Sterling Integrator®

EBICS Banking Server Module User Guide

Version 5.1

Sterling Commerce

An IBM Company

Contents

Overview

Overview of EBICS Banking Server Module

Electronic Banking Internet Communication Standard (EBICS) is an Internet-based communication and security standard that is primarily used for remote data transfer between your organization and a financial institution for corporate payment transactions.

EBICS allows data file exchange independent of message standards and formats. EBICS uses established digital signature and encryption procedures. Its features are based on international standards for Internet communication and improved security, for example, XML, HTTPS, TLS, and SSL. EBICS also has multibank capability wherein the corporate clients in the countries that have adopted EBICS can transact with any bank in those countries using the same software.

A range of prerequisites must be fulfilled by users of a partner for the users to be able to implement bank-technical EBICS transactions with a particular financial institution.The basic prerequisite to implement EBICS transactions is the signing of a contract between the partner and the financial institution. The following details are agreed upon in this contract:

• The nature of business transactions (bank-technical order types) the partner will conduct with the financial institution
• Information about the user's bank accounts
• The partner's users working with the bank's system
• The authorizations and permissions the users possess

The partner receives the financial institution's access data (bank parameters) after the contract is signed. The financial institution will set up the partner and user master data in the bank system in accordance with the contractual agreements.

Other prerequisites are successful subscriber initialization, download of the financial institution's public certificates by the user, and successful verification of the user's public certificates by the financial institution.

EBICS Banking Server Module of Sterling Integrator is a complete EBICS solution involving a bank, partner, and user management, certificate management, secure file transaction, error recovery and reporting. Use Sterling Integrator to send and receive EBICS transactions.

Note: EBICS Banking Server Module supports the French implementation of Electronic Banking Internet Communication Standard (EBICS) version 2.4.1. The German implementation of EBICS and VEU are not supported currently.

Configure Subscription Manager

Configure Order Type Manager

EBICS order types specify the various transactions that can take place between an EBICS Banking Server Module and an EBICS client. Each order type is based on an XML schema and caters to different requirements.

Order types are represented by a three-figure alphanumeric code that identifies the type of the order. The following table lists the order types supported for EBICS transaction:

Order Type	Description
Upload System Order Types	
INI	Used in subscriber initialization. Sends the bank-technical public certificate of the user to the EBICS Banking Server Module.
HIA	Used to transmit user public certificates for identification, authentication and encryption within the framework of subscriber initialization.
PUB	Used to update user's certificate. Sends the bank-technical public certificate of the customer for updating the EBICS Banking Server Module.
HCA	Used to update a user's certificates. Sends the following certificates for updating the EBICS Banking Server Module: • Identification and authentication public certificate • Encryption public certificate
HCS	Used to update a user's certificates. Sends the following certificates for updating the EBICS Banking Server Module: • Bank-technical public certificate • Identification and authentication public certificate • Encryption public certificate

Order Type	Description
SPR	Used to suspend a user's access authorization.
Download System Order Types	
HPB	Used to download bank public certificates from the EBICS Banking Server Module.
HEV	Used to download information on supported EBICS versions.
HPD	Used to download bank parameters from the EBICS Banking Server Module.
Upload Bank-Technical Order Type	
FUL	Used to upload file of any format.
Download Bank-Technical Order Type	
FDL	Used to download file of any format.

Create a File Format

Sterling Integrator enables you to add file formats and associate them with the bank-technical upload and download order types. An order type can have zero or more file formats. The file formats for FUL and FDL are based on the SWIFTNet request type.

To create a file format, complete the following steps:

1. Log in to Sterling Integrator.

2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Order Type Manager** > **File Format Configuration**.

3. In the File Format Configuration page, click **Go!** adjacent to **Create New File Format**.

4. Enter the name of the file format in the **File Format** field. The first five characters of the file format should be one of the following:

   • pain.
   • camt.
   • tsrv.
   • tsmt.

5. Select a Country Code from the **Country Code** drop-down list. The default value is [FR] FRANCE.

6. Click **Next**.

7. In the **Confirm** page, verify the file format settings, and click **Finish**.

8. Click **Cancel** to return to the File Format Configuration page.

Search for a File Format

To search for a file format, complete the following steps:

1. Log in to Sterling Integrator.
2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Order Type Manager** > **File Format Configuration**.
3. In the File Format Configuration page, perform one of the following actions, and click **Go!**
   - Under Search in the **File Format** field, enter either a part of the name or the entire name of the file format you are searching for.
   - From the **List Alphabetically** drop-down list, select **ALL** or the alphabet with which the name of the file format you are searching for begins. Selecting ALL lists all the file formats.
4. Click the file format link to view the file format settings.

Edit a File Format

To edit a file format, complete the following steps:

1. Log in to Sterling Integrator.
2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Order Type Manager** > **File Format Configuration**.
3. In the File Format Configuration page, using either **Search** or **List**, locate and select the file format you want to edit, and click **Go!**
4. Click **edit** adjacent to the file format you want to edit.
5. Select a Country Code from the **Country Code** drop-down list and click **Next**.
6. In the **Confirm** page, verify the file format settings, and click **Finish**.
7. Click **Cancel** to return to the File Format Configuration page.

Delete a File Format

To delete a file format, complete the following steps:

Note: You cannnot delete a file format assigned to an order type.

1. Log in to Sterling Integrator.
2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Order Type Manager** > **File Format Configuration**.
3. In the File Format Configuration page, using either **Search** or **List**, locate and select the file format you want to delete, and click **Go!**
4. Click **delete** adjacent to the file format you want to delete.
5. Click **Return** to return to the File Format Configuration page.

Search for an Order Type

To search for an order type, complete the following steps:

1. Log in to Sterling Integrator.
2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Order Type Manager** > **Order Type Configuration**.
3. In the Order Type Configuration page, perform one of the following actions, and click **Go!**
   - Under Search in the **Order Type** field, enter either a part of the name or the entire name of the order type you are searching for.
   - Under Search in the **Protocol Version** field, enter either a part of the name or the entire protocol version of the order type you are searching for.
   - From the **List Alphabetically** drop-down list, select **ALL** or the alphabet with which the name of the order type you are searching for begins. Selecting ALL lists all the order types.
4. In the Order Type Settings page, click the corresponding order type to view the order type's settings. To view the list of file formats assigned to the order type in the Order Type Settings page, click **Show All** adjacent to **List of File Formats**.

Edit an Order Type

To edit an order type, complete the following steps:

1. Log in to Sterling Integrator.
2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Order Type Manager** > **Order Type Configuration**.
3. In the Order Type Configuration page, using either **Search** or **List**, locate and select the order type you want to edit, and click **Go!**
4. Click **edit** adjacent to the order type you want to edit.

   Note: You can edit only the bank-techncial order types, FUL and FDL.

5. In the Order Type page, review the order type settings listed in the following table and click **Next**.

Field	Description
Order Type	The order type present in the system, for example, FDL.
Protocol Version	Schema version relevant for the supported EBICS version, for example, H003.
Release Version	EBICS version supported by the bank, for example, 02.40.
Description	Textual description of the order type, for example, Download file with any format.
Transfer Type	Transfer type can be one of the following: • Upload = Upload order data from EBICS client to EBICS server • Download = Download order data from EBICS server to EBICS client

Field	Description
Order Data Type	Order data type can be one of the following:
	• System = System order type
	• Technical = Technical order type

6. The file formats and the corresponding country codes associated with the order type are listed in the File Format List page. Click **add** to associate a file format with the order type, and click **delete** to disassociate a file format from the order type.

7. This step is applicable only if you opted to either add or delete a file format. Type a part of the file format name in the **Filter Data By Name** field and click the filter icon for a filtered list. You can also use the arrows to add the available file formats to the Assigned list. Click the first double arrow to add all available the file formats to the Assigned list.

8. Click **Next**.

9. In the **Confirm** page, click **Show All** adjacent to **List of File Formats** to view the list of file formats associated with the order type. Verify the order type settings, and click **Finish**.

10. Click **Cancel** to return to the Order Type Configuration page.

Configure Profile Manager

Profile Manager in Sterling Integrator enables you to configure the following profiles:

• Bank
• Partner
• User

Note: To prevent case insensitivity among various databases, ensure that you provide the profile ID (bank, partner, and user) values in upper case. If you provide the profile ID values in any other format, Sterling Integrator will change the value to upper case.

Create a Bank Profile

A bank profile includes the EBICS host information.

To create a bank profile, complete the following steps:

1. Log in to Sterling Integrator.

2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Profile Manager** > **Bank Configuration**.

3. In the Bank Configuration page, click **Go!** adjacent to **Create New Bank**.

4. In the Bank Configuration page, enter the values for the fields listed in the following table and click **Next**.

Field	Description
Bank ID	Required. Specify a unique ID for the bank in the bank's system. **Note:** It is recommended that you use the SWIFT-BIC (Bank Identifier Code) format for specifying the bank ID. If you do not specify the bank ID in the recommended SWIFT-BIC format, the Payment Status Report (.PSR) report will not be generated.
Bank Name	Required. Specify the name of the bank.
Address Line 1	Optional. Specify the address of the bank.
Address Line 2	Optional. Specify the address of the bank.
City	Optional. Pertains to address of the bank. Specify the name of the city.
State or Province	Optional. Specify the name of the state or province.
Country	Optional. Select the country.
Zip or Postal Code	Optional. Specify the zip code or postal code.
Time Zone	Optional. Select the time zone.
E-mail Address	Optional. Specify the e-mail address of the bank.
Telephone Number	Optional. Specify the phone number with country code and state code.

5. In the Bank Technical Information page, enter the values for the fields listed in the following table and click **Next**.

