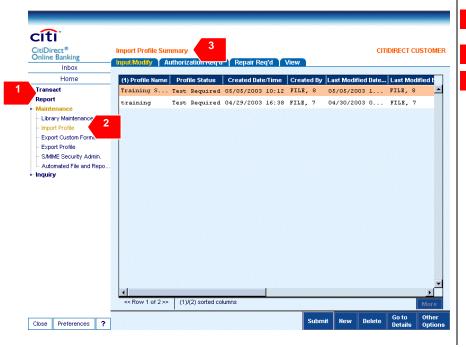


Import Transactions



- Select **Transact** on the navigation bar.
- Select Import Transactions.
- This displays the *Import Transactions Summary* screen.
 Click the tabs to proceed with your particular transaction.

Import Profile



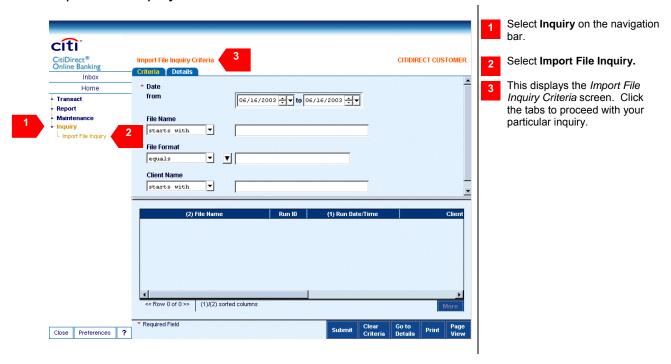
- Select **Maintenance** on the navigation bar.
- Select Import Profile.
- This displays the *Import Profile*Summary screen listing your

 available import profiles. Click
 the tabs to proceed with your
 particular import profile.

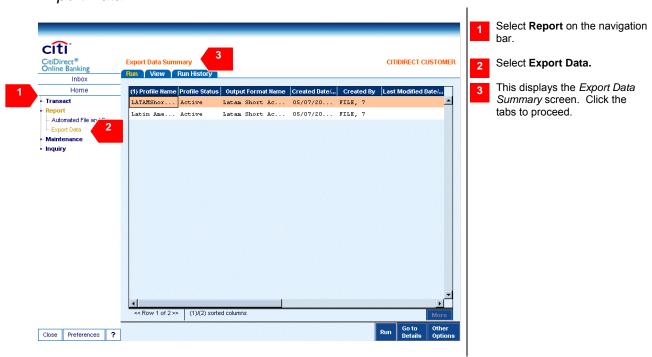
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Introduction to File Delivery

Import File Inquiry



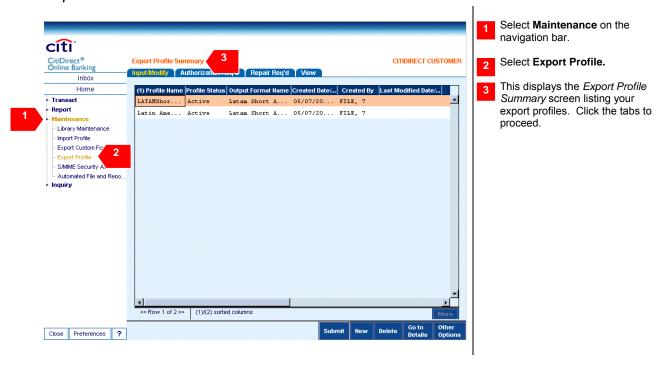
Export Data



Introduction to File Delivery



Export Profile



Businesses with Import/Export Options

The following businesses have import/export options:

- ARMS
- Citibank Payment Services (CPS)
- Controlled Disbursements
- International Direct Debit (IDD)
- International Mass Payments (IMPS)
- Lockbox
- Netting
- PayLink(SM) Asia
- PayLink(SM) Latin America
- REMS (Latin America)
- Purchasing Card
- WorldLink[®] Multicurrency Transaction Services

Benefits

There are many benefits to the File Delivery services through CitiDirect Online Banking:

- Provides in-session and automated (asynchronous) file delivery
- Supports file delivery for a wide range of corporate products
- Provides consistent functionality with a flexible architecture that can incorporate new standards as they emerge
- Easily and securely imports data created in client's computer applications
- Reduces data redundancy
- Saves time and money spent on physical delivery services as the information is sent immediately

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Introduction to File Delivery

- Downloads upgrades easily via the Internet
- Exports data in file formats you can use

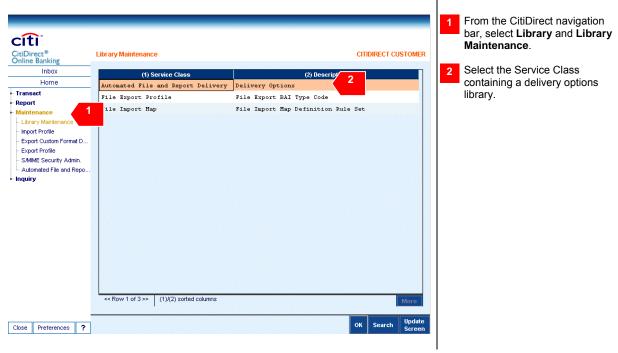
Selecting File Delivery

The Automated File and Report Delivery service enables you to schedule automatic file delivery.

- This Service Class enables you to schedule file imports or exports to run automatically so that you do
 not have to be logged onto CitiDirect Online Banking for the event to occur.
- It allows you to schedule daily, weekly, monthly, or one-time only events.
- Using import and export profiles, you can specify information for in-session and/ or automated runs.

Delivery Options Library

You can save time by setting up a library of delivery options with HTTPS and e-mail addresses. Select from this list when you define the import or export profile.



What Types of Data Can Be Exported?

You can export the following data types:

- Payments
- Direct Debit Instructions
- Direct Debit Mandates
- Preformats
- Netting Payments
- Account Statements

In addition to these data types, different formats for recording date information can also be exported. Please note that there is some regional variation in the types of data types supported.

Introduction to File Delivery



Export File Formats

Standard Export Formats

CitiDirect Online Banking provides standard export formats that you can use but not modify.

Custom Export Formats

You can define and maintain customized export formats and save and associate them with a client and a Service Class.

Standard File Export Formats

CitiDirect Online Banking supports a wide variety of standard file formats for export and supports custom formatting for your unique requirements:

- Flat File
- BAI2 Version D (latest version of D)
- DDL Account Details Citibank2
- DDL Account Details Infopool
- DDL Movements
- SAP MT940
- SWIFT™ MT940
- MCM Account Balance
- GTM Account Balance
- BAI1
- Datastream Cash
- EDITFACT FINSTA 96a
- Asia (6 formats)
- Central and Eastern Europe, Middle East and Africa (2 formats)
- Latin America (2 formats)
- DDA Maintenance Hong Kong, Singapore
- Multiple Invoice DDI Export Layout Singapore, Hong Kong
- Non-Multiple Invoice DDI Export Layout Singapore
- Latin America PayLink(SM) Beneficiary
- Latin America PayLink Payment
- Latin America PayLink Reconcilement

Incremental Exports

CitiDirect Online Banking facilitates delivery of incremental exports for SAP MT940, SWIFT MT940, and Citibank Flat File.

Types of Data That Can Be Imported

CitiDirect Online Banking supports the import of a variety of data types:

- ACH/GIRO
- Advice to Receive
- Book Transfer

Introduction to File Delivery



- Cheque
- · Cross Border Funds Transfer
- Domestic Funds Transfer
- Netting
- Payment Preformat records
- Payment records

File Delivery Duplication Checks

CitiDirect Online Banking makes every attempt to process files without duplicating data. As each import file is read for processing, CitiDirect associates a unique *identifier* with that file. If the same file is submitted twice, a *Duplication Alert* notifies the user or the system.

Standard Import File Formats

CitiDirect supports nearly 100 standard file formats. Below and on the following pages is a detailed list of the import file formats that are supported:

- Citibanking Flat File ACH Credit
- Citibanking Flat File ACH Debit
- Citibanking Flat File Book Transfer
- Citibanking Flat File Bank Transfer
- Citibanking Flat File CHIPS(SM)
- Citibanking Flat File Customer Transfer
- Citibanking Flat File Fed Drawdown
- Citibanking Flat File Fedwire
- Citibanking Flat File Pre-Advice
- Citibanking SWIFT ACH Credit
- Citibanking SWIFT ACH Debit
- Citibanking SWIFT Bank Transfer
- Citibanking SWIFT Fed Drawdown
- Citibanking SWIFT Pre-Advice
- Citibanking SWIFT Book Transfer Two Party (MT100)
- Citibanking SWIFT CHIPS(SM) (MT100)
- Citibanking SWIFT CHIPS(SM) (MT202)
- Citibanking SWIFT Customer Transfer (MT100)
- Citibanking SWIFT FedWire (MT100)
- Citibanking SWIFT FedWire (MT202)
- Citibanking SWIFT Bank Transfer (MT202)
- MTMS Book Transfer Hungary
- MTMS Book Transfer India
- MTMS Book Transfer Pakistan
- MTMS Book Transfer South Africa
- MTMS Book Transfer United Arab Emirates
- MTMS Domestic Payments Hungary
- MTMS Domestic Payments Russia
- MTMS EFT Payments ACH South Africa
- MTMS En Cashable Check Romania
- MTMS FCY Funds Transfer Czech Republic
- MTMS FCY Funds Transfer Slovakia
- MTMS FCY Funds Transfer Hungary
- MTMS FCY Funds Transfer India

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Introduction to File Delivery

- MTMS FCY Funds Transfer Poland
- MTMS FCY Funds Transfer South Africa
- MTMS FCY Funds Transfer Turkey
- MTMS FCY Funds Transfer United Arab Emigrates
- MTMS Funds Transfer Russia
- MTMS Group Transfer Hungary
- MTMS InterBank Funds Transfer Poland
- MTMS InterBank Funds Transfer South Africa
- MTMS InterBank Funds Transfer Turkey
- MTMS InterBank Funds Transfer Czech Republic
- MTMS InterBank Funds Transfer Slovakia
- MTMS Manager Check Hungary
- MTMS Manager Check India
- MTMS Manager Check Pakistan
- MTMS Manager Check Poland
- MTMS Manager Check South Africa
- MTMS Manager Check Turkey
- MTMS Manager Check United Arab Emirates
- MTMS Paylink(SM) Check Romania
- MTMS Payment Order Romania
- MTMS Post Dated Check United Arab Emirates
- MTMS Post Dated Checks Turkey
- MTMS Postal Voucher Hungary
- Paylink Asia Paylink Check, Australia
- Paylink Asia Paylink Payroll, Australia
- Paylink Asia Paylink Direct Credit, Australia
- Paylink Asia Paylink Check, Hong Kong
- Paylink Asia Paylink Check (USD), Hong Kong
- Paylink Asia Paylink Autopay, Hong Kong
- Paylink Asia Paylink Autopay Payroll, Hong Kong
- Paylink Asia WorldLink Factory Check, Hong Kong
- Paylink Asia Paylink Check, Singapore
- Paylink Asia Paylink Check (USD), Singapore
- Pavlink Asia Pavlink GIRO, Singapore
- Paylink Asia Paylink Payroll, Singapore
- Paylink Asia WorldLink Factory Check, Singapore
- Paylink Asia Paylink Check, Malaysia
- Paylink Asia WorldLink Factory Check, Malaysia
- Pavlink Asia Pavlink Check, China
- Paylink Asia Paylink GIRO, China
- Paylink Asia Paylink Payroll, China
- · Paylink Asia Paylink Check, Indonesia
- Paylink Asia Paylink LLG, Indonesia
- Paylink Asia Paylink LLG Payroll, Indonesia
- Paylink Asia WorldLink Factory Check, Indonesia
- Paylink Asia Paylink Check, Korea
- Paylink Asia Paylink P-note, Korea
- Paylink Asia Paylink Payroll, Korea
- Paylink Asia Paylink Check, Philippines
- Paylink Asia Paylink Draft, Taiwan
- Taylink Asia Laylink Dian, Taiwai
- Paylink Asia Paylink IBRS, Taiwan
- Paylink Asia Paylink Vendor, Taiwan
- Paylink Asia Paylink Check, Thailand

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Introduction to File Delivery

- Paylink Asia Paylink Autopay, Thailand
- Paylink Asia Paylink Payroll, Thailand
- Paylink Aisa Paylink Check, New Zealand
- Paylink Asia Paylink Direct Credit, New Zealand
- Paylink Asia Paylink Zengin Mass Payments
- Domestic Funds Transfer NCB4.35, Japan
- Domestic Funds Transfer NCB4.4, Japan
- Domestic Funds Transfer Firm Banking Format, Japan
- Paylink Latin America 1024
- Paylink Latin America 600
- Paylink Latin America 500
- Paylink Latin America 400
- WorldLink Import
- WorldLink Check
- WorldLink Check and Funds Transfer Combination Format
- WorldLink Funds Transfer



Module 2: Introduction to File Delivery Security

PLEASE NOTE: The screens in this document are for training purposes only. Actual screens may vary.

Three Methods of Security

Security measures are enforced at the network, client/user, and file levels using the latest methods:

- Secure Sockets Layer (SSL)
- Secure/Multipurpose Internet Mail Extensions (S/MIME)

There are responsibilities on both the Citibank and client for maintaining secure file delivery.

Network Security

CitiDirect® Online Banking provides a secure online session through the use of Secure Sockets Layer (SSL).

During a CitiDirect Online Banking session, encryption using the SSL protocol creates a secure communications channel, provides safety, reliability, and ensures that only authorized users can view encrypted data.

Client/User Security

You can require that all import map and import run items input or modified in CitiDirect Online Banking be authorized before Citibank can process them.

When you require that import items be authorized, only entitled users can authorize them. CitiDirect will not allow an item to be authorized by the same user who submitted or modified it.

