

Sterling B2B Integrator



EBICS Banking Server User Guide

Version 5.2.5

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Note

Before using this information and the product it supports, read the information in "Notices" on page 109.

Copyright

This edition applies to Version 5 Release 2 Modification 5 of Sterling B2B Integrator and to all subsequent releases and modifications until otherwise indicated in new editions.

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Chapter 1. Overview of EBICS Banking Server

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 a user (associated with a partner) to be able to implement bank-technical EBICS transactions with a particular bank. 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.

The Sterling B2B Integrator EBICS Banking Server is a complete EBICS solution involving a bank, partner, and user management, certificate management, secure file transaction, error recovery and reporting. Use Sterling B2B Integrator to send and receive EBICS transactions.

The Sterling B2B Integrator EBICS Banking Server supports EBICS Specification V2.5 for both French and German implementations.

Chapter 2. Configure Order Type Manager

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

About this task

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 transactions:

Order Type	Protocol Version	Description
Upload System Order Types		
H3K	H004	Used to transmit all public keys (Bank Technical Key certificate, Identification and Authentication certificate, and Encryption certificate) for subscriber initialization.
HCA	H003, H004	Used to update a user's certificates. Sends the following certificates for updating the EBICS Banking Server: <ul style="list-style-type: none">• Identification and authentication public certificate• Encryption public certificate
HCS	H003, H004	Used to update a user's certificates. Sends the following certificates for updating the EBICS Banking Server: <ul style="list-style-type: none">• Bank-technical public certificate• Identification and authentication public certificate• Encryption public certificate
HIA	H003, H004	Used to transmit user public certificates for identification, authentication and encryption within the framework of subscriber initialization.
HVE	H003, H004	Used to add the VEU signature
HVS	H003, H004	Used to upload a VEU cancellation
INI	H003, H004	Used in subscriber initialization. Sends the bank-technical public certificate of the user to the EBICS Banking Server.
PUB	H003, H004	Used to update user's certificate. Sends the bank-technical public certificate of the customer for updating the EBICS Banking Server.
SPR	H003, H004	Used to suspend a user's access authorization.
Download System Order Types		

Order Type	Protocol Version	Description
HAC	H004	Used to download customer acknowledgment (XML format)
HEV	H000	Used to download information on supported EBICS versions.
HKD	H003, H004	Used to download customer and subscriber data. Retrieves information stored by the bank pertaining to the subscriber's company and associated subscribers.
HPB	H003, H004	Used to download bank public certificates from the EBICS Banking Server.
HPD	H003, H004	Used to download bank parameters from the EBICS Banking Server.
HTD	H003, H004	Used to download customer and subscriber data. Retrieves information stored by the bank pertaining to the subscriber's company.
HVD	H003, H004	Used to retrieve the VEU state
HVT	H003, H004	Used to retrieve VEU transaction details
HVU	H003, H004	Used to download a VEU overview
HVZ	H003, H004	Used to download a VEU overview with additional information
Upload Bank-Technical Order Type		
FUL	H003, H004	Used to upload file of any format.
Download Bank-Technical Order Type		
FDL	H003, H004	Used to download file of any format.

Create a File Format

About this task

Sterling B2B 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:

Procedure

1. Log in to Sterling B2B 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** next 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**.

Search for a File Format

About this task

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

Procedure

1. Log in to Sterling B2B 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 letter 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

About this task

To edit a file format, complete the following steps:

Procedure

1. Log in to Sterling B2B 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** next 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**.

Delete a File Format

About this task

To delete a file format, complete the following steps:

Note: You cannot delete a file format assigned to an order type.

Procedure

1. Log in to Sterling B2B 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

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

About this task

To search for an order type:

Procedure

1. Log in to Sterling B2B 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**.
 - In the **Search Order Type** field, enter either a part of the name or the entire name of the order type you are searching for.
 - In the **Search 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 letter 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** next to **List of File Formats**.

Edit an Order Type

About this task

To edit an order type, complete the following steps:

Procedure

1. Log in to Sterling B2B 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** next to the order type you want to edit. Click the order type to view the order type settings.

Note: You can edit only the bank-technical 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: <ul style="list-style-type: none"> • Upload = Upload order data from EBICS client to EBICS server • Download = Download order data from EBICS server to EBICS client
Order Data Type	Order data type can be one of the following: <ul style="list-style-type: none"> • 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** next 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**.

Chapter 3. Configure Profile Manager

About this task

Profile Manager in Sterling B2B Integrator enables you to configure the following profiles:

- Bank
- Partner
- User

Note: To prevent case insensitivity among various databases, you must provide the profile ID (bank, partner, and user) values in upper-case. If you provide the profile ID values in any other format, Sterling B2B Integrator changes the value to upper-case.

Create a Bank Profile

A bank profile includes the EBICS host information.

About this task

To create a bank profile, complete the following steps:

Procedure

1. Log in to Sterling B2B Integrator.
2. From the **Administration** menu, select **EBICS > Subscription Manager > Profile Manager > Bank Configuration**.
3. In the Bank Configuration page, click **Go** next 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 (Host ID)	Required. Specify a unique ID for the bank in the bank's system. Note: You must 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 is not 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/Region	Optional. Select the country or region.