Field	Description
Encryption Private Certificate	Optional. Specify the key used by the bank to decrypt inbound order data. The key must be a Sterling Integrator system certificate. The bank must distribute the public part of the key to its EBICS partners and users.
Encryption Public Certificate	Optional. Specify the key to enable sending of encrypted requests to the EBICS Banking Server Module. The key is distributed by the EBICS Banking Server Module. The bank must distribute the public part of the key to its EBICS partners and users. The key must be a public part of the Sterling Integrator system certificate.
Authentication Private Certificate	Optional. Specify the private key used by the bank to create the digital signature in the response sent to the EBICS partners and users. The partners and users must have the public part of the key to validate the authorization. The key must be a Sterling Integrator system certificate.
Authentication Public Certificate	Optional. Specify the key the bank provides to the user to validate the authorization of the response received from the EBICS Banking Server Module. The key is distributed by the EBICS Banking Server Module. The key must be a public part of the Sterling Integrator system certificate.

Field	Description
Maximum Recovery Attempts	Optional. Specify the number of recovery attempts for a transaction. The default value is 0, which indicates that there will be no recovery.
Allow Prevalidation	Optional. Select this check box to allow preliminary verification of the account authorization, account limit, Electronic Signature, and other data, which are a part of the first transaction step. By default, this option is selected.
Support Client Download	Optional. Client Data Download. Select this check box to support the order types HKD and HTD.
Support Order Download	Optional. Downloadable order data. Select this check box to support the order type HAA.
Support X509Data	Optional. Select this check box to support X.509 data. By default, this option is selected.
Persist X509Data	Optional. Select this check box to persistently store the user's X.509 data on the server. By default, this option is selected.

6. In the Bank URL page, perform any of the following actions:

   - Click **add** to add a new bank URL.
   - Click **edit** next to the bank URL you want to edit.
   - Click **delete** next to the bank URL you want to delete.

7. This step is applicable only if you opted to add a new bank URL. In the Bank URL: Details page, specify values for the fields listed in the following table, anc click **Next**.

Field	Description
Bank URL	Required. Specify the HTTP URL the bank will host. A bank can have multiple URLs with a minimum of one. The bank URL is given to a user for the user to send requests to the bank. The Uniform Resource Indicator (URI) is configured in the HTTP Server Adapter to listen at the port, and receive EBICS requests, if any. **Note:** Each bank ID should have a unique port number or URI.
Valid From	Optional. Specify the date from which the URL or IP is valid in the MM/DD/YYYY format. Click the calendar icon to select the date.

8. In the Bank Protocol page, perform any of the following actions:

   - Click **add** to add a new bank protocol.
   - Click **edit** adjacent to the bank protocol you want to edit.
   - Click **delete** adjacent to the bank protocol you want to delete.

9. This step is applicable only if you opted to add a new bank protocol. In the Bank Protocol: Details page, specify the values for the fields listed in the following table, and click **Next**.

Field	Description
Protocol Version	Required. Select the schema version relevant to the supported EBICS version. Valid values are H003 and H000. The default value is H003.
Release Version	The EBICS version supported by the bank and associated with the protocol version specified, is displayed.

10. In the Bank Protocol: Bank Process page, perform any of the following actions:

   - Click **add** to add a new bank process.
   - Click **edit** adjacent to the bank process you want to edit.
   - Click **delete** adjacent to the bank process you want to delete.

11. This step is applicable only if you opted to add a new bank process. In the Bank Process: Details page, specify the values for the fields listed in the following table, and click **Next**.

Field	Description
Type	Required. Select the process type. Valid values are: • Encryption • Signature • Authentication
Version	Required. Select the process version.

12. In the Bank Protocol: Bank Process page, click **Next**.

13. In the Confirm page, verify the bank configuration settings, and click **Finish**.

14. Click **Cancel** to return to the Bank Configuration page.

Search for a Bank Profile

To search for a bank profile, complete the following steps:

1. Log in to Sterling Integrator.
2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Profile Manager** > **Bank Configuration**.
3. In the Bank Configuration page, perform one of the following actions, and click **Go!**

   - Under Search in the **Bank ID** field, enter either a part of the bank ID or the entire bank ID of the bank profile you are searching for.
   - From the **List Alphabetically** drop-down list, select **ALL** or the alphabet with which the ID of the bank you are searching for begins. Selecting ALL lists all the bank IDs.

Edit a Bank Profile

To edit a bank profile, complete the following steps:

1. Log in to Sterling Integrator.

2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Profile Manager** > **Bank Configuration**.

3. In the Bank Configuration page, using either **Search** or **List**, locate and select the bank ID you want to edit, and click **Go!**

4. Click **edit** adjacent to the bank ID you want to edit.

5. In the Bank Configuration page, enter the values for the fields listed in the following table and click **Next**.

Field	Description
Bank Name	Required. Specify the name of the bank.
Address Line 1	Optional. Specify the address of the bank.
Address Line 2	Optional. Specify the address of the bank.
City	Optional. Specify the name of the city.
State or Province	Optional. Specify the name of the state or province.
Country	Optional. Select the country.
Zip or Postal Code	Optional. Specify the zip code or postal code.
Time Zone	Optional. Select the time zone.
E-mail Address	Optional. Specify the e-mail address of the bank.
Telephone Number	Optional. Specify the phone number with country code and state code.

6. In the Bank Technical Information page, enter the values for the fields listed in the following table and click **Next**.

Field	Description
Encryption Private Certificate	Optional. Specify the key used by the bank to decrypt inbound order data. The key must be a Sterling Integrator system certificate. The bank must distribute the public part of the key to its EBICS partners and users.
Encryption Public Certificate	Optional. Specify the key to enable sending of encrypted requests to the EBICS Banking Server Module. The key is distributed by the EBICS Banking Server Module. The bank must distribute the public part of the key to its EBICS partners and users. The key must be a public part of the Sterling Integrator system certificate.
Authentication Private Certificate	Optional. Specify the private key used by the bank to create the digital signature in the response sent to the EBICS partners and users. The partners and users must have the public part of the key to validate the authorization. The key must be a Sterling Integrator system certificate.
Authentication Public Certificate	Optional. Specify the key the bank provides to the user to validate the authorization of the response received from the EBICS Banking Server Module. The key is distributed by the EBICS Banking Server Module. The key must be a public part of the Sterling Integrator system certificate.

Field	Description
Maximum Recovery Attempts	Optional. Specify the number of recovery attempts for a transaction. The default value is 0, which indicates that there will be no recovery.
Allow Prevalidation	Optional. Select this check box to allow preliminary verification of the account authorization, account limit, Electronic Signature, and other data, which are a part of the first transaction step. By default, this option is selected.
Support Client Download	Optional. Client Data Download. Select this check box to support the order types HKD and HTD.
Support Order Download	Optional. Downloadable order data. Select this check box to support the order type HAA.
Support X509Data	Optional. Select this check box to support X.509 data. By default, this option is selected.
Persist X509Data	Optional. Select this check box to persistently store the user's X.509 data on the server. By default, this option is selected.

7. In the Bank URL page, perform any of the following actions:

  - Click **add** to add a new bank URL.
  - Click **edit** next to the bank URL you want to edit.
  - Click **delete** next to the bank URL you want to delete.

8. This step is applicable only if you opted to add a new bank URL. In the Bank URL: Details page, specify values for the fields listed in the following table, anc click **Next**.

Field	Description
Bank URL	Required. Specify the HTTP URL the bank will host. A bank can have multiple URLs with a minimum of one. The bank URL is given to a user for the user to send requests to the bank. The Uniform Resource Indicator (URI) is configured in the HTTP Server Adapter to listen at the port, and receive EBICS requests, if any. **Note:** Each bank ID should have a unique port number or URI.
Valid From	Optional. Specify the date from which the URL or IP is valid in the MM/DD/YYYY format. Click the calendar icon to select the date.

9. In the Bank Protocol page, perform any of the following actions:

  - Click **add** to add a new bank protocol.
  - Click **edit** adjacent to the bank protocol you want to edit.
  - Click **delete** adjacent to the bank protocol you want to delete.

10. This step is applicable only if you opted to add a new bank protocol. In the Bank Protocol: Details page, specify the values for the fields listed in the following table, and click **Next**.

Field	Description
Protocol Version	Required. Select the schema version relevant to the supported EBICS version. Valid values are H003 and H000. The default value is H003.
Release Version	The EBICS version supported by the bank and associated with the protocol version specified, is displayed.

11. In the Bank Protocol: Bank Process page, perform any of the following actions:

- Click **add** to add a new bank process.
- Click **edit** adjacent to the bank process you want to edit.
- Click **delete** adjacent to the bank process you want to delete.

12. This step is applicable only if you opted to add a new bank process. In the Bank Process: Details page, specify the values for the fields listed in the following table, and click **Next**.

Field	Description
Type	Required. Select the process type. Valid values are: • Encryption • Signature • Authentication
Version	Required. Select the process version.

13. In the Bank Protocol: Bank Process page, click **Next**.

14. In the Confirm page, verify the bank configuration settings, and click **Finish**.

15. Click **Cancel** to return to the Bank Configuration page.

Delete a Bank Profile

To delete a bank profile, complete the following steps:

Note: You cannot delete a bank profile if a contract with a partner has been established with the bank.

1. Log in to Sterling Integrator.
2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Profile Manager** > **Bank Configuration**.
3. In the Bank Configuration page, using either **Search** or **List**, locate and select the bank ID you want to delete, and click **Go!**
4. Click **delete** adjacent to the bank ID you want to delete.
5. Click **Return** to return to the Bank Configuration page.

Create a Partner Profile

A partner represents a customer who interacts with the EBICS Server. A customer is an organizational unit (a company or a private person) that has entered into a contract with a bank.

A customer can have one or more partners, with each having a Partner ID. Each partner can have one or more bank accounts.

To create a partner profile, complete the following steps:

1. Log in to Sterling Integrator.
2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Profile Manager** > **Partner Configuration**.
3. In the Partner Configuration page, click **Go!** adjacent to **Create New Partner**.
4. In the Partner Configuration page, enter the values for the fields listed in the following table and click **Next**.