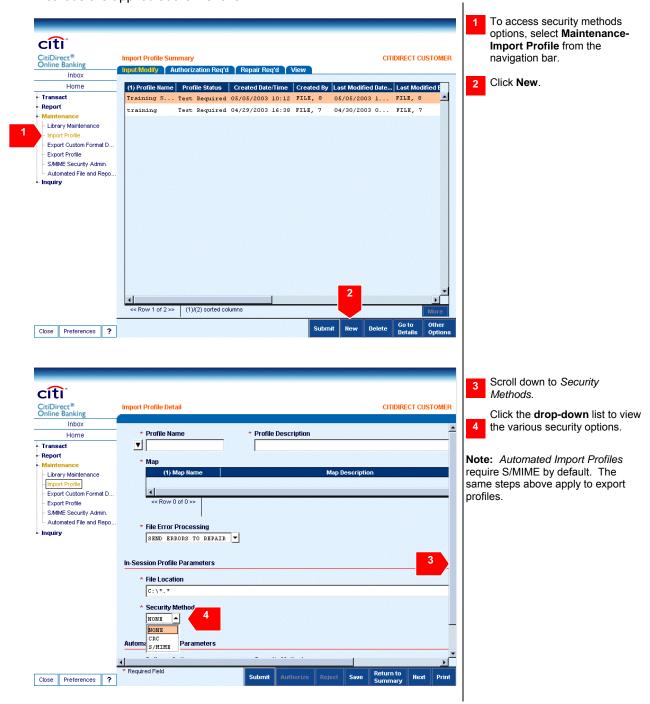
Entitled users, such as Security Managers, can specify authorization requirements using the *Flow Maintenance* Service Class.

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Introduction to File Delivery Security

File Security

CitiDirect Online Banking supports Secure/Multipurpose Internet Mail Extensions (S/MIME) to encrypt data and to validate the identity of the user who is initiating data transfer. These optional security methods are applied at the file level.



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Introduction to File Delivery Security

File Security Two-Step Process

File security is a two-step process:

- 1. You choose to apply an optional Security Method (S/MIME) as the import or export profile is created.
- 2. The file is transmitted via a secure connection channel (SSL) from your site to CitiDirect during an import run or from CitiDirect to your site during an export run.

All files imported into and exported from CitiDirect are considered secure for several reasons:

- Data Integrity: the content will not be altered in transit.
- Authenticity: the source of the file is assured.
- Secrecy: the content is hidden from view.
- Irrefutability: the sender is proved to have sent the document.

By establishing this secure network and supporting the use of S/MIME, CitiDirect not only ensures that the information being imported and exported is protected, it also guarantees that it is not altered.

Security Exceptions

Regardless of their nature, notifications of all exception events are routed to the *Inbox* of all entitled users.

Detailed information on the nature of the exception is provided in the Security Exceptions Reports including the following:

- Import File Name
- User/System ID of Initiator
- Date/Time of File Transfer
- Date/Time of Exception Event
- Reason for Exception

PLEASE NOTE: The screens in this document are for training purposes only. Actual screens may

Module 3: Secure/Multipurpose Internet Mail Extensions (S/MIME)

vary.

Secure/Multipurpose Internet Mail Extensions (S/MIME) provides a secure and private way to send and receive encrypted data. CitiDirect® Online Banking strongly recommends the use of S/MIME because it provides authentication and ensures message integrity.

S/MIME uses a digital envelope and public key algorithms. You could think of it working this way:

- 1. The message is coded with a secret key.
- 2. The sender signs the letter with a unique signature that assures the receiver who sent it.
- 3. The letter is placed in a sealed envelope so other people cannot see or change the letter and its signature.

Public Key Certificate

The sender uses two keys to encrypt the data. One key is secret; the other is a Public Key. The receiver must have a copy of the sender's Public Key in order to decrypt the data. The Public Key is freely distributed with a Public Key Certificate. Confidentiality is not required with a Public Key, but the integrity of the Public Key must be assured.

Certificate Authority (CA) confirms the identity of the holder of the corresponding private key.

Requirements for S/MIME

In order to use S/MIME, the following requirements must be satisfied:

- 1. CitiDirect and you must have the S/MIME (PKCS-7) Compliant Software Utility. This utility will encrypt and sign all S/MIME files.
- 2. You must obtain and maintain your S/MIME security and certificate administration. S/MIME is then used to download Citibank's Public Key.
- 3. Citibank's initial list of approved CAs:
 - VeriSign[®]
 - Thawte Consulting
 - Società per iServici Bancari SSB S.p.A.
 - Internet Publishing Services
 - Certisign Certification Digital Ltda
 - GlobalSign
 - · British Telecommunications

S/MIME Certificate Management

From the navigation bar under the *Maintenance* Category, the S/MIME Administration Service Class enables you to upload and manage your S/MIME Public Key Certificates through CitiDirect Online Banking.

You must create and sign a certificate with its own Private Signature Key and vouch for the authenticity of the Public Key and identity of its owner.



Your Public Key Certificate used for digital signing must meet the following requirements:

- A valid (not expired) X.509 signing certificate must be used (e-mail certificate).
- RSA public key (signature) algorithms using key lengths of 1024 bits (or larger).
- Message Digest Algorithm must be SHA1-RSA.
- Encryption algorithm is DES3 (triple DES).

Note: Certificate expiration period should not exceed two years.

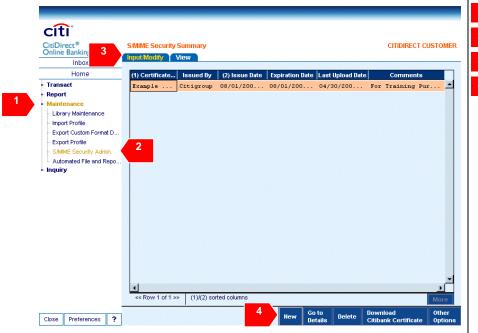
Note: CitiDirect Online Banking offers certificates for File Delivery Security Method S/MIME and Automated File Report and Delivery (AFRD) Delivery Method S/MIME. AFRD Delivery Method S/MIME uses a Web certificate.

S/MIME Responsibilities

- 1. Security is an option you choose to apply.
- 2. Citibank does not offer a security certificate or provide consultation to assist client's in establishing a Public Key Identification (PKI) environment at their site.
- 3. You will use the S/MIME Administration service in CitiDirect Online Banking to remove expired or revoked keys on your certificates.
- CitiDirect Online Banking will warn you that a Certificate is expiring but will not certify the validity of a Certificate.
- 5. S/MIME is required for all import/export profiles run as automated events.
- 6. CitiDirect Online Banking uses the Certificate residing on its Entrust server that has been designated to accommodate your use of S/MIME.

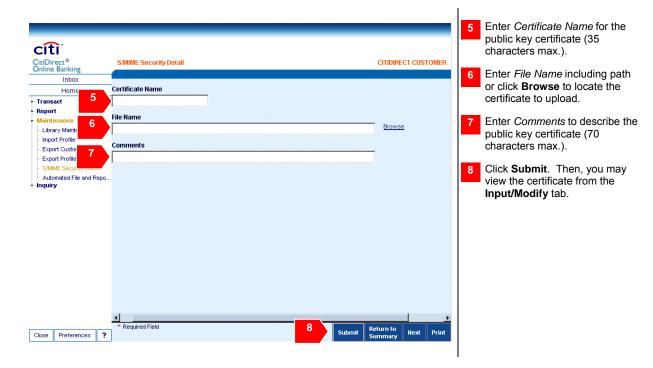
Uploading a New Public Key Certificate

You must obtain your own Public Key Certificate and upload it to CitiDirect Online Banking, enabling Citibank to authenticate and decrypt data that you have encrypted.

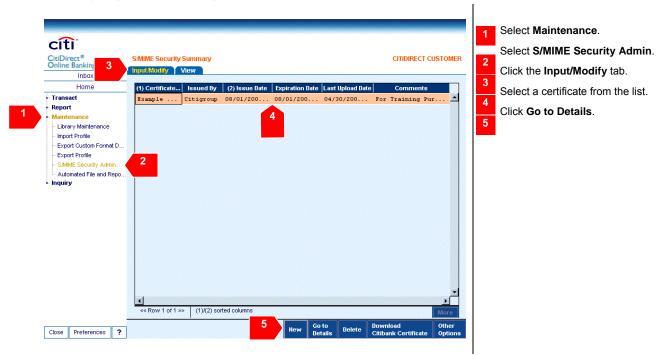


- Select Maintenance.
- Select S/MIME Security Admin.
- Click the Input/Modify tab.
- Click New.

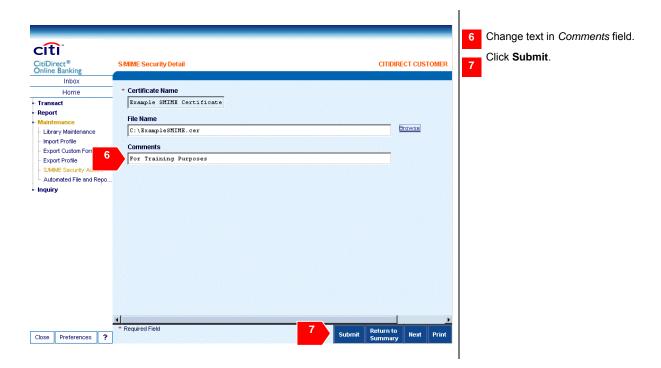




Modifying an Existing S/MIME Certificate







If the Citibank Public Key is Revoked

The following scenario describes what will happen if the Citibank Public Key is revoked.

After Citibank installs the initial CitiDirect Online Banking File Delivery key pair (Private Key, Private Key password, and Public Key) in the necessary locations within the CitiDirect architecture, the CitiDirect File Delivery service will use this key pair systematically to:

- Decrypt import files that have been retrieved from you, a client.
- Digitally sign export files or reports that will be delivered to you, a client.

You download the Citibank Public Key using the CitiDirect S/MIME Security Admin Service Class.

You save the downloaded Citibank Public Key in your own location to:

- Encrypt import files that will be retrieved from you by.
- Signature authenticate export files or reports that have been delivered by CitiDirect Online Banking to you.

Note: Any user at your site who has been entitled to the CitiDirect *S/MIME Security Admin* Service Class may download the Citibank Public Key as many times as he or she wishes.

File Import

You create an import profile, sign it with your Private Key, and encrypt it with your downloaded copy of the (now revoked) Citibank Public Key.

Your import file object is retrieved by CitiDirect Online Banking per the Automated File and Report Delivery service.

Decryption of the import file object in CitiDirect fails because the Citibank Public Key that you used to encrypt the file with is not from the new Citibank key pair.



File Export and Report Delivery

Per schedule, CitiDirect Online Banking creates an export file or a report, signs it with the Citibank Private Key that is currently in effect, and encrypts it with the Customer's Public Key.

CitiDirect delivers the export file or report object to your specified location (either your Web server or your e-mail address).

Decryption of the export file or report object by you succeeds (because your key pair has not changed), but your signature authentication of the object fails because the Citibank Public Key you used to authenticate the Citibank signature is not from the new Citibank key pair.

If Citibank Key Pair is Compromised

In the event that Citibank decides that the Citibank key pair has been compromised and must be replaced, CitiDirect Online Banking support staff will revoke the key, get a new key pair, and install the new key pair in the necessary CitiDirect architecture locations.

From this point forward, the new Citibank key pair is used by the CitiDirect File Delivery service for processing import files, export files, and report deliveries.

Since Citibank Public Key downloads are not logged, there are no automated alerts or client notifications that the Citibank Public Key has been replaced.

Your users continue to use the previously downloaded (now revoked) Citibank Public Key.



Module 4: Introduction to File Export

PLEASE NOTE: The screens in this document are for training purposes only. Actual screens may vary.

In today's world, data is stored in a wide variety of application programs and data formats. At times, you will need to move information from Citibank into your system. File export allows you to export data from CitiDirect[®] Online Banking as a file in the format you select.

Benefits of Using File Export

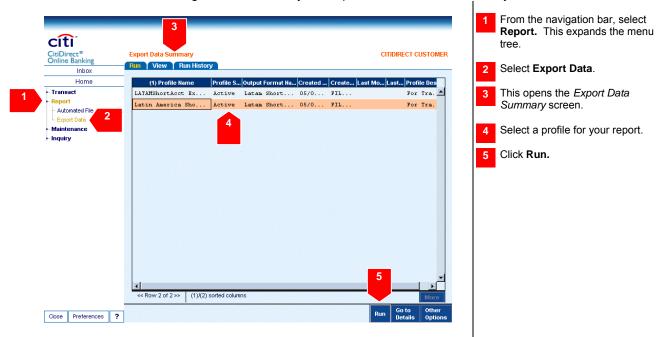
- 1. Data is exported from CitiDirect over secure Internet lines.
- 2. You receive data in a format that you can use on your own systems.
- 3. Data redundancy is eliminated.
- 4. Error due to duplicated data is greatly reduced.

Running a File Export: Number of Records in an Export |

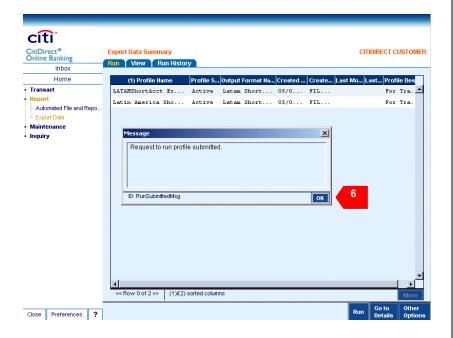
The maximum number of records allowed in an export is now 15,000. This more than doubles the previous limit of 7,000 records per export.