Field	Description
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 B2B 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. The key is distributed by the EBICS Banking Server. 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 B2B 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 B2B 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. The key is distributed by the EBICS Banking Server. The key must be a public part of the Sterling B2B Integrator system certificate.
Maximum Recovery Attempts	Required. Specify the number of recovery attempts for a transaction. The default value is 0, which indicates that there is no recovery.
Maximum No. of Sign Allowed	Required. Specify the maximum number of personal signatures allowed for each order type or file format in the contract. The default value is 2. If the value is set to 0, no personal signature is required for the contracts of the bank.

Field	Description
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, and 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** next to the bank protocol you want to edit.
 - Click **delete** next 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 H004, 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. This step is applicable only if you added a new bank protocol. In the Bank Protocol: Bank Process page, perform any of the following actions:
 - Click **add** to add a new bank process.
 - Click **edit** next to the bank process you want to edit.
 - Click **delete** next 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: <ul style="list-style-type: none"> • Encryption • Signature • Authentication
Version	Required. Select the process version. <ul style="list-style-type: none"> • If you selected Encryption as the process type, the valid value is E002. • If you selected Signature as the process type, the valid values are A005 and A006. • If you selected Authentication as the process type, the valid value is X002.

12. In the Bank Protocol: Bank Process page, click **Next**.
13. In the Confirm page, verify the bank configuration settings.
 - Click **Show All** next to Bank URL Information to view the Bank URL settings.
 - Click **Show All** next to Bank Protocol Information/Bank Process Information to view the Protocol version, Release version, Bank Process type and Bank Process version.

After verifying the bank configuration settings, click **Finish**.

Search for a Bank Profile

About this task

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

Procedure

1. Log in to Sterling B2B 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 (Host 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 letter with which the ID of the bank you are searching for begins. Selecting **ALL** lists all the bank IDs.

Edit a Bank Profile

A bank profile includes the EBICS host information.

About this task

To edit a bank profile, complete the following steps:

Procedure

1. Log in to Sterling B2B 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 (Host ID) you want to edit, and click **Go**.
4. Click **edit** next 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/Region	Optional. Select the country or region.
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 B2B 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. The key is distributed by the EBICS Banking Server. 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 B2B 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 B2B 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. The key is distributed by the EBICS Banking Server. The key must be a public part of the Sterling B2B Integrator system certificate.
Maximum Recovery Attempts	Required. Specify the number of recovery attempts for a transaction. The default value is 0, which indicates that there is no recovery.
Maximum No. of Sign Allowed	Required. Specify the maximum number of personal signatures allowed for each order type or file format in the contract. The default value is 2. If the value is set to 0, no personal signature is required for the contracts of the bank.
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.

Field	Description
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 or edit a bank URL. In the Bank URL: Details page, specify values for the fields listed in the following table, and click **Next**.

Field	Description
Bank URL	Required. Specify the HTTP URL the bank hosts. 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** next to the bank protocol you want to edit.
 - Click **delete** next to the bank protocol you want to delete.
10. This step is applicable only if you opted to add or edit a 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 protocol version relevant to the supported EBICS version. Valid values are H004, 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. This step is applicable only if you added or edited a bank protocol. In the Bank Protocol: Bank Process page, perform any of the following actions:
 - Click **add** to add a new bank process.
 - Click **edit** next to the bank process you want to edit.
 - Click **delete** next to the bank process you want to delete.

12. This step is applicable only if you opted to add or edit a 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: <ul style="list-style-type: none"> • Encryption • Signature • Authentication
Version	Required. Select the process version. <ul style="list-style-type: none"> • If you selected Encryption as the process type, the valid value is E002. • If you selected Signature as the process type, the valid values are A005 and A006. • If you selected Authentication as the process type, the valid value is X002.

13. In the Bank Protocol: Bank Process page, click **Next**.
14. In the Confirm page, verify the bank configuration settings.
- Click **Show All** next to Bank URL Information to view the Bank URL settings.
 - Click **Show All** next to Bank Protocol Information/Bank Process Information to view the Protocol version, Release version, Bank Process type and Bank Process version.

After verifying the bank configuration settings, click **Finish**.

Delete a Bank Profile

About this task

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.

Procedure

1. Log in to Sterling B2B 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 (Host ID) you want to delete, and click **Go**.
4. Click **delete** next to the bank ID you want to delete.
5. Click **Return** to return to the Bank Configuration page.

Create a Partner Profile

Creating a Partner Profile allows a partner to interact with the EBICS server.

About this task

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:

Procedure

1. Log in to Sterling B2B Integrator.
2. From the **Administration** menu, select **EBICS > Subscription Manager > Profile Manager > Partner Configuration**.
3. In the Partner Configuration page, click **Go** next 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 B2B Integrator trims the value to 35 characters, and creates a new record (the trimmed value) in the database.
Organization Code	Required. Specify the code of the organization that has been created in Sterling B2B 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/Region	Optional. Select the country or region.
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 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** next to the partner account you want to edit.
 - Click **delete** next 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 is 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 takes 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 do not comply to German or 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.