Field	Description
Partner ID	Required. Specify the unique ID of a partner in the bank's system. To select from a list of partner IDs, click the **Lookup** icon next to the **Partner ID** field. **Note:** Using the **Lookup** icon, if you select a partner ID that exceeds 35 characters, Sterling Integrator trims the value to 35 characters, and creating a new record (the trimmed value) in the database.
Organization Code	Required. Specify the code of the organization that has been created in Sterling Integrator through the Trading Partner user interface or through the Sterling File Gateway user interface.
Partner Name	Required. Specify the name of the partner. You can search for a partner using the Search functionality in the Sterling File Gateway user interface.
Address Line 1	Optional. Specify the address of the partner.
Address Line 2	Optional. Specify the address of the partner.
City	Optional. Specify the name of the city.
State or Province	Optional. Specify the name of the state or province.
Country	Optional. Select the country.
Zip or Postal Code	Optional. Specify the zip code or the postal code.
Time Zone	Optional. Select the time zone.
E-mail Address	Optional. Specify the e-mail address of the partner.
Telephone Number	Optional. Specify the phone number of the partner with the country code and state code.

5. In the Partner Acct page, perform any of the following actions:

   - Click **add** to add a new partner account.
   - Click **edit** adjacent to the partner account you want to edit.
   - Click **delete** adjacent to the partner account you want to delete.

6. This step is applicable only if you opted to add a new partner account or edit an existing partner account. A partner can have zero or more account information. In the Partner Acct: Partner Account Info page, enter the values for the fields listed in the following table and click **Next**.

Field	Description
Account ID	Required. Specify the account identification code of the partner. The account ID will be used when the bank associates a partner and a user with an order type.
Account Holder Name	Required. Specify the name of the account holder name to whom the account ID belongs to.
Account Description	Optional. Specify information of partner's accounts.
Account Currency	Required. Select the currency in which the transactions pertaining to the account will take place. The default value is [EUR] European Community Euro.
Account Number	Required if you do not specify a National Account Number. Specify the account number, either in national (German) or international (IBAN) format. A valid account number should have either a 3-10 digit numeric code or 7- 30 characters of which the first two characters must be A-Z and the next two characters must be numeric digits followed by 3-30 characters that use the A-Za-z0-9 pattern.
International	Optional. Select this check box if the account number is specified in international (IBAN) format.
National Account Number	Required if you do not specify an Account Number. Specify the account number in free format. This is applicable for national account numbers that neither comply to German nor international (SWIFT-BIC) standards.
Format	Required if National Account Number is specified. Specify the format of the account number.
Bank Code	Required if the account ID is specified. Specify the bank code in free format. A bank code should have either an eight digit numeric code or eleven characters of which the first six characters must be A to Z and the next five characters must be A to Z or 0-9.
International	Optional. Select this check box if the bank code is specified in international (SWIFT) format.
Prefix (Bank Code)	Optional. Specify the national bank sort code prefix.
National Bank Code	Required. Specify the bank code in free format. This is applicable for national bank codes that neither comply to German nor international (SWIFT-BIC) standards.
Format	Required if National Bank Code is specified. Specify the format of the bank code.

7. In the Partner Acct page, click **Next**

8. In the Confirm page, verify the partner configuration settings, and click **Finish**.

9. Click **Cancel** to return to the Partner Configuration page.

Search for a Partner Profile

To search for a partner profile, complete the following steps:

1. Log in to Sterling Integrator.
2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Profile Manager** > **Partner Configuration**.
3. In the Partner Configuration page, perform one of the following actions, and click **Go!**

   - Under Search in the **Partner ID** field, enter either a part of the partner ID or the entire partner ID of the partner profile you are searching for.
   - From the **List Alphabetically** drop-down list, select **ALL** or the alphabet with which the ID of the partner you are searching for begins. Selecting ALL lists all the partner IDs.

Edit a Partner Profile

To edit a partner profile, complete the following steps:

1. Log in to Sterling Integrator.
2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Profile Manager** > **Partner Configuration**.
3. In the Partner Configuration page, using either **Search** or **List**, locate and select the partner ID you want to edit, and click **Go!**
4. Click **edit** adjacent to the partner ID you want to edit.
5. In the Partner Configuration page, enter the values for the fields listed in the following table and click **Next**.

Field	Description
Partner Name	Required. Specify the name of the partner. You can search for a partner using the Search functionality in the Sterling File Gateway user interface.
Address Line 1	Optional. Specify the address of the partner.
Address Line 2	Optional. Specify the address of the partner.
City	Optional. Specify the name of the city.
State or Province	Optional. Specify the name of the state or province.
Country	Optional. Select the country.
Zip or Postal Code	Optional. Specify the zip code or the postal code.
Time Zone	Optional. Select the time zone.
E-mail Address	Optional. Specify the e-mail address of the partner.
Telephone Number	Optional. Specify the phone number of the partner with the country code and state code.

6. In the Partner Acct page, perform any of the following actions:

   - Click **add** to add a new partner account.

- Click **edit** adjacent to the partner account you want to edit.
- Click **delete** adjacent to the partner account you want to delete.

7. This step is applicable only if you opted to add a new partner account or edit an existing partner account. A partner can have zero or more account information. In the Partner Acct: Partner Account Info page, enter the values for the fields listed in the following table and click **Next**.

Field	Description
Account ID	Required. Specify the account identification code of the partner. The account ID will be used when the bank associates a partner and a user with an order type.
Account Holder Name	Required. Specify the name of the account holder name to whom the account ID belongs to.
Account Description	Optional. Specify information of partner's accounts.
Account Currency	Required. Select the currency in which the transactions pertaining to the account will take place. The default value is [EUR] European Community Euro.
Account Number	Required if you do not specify a National Account Number. Specify the account number, either in national (German) or international (IBAN) format.
	A valid account number should have either a 3-10 digit numeric code or 7- 30 characters of which the first two characters must be A-Z and the next two characters must be numeric digits followed by 3-30 characters that use the A-Za-z0-9 pattern.
International	Optional. Select this check box if the account number is specified in international (IBAN) format.
National Account Number	Required if you do not specify an Account Number. Specify the account number in free format. This is applicable for national account numbers that neither comply to German nor international (SWIFT-BIC) standards.
Format	Required if National Account Number is specified. Specify the format of the account number.
Bank Code	Required if the account ID is specified. Specify the bank code in free format.
	A bank code should have either an eight digit numeric code or eleven characters of which the first six characters must be A to Z and the next five characters must be A to Z or 0-9.
International	Optional. Select this check box if the bank code is specified in international (SWIFT) format.
Prefix (Bank Code)	Optional. Specify the national bank sort code prefix.
National Bank Code	Required. Specify the bank code in free format. This is applicable for national bank codes that neither comply to German nor international (SWIFT-BIC) standards.
Format	Required if National Bank Code is specified. Specify the format of the bank code.

8. In the Partner Acct page, click **Next**

9. In the Confirm page, verify the partner configuration settings, and click **Finish**.

10. Click **Cancel** to return to the Partner Configuration page.

Delete a Partner Profile

To delete a partner profile, complete the following steps:

Note: You cannot delete a partner profile if the partner has established a contract with the bank.

1. Log in to Sterling Integrator.

2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Profile Manager** > **Partner Configuration**.

3. In the Partner Configuration page, using either **Search** or **List**, locate and select the partner ID you want to delete, and click **Go!**

4. Click **delete** adjacent to the partner ID you want to delete.

5. Click **Return** to return to the Partner Configuration page.

Create a User Profile

A user can be under either one partner or multiple partners. A user should always be associated with a partner to enable exchange of EBICS messages.

To create a user profile, complete the following steps:

1. Log in to Sterling Integrator.

2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Profile Manager** > **User Configuration**.

3. In the User Configuration page, click **Go!** adjacent to **Create New User**.

4. In the User Configuration page, enter the values for the fields listed in the following table and click **Next**.

Field	Description
User ID	Required. Specify the unique ID of a user in the bank's system.
User Name	Required. Specify the name of the user.
Address Line 1	Optional. Specify the address of the user.
Address Line 2	Optional. Specify the address of the user.
City	Optional. Specify the name of the city.
State or Province	Optional. Specify the name of the state or province.
Country	Optional. Select the country.
Zip or Postal Code	Optional. Specify the zip code or the postal code.
Time Zone	Optional. Select the time zone.
E-mail Address	Optional. Specify the e-mail address of the user.

Field	Description
Telephone Number	Optional. Specify the phone number of the user with the country code and state code.

5. In the Associated Partners page, perform any of the following actions

- Click **add** to add a new associate partner.
- Click **edit** adjacent to the associate partner you want to edit.
- Click **delete** adjacent to the associate partner you want to delete.
- Click **suspend** adjacent to the associate partner you want to suspend.

6. This step is applicable only if you opted to add a new associate partner or edit an existing associate partner.

The bank assigns a set of permissions, order types and file formats, to a user based on the contract.

In the Associated Partners: User Settings page, specify values for the fields listed in the following table, anc click **Next**.

Field	Description
Associate Partner	
Partner ID	Required. Specify the partner to which a user is associated in the **Partner ID** field. A user can be under many partners. You can also select a partner ID from a list of Partner IDs by clicking the **Lookup** icon adjacent to the **Partner ID** field.
Mailbox Settings	
Upload Mailbox Path	Required. Specify the mailbox path for the uploaded messages. You must assign a mailbox path to store the unpacked messages from an EBICS request.
	The mailbox is auto-created if the User ID, Partner ID, and Inbox Settings are not specified.
	A default mailbox path is set if no value is provided.
	If the mailbox (User ID, Partner ID, Inbox), already exists in Sterling Integrator and if you leave this field blank, an error message asking you to specify the default mailbox path is displayed.
	Note: Ensure that the mailbox path starts with a forward slash (/).
Download Mailbox Path	Required. Specify the mailbox path for the downloaded messages. You must assign a mailbox path to store the messages that will be packaged as part of an EBICS response.
	The mailbox is auto-created if the User ID, Partner ID, and Outbox Settings are not specified.
	A default mailbox path is set if no value is provided.
	If the mailbox (User ID, Partner ID, Outbox) already exists in Sterling Integrator, and if you leave this field blank, an error message asking you to specify the default mailbox path is displayed.