Running a File Export: Generating an Export Report 12

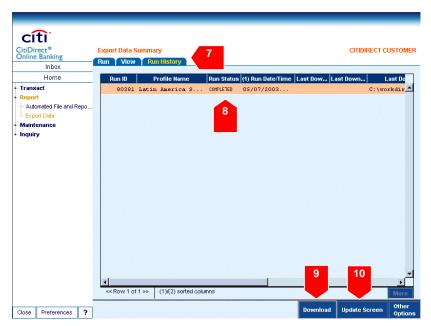
The Actuate[®] reporting engine generates the export report. You use the same, familiar navigation bar in CitiDirect[®] Online Banking associated with your Export Profile and File Delivery Service Classes.







This opens a *Message* box informing you that your profile has been submitted. Click **OK** to close the box and proceed.



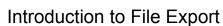
- To complete the process, click the **Run History** tab.
- Report Status of your report based on the selected profile. A COMPLETED status means that the report is ready to download according to the instructions in the Export Profile.
- 9 Click **Download** to get the report.
- 10 Click **Update Screen** to see the change in status. You may need to click the button several times.

Formats for Payments 2

Three new formats for Payments are now offered. They are:

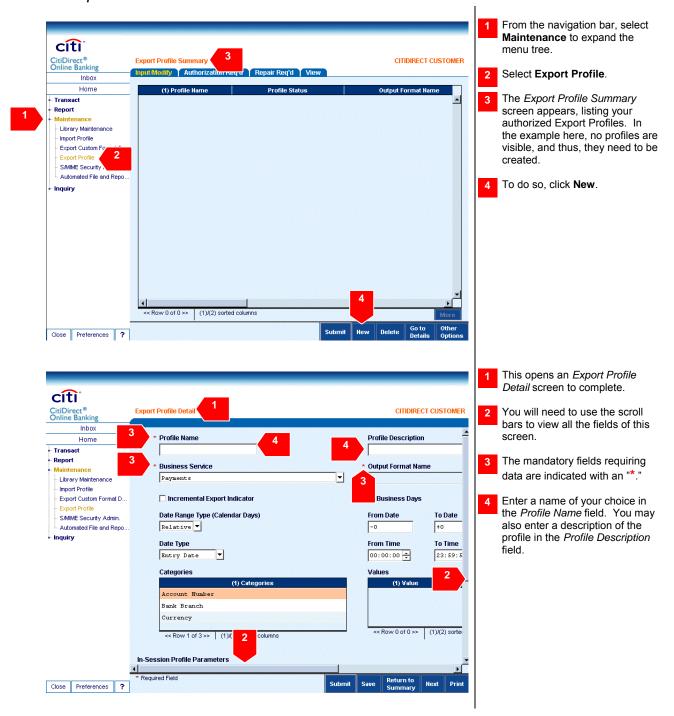
- Latin America Short Account Statement
- Latin America Long Account Statement
- FEBRABAN

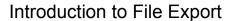
Creating an export in these formats follows the same process as with the other formats. That process is illustrated below using the *Latin America Short Account Statement* format.



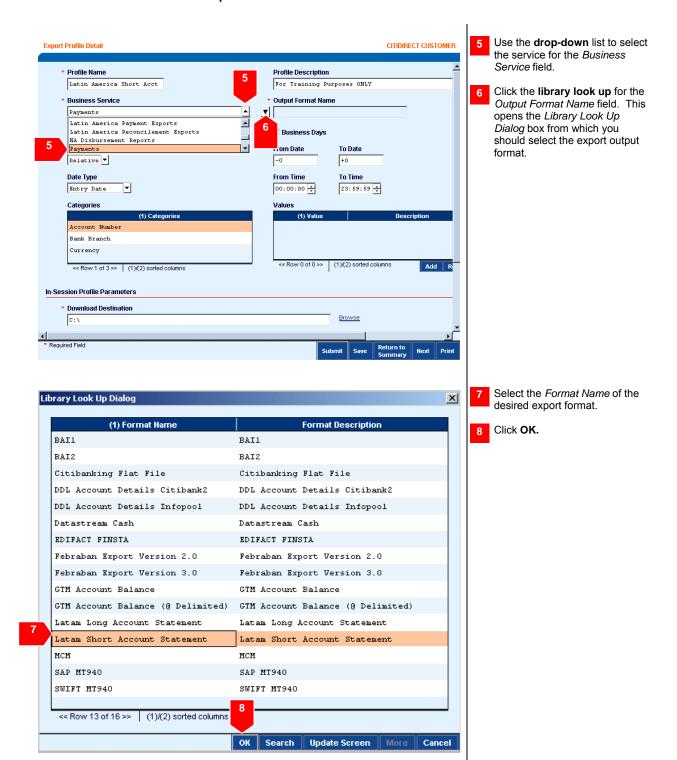


Example of Latin America Short Account Statement Format

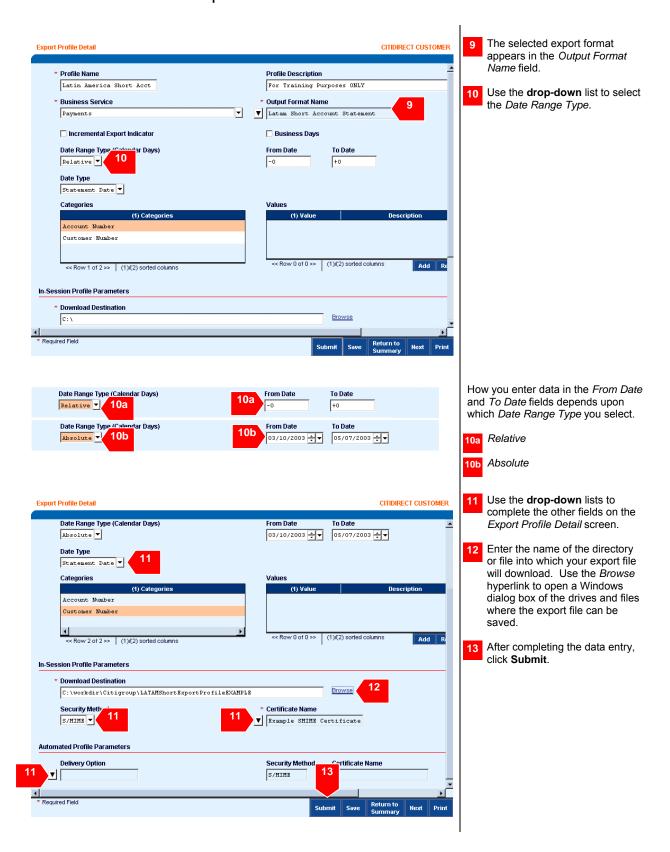


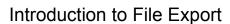




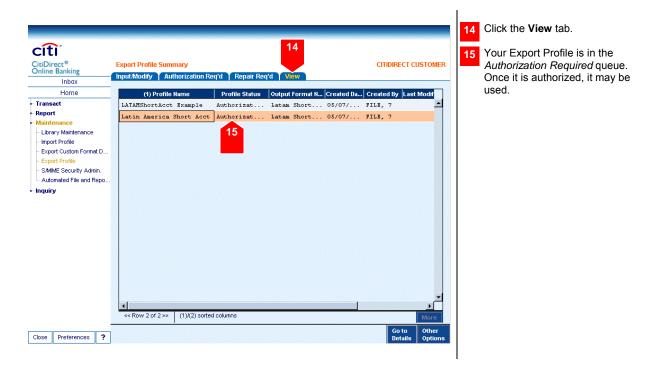






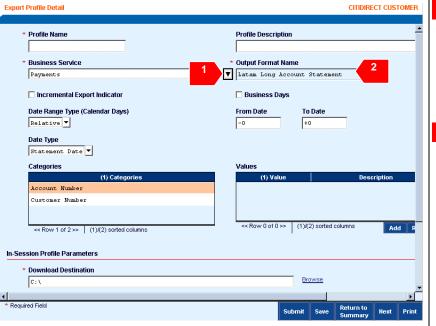




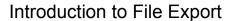


Selecting the Latin America Long Account Statement Format

To select the Latin America Long Account Statement format, you follow the same, customary procedure.



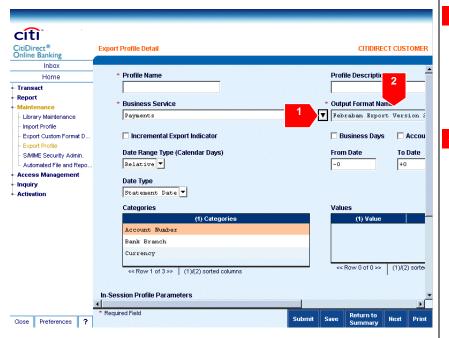
- Click the **library look up** for the Output Format Name field. This opens the Library Look Up Dialog box from which you should select the Latam Long Account Statement export output format. (See the example of the Library Look Up Dialog box in the previous section).
- The Output Format Name field is automatically completed with the name of your selection from the Library Look Up Dialog box.





Selecting the FEBRABAN Format

To select the *FEBRABAN* format, you follow the same, customary procedure.



- Click the **library look up** for the Output Format Name field. This opens the Library Look Up Dialog box from which you should select the Febraban Export format. (See the example of the Library Look Up Dialog box in the previous section).
- The Output Format Name field is automatically completed with the name of your selection from the Library Look Up Dialog box.

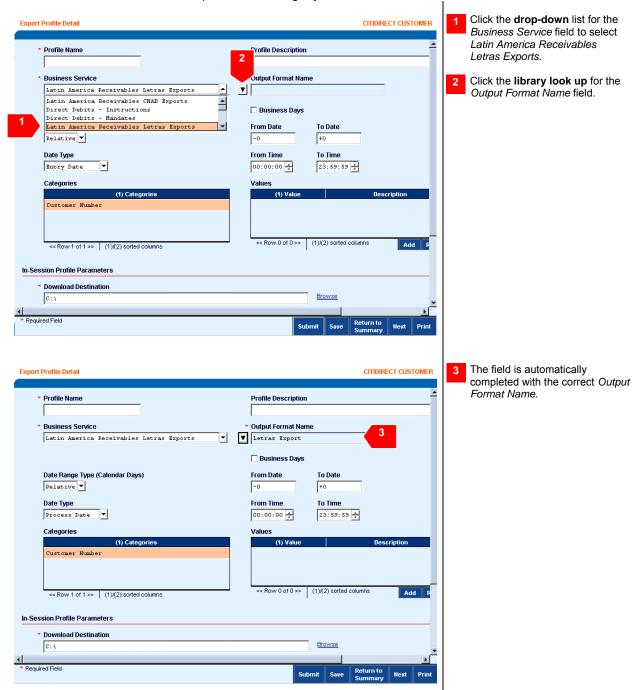
Formats for Latin America Receivables CNAB and Letras

Latin America Receivables CNAB and Letras is a new business service. There are two new formats associated with this service – Letras Export and CNAB400 Export



Selecting the Letras Format

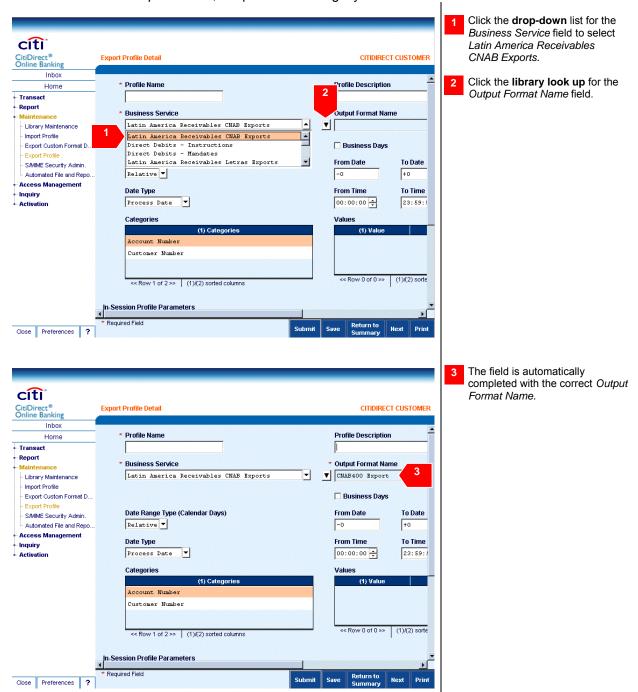
To select the Letras format, the procedure is slightly different.





Selecting the CNAB Exports Format

To select the CNAB Export format, the procedure is slightly different.





Standard File Formats

CitiDirect Online Banking supports the following standard file formats:

- Bank Administration Institute (BAI)
- SAP MT940
- Datastream Cash Statement
- Data Download
- Flat File
- GTM
- MCM
- SWIFT™ MT940
- EDIFACT

Custom File Formats

CitiDirect Online Banking supports three basic types of custom formatting.

Fixed Length

Each field is a fixed length so the system automatically knows where to separate each field. Unused portions of a field can be filled up with padding characters to ensure each exported file contains fields of the correct length.

Variable Length

Each field length varies, so a character separates each field. This field delimiter is often a comma or tab.

Tagged

In addition to field delimiters, some types of exported files need fields to be labeled with tags. Tag delimiters are characters that separate tags.

Export Service Classes

You must first create and activate an export profile before running an actual file export. Each export profile specifies a file format, criteria used to select data to be included, and parameters such as file destination and security.

Then, you set up the file export process using the *Export Profile* Service Class under the *Maintenance* Category. Create *Custom Formats for Data Export* using the *Export Custom Format* Service Class.