Field	Description
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 do not comply to German or 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. Click **Show All** next to Partner Account Settings to view the account details specified for the partner. After verifying all partner configuration settings, click **Finish**.

Search for a Partner Profile

About this task

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

Procedure

1. Log in to Sterling B2B 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 letter with which the ID of the partner you are searching for begins. Selecting **ALL** lists all the partner IDs.

Edit a Partner Profile

Sometimes a Partner Profile needs updated to ensure a partner has proper interaction with the EBICS server.

About this task

To edit a partner profile:

Procedure

1. Log in to Sterling B2B 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** next 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/Region	Optional. Select the country or region.
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 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** next to the partner account you want to edit.
 - Click **delete** next 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 is 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 takes place. The default value is [EUR] European Community Euro.

Field	Description
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 do not comply to German or 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 do not comply to German or 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. Click **Show All** next to Partner Account Settings to view the account details specified for the partner. After verifying all partner configuration settings, click **Finish**.

Delete a Partner Profile

About this task

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.

Procedure

1. Log in to Sterling B2B 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** next to the partner ID you want to delete.
5. Click **Return** to return to the Partner Configuration page.

Create a User Profile

An EBICS 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.

About this task

To create a user profile:

Procedure

1. Log in to Sterling B2B Integrator.
2. From the **Administration** menu, select **EBICS > Subscription Manager > Profile Manager > User Configuration**.
3. In the User Configuration page, click **Go** next 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/Region	Optional. Select the country or region.
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 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** next to the associate partner you want to edit.

- Click **delete** next to the associate partner you want to delete.
- Click **suspend** next to the associate partner you want to suspend.

Click **suspend** to suspend and stop the user from transacting further. After the user is suspended using this suspend option, initialization by sending INI and HIA is not possible. Suspension can only be revoked by the bank by clicking on Reset.

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, and 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 next to the Partner ID field.
Mailbox Settings	
Upload Mailbox Path	<p>Required. Specify the mailbox path for the uploaded messages. You must assign a mailbox path to store the unpacked messages from an EBICS request.</p> <p>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.</p> <p>If the mailbox (User ID, Partner ID, Inbox), already exists in Sterling B2B Integrator and if you leave this field blank, an error message asking you to specify the default mailbox path is displayed.</p> <p>Note: Ensure that the mailbox path starts with a forward slash (/).</p>
Download Mailbox Path	<p>Required. Specify the mailbox path for the downloaded messages. You must assign a mailbox path to store the messages that are packaged as part of an EBICS response.</p> <p>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.</p> <p>If the mailbox (User ID, Partner ID, Outbox) already exists in Sterling B2B Integrator, and if you leave this field blank, an error message asking you to specify the default mailbox path is displayed.</p> <p>Note: Ensure that the mailbox path starts with a forward slash (/).</p>

Field	Description
Archive Mailbox Path	<p>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).</p> <p>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.</p> <p>If the mailbox (User ID, Partner ID, Archive) already exists in Sterling B2B Integrator, and if you leave this field blank, an error message asking you to specify the default mailbox path is displayed.</p> <p>Note: Ensure that the mailbox path starts with a forward slash (/).</p>

7. In the Associated Partners page, click **Next**.
8. In the Confirm page, verify the user configuration settings. Click **Show All** next to **Associate Partner(s)** to view the list of partners associated with the user. After verifying all user configuration settings, click **Finish**.

Search for a User Profile

About this task

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

Procedure

1. Log in to Sterling B2B 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 letter with which the ID of the user you are searching for begins. Selecting ALL lists all the user IDs.

Edit User Profile

An EBICS 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.

About this task

To edit a user profile:

Procedure

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**. You can click the user ID to view the user profile settings. You can click **Show All** next to Associated Partners in the User Settings summary page to view the user status, user role (transport or signatory), the certificates (signing, encryption, and authentication), and other details of the partner ID associated with the user.
3. Click **edit** next 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/Region	Optional. Select the country or region.
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 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** next to the associate partner you want to edit.
 - Click **delete** next to the associate partner you want to delete.
 - Click **suspend** next to the associate partner you want to suspend.

Click **suspend** to suspend and stop the user from transacting further. After the user is suspended using this suspend option, initialization by sending INI and HIA is not possible. Suspension can only be revoked by the bank by clicking **Reset**.

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, and 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 next to the Partner ID field.
Mailbox Settings	

Field	Description
Upload Mailbox Path	<p>Required. Specify the mailbox path for the uploaded messages. You must assign a mailbox path to store the unpacked messages from an EBICS request.</p> <p>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.</p> <p>If the mailbox (User ID, Partner ID, Inbox), already exists in Sterling B2B Integrator and if you leave this field blank, an error message asking you to specify the default mailbox path is displayed.</p> <p>Note: Ensure that the mailbox path starts with a forward slash (/).</p>
Download Mailbox Path	<p>Required. Specify the mailbox path for the downloaded messages. You must assign a mailbox path to store the messages that are packaged as part of an EBICS response.</p> <p>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.</p> <p>If the mailbox (User ID, Partner ID, Outbox) already exists in Sterling B2B Integrator, and if you leave this field blank, an error message asking you to specify the default mailbox path is displayed.</p> <p>Note: Ensure that the mailbox path starts with a forward slash (/).</p>
Archive Mailbox Path	<p>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).</p> <p>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.</p> <p>If the mailbox (User ID, Partner ID, Archive) already exists in Sterling B2B Integrator, and if you leave this field blank, an error message asking you to specify the default mailbox path is displayed.</p> <p>Note: Ensure that the mailbox path starts with a forward slash (/).</p>

7. In the Associated Partners page, click **Next**.
8. In the Confirm page, verify the user configuration settings. Click **Show All** next to **Associate Partner(s)** to view the list of partners associated with the user. After verifying all user configuration settings, click **Finish**.