Field	Description
	Note: Ensure that the mailbox path starts with a forward slash (/).
Archive Mailbox Path	Required. Specify the mailbox path for archiving the downloaded messages. You must assign a mailbox path to store the messages downloaded by an FDL request, for example, Payment Status Report (PSR).
	The mailbox is auto-created if the User ID, Partner ID, and Archive Settings are not specified.
	A default mailbox path is set if no value is provided.
	If the mailbox (User ID, Partner ID, Archive) already exists in Sterling Integrator, and if you leave this field blank, an error message asking you to specify the default mailbox path is displayed.
	Note: Ensure that the mailbox path starts with a forward slash (/).

7. In the Associated Partners page, click **Next**.

8. In the Confirm page, click **Show All** adjacent to **Associate Partners** to view the list of partners associated to the user. Verify the user configuration settings, and click **Finish**.

9. Click **Cancel** to return to the User Configuration page.

Search for a User Profile

To search for a user profile, complete the following steps:

1. Log in to Sterling Integrator.

2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Profile Manager** > **User Configuration**.

3. In the User Configuration page, perform one of the following actions, and click **Go!**

   - Under Search in the **User ID** field, enter either a part of the user ID or the entire user ID of the user profile you are searching for.
   - From the **List Alphabetically** drop-down list, select **ALL** or the alphabet with which the ID of the user you are searching for begins. Selecting ALL lists all the user IDs.

Edit User Profile

To edit a user profile, complete the following steps:

1. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Profile Manager** > **User Configuration**.

2. In the User Configuration page, using either **Search** or **List**, locate and select the user ID you want to edit, and click **Go!**

3. Click **edit** adjacent to the user ID you want to edit.

4. In the User Configuration page, enter the values for the fields listed in the following table and click **Next**.

Field	Description
User Name	Required. Specify the name of the user.
Address Line 1	Optional. Specify the address of the user.
Address Line 2	Optional. Specify the address of the user.
City	Optional. Specify the name of the city.
State or Province	Optional. Specify the name of the state or province.
Country	Optional. Select the country.
Zip or Postal Code	Optional. Specify the zip code or the postal code.
Time Zone	Optional. Select the time zone.
E-mail Address	Optional. Specify the e-mail address of the user.
Telephone Number	Optional. Specify the phone number of the user with the country code and state code.

5. In the Associated Partners page, perform any of the following actions

   - Click **add** to add a new associate partner.
   - Click **edit** adjacent to the associate partner you want to edit.
   - Click **delete** adjacent to the associate partner you want to delete.
   - Click **suspend** adjacent to the associate partner you want to suspend.

6. This step is applicable only if you opted to add a new associate partner or edit an existing associate partner.

   The bank assigns a set of permissions, order types and file formats, to a user based on the contract.

   In the Associated Partners: User Settings page, specify values for the fields listed in the following table, anc click **Next**.

Field	Description
Associate Partner	
Partner ID	Required. Specify the partner to which a user is associated in the **Partner ID** field. A user can be under many partners. You can also select a partner ID from a list of Partner IDs by clicking the **Lookup** icon adjacent to the **Partner ID** field.
Mailbox Settings	
Upload Mailbox Path	Required. Specify the mailbox path for the uploaded messages. You must assign a mailbox path to store the unpacked messages from an EBICS request. The mailbox is auto-created if the User ID, Partner ID, and Inbox Settings are not specified. A default mailbox path is set if no value is provided. If the mailbox (User ID, Partner ID, Inbox), already exists in Sterling Integrator and if you leave this field blank, an error message asking you to specify the default mailbox path is displayed.

Field	Description
	Note: Ensure that the mailbox path starts with a forward slash (/).
Download Mailbox Path	Required. Specify the mailbox path for the downloaded messages. You must assign a mailbox path to store the messages that will be packaged as part of an EBICS response.
	The mailbox is auto-created if the User ID, Partner ID, and Outbox Settings are not specified.
	A default mailbox path is set if no value is provided.
	If the mailbox (User ID, Partner ID, Outbox) already exists in Sterling Integrator, and if you leave this field blank, an error message asking you to specify the default mailbox path is displayed.
	Note: Ensure that the mailbox path starts with a forward slash (/).
Archive Mailbox Path	Required. Specify the mailbox path for archiving the downloaded messages. You must assign a mailbox path to store the messages downloaded by an FDL request, for example, Payment Status Report (PSR).
	The mailbox is auto-created if the User ID, Partner ID, and Archive Settings are not specified.
	A default mailbox path is set if no value is provided.
	If the mailbox (User ID, Partner ID, Archive) already exists in Sterling Integrator, and if you leave this field blank, an error message asking you to specify the default mailbox path is displayed.
	Note: Ensure that the mailbox path starts with a forward slash (/).

7. In the Associated Partners page, click **Next**.

8. In the Confirm page, click **Show All** adjacent to **Associate Partners** to view the list of partners associated to the user. Verify the user configuration settings, and click **Finish**.

9. Click **Cancel** to return to the User Configuration page.

Delete User Profile

To delete a user profile, complete the following steps:

Note: You cannot delete a user profile if order types have been assigned to the user while configuring user permissions.

1. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Profile Manager** > **User Configuration**.

2. Using either Search or List, locate the user ID you want to delete and click **Go!**

3. Next to the user ID you want to delete, click **delete**.

> **Note:** Deleting a user profile does not delete the corresponding mailboxes that have already been created.

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4. Click **Return** to return to the User Configuration page.

Configure Offer Manager

A bank can create one or more offers. An offer enables grouping a set of order types and file formats to a list of partners. An offer provides an easy way for a bank to set up a contract with a partner. It groups together a set of order types with the associated order formats and the signatures. An offer is valid for use with a set of order types. Each partner is allocated a set of order types. Use Sterling Integrator to create offers.

Create an Offer

To create an offer, complete the following steps:

1. Log in to Sterling Integrator.
2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Offer Manager** > **Offer Configuration**.
3. In the Offer Configuration page, click **Go!** adjacent to **Create New Offer**.
4. In the Offer Configuration page, enter the values for the fields listed in the following table and click **Next**.

Field	Description
Bank ID	Required. Select a bank ID from the drop-down list.
Offer Name	Required. Specify a name for the offer.

5. The bank assigns the order types and file formats to the partners of the offer. The bank assigns the order types either in full or as a subset.

In the Associate/Disassociate Order Types page, you can type a part of the order type in the **Filter Data By Name** field and click the filter icon for a filtered list. You can also use the arrows to add the Available Order Types to the Selected Order Types list. Click the first double arrow to add all the available order types to the Selected Order Types list.

The bank assigns the order types for the newly created offer. In the Associate/Disassociate Order Types page, enter the values for the fields listed in the following table and click **Next**.

Field	Description
Authorization Level	Optional. Select the signature authorization of the user who acted as the signatory. Valid value is [T] Transport signature.
No. of Sign Reqd.	Optional. Specify the minimum number of signatures required to authorize the order. The default value displayed is 0.
Post Business Process	Optional. Select the business process to be invoked at the EBICS Banking Server Module after the upload order type is completed.

Field	Description
Replace Default Attributes	Valid values are: • Replace Currently Added Order Types - Indicates that the attributes specified in this page will be applied to the order types that have just been added from this user interface. This does not include the order types that are retrieved from the database, and the order types that were added earlier. This is the default value. • Replace Newly Added (unsaved) Order Types - Indicates that the attributes specified in this page will be applied to the order types that have been added but are not yet saved. This does not include the order types that are retrieved from the database. • Replace ALL - Indicates that the attributes specified in this page will be applied to all the order types in the Selected Order Types list.

6. The Order Type List page lists the order types assigned to the offer. You can edit the settings of the order type assigned to the offer by clicking **edit** adjacent to the order type. You can also add or remove order types by clicking **add** or **delete** respectively.

7. In the Order Type List page, click **Next**.

8. In the Confirm page, click **Show All** adjacent to **List of Order Types** to view the list of order types assigned to the offer. Verify the offer configuration settings, and click **Finish**.

9. Click **Cancel** to return to the Offer Configuration page.

Search for an Offer

To search for an offer, complete the following steps:

1. Log in to Sterling Integrator.

2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Offer Manager** > **Offer Configuration**.

3. In the Offer Configuration page, perform one of the following actions, and click **Go!**

   • Under Search in the **Bank ID** field, enter either a part of the bank ID or the entire bank ID you are searching for.
   • Under Search in the **Offer Name** field, enter either a part of the offer name or the entire offer name you are searching for.
   • From the **List Alphabetically** drop-down list, select **ALL** or the alphabet with which the ID of the bank you are searching for begins. Selecting ALL lists all the bank IDs.

Edit an Offer

To edit an offer, complete the following steps:

1. Log in to Sterling Integrator.

2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Offer Manager** > **Offer Configuration**.

3. In the Offer Configuration page, using either **Search** or **List**, locate and select the offer you want to edit, and click **Go!**

4. Click **edit** adjacent to the offer you want to edit.

5. Review the information in the Offer Configuration page and click **Next**.

6. The bank assigns the order types and file formats to the partners of the offer. The bank assigns the order types either in full or as a subset.

   In the Associate/Disassociate Order Types page, you can type a part of the order type in the **Filter Data By Name** field and click the filter icon for a filtered list. You can also use the arrows to add the Available Order Types to the Selected Order Types list. Click the first double arrow to add all the available order types to the Selected Order Types list.

   The bank assigns the order types for the newly created offer. In the Associate/Disassociate Order Types page, enter the values for the fields listed in the following table and click **Next**.

Field	Description
Authorization Level	Optional. Select the signature authorization of the user who acted as the signatory. Valid value is [T] Transport signature.
No. of Sign Reqd.	Optional. Specify the minimum number of signatures required to authorize the order. The default value displayed is 0.
Post Business Process	Optional. Select the business process to be invoked at the EBICS Banking Server Module after the upload order type is completed.
Replace Default Attributes	Valid values are: • Replace Currently Added Order Types - Indicates that the attributes specified in this page will be applied to the order types that have just been added from this user interface. This does not include the order types that are retrieved from the database, and the order types that were added earlier. This is the default value. • Replace Newly Added (unsaved) Order Types - Indicates that the attributes specified in this page will be applied to the order types that have been added but are not yet saved. This does not include the order types that are retrieved from the database. • Replace ALL - Indicates that the attributes specified in this page will be applied to all the order types in the Selected Order Types list.