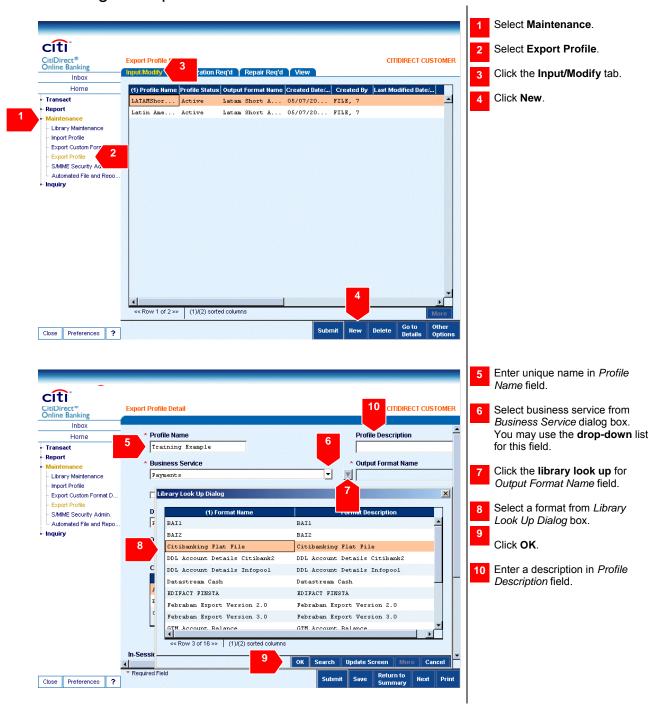
Finally, you run the file export process and view the *File Export Run History* in the *Export Files* Service Class under the *Report* Category from the on-screen navigation bar.



Module 5: Export Profiles

PLEASE NOTE: The screens in this document are for training purposes only. Actual screens may vary.

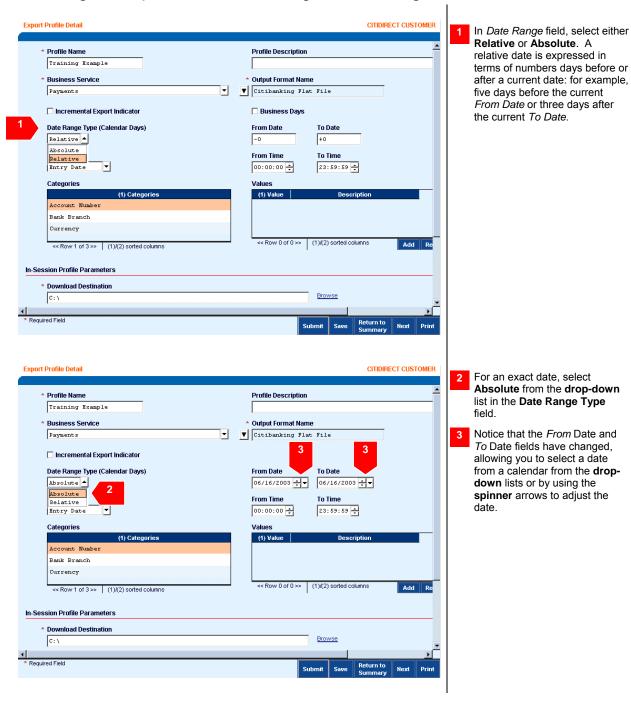
Creating an Export Profile





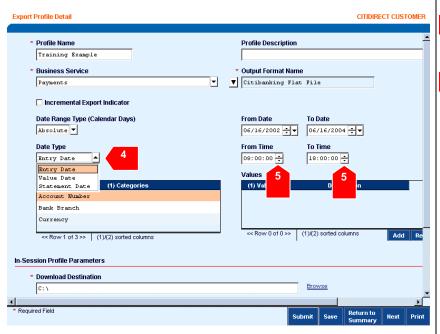


Creating an Export Profile: Entering a Date Range



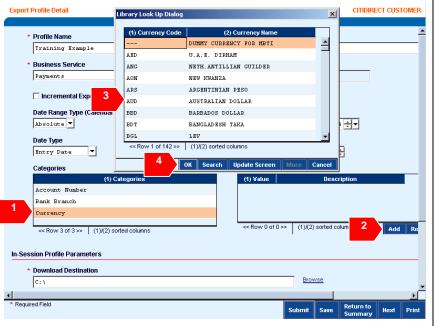






- Select Entry Date as the default Date Type field or click the drop-down list and select from the list.
- 5 Click the **spinner** arrows to change default times in the *From Time* and *To Time* fields

Creating an Export Profile: Selecting Information



While creating an export profile, do the following steps to select information to be exported:

- Select specific information to export from the *Categories* list.
- 2 Click Add.
- Select one or more records from the *Library Look Up Dialog* box.
- 4 Click OK.

Repeat steps 1 thru 4 to select one or more remaining categories.

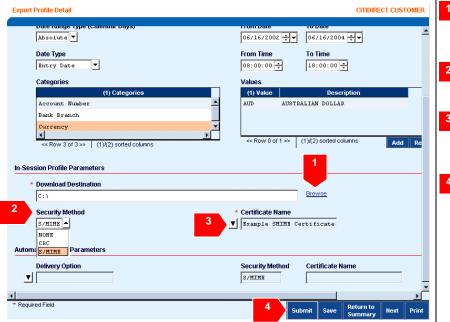
Note: If needed, select one or more values from the *Values* dialog box and click **Remove**.

Export Profiles



Creating an Export Profile: Selecting a Security Method 2

All export profiles are created as in-session profiles, meaning that you are logged in to CitiDirect® Online Banking to run the export profile. However, before you can run the export profile, you must select a security method.



Click **Browse** in the *Download Destination* field and select the destination path for the export file

Select **S/MIME** if you would like to use a security method. The default is *None*.

If **S/MIME** security is selected, click the **library look up** for the *Certificate Name* field and select a certificate.

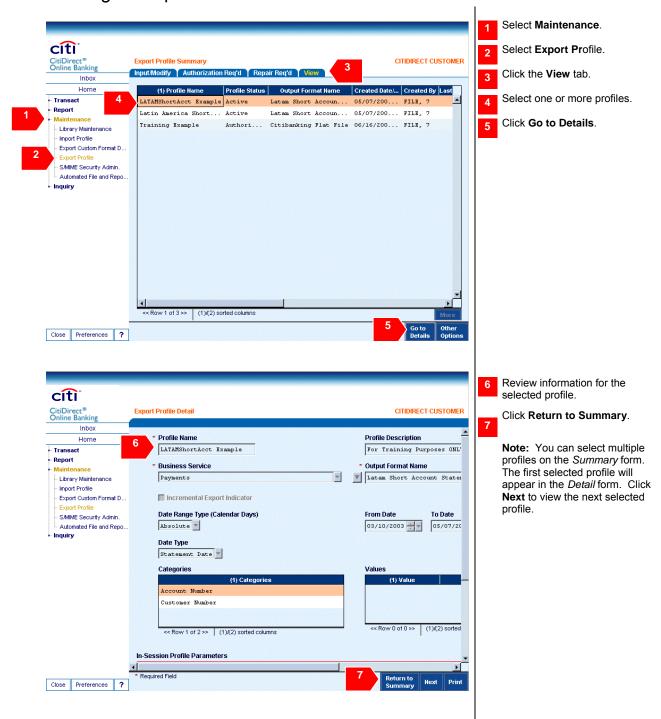
Click Submit.

Note: If you want to save this profile to complete at a later date, click **Save**.





Viewing an Export Profile

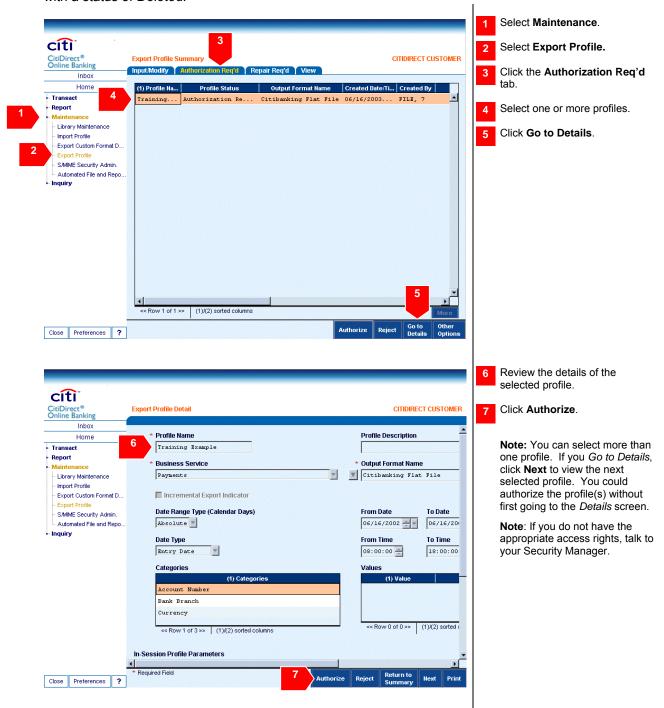




Authorizing an Export Profile

All profiles with an *Authorization Required* status that you are entitled to authorize are listed. If you created, modified, or deleted an export profile, you cannot authorize it. If your Access Profile does not include entitlement rights to authorize export profiles, the **Authorization Req'd** tab does not appear.

Once authorized, export profiles with a status of *Authorization Required* move to the **Input/Modify** tab with a status of *Active*, and those with a status of *Delete Authorization Required*, move to the **View** tab with a status of *Deleted*.



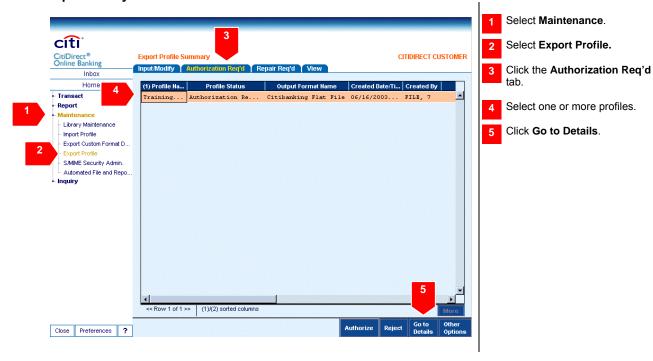


Rejecting an Export Profile

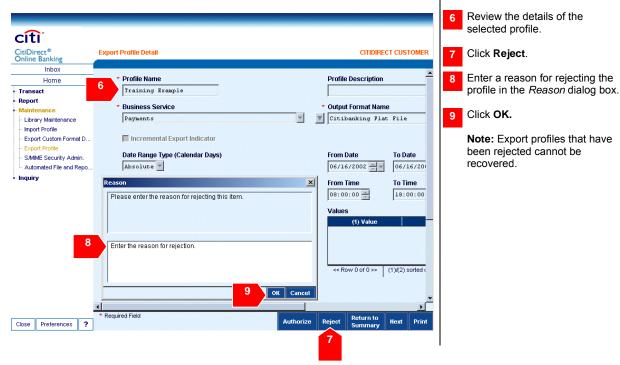
You can select more than one profile. If you go to details, click **Next** to view the next selected profile. You could reject the profile(s) without first going to the *Details* screen. If you created, modified, or deleted an export profile, you cannot reject it.

If multiple export profiles were selected, you must enter the same reason for all export profiles. If the same reason does not apply, then select and reject each export profile individually.

Once rejected, export profiles with a status of *Authorization Required* move to the **Repair Req'd** tab with a status of *Repair Required*, and those with a status of *Delete Authorization Required* move to the **Input/Modify** tab with a status of *Active*.

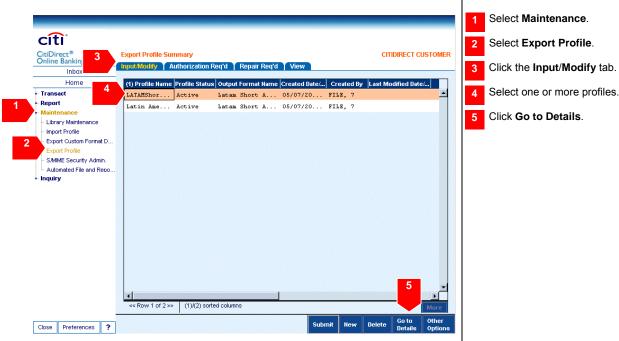




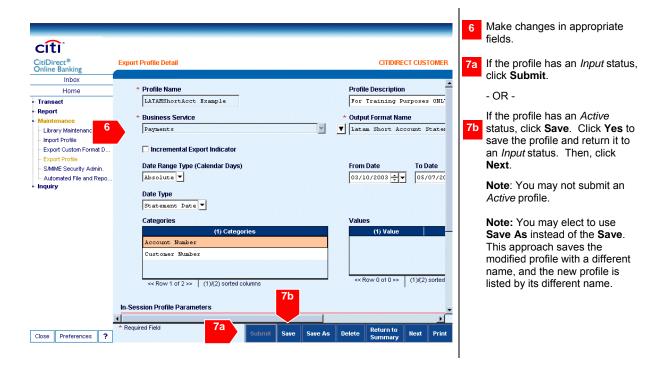


Modifying an Export Profile

You can also select more than one profile. When you click **Go to Details**, click **Next** to view the next selected profile.



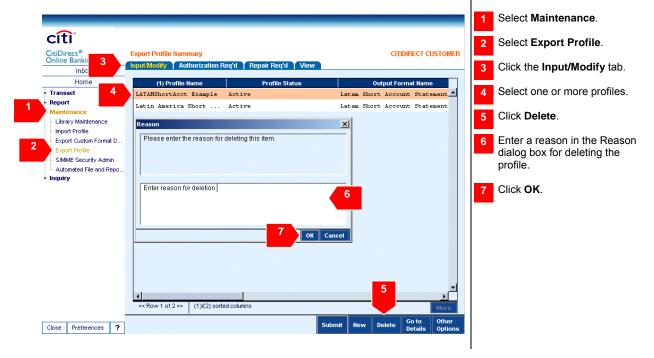




Deleting an Export Profile

You can select more than one profile to delete. If you delete multiple export profiles at once, you must enter the same reason for deleting all. If the same reason does not apply, then individually select and delete each export profile.

Note: If you delete an export profile, you will not be able to export unless another profile is created.