Delete User Profile

About this task

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.

Procedure

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.

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

Chapter 4. Configure Offer Manager

About this task

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 B2B Integrator to create offers.

Create an Offer

Use the Offer Manager in Sterling B2B Integrator to create offers.

About this task

To create an offer, complete the following steps:

Procedure

1. Log in to Sterling B2B Integrator.
2. From the **Administration** menu, select **EBICS > Subscription Manager > Offer Manager > Offer Configuration**.
3. In the Offer Configuration page, click **Go** next 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 (Host ID)	Required. Select a bank ID from the drop-down list.
Offer Name	Required. Specify a name for the offer.

5. In the Associate/Disassociate Order Types page, 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.
 - a. Optionally, you can filter the list of Available Order Types. Type a part of the order type in the **Filter Data By Name** field and click the filter icon for a filtered list.
 - b. Use the arrows to add Available Order Types to the Selected Order Types list. This assigns the order types to the newly created offer. Click the first double arrow to add all the available order types to the Selected Order Types list.
 - c. Enter the values for the fields listed in the following table and click **Next**.

Field	Description
Authorization Level	<p>Optional. Select the signature authorization of the user who acted as the signatory. Valid values are:</p> <ul style="list-style-type: none"> • [T] Transport Signature – Use to submit the order data • [E] Single Signature – Use to authorize the order data <p>Note: This field is not applicable to INI, HIA, and download order types with protocol version set to H003 or H004.</p> <p>To view this option, specify the authorization level in the ebics_server.properties file by setting the value of the SigClassesAllowed parameter to 'TE'. 'TE' indicates that the EBICS Banking Server supports both T and E signatures.</p> <p>In Transport signature, the role of the user is submitter. In single signature, the role of the user can be either submitter or signatory.</p>
No. of Sign Reqd. Min and Max	<p>Optional. Specify the minimum and maximum number of personal signatures required to authorize the order. If you do not provide a value for these fields, the default value, 0, is used.</p>
Post BP	<p>Optional. Select the business process to be invoked at the EBICS Banking Server after the selected order type is completed.</p>
VEU enabled	<p>Indicates whether Distributed Electronic Signature (VEU) is enabled. Valid values are:</p> <ul style="list-style-type: none"> • Enabled - Enables VEU • Disabled - Disables VEU
Replace Default Attributes	<p>Valid values are:</p> <ul style="list-style-type: none"> • Replace Currently Added Order Types - Indicates that the attributes specified in this page are 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 are 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 are 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** next 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** next to **List of Order Types** to view the list of order types assigned to the offer. Verify the offer configuration settings, and click **Finish**.

Search for an Offer

About this task

To search for an offer, complete the following steps:

Procedure

1. Log in to Sterling B2B 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 (Host 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 letter with which the ID of the bank you are searching for begins. Selecting **ALL** lists all the bank IDs.

Edit an Offer

Use the Offer Manager in Sterling B2B Integrator to edit offers.

About this task

To edit an offer:

Procedure

1. Log in to Sterling B2B 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** next to the offer you want to edit.
5. Review the information in the Offer Configuration page and click **Next**.
6. In the Associate/Disassociate Order Types page, 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.
 - a. Optionally, you can filter the list of Available Order Types. Type a part of the order type in the **Filter Data By Name** field and click the filter icon for a filtered list.

- b. Use the arrows to add Available Order Types to the Selected Order Types list. This assigns the order types to the newly created offer. Click the first double arrow to add all the available order types to the Selected Order Types list.
- c. Enter the values for the fields listed in the following table and click **Next**.

Field	Description
Authorization Level	<p>Optional. Select the signature authorization of the user who acted as the signatory. Valid values are:</p> <ul style="list-style-type: none"> • [T] Transport Signature – Use to submit the order data • [E] Single Signature – Use to authorize the order data <p>Note: This field is not applicable to INI, HIA, and download order types with protocol version set to H003 or H004.</p> <p>To view this option, specify the authorization level in the ebics_server.properties file by setting the value of the SigClassesAllowed parameter to 'TE'. 'TE' indicates that the EBICS Banking Server supports both T and E signatures.</p> <p>In Transport signature, the role of the user is submitter. In single signature, the role of the user can be either submitter or signatory.</p>
<p>No. of Sign Reqd. Min and Max</p>	<p>Optional. Specify the minimum and maximum number of personal signatures required to authorize the order. If you do not provide a value for these fields, the default value, 0, is used.</p>
Post BP	<p>Optional. Select the business process to be invoked at the EBICS Banking Server after the selected order type is completed.</p>
VEU enabled	<p>Indicates whether Distributed Electronic Signature (VEU) is enabled. Valid values are:</p> <ul style="list-style-type: none"> • Enabled - Enables VEU • Disabled - Disables VEU

Field	Description
Replace Default Attributes	<p>Valid values are:</p> <ul style="list-style-type: none"> • Replace Currently Added Order Types - Indicates that the attributes specified in this page are 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 are 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 are 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** next 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** next to **List of Order Types** to view the list of order types assigned to the offer. Verify the offer configuration settings, and click **Finish**.