7. The Order Type List page lists the order types assigned to the offer. You can edit the settings of the order type assigned to the offer by clicking **edit** adjacent to the order type. You can also add or remove order types by clicking **add** or **delete** respectively.

8. In the Order Type List page, click **Next**.

9. In the Confirm page, click **Show All** adjacent to **List of Order Types** to view the list of order types assigned to the offer. Verify the offer configuration settings, and click **Finish**.

10. Click **Cancel** to return to the Offer Configuration page.

Delete an Offer

1. Log in to Sterling Integrator.
2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Offer Manager** > **Offer Configuration**.
3. In the Offer Configuration page, using either **Search** or **List**, locate and select the offer you want to delete, and click **Go!**
4. Click **delete** adjacent to the offer you want to delete.

   Note: You cannot delete an offer if the offer has already been assigned in the contract configuration.

5. Click **Return** to return to the Offer Configuration page.

Create a Contract

In a contract, the following terms are agreed upon:

• The business transactions the customer will conduct with the bank
• The account information of the partners
• The users who have the necessary permissions to work with the bannk's system
• The authorizations the users will possess

To create a contract, complete the following steps:

1. Log in to Sterling Integrator.
2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Offer Manager** > **Contract Configuration**.
3. In the Contract Configuration page, using the **Bank ID** and **Offer Name** drop-down lists, select the bank ID and the offer name with which you want to create a contract and click **Go!**
4. The bank creates a contract by assigning a partner to an offer. A Partner ID is mapped to an offer belonging to a bank ID. Click **add** adjacent to **Add New Partner to Offer**.
5. In the Link Partners to Offer page, enter a part of the partner ID in the **Filter by Partner Id** field and click the filter icon for a filtered list. You can also select a Partner ID from the **Select** list and click **Save**.
6. In the Partner Order Types page, click **add** to add an order type to a partner and click **delete** to remove an order type from a partner.
7. This step is applicable only if you opted to add or delete an order type.

   In the Add Order Types to Partner page, enter a part of the order type in the **Filter Data By Name** field and click the filter icon for a filtered list. You can also use the arrows to add the Available Order Types to the Selected Order Types list. Click the first double arrow to add all the available order types to the Selected Order Types list.

   In the Add Order Types to Partner page, enter the values for the fields listed in the following table and click **Next**.

Field	Description
No. of Sign Reqd.	Optional. Specify the minimum number of signatures required to authorize the order. If you do not provide a value for this field, the value specified in the offer is used.
Post Business Process	Optional. Select the business process to be invoked in the EBICS Banking Server Module after the upload order type is completed. If you do not provide a value for this field, the value specified in the offer is used.
Replace Default Attributes	Valid values are: • Replace Currently Added Order Types - Indicates that the attributes specified in this page will be applied to the order types that have just been added from this user interface. This does not include the order types that are retrieved from the database, and the order types that were added earlier. • Replace Newly Added (unsaved) Order Types - Indicates that the attributes specified in this page will be applied to the order types that have been added but are not yet saved. This does not include the order types that are retrieved from the database. • Replace ALL - Indicates that the attributes specified in this page will be applied to all the order types in the Selected Order Types list. This is the default value.

8. The Partner Order Types page lists the order types assigned to the partner. You can edit the settings of the order type assigned to the partner by clicking **edit** adjacent to the order type. You can also add or remove order types by clicking on **add** or **delete** respectively.

9. In the Partner Order Types page, click **Next**.

10. In the Confirm page, click **Show All** adjacent to **List of Order Types** to view the list of order types assigned to the partner. Verify the contract configuration settings, and click **Finish**.

11. Click **Cancel** to return to the Contract Configuration page.

Search for a Contract

To search for a contract, complete the following steps:

1. Log in to Sterling Integrator.

2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Offer Manager** > **Contract Configuration**.

3. In the Contract Configuration page, using the **Bank ID** and **Offer Name** drop-down lists, locate and select the bank ID and the offer name and click **Go!**

Edit a Contract

To edit a contract, complete the following steps:

1. Log in to Sterling Integrator.

2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **Offer Manager** > **Contract Configuration**.

3. In the Contract Configuration page, using the **Bank ID** and **Offer Name** drop-down lists, locate and select the contract you want to edit, and click **Go!**

4. Click **edit** adjacent to the contract you want to edit.

5. The bank creates a contract by assigning a partner to an offer. A Partner ID is mapped to an offer belonging to a bank ID. Click **add** adjacent to **Add New Partner to Offer**.

6. In the Link Partners to Offer page, enter a part of the partner ID in the **Filter by Partner Id** field and click the filter icon for a filtered list. You can also select a Partner ID from the **Select** list and click **Save**.

7. In the Partner Order Types page, click **add** to add an order type to a partner and click **delete** to remove an order type from a partner.

8. This step is applicable only if you opted to add or delete an order type.

   In the Add Order Types to Partner page, enter a part of the order type in the **Filter Data By Name** field and click the filter icon for a filtered list. You can also use the arrows to add the Available Order Types to the Selected Order Types list. Click the first double arrow to add all the available order types to the Selected Order Types list.

   In the Add Order Types to Partner page, enter the values for the fields listed in the following table and click **Next**.

Field	Description
No. of Sign Reqd.	Optional. Specify the minimum number of signatures required to authorize the order. If you do not provide a value for this field, the value specified in the offer is used.
Post Business Process	Optional. Select the business process to be invoked in the EBICS Banking Server Module after the upload order type is completed. If you do not provide a value for this field, the value specified in the offer is used.
Replace Default Attributes	Valid values are: • Replace Currently Added Order Types - Indicates that the attributes specified in this page will be applied to the order types that have just been added from this user interface. This does not include the order types that are retrieved from the database, and the order types that were added earlier. • Replace Newly Added (unsaved) Order Types - Indicates that the attributes specified in this page will be applied to the order types that have been added but are not yet saved. This does not include the order types that are retrieved from the database. • Replace ALL - Indicates that the attributes specified in this page will be applied to all the order types in the Selected Order Types list. This is the default value.

9. The Partner Order Types page lists the order types assigned to the partner. You can edit the settings of the order type assigned to the partner by clicking **edit** adjacent to the order type. You can also add or remove order types by clicking on **add** or **delete** respectively.

10. In the Partner Order Types page, click **Next**.

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11. In the Confirm page, click **Show All** adjacent to **List of Order Types** to view the list of order types assigned to the partner. Verify the contract configuration settings, and click **Finish**.

12. Click **Cancel** to return to the Contract Configuration page.

Configure User Permission

You can use Sterling Integrator to give the necessary permissions to an EBICS user by assigning either all the order types and file formats or a subset of the order types and file formats that are currently assigned to a partner in a particular offer, for example, a contract.

Search User Permission

To search for a partner-user relationship, complete the following steps:

1. Log in to Sterling Integrator.

2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **User Permission Configuration**.

3. In the User Permission Configuration page, perform one of the following actions, and click **Go!**

   - Under Search in the **Partner ID** field, enter either a part of the partner ID or the entire partner ID you are searching for. To select from a list of partner IDs, click the **Lookup** icon adjacent to the **Partner ID** field. You can type a part of the partner ID in the **Filter Data By Partner ID** field and click the filter icon to view a filtered list. You can also select a Partner ID from the Select Partner ID list and click **Save**.

   - Under Search in the **User ID** field, enter either a part of the user ID or the entire name of the user ID you are searching for. To select from a list of user IDs, click the **Lookup** icon adjacent to the **User ID** field. You can type a partial name in the **Filter Data By User ID** field and click the filter icon to view a filtered list. You can also select a user ID from the Select User ID list and click **Save.**

A list of relationships that exists between the user and the partner, the offer, and the bank the partner has established a contract with, is displayed.

Edit User Permission

To edit the user permission configuration, complete the following steps:

1. Log in to Sterling Integrator.

2. From the **Administration** menu, select **EBICS** > **Subscription Manager** > **User Permission Configuration**.

3. In the User Permission Configuration page, using either **Search** or **List**, locate and select the contract you want to edit, and click **Go!**

4. Click **edit** adjacent to the user permission you want to edit.

5. You can enter a part of the order type in the **Filter Data By Order Data** field and click the filter icon to view a filtered list. You can also use the arrows to add the Available Order Types to the Selected Order Types list. Click the first double arrow to add all the available order types to the Selected Order Types list.

   The Available Order Types list contains the order types assigned to a partner in a contract. You can assign permissions to a user by moving the order types from the Available Order Types list to the Selected Order Types list.

6. Click **Next**.

7. In the Order Type Attribute Settings page, enter a part of the Account ID in the **Filter Data By Account ID** field and click the filter icon to view a filtered list. You can also use the arrows to add the Available Accounts to the Selected Accounts list. Click the first double arrow to add all the available accounts to the Selected Accounts list.

   In the Order Type Attribute Settings page, enter the values for the fields listed in the following table and click **Next**.

Field	Description
Authorization Level	Optional. Select the signature authorization of the user who acted as the signatory. Valid value is [T] Transport signature.
	If you do not specify a value for this field, the value set specified in the contract is inherited.
Maximum Amount	Optional. Specify the amount limit for the user. This field is applicable for bank-technical order types.
	Note: If you set the amount limit as 0, the values specified in Maximum Amount and Currency will be removed.
Currency	Required if the maximum amount is specified. Select the currency in which the maximum amount has been specified. This field is applicable for bank-technical order types.
Replace Default Attributes	Valid values are:
	• Replace Currently Added Order Types - Indicates that the attributes specified in this page will be applied to the order types that have just been added from this user interface. This does not include the order types that are retrieved from the database, and the order types that were added earlier.
	• Replace Newly Added (unsaved) Order Types - Indicates that the attributes specified in this page will be applied to the order types that have been added but are not yet saved. This does not include the order types that are retrieved from the database.
	• Replace ALL - Indicates that the attributes specified in this page will be applied to all the order types in the Selected Order Types list. This is the default value.