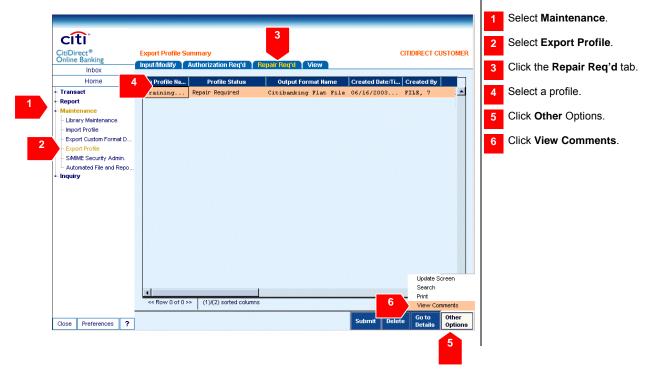
Considerations Regarding Modifying or Deleting Export Profiles

If modifications are made to a running export profile, a warning dialog box appears. **Important:** modifying any profile with an *Active* status will affect any *Out of Session* schedule profiles that might have been previously created.

- 1. You may delete export profiles for which an export run is in progress. Deleting the profile does not affect the export run in progress.
- 2. If specified by Flow Control requirements, export profiles with an *Active* status move to the **Authorization Reg'd** tab before the deletion can be completed.
- 3. Export profiles with an *Input* status move to the **View** tab before the deletion can be completed.
- 4. Deleted export profiles cannot be recovered.

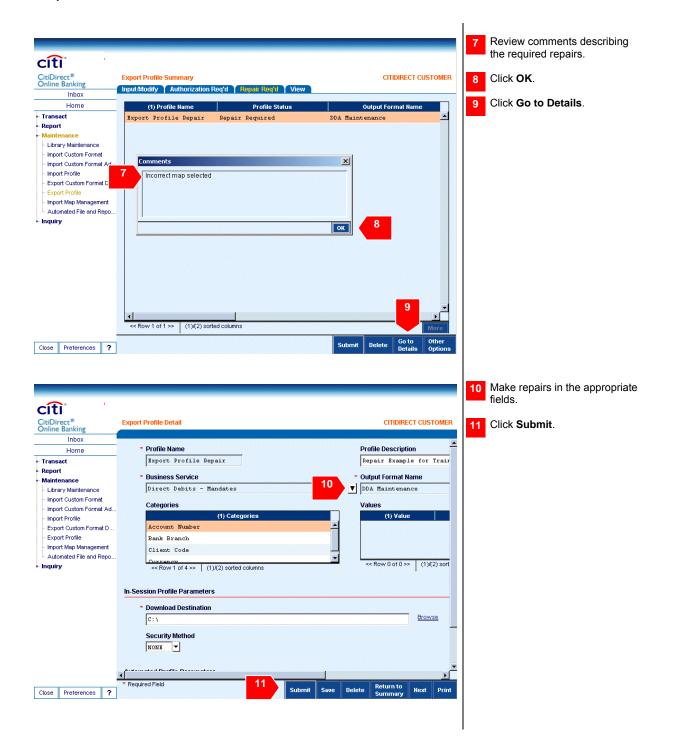
Repairing an Export Profile

It is best to individually select each export profile for repair so that you can view comments.







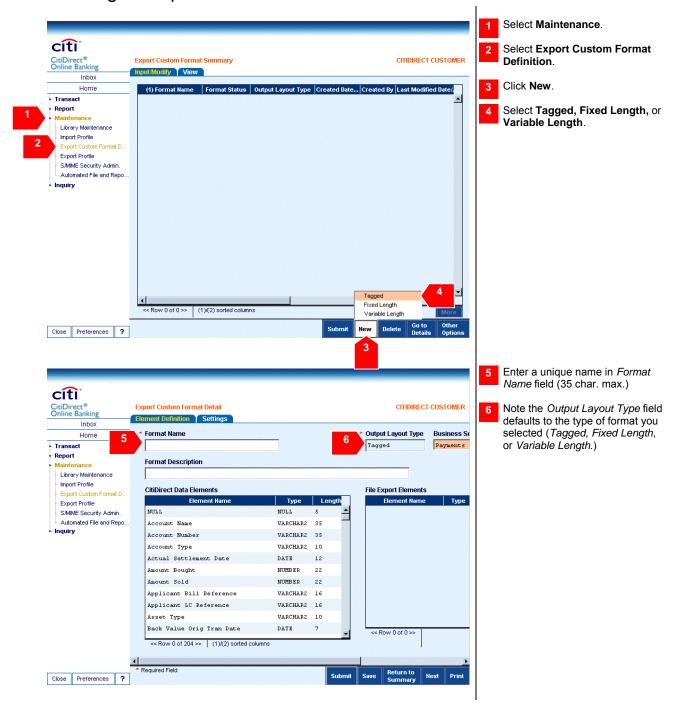




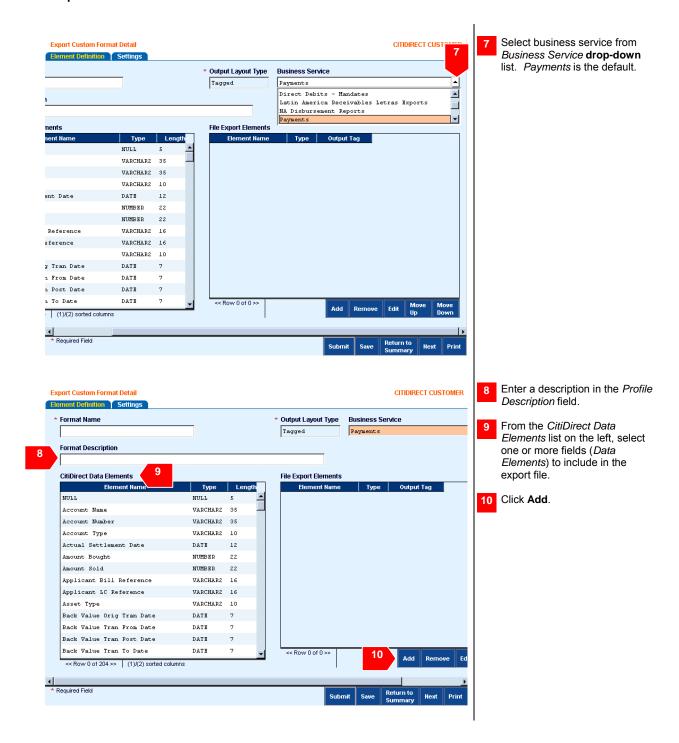
Module 6: Export Custom Formats

PLEASE NOTE: The screens in this document are for training purposes only. Actual screens may vary.

Creating an Export Custom Format

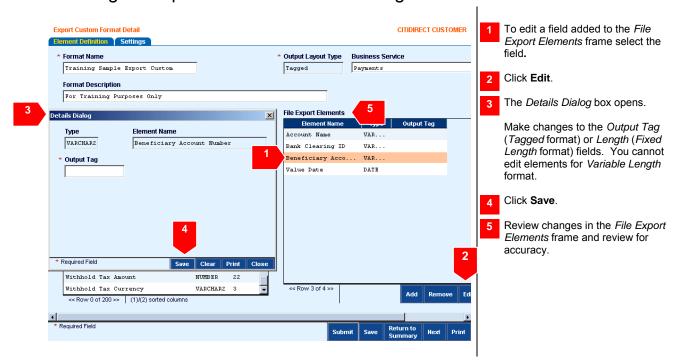






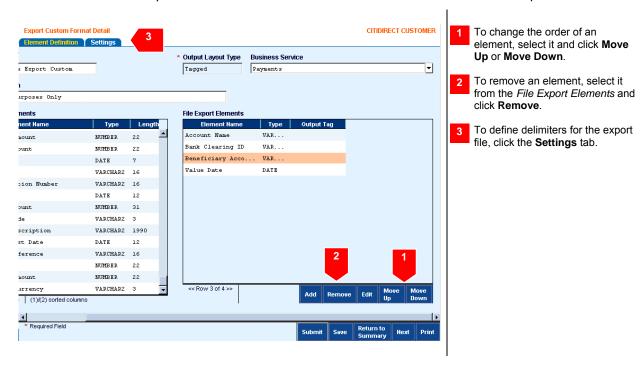


Creating an Export Custom Format: Editing Elements

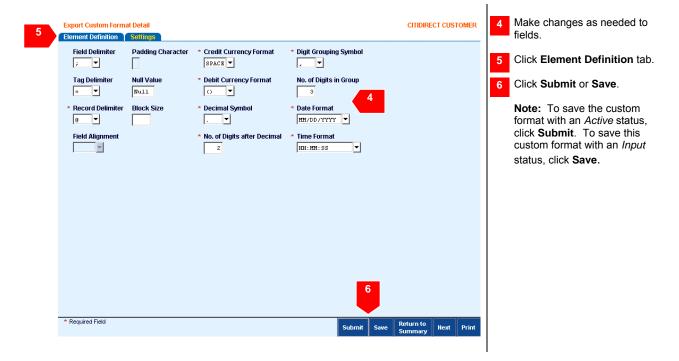


Creating an Export Custom Format: Final Steps

The order in the File Export Elements frame determines the order of elements in the export file.



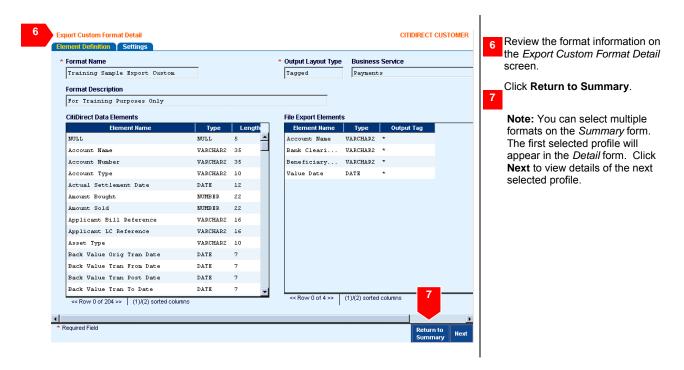




Viewing a Custom Export Format







Settings Tab Fields

The **Settings** tab lets you further define the export custom format.

Review this chart for information and descriptions of the 15 different types of settings tab fields and possible values.

Settings Tab Field	Description		
Block Size	The size of the data block. If block size is not indicated, information will wrap to the next line.		
Credit Currency Format	The format of the currency in an exported file. Possible values include: Space (default) + ()		
Date Format	The format of the date fields. Possible values include: MM/DD/YYY MM/DD/YY DD/MM/YYYY YYYY/MM/DD YY/MM/DD YYYYMMDD YYYMMDD YYYMMDD YYYMM.DD YYY.MM.DD MMM-DD-YYYY MMM-DD-YYYY DD-MMM-YYYY		



Settings Tab Field	Description			
Debit Currency Format	The format that indicates a negative amount. Possible values include: Space (default) + + ()			
Decimal Symbol	The symbol used to denote decimals, based on currency. Possible values include: None ,			
Digit Grouping Symbol	The symbol used to denote digit groupings (hundreds, thousands, etc.), based on currency. Possible values include: None , .			
Field Delimiter	This field is active only if a tagged or variable length custom format was selected. It consists of a character that indicates the separation between two fields. Typically, this will be a space or comma. The selected delimiter must not occur within the body of a field or it will be impossible to determine if it is a delimiter or data. Available field delimiters include the following: # # @ # # @ # # # # # # # # # # # #			
Field Alignment	This field is active only if a fixed length custom format was selected. It indicates how fields are aligned. You may select left or right.			
No. of Digits after Decimal	The number of digits that follow the decimal point, based on currency. A maximum of four can be specified.			
No. of Digits in Group	The number of digits in a group. The field defaults to three and a maximum of four may be specified.			
Null Value	The value null is used to leave "blanks" where CitiDirect® Online Banking's database does not indicate a field that is comparable to the corresponding field in the client's database.			
Padding Character	This field is active only if a fixed length custom format was selected. It consists of characters used to fill up unused portions of a data structure, such as a field. A field may be padded with blanks, zeros, or nulls. To ensure proper alignment of formatted numbers, you can replace non-significant zero digits with a padding character, or you can use padding characters to pad any number to a fixed width. The default padding character is a space.			
Record Delimiter	A character that indicates the end of a record. Typically, this will be an Enter Line-Feed Combination (CRLF), used in MS-DOS. The selected delimiter must not occur within the body of a field or record, or it will be difficult or impossible to determine if it is a delimiter or data. Available record delimiters include the following: # @ : : : : : : : : : : : : : : : :			
	 CRLF (carriage return/line feed combination) CR LF 			

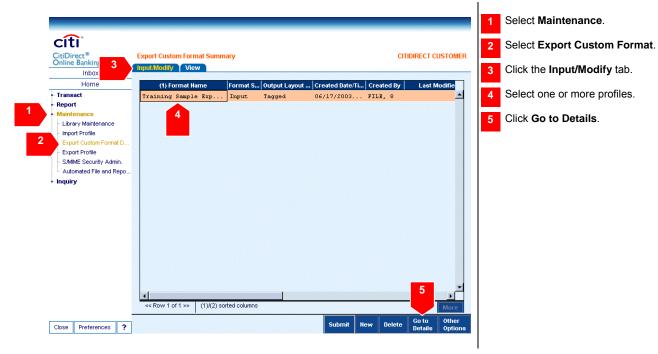


Settings Tab Field	Description		
Tag Delimiter	This field is active only if a tagged custom format was selected. A tag is a name (label, mnemonic) assigned to a data structure, such as a field. A tag delimiter is a character that indicates a separation between tags. The delimiter must be selected so that it does not occur within the body of a field or record, or it will be difficult or impossible to determine if it is a delimiter or data. Available record delimiters include the following:		
	• = • ,		
	• # • @ • :		
	• ; • & • <		
	· >		
Time Format	The format of the time field. Possible values are:		
	H:MM:SSHH:MM:SS		
	Note: H=Hour, M=Minute, S=Second		

Modifying a Custom Export Format

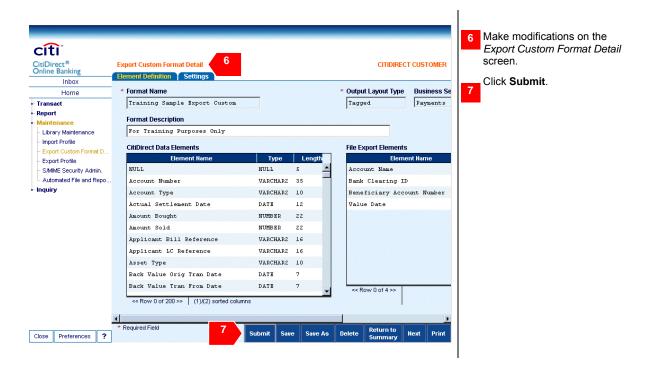
You can select more than one format to modify. After clicking **Go to Details**, click **Next** to view the next selected format.