Delete an Offer

Procedure

1. Log in to Sterling B2B 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** next 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

Use the Offer Manager in Sterling B2B Integrator to create a contract between a bank and its partners.

About this task

In a contract, the following terms are agreed upon:

- The business transactions the customer conducts with the bank

- The account information of the partners
- The users who have the necessary permissions to work with the banks system
- The authorizations the users possess

To create a contract:

Procedure

1. Log in to Sterling B2B Integrator.
2. From the **Administration** menu, select **EBICS > Subscription Manager > Offer Manager > Contract Configuration**.
3. In the Contract Configuration page, using the **Bank ID (Host 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**. You can also enter the Partner ID in the **Partner ID** field to search for existing contracts, if any, 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** next to **Add New Partner to Offer** to add a new contract.
 - Click **edit** or **delete** next to the Partner ID for the contract you want to modify or delete respectively.
 - Click **info** to view a summary of each contract.
5. This step only applies if you chose to **add** or **edit** a contract. In the Link Partners to Offer page:
 - a. Optional. To filter the list, enter a part of the partner ID in the **Filter by Partner Id** field and click the filter icon.
 - b. Select a Partner ID from the **Select** list
 - c. Click **Next**.
6. In the Partner Order Types page, click **add** to add an order type to a partner or 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:
 - a. Optional. To filter the list, enter a part of the partner ID in the **Filter by Partner Id** field and click the filter icon.
 - b. 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.
 - a. 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. Min and Max	Optional. Specify the minimum and maximum number of personal signatures required to authorize the order. If you do not provide a value for these fields, the value specified in the offer is used. Note: If the order type or file format in the contract has insufficient signatories assigned to it, the values of the Min Sign Reqd and Max Sign Reqd are highlighted in red. If the number of signatures required is changed to zero, the signatories associated with the contract will be disassociated.

Field	Description
Post BP	Optional. Select the business process to be invoked in the EBICS Banking Server after the selected order type is completed. If you do not provide a value for this field, the value specified in the offer is used.
VEU enabled	Indicates whether Distributed Electronic Signature (VEU) is enabled. Valid values are: <ul style="list-style-type: none"> • Enabled - Enables VEU • Disabled - Disables VEU
Replace Default Attributes	Valid values are: <ul style="list-style-type: none"> • Replace Currently Added Order Types - Indicates that the attributes specified in this page are 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 are 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 are 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 perform the following:
 - Edit the settings of the order type assigned to the partner by clicking **edit** next to the order type.
 - Add order types by clicking **add**.
 - Remove order types by clicking **delete**.
 - a. Complete all actions required based on your choice.
 - b. When all actions have been completed, click **Next** in the Partner Order Types page.
9. In the Confirm page, verify the contract configuration settings. Click **Show All** next to **List of Order Types** to view the list of order types assigned to the partner. After verifying all settings, click **Finish**.

Search for a Contract

About this task

To search for a contract, complete the following steps:

Procedure

1. Log in to Sterling B2B 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

Use the Offer Manager in Sterling B2B Integrator to edit a contract between a bank and its partners.

About this task

To edit a contract:

Procedure

1. Log in to Sterling B2B Integrator.
2. From the **Administration** menu, select **EBICS > Subscription Manager > Offer Manager > Contract Configuration**.
3. In the Contract Configuration page, using the **Bank ID (Host ID)** and **Offer Name** drop-down lists, locate and select the contract you want to edit, and click **Go**.
4. Click **edit** next to the contract you want to edit.
5. The Partner Order Types page lists the order types assigned to the partner. You can perform the following:
 - Edit the settings of the order type assigned to the partner by clicking **edit** next to the order type.
 - Add order types by clicking **add**.
 - Remove order types by clicking **delete**.
6. This step is applicable only if you opted to add or delete an order type. In the Add Order Types to Partner page:
 - a. Optional. To filter the list, enter a part of the partner ID in the **Filter by Partner Id** field and click the filter icon.
 - b. 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.
 - c. Enter the values for the fields listed in the following table and click **Next**.

Field	Description
No. of Sign Reqd. Min and Max	Optional. Specify the minimum and maximum number of personal signatures required to authorize the order. If you do not provide a value for these fields, the value specified in the offer is used. Note: If the order type or file format in the contract has insufficient signatories assigned to it, the values of the Min Sign Reqd and Max Sign Reqd are highlighted in red. If the number of signatures required is changed to zero, the signatories associated with the contract will be disassociated.