8. The List of Order Types page lists the order types assigned to the user. You can edit the settings of the order type assigned to the user by clicking **edit** next to the order type. You can also add or remove order types by clicking on **add** or **delete** respectively.

9. In the List of Order Types page, click **Next**.

10. In the Confirm page, click **Show All** adjacent to **List of Order Types** to view the list of order types assigned to the user. Verify the user permission configuration settings, and click **Finish**.

11. Click **Cancel** to return to the User Permission Configuration page.

Verify User Permission

To verify if the information on user configuration is present in the Subscription Manager database, complete the following steps:

1. Log in to Sterling Integrator.

2. From the **Administration** menu, select **Operations** > **System** > **Support Tools** > **SQL Manager**.

3. In the SQL Manager page:

   - To view user relationship information pertaining to the user and the partner, select * from EB_PTNER_USER.

   - To view user relationship information pertaining to the bank and the offer, select * from EB_HOST_OFFER.

Permissions to Access EBICS GUI Resources

To access the EBICS Graphical User Interface and its functions in Sterling Integrator, you must be assigned to one of the two permissions groups: EBICS Operators or EBICS Administrators. The following table summarises the functions available to members of each group:

Group	Functions available to group menbers
EBICS Operators	Create and edit entities in Subscription Manager
EBICS Administrators	Create, edit, and delete entities in Subscription Manager

Note: For an FG_OPERATOR group, the EBICS menu is not displayed in the webservice (/ws) screen. This is because EBICS is a sub group and permissions, which are not for a sub group, are displayed in the webservice (/ws) screen. The EBICS menu is displayed in a webservice (/ws) screen for an FG_SYSADMIN group. For more information on the roles of Operators and System Administrators in Sterling File Gateway, see the Sterling File Gateway 2.0 Help.

The following table lists the EBICS menu items in Sterling Integrator and the permissions required to access the page associated with each group:

Note: Access to a menu item allows access to the full functionality of the associated page, with the delete function limited to users with administrator permissions.

Menu Item	Permission Name (Permission ID)	Permission Inherited with EBICS Operator?	Permission Inherited with EBICS Administrator?
EBICS	UI EBICS Menu (EBICS)	Yes	Yes
EBICS > Subscription Manager	UI EBICS Subscription Manager (EBICS_SUBSCRIP_MANAGER)	Yes	Yes

Menu Item	Permission Name (Permission ID)	Permission Inherited with EBICS Operator?	Permission Inherited with EBICS Administrator?
EBICS > Subscription Manager > Order Type Manager	UI EBICS Order Type Manager (EBICS_ORDER_MANAGER)	Yes	Yes
EBICS > Subscription Manager > Order Type Manager > File Format Configuration	UI Delete EBICS File Format Configuration (EBICS_FILE_FMT_CONF_DEL)	No	Yes
	UI EBICS File Format Configuration (EBICS_FILE_FMT_CONF)	Yes	Yes
EBICS > Subscription Manager > Order Type Manager > Order Type Configuration	UI Delete EBICS Order Type Configuration (EBICS_ORD_TYPE_CONF_DEL)	No	Yes
	UI EBICS Order Type Configuration (EBICS_ORDER_CONFIG)	Yes	Yes
EBICS > Subscription Manager > Profile Manager	UI EBICS Profile Manager (EBICS_PROFILE_MANAGER)	Yes	Yes
EBICS > Subscription Manager > Profile Manager > Bank Configuration	UI Delete EBICS Bank Profile Configuration (EBICS_BANK_CONFIG_DEL)	No	Yes
	UI EBICS Bank Profile Configuration (EBICS_BANK_CONFIG)	Yes	Yes
EBICS > Subscription Manager > Profile Manager > Partner Configuration	UI Delete EBICS Partner Profile Configuration (EBICS_PARTNER_CONFIG_DEL)	No	Yes
	UI EBICS Partner Profile Configuration (EBICS_PARTNER_CONF)	Yes	Yes
EBICS > Subscription Manager > Profile Manager > User Configuration	UI Delete EBICS User Profile Configuration (EBICS_USER_CONFIG_DEL)	No	Yes
	UI EBICS User Profile Configuration (EBICS_USER_CONFIG)	Yes	Yes
EBICS > Subscription Manager > Offer Manager	UI EBICS Offer Manager (EBICS_OFFER_MANAGER)	Yes	Yes
EBICS > Subscription Manager > Offer Manager > Offer Configuration	UI Delete EBICS Offer Configuration (EBICS_OFFER_CONFIG_DEL)	No	Yes
	UI EBICS Offer Configuration (EBICS_OFFER_CONFIG)	Yes	Yes
EBICS > Subscription Manager > Offer Manager > Contract Configuration	UI Delete EBICS Contract Configuration (EBICS_CONTRACT_CONF_DEL)	No	Yes
	UI EBICS Contract Configuration (EBICS_CONTRACT_CONF)	Yes	Yes

Menu Item	Permission Name (Permission ID)	Permission Inherited with EBICS Operator?	Permission Inherited with EBICS Administrator?
EBICS > Subscription Manager > User Permission Configuration	UI Delete EBICS User Permission Configuration (EBICS_USERPERM_CONF_DEL)	No	Yes
	UI EBICS User Permission Configuration (EBICS_USERPERM_CONF)	Yes	Yes
EBICS > Utilities > Subscriber Keys Validation	UI EBICS Subscriber Key Validation (EBICS_SUBS_KEY_VAL)	Yes	Yes

To view the GUI items in the parent menu, when the user is not assigned to any group, the corresponding child items permissions must be assigned along with the following permissions:

• UI EBICS Menu
• UI EBICS Subscription Manager
• UI EBICS Order Type Manager
• UI EBICS Profile Manager
• UI EBICS Offer Manager

Import and Export Subscription Manager Information

Import Subscription Manager Information

The EBICSSubscrMgrImport business process enables you to import configuration related to a bank, partner, user, offer, user relationship, and order type and file format in the EBICS Banking Server Module.

You can create an import file using one of the following methods:

Note: To ensure optimum performance, it is recommended that you include a maximum of 5000 partners and 5000 users (for example, one partner to one user) in a single import file and 5000 partners in an import file or 5000 users in an import file with corresponding individual configuration details. It is also recommended to sequentially import files of user data with individual configuration details. Importing of files concurrently can be done in lesser time compared to sequentially importing the files. The ability to concurrently import files is dependent on the performance of the system. For example, in a Red Hat Enterprise Linux Server, release 5.1, with 4 processors, importing 5 files of 2000 partners and 2000 users concurrently will yield good performance results.

- A single import file with configuration information of bank, partner, user, offer, contract, user permissions, and order type and file format
- Individual import files with the corresponding configuration information, for example, an import file with configuration details pertaining to a user, import file with configuration details of the user relationship with a partner and user permissions

To import the configurations related to a bank, partner, user, offer, user relationship, or order type and file format in the EBICS Banking Server Module, complete the following steps:

1. Log in to Sterling Integrator.

2. From the **Administration** menu, select **Business Processes** > **Manager**.

3. Search for the EBICSSubscrMgrImport business process by specifying a part of the business process name or the entire business process name in the **Process Name** field and click **Go!** Alternatively, you can also list all the business processes or specific processes based on the alphabet with which the process name begins. Click the down arrow adjacent to **Alphabetically**, make your selection, and click **Go!**

4. Click **execution manager** adjacent to the Process Name you want to execute.

5. Click **execute**.

6. In the Execute Business Process Input page, browse to locate the `<input.xml>` file with the required configuration, select the file, and click **Go!**

   The input file is created based on the configuration related to either the bank, partner, user, offer, user relationship, or order type and file format in the EBICS Banking Server Module.

   After the business process is executed, Instance Data in Sterling Integrator displays a message stating whether the import was successful or not.

Export Subscription Manager Information

The following table lists the XML attributes that must be present in the primary document of the EBICSSubscrMgrExport business process. This business process enables you to retrieve information related to a host ID, partner ID, user ID, protocol version, and order type.

Attribute	Description
HostId	Based on the host ID, all the information related to the host will be retrieved. This includes basic host information, all the URLs pertaining to the host, all the offers that belong to the host, and all the order types that belong to each of the offers.
HostId PartnerId	Based on the host ID and the partner ID, all the information related to the host and the specified partner will be retrieved. The offer to which the partner belongs, orders used by the partner, and the list of users under this partner will be specified. Partner information includes the account information pertaining to partner.
HostId PartnerId UserId	Information related to the host, the partner, the offer to which the partner belongs, the user, and the orders to which the partner is associated with, is retrieved. The account information is used by the user. The user information includes permissions for the user, such as the authorization level, maximum amount, currency, allow test flow and user keys.
ProtocolVer	Information related to all the order types and file formats associated with the defined protocol version, for example, H003, is retrieved.
ProtocolVer OrdType	Information related to all the order types and file formats associated with the defined protocol version, for example, H003, and order type, for example, FUL, is retrieved.

To export the configurations related to a bank, partner, user, offer, user relationship, or order type and file format in the EBICS Banking Server Module, complete the following steps:

1. Log in to Sterling Integrator.

2. From the **Administration** menu, select **Business Processes** > **Manager**.

3. Search for the EBICSSubscrMgrExport business process by specifying a part of the business process name or the entire business process name in the **Process Name** field and click **Go!** Alternatively, you can also list all the business processes or specific processes based on the the alphabet with which the process name begins. Click the down arrow adjacent to **Alphabetically**, make your selection, and click **Go!**

4. Click **execution manager** adjacent to the Process Name you want to execute.

5. Click **execute**.

6. In the Execute Business Process Input page, browse to locate the `<input.xml>` file with the required configuration, select the file, and click **Go!**

   The input file is created based on the configuration related to either the bank, partner, user, offer, user relationship, or order type and file format in the EBICS Banking Server Module.