Click Save As to save a modified format with a different name.





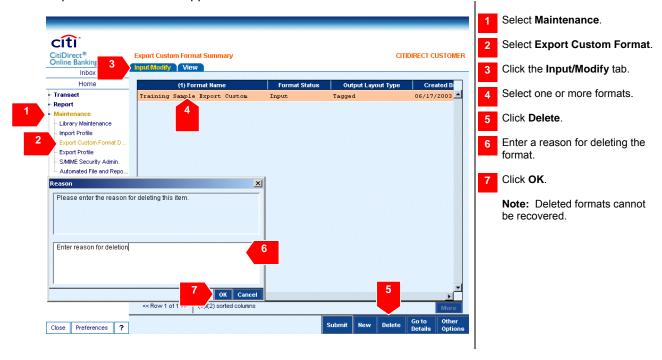




Deleting an Export Custom Format

You can select more than one format to delete. If you delete multiple formats at once, you must enter the same reason for deleting all. If the same reason does not apply, then individually select and delete each format. If you try to delete an export custom format being used in an active export profile, a message will indicate the format must be detached from the active profile before deletion.

Export custom formats appear in the **View** tab with a *Deleted* status after deletion.





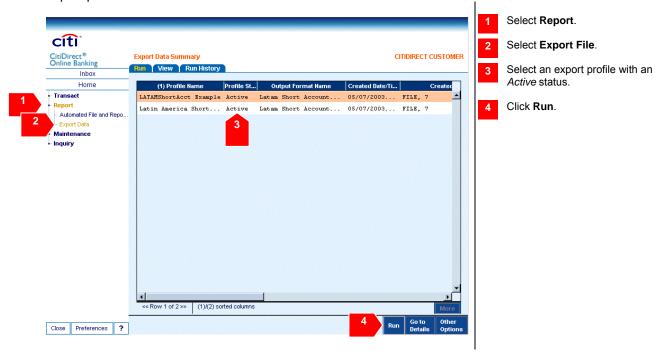
Module 7: Exporting Files

PLEASE NOTE: The screens in this document are for training purposes only. Actual screens may vary.

Running a File Export

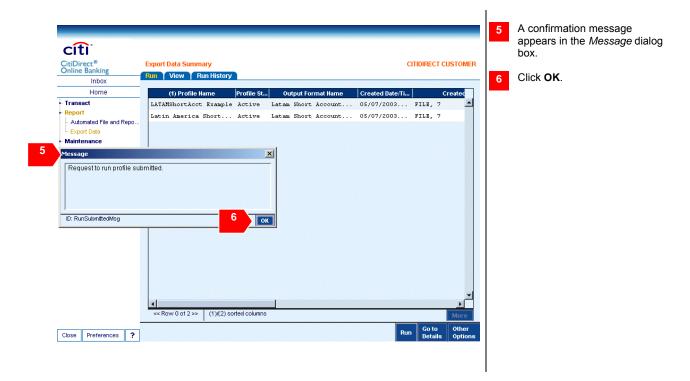
After creating an export profile and, if necessary, selecting an export custom format, you are ready to export a file.

Only one export profile can be run at a time. A confirmation message appears stating "Request to run export profile submitted."



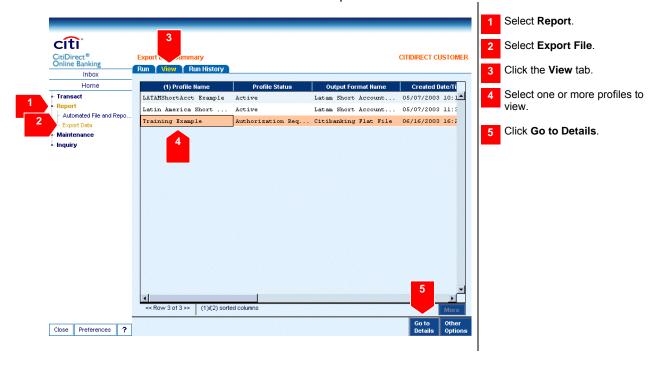


Exporting Files



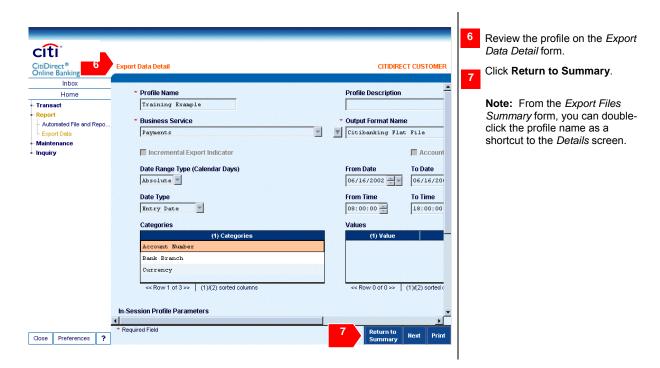
Viewing an Export Profile

You can select multiple profiles on the *Summary* form to view. The first selected profile will appear in the *Detail* form. Click **Next** to view the next selected profile.



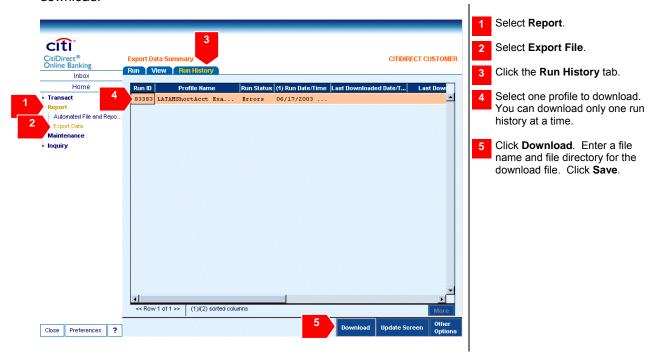
Exporting Files





Downloading Details of a Run History

Only run events with a status of *Completed* or *Downloaded* may be downloaded. The last download-related fields and, if necessary, the status of the run event record are updated upon completion of the download.





Module 8: File Import

PLEASE NOTE: The screens in this document are for training purposes only. Actual screens may vary.

At times, you will need to exchange information from your system into CitiDirect® Online Banking. File import allows you to import data from your system in a format that works with CitiDirect Online Banking.

Benefits of Using File Import

- 1. Data is imported into CitiDirect Online Banking over secure Internet lines.
- 2. Data in your own format can be imported into the CitiDirect Online Banking structure.
- 3. Data redundancy is eliminated.
- 4. Error due to duplicated data is greatly reduced.

Import Formats

Import formats specify the file type (flat file or SWIFT™) that has been defined for import into CitiDirect Online Banking. CitiDirect supports standard import formats.

Importing Files: Multi-Regional Payments in a Single File 🄁

Single import files may now contain funds transfer payments for multiple regions and countries. Clients should consult with their Citibank Service Representative for information regarding this functionality.

Import Maps

Import maps are a means of translating data from your system's data structure to CitiDirect Online Banking's data structures. Flat file formats are publicly-owned map definitions accessible to all clients, and as such, are used as the standard import maps in CitiDirect Online Banking. Some examples of standard flat file formats are Citibanking ACH Credit, ACH Debit, and CHIPS(SM).

Standard Naming Convention for Standard File Import Maps 🔁

The standard File Import Maps have been named in accordance with the region who owns the maps as well as the format type/payment methods that are being used. Accordingly, a set of rules defines just how to construct the names for standard File Import Maps. Knowing these rules allows users to identify which maps should be used depending on the transactions that are being inputted.

The naming convention for the standard File Import Maps are:

- 1. The total length of the name is limited to 20 characters, including spaces.
- 2. Within the name, up to four fields can be populated. Fields can be of variable length with each field delimited by a space.



Example of Naming Convention

File Import Map Name: A BBBBB CCCCCCC DD

Field	Field Purpose	Field Legend
A	Identifies region	G = global W = WorldLink® Multicurrency Transaction Services - OR -
		- OR -
		A regional code (A = Asia, C = Central Europe, Middle East, and Africa, E = Europe, L = Latin America N = North America)
В	Identifies file format type	MTMS, SWIFT, etc.
С	Identifies payment/ transaction type	DFT, BKT, etc.
D	Identifies Country Code	If applicable, same as those used by CitiDirect® Online Banking

Import Profiles

You must set up an import profile before actually importing files. The import profile specifies the parameters applied to an import run. Each import profile is associated with a particular import format and one or more import maps.

Import Profiles: Enhancements to File Import Maps 2

Several new formats have been added.

- Five Direct Debit formats for Latin America Direct Debits
 - Mandate Creation Latin America
 - Mandate Deletion Latin America
 - Direct Debit Instruction Without Mandate Creation Latin America
 - Reversion Instruction Creation Latin America
 - Instruction Import Latin America
- One Receivables format for Latin America Receivables-CNAB: CNAB 400
- One Direct Debit format for Direct Debits-Instructions: Nigeria Direct Debit

Legal and regulatory changes have necessitated the addition of new data to some formats in the Payments Service Class. For example, Central Bank Report (CBR) data has been added to flat file and SWIFT formats so CBR data can now be imported for cheque payments for Belgium and France.

Other modifications to the Payments Service Class are more general.

- 1. Some field lengths have changed.
- 2. Some fields are now optional instead of mandatory.
- 3. Additional validations are now processed.

cîti

File Import

- 4. Additional payment methods are available for the Latin America region.
- 5. Additional payment methods are available for the Central and Eastern Europe, Middle East, and Africa region.

Import Service Classes

Maintenance, Transact, and *Inquiry* on the navigation bar contain file import functions in the Service Classes associated with these categories.

- Maintenance Import Profile: create, authorize, and modify import profiles
- Transact Import Transactions: test import profiles, run file imports, and view file import run history
- Inquiry Import File Inquiry: retrieve archived data file information from executed import runs



Module 9: Import Profiles

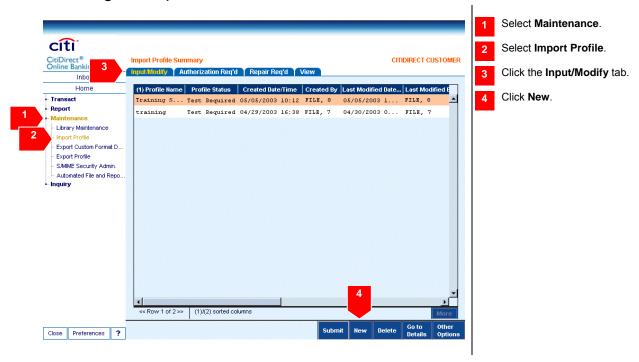
PLEASE NOTE: The screens in this document are for training purposes only. Actual screens may vary.

Import Profiles Overview H

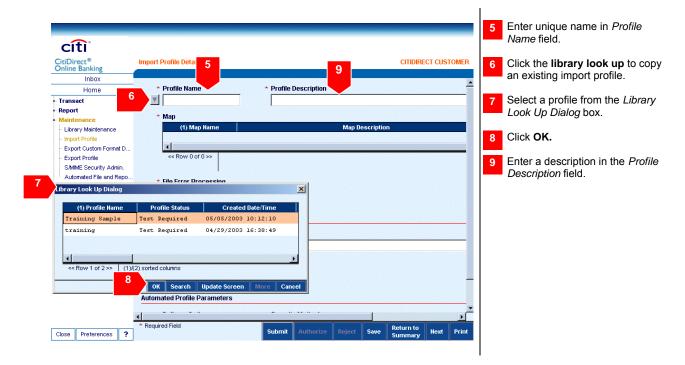
You must create an import profile before actually importing data from your system into CitiDirect[®] Online Banking. A specific file format is associated with each profile. The import profile delineates both the specific file parameters, such as security method and file destination, and the scope of the data to be included.

Note: As all import profiles are now created as *in-session*, you must be logged into CitiDirect Online Banking before initiating this procedure.