Field	Description
Post BP	Optional. Select the business process to be invoked in the EBICS Banking Server after the selected order type is completed. If you do not provide a value for this field, the value specified in the offer is used.
VEU enabled	Indicates whether Distributed Electronic Signature (VEU) is enabled. Valid values are: <ul style="list-style-type: none"> • Enabled - Enables VEU • Disabled - Disables VEU
Replace Default Attributes	Valid values are: <ul style="list-style-type: none"> • Replace Currently Added Order Types - Indicates that the attributes specified in this page are 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 are 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 are applied to all the order types in the Selected Order Types list. This is the default value.

7. This step is applicable only if you opted to edit an order type. In the Edit Partner Order Details page, the Order Type, Protocol Version, and File Format are displayed but cannot be edited. As needed, revise the values for the fields listed in the following table and click **Next**.

Field	Description
No. of Sign Reqd. Min and Max	Optional. Specify the minimum and maximum number of personal signatures required to authorize the order. If you do not provide a value for these fields, the value specified in the offer is used. Note: If the order type or file format in the contract has insufficient signatories assigned to it, the values of the Min Sign Reqd and Max Sign Reqd are highlighted in red. If the number of signatures required is changed to zero, the signatories associated with the contract will be disassociated.
VEU enabled	Indicates whether Distributed Electronic Signature (VEU) is enabled. Valid values are: <ul style="list-style-type: none"> • Enabled - Enables VEU • Disabled - Disables VEU

Field	Description
Post BP	Optional. Select the business process to be invoked in the EBICS Banking Server after the selected order type is completed. If you do not provide a value for this field, the value specified in the offer is used.

8. If all actions have been completed, click **Next** in the Partner Order Types page.
9. In the Confirm page, verify the contract configuration settings. Click **Show All** next to **List of Order Types** to view the list of order types assigned to the partner. After verifying all settings, click **Finish**.

Chapter 5. Configure User Permission

About this task

You can use Sterling B2B 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

About this task

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

Procedure

1. Log in to Sterling B2B 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 next 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 next 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

You can use the Subscription Manager in Sterling B2B Integrator to edit user permissions.

About this task

To edit the user permission configuration:

Procedure

1. Log in to Sterling B2B 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** next to the user permission you want to edit. Click **info** to view a summary of each user permission.
5. The List of Order Types page lists the order types assigned to the user. The following information is displayed:
 - Order Type
 - Protocol Version
 - File Format
 - Authorization Level - T or E
 - Selected Accounts - Partner Account ID (Click the link to view the details of the partner account.)
 - Currency
 - Maximum Amount

You can add or remove order types by clicking **add** or **delete** next to **Add or Remove Order Type(s)**.

You can also edit the settings of most order types assigned to the user by clicking **edit** next to the order type. Not all order types can be edited. When editing the list of order types, you can modify the value of the Authorization Level if the order type is a bank-technical order type. However, you cannot modify the value of the Authorization level if the order type is a download bank-technical order type whose protocol version is set to H003, because H003 does not support Electronic Signatures. For certain order types, you can also modify the Maximum Amount.

6. This step is applicable if you chose to add or delete an order type associated with the user. 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. Click **Next** when finished.
7. This step is applicable if you chose to add an order type associated with the user. In the Order Type Attribute Settings page, you can click the Partner Account ID link to view the Partner Account information. To select the settings, enter the values for the fields listed in the following table and click **Next**.

Field	Description
Currency	This field is not editable. The value of this field depends on the partner account it is associated with.

Field	Description
Maximum Amount	<p>Optional. Specify the amount limit for the user. The account association is applicable for bank-technical order types, but not applicable for download bank-technical order types whose protocol version is set to H003, because H003 does not support Electronic Signatures.</p> <p>For order types applicable to the account association, at least one maximum amount must be entered in the partner account. The value must be greater than 0.</p>
Authorization Level	<p>Optional. Select the signature authorization of the user who acted as the signatory. Valid values are:</p> <ul style="list-style-type: none"> • [T] Transport Signature – Use to submit the order data • [E] Single Signature – Use to authorize the order data <p>Note: This field is not applicable to INI, HIA, and download order types with protocol version set to H003 or H004.</p> <p>To view this option, specify the authorization level in the ebics_server.properties file by setting the value of the SigClassesAllowed parameter to 'TE'. 'TE' indicates that the EBICS Banking Server supports both T and E signatures.</p> <p>In Transport signature, the role of the user is submitter. In single signature, the role of the user can be either submitter or signatory.</p> <p>If you do not specify a value for this field, the default value, [T] Transport Signature, is used.</p>
Replace Default Attributes	<p>Valid values are:</p> <ul style="list-style-type: none"> • Replace Currently Added Order Types - Indicates that the attributes specified in this page are 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 are 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 are applied to all the order types in the Selected Order Types list. This is the default value.

8. This step is applicable if you chose to edit an order type associated with the user. In the Setting of Order Types page, you can edit the Authorization Level for the associated order type. To edit the Authorization Level setting, choose one of the following from the list:

- [T] Transport Signature – Use to submit the order data
- [E] Single Signature – Use to authorize the order data

When the authorization level is changed from E to T, the associated accounts and signatory are disassociated.

Click **Next** when finished.