   The `<input.xml>` is in the following format:

   • The root XML tag is <SubscriberMgrInfo>.
   • The child XML tag <Profiles> is used for bank and bank-related information, for example, the offer and permissions relating to partner and subscriber, . The <HostInfo> with the appropriate attributes is under the <Profiles> tag.
   • The child XML tag <OrderTypes> is used for order type information. The <OrdTypeInfo> with the appropriate attributes is under the <OrderTypes> tag.

   The following XML illustrates the input XML for export of data related to a host, partner, order types, file formats, and permissions given to a user:

```
<SubscriberMgrInfo xmlns=
"http://www.sterlingcommerce.com/ebics/SubscriberMgrInfo"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation=
"http://www.sterlingcommerce.com/ebics/SubscriberMgrInfo">
 <Profiles>
  <HostInfo HostId="HOSTBNK1" PartnerId="PARTNER1" UserId="USER1"/>
 </Profiles>
 <OrderTypes>
  <OrdTypeInfo ProtocolVer="H003" OrdType="FUL"/>
 </OrderTypes>
</SubscriberMgrInfo>
```

   After the business process is executed, Instance Data in Sterling Integrator displays a message stating whether the export was successful or not.

Configure EBICS Adapters and Services

Configure EBICS Adapters and Services

As a prerequisite, a bank must install the EBICS HTTP Server Adapter in Sterling Integrator in order to receive a user's request. The URI (Uniform Resource Indicator) in the EBICS HTTP Server Adapter bootstraps the handleEBICSRequest business process to handle the EBICS request, and invokes the EBICS Server Service.

Note: The database space required to store files processed by the EBICS Banking Server Module is approximately 2.5 times the size of the transacted files.

Configure an HTTP Server Adapter

An HTTP Server Adapter instance is used to receive the incoming EBICS requests, and bootstraps a business process to start processing the EBICS transactions.

By default, an HTTP Server Adapter instance (EBICS Http Server Adapter) is auto-configured for handling EBICS requests. The HTTP Server Adapter instance has an URI mapped to the business process.

The URI, `/ebicsrequest`, is the default URI specified in the EBICS HTTP Server Adapter. If you want to configure a new URI, ensure that you complete the following tasks while configuring a new URI in the EBICS HTTP Server Adapter. For more information about configuring a URI, see *HTTP Server Adapter* in the Sterling Integrator online documentation library.

Note: The newly configured URI and the HTTP Server port number must match the host URL of the bank's profile.

1. Click **add** adjacent to **New URI** while configuring the EBICS HTTP Server Adapter in Sterling Integrator.

2. Under **Launch a BP Or WAR**, select **Business Process**

3. From the **Business Process** drop-down list, select handleEBICSRequest.

4. Set **Send Raw Messages** to No.

Configure an HTTPS Server Adapter

If you want to configure an HTTPS Server Adapter, complete the following steps while configuring the HTTP Server Adapter instance:

1. Log in to Sterling Integrator.

2. Navigate to **Deployment** > **Services** > **Configuration**.

3. Search for EBICS Http Server Adapter in the **Service Name** field. Click **Go!**

4. In the Services Configuration page, click **edit** adjacent to the service name.

5. Specify valid values in the configuration parameters. For information about configuring an HTTP Server Adapter, refer to *HTTP Server Adapter* topic in the Sterling Integrator online documentation library.

6. Select Must in the **Use SSL** check box.

7. Create a self-signed certificate to be used with the HTTPS Server Adapter. For information about creating a self-signed certificate, refer to *Create a Self-Signed Certificate* topic.

8. From the **System Certificate** drop-down list, select the newly created certificate.

9. Specify the **Cipher Strength**. Valid values are Strong, All, and Weak.

   Note: It is recommended that you use Strong as the cipher strength for configuring HTTP Server Adapter with SSL.

10. Complete the configuration by providing valid values for the remaining fields pertaining to EBICS Http Server Adapter. For information about configuring an HTTP Server Adapter, refer to *HTTP Server Adapter* topic in the Sterling Integrator online documentation library.

Configure an EBICS Server Service

The EBICS Server Service handles incoming EBICS requests (through HTTP and HTTPS) based on the EBICS protocol specifications, generating and sending the appropriate response back to the subscriber.

Following are the other responsibilities of an EBICS Server Service:

• Processing the incoming EBICS requests and generating responses
• Performing message authentication, generation, and verification of the identification and authentication signatures of EBICS messages
• Managing the life cycle of EBICS transactions in a bank's system
• Managing process flows of various requests, such as download (FDL) and upload (FUL)

Note: Ensure that you set the scheduler settings with an appropriate value to ensure that the idle transactions are cancelled when they exceed the Maximum Idle Time period.

For information about configuring EBICS Server Service, refer to *EBICS Server Service* topic in the Sterling Integrator online documentation library.

Initialize a Subscriber

Initialize a User

After a contract has been defined, the corresponding bank sets up the partner and user master data in the Subscription Manager database through the import function. The bank does not yet have the user's public certificates. The transmission of the user's public certificates to the bank's system is necessary for the initialization of the user.

The supported versions for the Electronic Signature (ES), encryption, and identification and authentication signature are components of the bank parameters. The user's bank-technical key must be newly-generated if the user does not have a suitable bank-technical key or does not want to use an existing bank-technical key for the new bank connection. The same applies for the encryption key and the identification and authentication key.

The user transmits the public certificates to the financial institution through two independent communication paths:

• INI - Sends the public bank-technical key
• HIA - Sends the public identification and authentication key and the public encryption key

When the user is first assigned to a partner, the status of the user is New. If the user sends only the INI request to the bank, the status is changed to Partly Initialized (INI). If the user sends only the HIA request to the bank, the status is changed to Partly Initialized (HIA). After the user sends both the INI and HIA requests to the bank, the status is changed to Initialized. The user mails the initialization letters of the INI and HIA keys to the bank. When the bank receives the initialization letters of INI and HIA, it verifies the hash values in the certificates against its database. After successful verification, the status of the user is set to Ready, indicating that the user can now transact with the bank. The user then downloads the bank's public certificates by using the HPB system order type.

Create a Self-Signed Certificate

A bank must create the encryption, and authentication and identification bank certificates in the Sterling Integrator database.

To create a self-signed certificate, complete the following steps:

1. Log in to Sterling Integrator.

2. From the **Administration** menu, select **Trading Partner** > **Digital Certificates** > **System** .

3. In the System Certificates page, click **Go!** adjacent to Create Self-Signed Certificate.

4. In the **Name** field, enter the name of the self-signed certificate. This must be a unique and meaningful name.

5. In the **Organization** field, enter the name of the originating organization.

6. From the **Country** drop-down list, select the country or origin of the self-signed certificate.

7. In the **E-mail** field, enter the e-mail address of the person responsible for the certificates in the organization.

8. Click **Next.**

9. In the Specification page, enter the serial number that you want to assign to the self-signed certificate, in the **Serial Number** field.

10. In the **Duration** field, enter the number of days for which the self-signed certificate is valid.

11. In the **List of IP addresses Separated by Comma** field, specify the IP addresses.

12. In the **List of DNS Names Separated by Comma** field, specify the DNS names.

13. From the **Key Length** drop-down list, select a key length (`512`, `1024`, or `2048`).

> **Note:** It is recommended you use 2048 as the key length for EBICS.

14. From the **Signing Algorithm** drop-down list, select the signing algorithm option:

    *   SHA1withRSA - Use this for certificates used with EBICS transactions and TLS layer encryption (SSL).
    *   SHA256withRSA (Recommended) - Use this for certificates used with EBICS transactions.

15. Next to **Validate When Used** check box, select the validation option:

    *   Validity – Verifies if the dates in the validity period of the certificate are still in effect or not. If the dates are not in effect, the certificate is not used.

        > **Note:** Before you set a value to the validity period of the certificate, it is recommended you read and apply the best practice recommendations from the Microsoft PKI Quick Guide. For information about the best practice recommendations for using certificates, see
        > *http://www.windowsecurity.com/articles/Microsoft-PKI-Quick-Guide-Part3.html*.

    *   Auth Chain – Constructs a chain of trust for certificates that are not self-signed. If a chain of trust cannot be constructed using valid certificates, the certificate is not used. If the certificate is self-signed, this option verifies only the certificate signature.

16. Select the **Set the Certificate Signing bit** check box.

17. Click **Next**.

18. In the Confirm page, verify the information pertaining to the self-signed certificate, and click **Finish**.

19. Click **Return** to return to the System Certificates page.

    The bank certificates are now available for viewing and editing under **Trading Partner** > **Digital Certificates** > **System** under the **Administration** menu of Sterling Integrator.

Accept a User Public Certificate

A bank verifies the INI and HIA requests from a user before accepting them. The bank checks the relationship between the user ID and the partner ID and validates the user state. On successful verification, the user's public certificate will be automatically added to the EBICS Banking Server Module repository. Navigate to **Trading Partner** > **Digital Certificates** > **System** under the **Administration** menu of Sterling Integrator to view the newly added certificates.

After both the INI and HIA requests are processed successfully, the bank changes the status of the user to Initialized.

Validate a Subscriber Key

After a bank receives the INI and HIA order types, the corresponding user's status is set to Initialized. Sterling Integrator allows you to validate the hash value of the certificates sent by the user in the initialization letters against the Subscription Manager database. On successful validation, the status of the user is set to Ready.