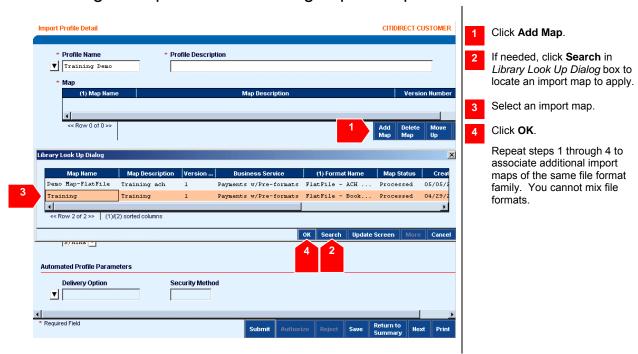
Creating an Import Profile



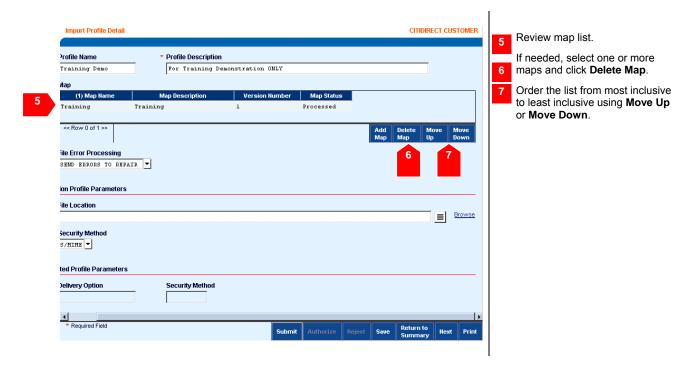




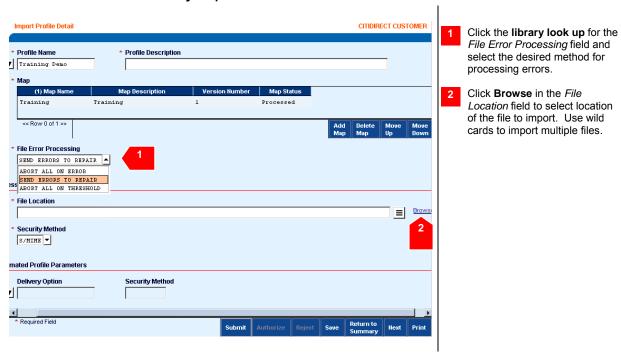
Creating an Import Profile: Adding Import Maps





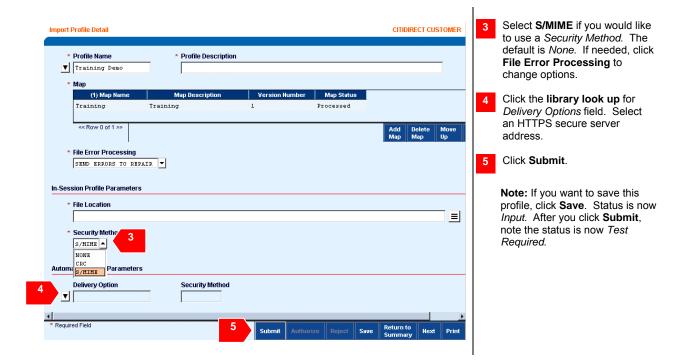


Creating an Import Profile: Selecting File Error Processing, Security Methods, and Delivery Options









Viewing Import Profiles

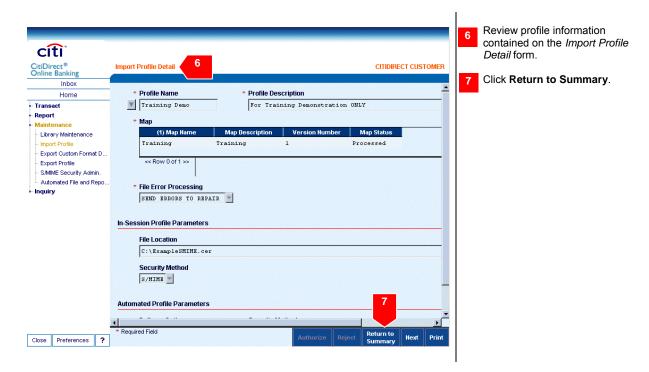
From the *Import Files Summary* form, you can double-click the profile name as a shortcut to the *Details* screen. You can only view, not modify, the profile accessed from the **View** tab.

You can select multiple profiles on the *Summary* form. The first selected profile will appear in the *Detail* form. Click **Next** to view the next selected profile.





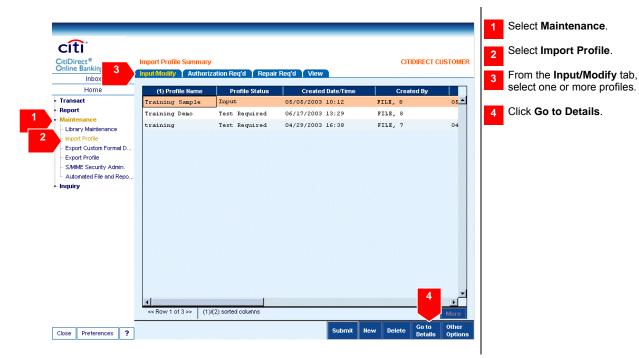




Submitting an Import Profile with Input Status for Testing

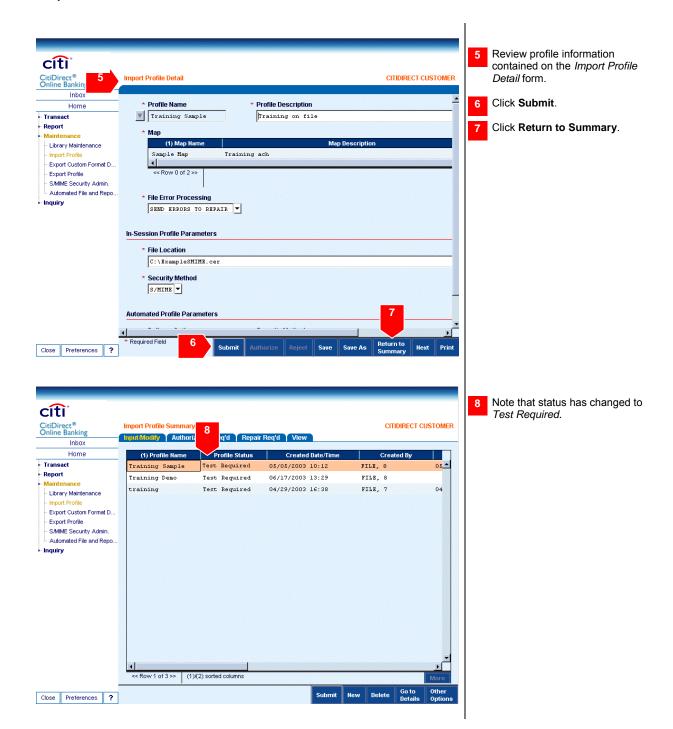
You can select multiple profiles on the *Summary* form. The first selected profile will appear in the *Detail* form. Click **Next** to view the next selected profile.

Testing an import profile allows the user to debug the structure of the profile without risking the loss or misuse of data.





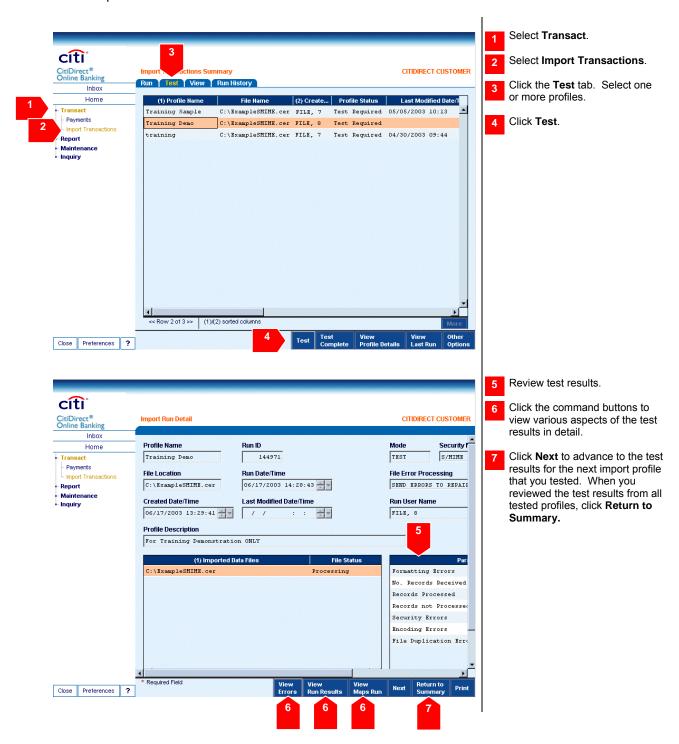




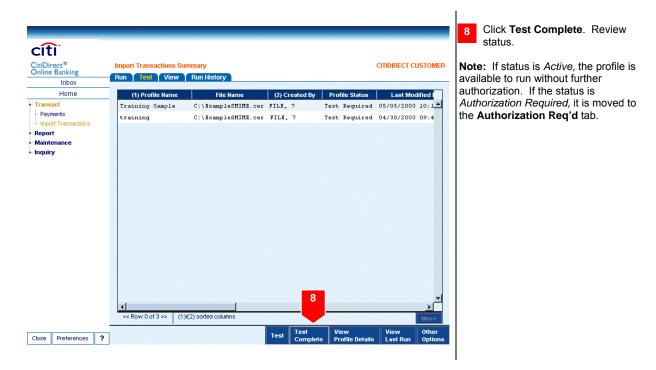


Testing Import Profiles 2

Before they can be authorized, you must test all import profiles. You can select multiple profiles on the *Summary* form. The first selected profile will appear in the *Detail* form. Click **Next** to view the next selected profile.



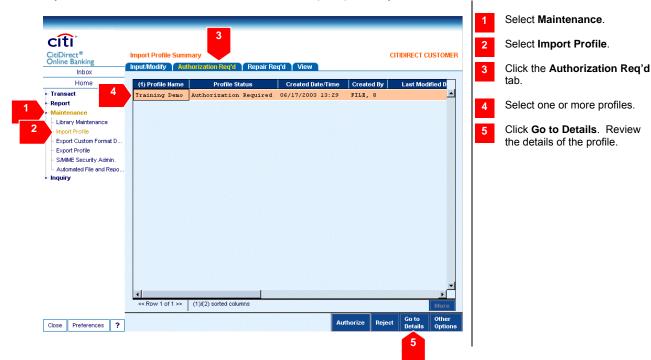




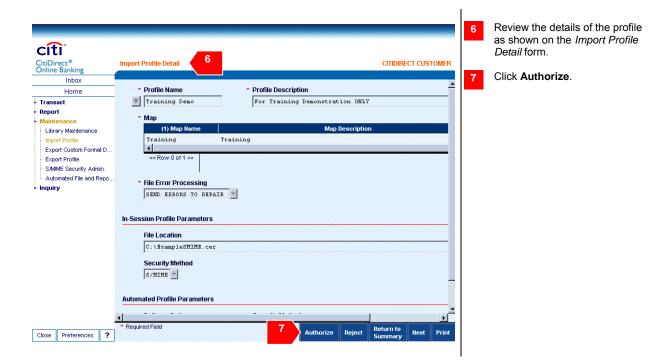
Authorizing an Import Profile

You can select more than one profile. After clicking **Go to Details**, click **Next** to view the next selected profile. You could authorize the profile(s) without first going to the *Details* screen. If your Access Profile does not include entitlement rights to authorize import profiles, the **Authorization Req'd** tab does not appear. All profiles that you are entitled to authorize are listed. Once authorized, import profiles move to the **Input/Modify** tab with a status of *Active*; the others move to the **View** tab with a status of *Deleted*.

If you have created, modified, or deleted an import profile, you cannot authorize it.







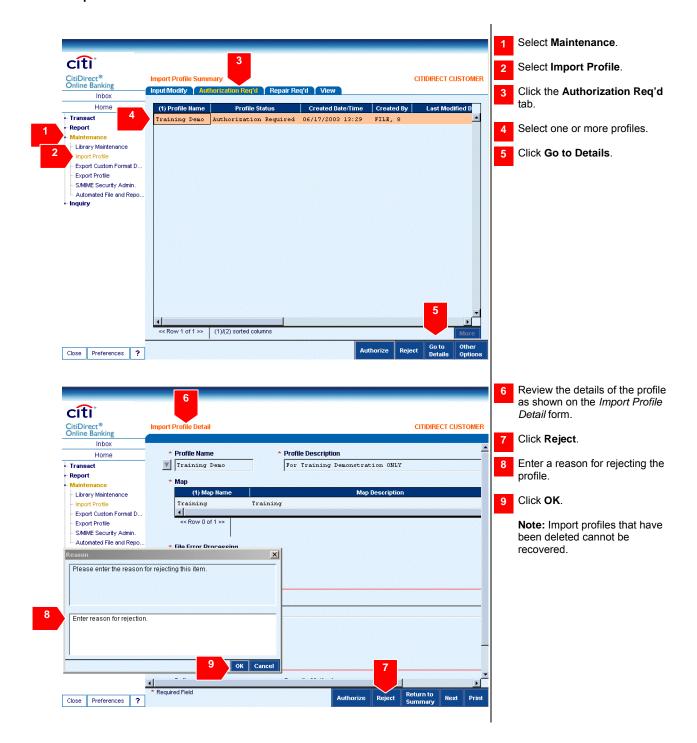
Rejecting an Import Profile

You can select more than one profile. After clicking **Go to Details**, click **Next** to view the next selected profile. You could reject the profile(s) without first going to the *Details* screen.

Once rejected, export profiles with a status of *Authorization Required* move to the **Repair Req'd** tab with a status of *Repair Required*, and those with a status of *Delete Authorization Required* move to the **Input/Modify** tab with a status of *Active*.

If multiple import profiles were selected, you must enter the same reasons for all import profiles. If the same reason does not apply, then select and reject each export profile individually.



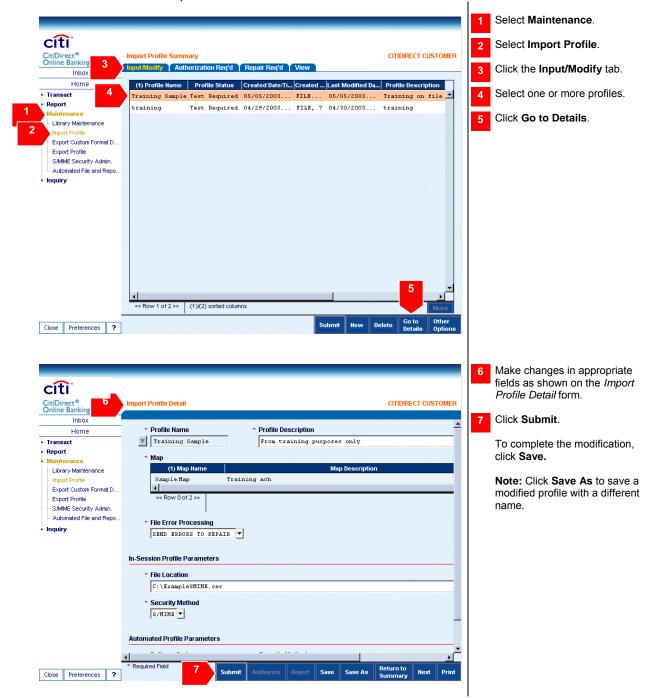




Modifying an Import Profile Page 1

You can also select more than one profile. After clicking **Go to Details**, click **Next** to view the next selected profile.