9. This step is applicable if you chose to edit an order type associated with the user and only to certain order types. In the Account Association page, you can click the Partner Account ID link to view the Partner Account Information. To edit the Maximum Amount setting for one or more associated Partner Accounts, specify the amount limit for the partner in the Maximum Amount field. At least one Partner Account must be associated with Maximum Amount. Click **Next** when finished.

Note: The account association is applicable for bank-technical order types, but not applicable for download bank-technical order types whose protocol version is set to H003, because H003 does not support Electronic Signatures. For order types applicable to the account association, the maximum amount must be entered in at least one of the partner accounts. The value must be greater than 0.

This returns to the List of Order Type(s) page.

10. In the List of Order Type(s) page, click **Next**.
11. In the Confirm page, verify the user permission configuration settings,. Click **Show All** next to **List of Order Types** to view the list of order types assigned to the user. After verifying all user permission configuration settings, click **Finish**.

Verify User Permission

About this task

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

Procedure

1. Log in to Sterling B2B 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.

Chapter 6. Create a Signatory

After configuring the contract and user permission, you can configure the designated list of signatories to be associated with the order type or file format in the contract. When configuring the contract, if you have specified the number of signatures required to authorize an order to a value greater than 0, you must configure the signatory.

About this task

Signatory configuration allows you to add, edit, and delete signatures for each order type or file format associated with the contract. The Signatory Configuration page enables you to add signatories for a specific bank, offer, or a partner. Use this page to configure signatories of the contract.

Note: This menu is available to users assigned to the EBICS Administrators permission group.

To create a signatory, complete the following steps:

Procedure

1. Log in to Sterling B2B Integrator.
2. From the **Administration** menu, select **EBICS > Subscription Manager > Signatory Configuration**.
3. In the Signatory Configuration page, using the Bank ID (Host ID) and Offer Name drop-down lists, select the bank ID and the offer name with which you want to create a signatory and click **Go**. You can also specify a partner ID in the Partner ID field. Click on the Lookup icon next to the Partner ID field to select a partner ID from the list. Click **Go**. A list of partner contracts associated with the selected bank's offer is displayed. Click **info** to view a summary of the contract. The 'edit' button is displayed if the contract has at least one order type or file format where the number of signatures required to authorize the order is greater than 0.
4. Click **edit** next to the partner ID you want to modify. A list of order types and file formats in the contract is displayed. The Partner ID, User ID, and Authorization Level fields are populated when signatories are assigned to the order type or file format of the contract.
5. The Partner Order Types page displays the following information for the Bank ID and Offer Name:
 - Order Type
 - Protocol Version
 - File Format
 - Min Sign Reqd
 - Max Sign Reqd
 - Partner ID (associated with the signatory)
 - User ID (associated with the signatory)
 - Authorization Level – T or E (associated with the signatory)

Numbers in red for Min Sign Reqd and Max Sign Reqd indicate that insufficient signatories are assigned to the order type.

6. Click **edit** next to the order type or file format to modify the details of the signatories. The signatories are grouped by Partner ID. If more than one signatory is assigned to the same partner, the User ID is displayed in split rows.
7. The Edit Signatories page displays the following information for the Bank ID and Offer Name for the Partner ID selected:
 - Bank ID (Host ID)
 - Offer Name
 - Order Type
 - Protocol Version
 - File Format
 - Min No. of Sign Reqd
 - Max No. of Sign Reqd
8. Click **add**, **edit**, or **delete** to add, edit, or delete a signatory respectively.
9. In the Add Signatories page, you can associate the signatories with the order types from an existing partner or a new partner.
 - a. Specify the partner ID in the Partner ID field. To select from a list of partner IDs, click the Lookup icon next to the Partner ID field. A list of users associated with the selected partner with a non-transport signature permission and accessible to the selected order type and file format is displayed under Available Users and Selected Users.
 - b. Use the arrows to add the Available Users to the Selected Users list. Click the first double arrow to add all the available users to the Selected users list.
 - c. Click **Next**.
10. In the Edit Signatories page, click **Next**.
11. Click **Next** in the Partner Order Types page.
12. In the Confirm page, click **Show All** next to Order Type to view the number of signatories assigned to the order type. Verify the signatory configuration settings, and click **Finish**.

Chapter 7. Enabling VEU management to process payment details

In Sterling B2B Integrator, to extract the payment details from the EBICS payment orders, the partner order types need to be configured for a post process business process.

Before you begin

Before the partner order types can be configured for the post process Business Process (post BP), the following must be completed in Sterling B2B Integrator:

1. Create a JavaTask service or Translation service which will translate or extract the order data which comes as input into an EBICS Payment Detail xml file.
2. Replace this service with the sample service present in the EBICSPaymentDetail business process.
3. Save the version of the EBICSPaymentDetail business process.

About this task

Configuring a partner order type for post BP processing :

Procedure

1. From the **Administration Menu**, go to **EBICS > Subscription Manager > Offer Manager > Contract Configuration**.
2. Select the **Bank ID (Host ID)** and **Offer Name**.
3. Click **Go**.
4. Click **edit** in the row for the contract you need to modify.
5. From the Partner Order Types page:
 - a. Locate the row containing the **Order Type** and **File Format** for which **Post BP** needs to be configured, and click **edit** in that row.
 - b. In the **Post BP** drop down, select **EBICSPaymentDetail**.
 - c. Click **Next**.
 - d. Repeat as needed for additional Order Types and File Formats.
6. In the Partner Order Types page, click **Next**.
7. Confirm the contract configuration settings and then click **Finish**.