To validate a subscriber key, complete the following steps:

1. Log in to Sterling Integrator.
2. From the **Administration** menu, select **EBICS** > **Utilities** > **Subscriber Keys Validation**.
3. In the Subscriber Keys Validation page, provide values for the fields listed in the following table:

Field	Description
Partner ID	Required. Specify the partner ID. To select from a list of partner IDs, click the **Lookup** icon adjacent to the **Partner ID** field.
User ID	Required. Specify the user ID. To select from a list of user IDs, click the **Lookup** icon adjacent to the **User ID** field.
Identification and Authentication Key Hash Value (in Hex format)	Required. Specify the identification and authentication key hash value in hex format.
Hash Algorithm	Required. Select the hash algorithm of the identification and authentication key hash value. Valid values are: • SHA256 (default) • SHA1
Encryption Key Hash Value (in Hex format)	Required. Specify the encryption key hash value in hex format.
Hash Algorithm	Required. Select the hash algorithm of the encryption key hash value. Valid values are: • SHA256 (default) • SHA1
Electronic Signature Key Hash Value (in Hex format)	Required. Specify the electronic signature key hash value in hex format.
Hash Algorithm	Required. Select the hash algorithm of the electronic signature key hash value. Valid values are: • SHA256 (default)

Field	Description
	• SHA1

4. Click **Reset** if you want to clear the existing values and enter new values.

5. Click **Validate**.

Accept Request to Download a Bank Public Certificate

A user downloads all the public certificates (identification and authentication signature, bank-technical signature, and encryption) from the corresponding bannk through the order type HPB. The user can download the public bank certificates only after the user status is set to Ready.

The following steps summarise a bank's handling of the HPB order type:

1. A bank receives an HPB request from a user.

2. The bank conducts an authentication check of the user's request.

3. The bank supplies the requested HPB order data, that is, the bank's public certificates, as a response to the user for the user to download the public certificates.

Transact Using EBICS

Accepting Test Flow from a User

In an FUL or FDL request, a user can specify the parameter TEST with the value True to indicate the use of a test file, or False to indicate the use of a real file. This parameter can be specified under the FULOrderParams element for an FUL request, or under the FDLOrderParams element for an FDL request.

When a user uses the TEST flag, the request is processed and verified the same way a real file is. The only difference between a real file and a file with a TEST flag is the difference in the message filename when requests are dropped from (or collected in) the user's upload (or download) mailbox.

The naming convention for a test file with the TEST parameter set to True, is as follows:

```
<HostID>_<FileFormat>_T_D<YYYYMMDD>_H<HHMMSS>_<UniqueID>.DAT
```

The naming convention for a real file with the TEST parameter set to False or with no value, is as follows:

```
<HostID>_<FileFormat>_R_D<YYYYMMDD>_H<HHMMSS>_<UniqueID>.DAT
```

Providing Data for Download Orders

An FDL request depends on the availability of data in the corresponding user's download mailbox. The user must ensure that the data is provided regularly in the user's download mailbox with the following filename conventions:

The naming convention for a test file with the TEST parameter set to True, is as follows:

```
<HostID>_<FileFormat>_T_D<YYYYMMDD>_H<HHMMSS>_<UniqueID>.DAT
```

The naming convention for a real file with the TEST parameter set to False or with no value, is as follows:

```
<HostID>_<FileFormat>_R_D<YYYYMMDD>_H<HHMMSS>_<UniqueID>.DAT
```

Accepting an FDL Request with Date Range

If StartDate and EndDate elements are not specified in the FDLOrderParams element of the FDL request, the messages will be collected from the user's download mailbox. If the StartDate and EndDate elements are specified in the FDLOrderParams element of the FDL request, the messages will be collected from the user's archive mailbox.

Generating and Retrieving EBICS Reports

Use the EBICS Reporting service to generate a payment status report (PSR) with every upload order (FUL) request. The .PSR report is in an XML format and follows the pain.002.001.02 schema. After the .PSR report is generated successfully, it is placed in the EBICS user's download mailbox.

A .PSR report is generated after asynchronous order processing of each FUL. A user can send an FDL request with the FileFormat pain.002.001.02.ara in order to retrieve the .PSR report. If no date range is specified in the EBICS request, the bank concatenates the PSR reports in the user's download mailbox, and packages the order data in the EBICS response.

When the bank receives a positive acknowledgement from the user based on the parameter value provided under the FDLOrderParams element in the FDL request, the .PSR reports in the user's download mailbox are moved to the user's archive mailbox. If no positive acknowledgement is received after a specified time-out period, the EBICS Server Service scheduler changes the Extractable Count back to 1 for the .PSR reports in the user's download mailbox, enabling the user to download the .PSR reports again.

If the user wants to download the .PSR reports from the user's archive mailbox, the user must specify a date range in the EBICS request. The user must ensure that the date range matches the drop date of the .PSR reports when moved from the user's download mailbox to the user's archive mailbox.

Using the EBICS Log Files

The following table lists the log files that are available in the `/install_dir/logs` directory:

Name	Description
EBICS.log	Contains log messages for EBICS components other than EBICS Services, such as the Subscription Manager and Import and Export Services. Use this log when you encounter an error related to the operations of the EBICS components.
EBICS Client.log	Contains log messages generated by the EBICS test client. Use this log when the EBICS test client encounters an error.
EBICS Message.log	Use this log to view detailed messages about the initialization and transfer phases in an EBICS message, and detailed information about the incoming EBICS request message.

Name	Description
EBICS Server.log	Contains log messages for all EBICS Server Services operations. Use this log when the EBICS Server Service encounters an error.

Document Tracking for EBICS

Document tracking support within EBICS Services provides you with a document-centric view of the entire EBICS messaging process. This gives you the ability to monitor the workflow not only from a business process point of view, but also from the actual document point of view. In a single view, you can see how the document is transformed from one form to another within Sterling Integrator, and how the request and response document correlate with each other.

To enable this feature, all the business processes that are related to the EBICS workflow must have the Document Tracking option enabled when you check in or edit the business processes. To do so and enable the framework to track, select the **Document Tracking** check box in the Process Levels page. Set the following options as required, and leave the rest of the business process parameters as defaults:

• In the Deadline Settings page, set the deadline and notification options, if necessary.
• In the Life Span page, set the life span, if necessary.

Monitor EBICS Data Flow

The Data Flow Monitoring feature in Sterling Integrator enables you to view the inbound and outbound EBICS data flows. You can correlate and view the transformation of an incoming request document. You can also see the extracted information related to the incoming request document.

To perform an advanced search for EBICS business process data flows, complete the following steps:

1. Log in to Sterling Integrator.
2. From the **Administration** menu, select **Business Processes** > **Monitor** > **Advanced Search** > **Data Flows**.
3. In the Business Process Monitor Data Flows page, specify any combination of the search criteria listed in the following table, as appropriate:

Field	Description
Search	
Endpoint	Optional. The remote end point of the data flows to search for. Host name or IP address.
Direction	Optional. Direction of the data flows to search for. Valid values are: • Inbound • Outbound

Field	Description
Protocol	Optional. Protocol for the data flows to search for. Valid values are: • AS2 • AS3 • HTTP • FTP • SFTP • MBI • Mailbox Service • Connect:Direct • WebDAV • SWIFTNet • OFTP • SAP • EBICS
Status	Optional. Current or final status of a data flow. Select one of the following options: • Normal • Error
Document Name	Optional. For data flows associated with a specific document, enter the document name.
Data Size	Optional. Range of the size of the data transferred. In the **From** and **To** fields, specify the size in KB, MB, or GB.
DateRange	Optional. From - The start date and time of the data flow to search for. To - The end date and time of the data flow to search for. **Note:** Click the **calendar** icon adjacent the date to access the calendar.
Save search results values by using tag	Required. Enter a string that can be used to repeat the search in another session.
Results per page	Required. The number of results to be displayed per page. Valid values are: • 10 • 25 • 50 • 100 • 200 • 250 • 400 • 500

Field	Description
	The default value is 10.
List Directly	
By Data Flow ID	Enter the data flow ID you want to search.

4. Click **Go!**

   The Monitor page is displayed, listing the business process data flows that match your search criteria.

5. Click the Root Document Name corresponding to the data flow you want to view. There are three different types of data flows:

   - If the Root Document Name is EBICS_Request_*<OrderType>*_Initialization_*<TrxID>*, it indicates an inbound data flow representing the initialization phase of a request. The TrxID at the end of the name indicates that the data flow is a part of the EBICS transaction with that transaction ID.
   - If the Root Document Name is EBICS_Request_*<OrderType>* _Transfer-*<SegmentNo>*_*<TrxID>*, it corresponds to an inbound data flow representing the transfer phase of a particular segment number.
   - If the Root Document Name is EBICS_Request_*<OrderType>* _Receipt-*<SegmentNo>* _*<TrxID>*, it corresponds to an inbound data flow representing the acknowledgment phase of a particular transaction ID.

Monitor EBICS Communication Session Records

Sterling Integrator creates communication session records for all associated authentication, authorization, file transfer, or nonfile transfer records, even if a document is not transferred, and no data flow record is created.

To view the EBICS communications sessions records, complete the following steps:

1. Log in to Sterling Integrator.
2. From the **Administration** menu, select **Business Processes** > **Monitor** > **Advanced Search** > **Communication Sessions**.
3. Provide values for the fields listed in the following table:

Field	Description
Search	
Endpoint	Optional. The remote end point of the communication sessions to search for. Host name or IP address.
Protocol	Optional. Protocol for the communication sessions to search for. Valid values are: • AS2 • AS3 • HTTP • FTP • SFTP • MBI

Field	Description
	• Mailbox Service • Connect:Direct • WebDAV • SWIFTNet • OFTP • SAP • EBICS
DateRange	Optional. From - The start date and time of the communication session records to search for. To - The end date and time of the communication session records to search for. **Note:** Click the **calendar** icon adjacent the date to access the calendar.
Principal	Optional. Search for a communication session associated with a Principal participant.
Secure Mode	Optional. Search for a communication session in a secure mode. Valid values are: • SSL • CCC
Locally Initialized	Optional. Search for a locally initialized communication session record. Valid values are True and False.
Status	Optional. Current or final status of a communication session. Select one of the following options: • Normal • Error
Connection	Optional. Current or final status of a connection. Valid values are Active and Closed.
Save search results values by using tag	Required. Enter a string that can be used to repeat the search in another session.
Results per page	Required. Select the number of results to be displayed per page. Valid values are: • 10 • 25 • 50 • 100 • 200 • 250 • 400 • 500

Field	Description
	The default value is 10.
Search by Process ID	Type the business process ID you want to search.
List Directly	
By Communication Session ID	Type the communication session ID you want to search.

4. Click **Go!**

   The Monitor page is displayed, listing the communication session records that match your search criteria.

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