Profiles with an *Active* status must be saved first to change them back to *Input* status. You may not submit an *Active* status profile.

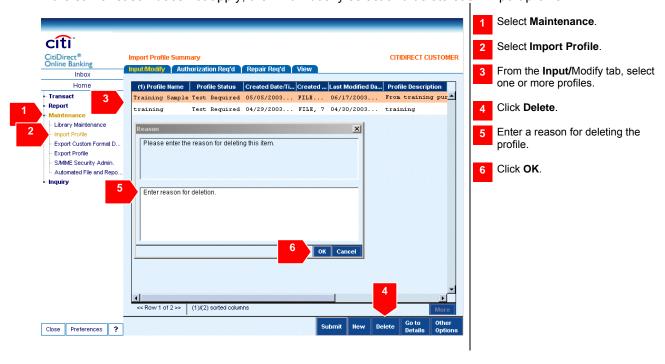




Deleting an Import Profile

You can select more than one profile to delete. If you delete multiple import profiles at once, you must enter the same reason for deleting all.

If the same reason does not apply, then individually select and delete each import profile.

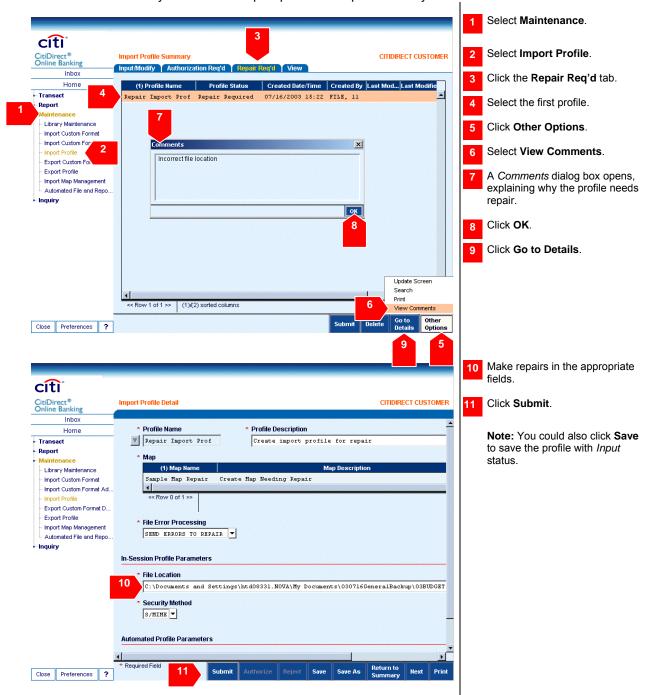






Repairing an Import Profile

It is best to individually select each import profile for repair so that you can view comments.





Module 10: Importing Files

PLEASE NOTE: The screens in this document are for training purposes only. Actual screens may vary.

Importing Files Overview

After creating an import profile, you are ready to import a file.

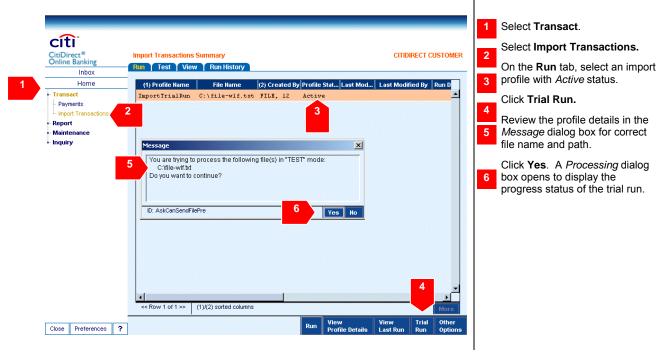
You will see how to import files, perform trial runs, view run details, and view archived data from previous import runs.

Running a Trial Run File Import

Once you have an import profile, you can run a file import and choose to do a trial run before you actually import the file.

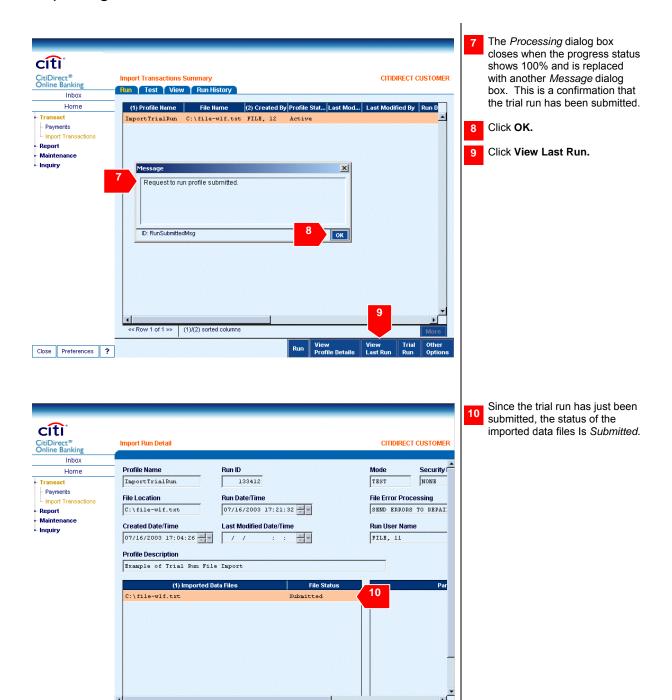
A Warning Dialog box appears if no files specified in the import profile can be imported or if a file is not found.

In a trial run, no data is imported to CitiDirect® Online Banking. A trial run enables you to determine whether there are any problems with the import file.



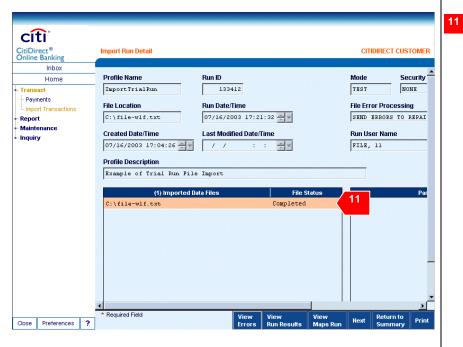






Close Preferences ?





When the trial run is completed, the status changes to *Completed.*

Running a File Import

If you are satisfied with the results of the trial run, then you follow the same procedure to run the actual file import. The only difference is the command button you click: for the real file import, click **Run** instead of **Trial Run**.

A Warning Dialog box appears if no files specified in the import profile can be imported or if a file is not found.

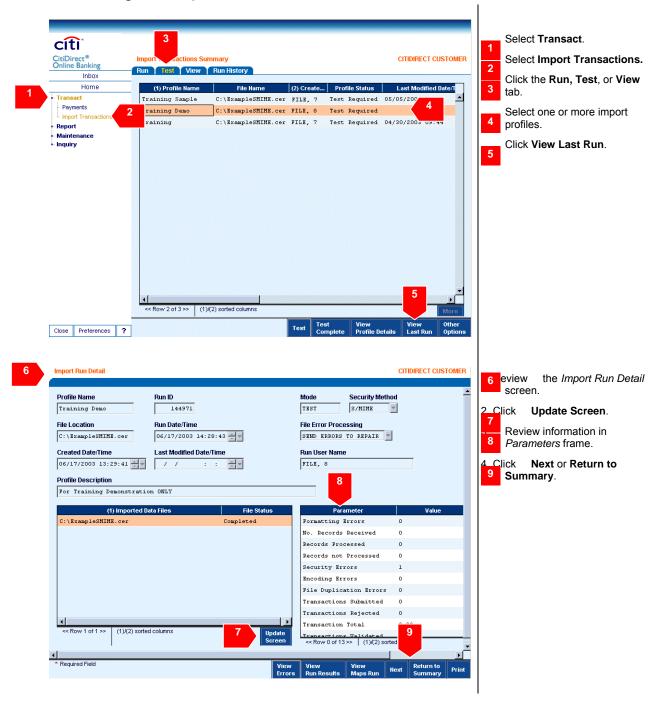
Click the **Run History** tab to view details of all import profiles run or tested in the last 90 days.

Select the import profile and click View Last Run to view details of the last run.





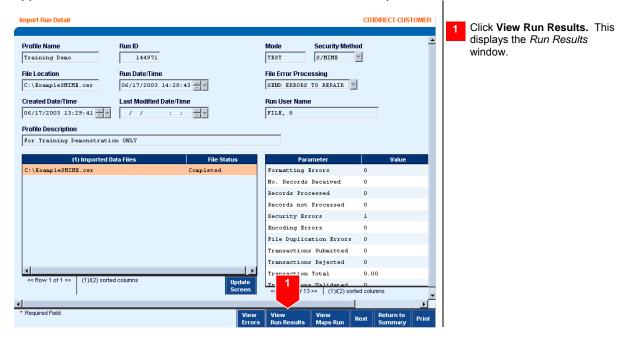
Accessing the Import Run Detail Screen





Viewing Import Run Results

Use *Import Run Details* form to view import run results, input processing errors, and import maps used in the import process. You can select multiple profiles on the *Summary* form. The first selected profile will appear in the *Detail* form. Click **Next** to view the next selected profile.



Downloading Import Run Results to a File

Users often find it useful to download the results to a file so they can use those results in other desktop applications. To save these results to a file:

- 1. Follow the procedure for viewing import run results.
- From the Run Results window, click **Download** and specify file name and path in order to save the results.

Viewing Input Processing Errors

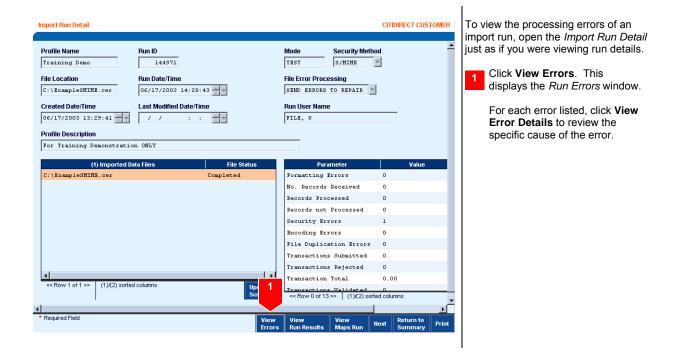
There are two major types of import processing errors:

- 1. <u>Level 1 (Format Errors):</u> System stops at first level one error encountered.
- 2. Level 2 (Transactional Errors): System reports on all Level 2 errors

The most frequent cause of input processing errors is a file that uses an incorrect format.

You can select multiple profiles, errors, and maps on the appropriate form or dialog box. The first selected profile will appear in the *Detail* form or dialog box. Click **Next** to view the next selected item.





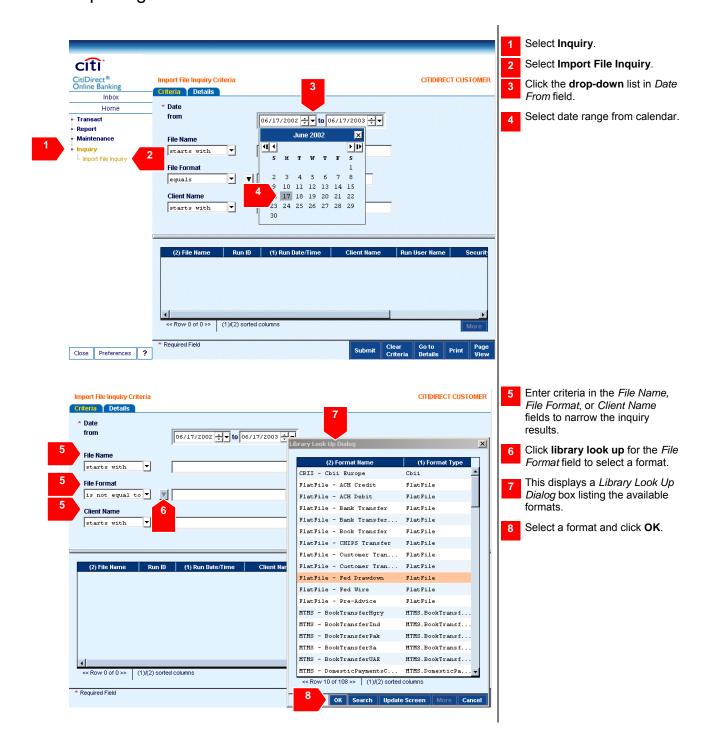
Viewing Archived Data from Previous Import Runs

Being able to retrieve archived data files allows a user to reconstruct the history of a transaction.

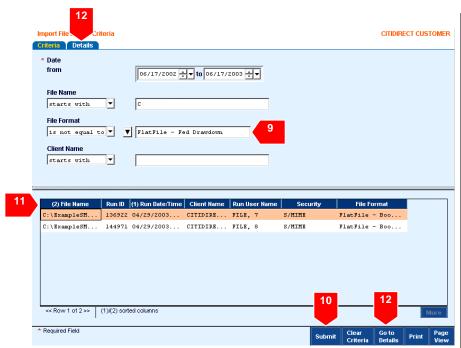
Click **Page View** to toggle between *Page View* and *Split View*. In **Page View**, results appear on *Criteria* and *Summary* tabs.

Information about archived data files is available online for items less than 90 days old. Call Citibank Service Representative for items older than 90 days, or in some regions, enter an online request online at CitiDirect Online Banking's Web site.









- The selected format appears in the *File Format* field.
- 10 Click Submit.
- The import runs that satisfy the criteria are displayed.
- Select a run and click **Go to Details** or the **Details** tab.

Note: Enter the same date in both *Date* fields to view data for a specific date.

Note: If the date range is not specified as same date, then both *File Name* and *File Format* are required to be entered as *Criteria*.



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