Results

This enables Sterling B2B Integrator EBICS Server VEU Management to process HVT and HVZ payment details.

Chapter 8. Permissions to Access EBICS GUI Resources

To access the EBICS Graphical User Interface and its functions in Sterling B2B Integrator, you must be assigned to one of the two permissions groups: EBICS Operators or EBICS Administrators. The following table summarizes the functions available to members of each group:

Group	Functions available to group members
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 subgroup and permissions, which are not for a subgroup, 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 Help.

The following table lists the EBICS menu items in Sterling B2B 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
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

Menu Item	Permission Name (Permission ID)	Permission Inherited with EBICS Operator?	Permission Inherited with EBICS Administrator?
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
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
EBICS > Subscription Manager > Signatory Configuration	UI EBICS Signatory Configuration (EBICS_SIGNATORY_CONF)	No	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

Chapter 9. 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.

Before you begin

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 yields 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).

About this task

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

Procedure

1. Log in to Sterling B2B 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 letter with which the process name begins. Click the down arrow next to **Alphabetically**, make your selection, and click **Go**.
4. Click **execution manager** next to the Process Name you want to run.
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.

After the business process is run, Instance Data in Sterling B2B Integrator displays a message stating whether the import was successful or not.

Chapter 10. 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.

About this task

Attribute	Description
HostId	Based on the host ID, all the information related to the host is 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. is
HostId PartnerId	Based on the host ID and the partner ID, all the information related to the host and the specified partner is retrieved. The offer to which the partner belongs, orders used by the partner, and the list of users under this partner are 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, complete the following steps:

Procedure

1. Log in to Sterling B2B 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 letter with which the process name begins. Click the down arrow next to **Alphabetically**, make your selection, and click **Go**.

4. Click **execution manager** next to the Process Name you want to run.
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.

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 run, Instance Data in Sterling B2B Integrator displays a message stating whether the export was successful or not.

Chapter 11. Configure EBICS Adapters and Services

About this task

As a prerequisite, a bank must install the EBICS HTTP Server adapter in Sterling B2B 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 is approximately 2.5 times the size of the transacted files.

Configure an HTTP Server Adapter

About this task

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*.

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

Procedure

1. Click **add** next to **New URI** while configuring the EBICS HTTP Server adapter in Sterling B2B 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

About this task

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

Procedure

1. Log in to Sterling B2B 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** next to the service name.

5. Specify valid values in the configuration parameters. For information about configuring an HTTP Server adapter, see *HTTP Server Adapter*.
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, see “Create a Self-Signed Certificate” on page 56.
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: You should 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, see *HTTP Server Adapter*.

Configure an EBICS Server Service

About this task

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, see *EBICS Server Service*.

Chapter 12. Initializing a Subscriber

After a contract has been defined, the corresponding bank sets up the partner and subscriber (user) master data in the Subscription Manager database through the import function.

The bank does not yet have the user's public certificates. Transmission of the user's public certificates to the bank's system is required to initialize the user.

There are three order types used for subscriber initialization: H3K, INI, and HIA. H3K is the simplest and transmits all three public certificates at the same time. However, H3K cannot be used in all cases, such as if trusted keys are used or with protocol version H003. If you cannot, or prefer not to, use H3K, you can use INI and HIA together to transmit the public certificates.

Table 1. Order types for subscriber initialization

Order types	Protocol	Keys/certificates
H3K	H004	<ul style="list-style-type: none">• Bank Technical Key certificate for Electronic Signature (ES)• Identification and Authentication certificate• Encryption certificate
INI	H003, H004	Bank-technical key
HIA	H003, H004	<ul style="list-style-type: none">• Identification and Authentication key• Encryption key

H3K

With protocol version H004, you can use order type H3K, which simplifies and automates the procedure, essentially combining INI and HIA into a single step. Trusted keys are not supported for H3K, and at least the bank technical key used for the ES must be a certificate issued by a Certification Authority (CA). The remaining two certificates for identification and authorization and for encryption can be self-signed certificates. H3K requires no initialization letters.

Use INI and HIA for initialization with non-CA issued certificates or trusted keys, or with protocol version H003.

INI and HIA

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 signed initialization letters containing the INI and HIA keys to the bank. When the bank receives the initialization letters for 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 using the HPB system order type.

The subscribers can retrieve information stored by the bank using the HKD and HTD order types after the user status is set to 'Ready'.

Create a Self-Signed Certificate

A bank must create the encryption, and authentication and identification bank certificates in the Sterling B2B Integrator database.

About this task

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

Procedure

1. Log in to Sterling B2B Integrator.
2. From the **Administration** menu, select **Trading Partner > Digital Certificates > System** .
3. In the System Certificates page, click **Go** next 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: 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, you should 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 B2B Integrator.

Accept a User Public Certificate

About this task

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 is automatically added to the EBICS Banking Server repository. Navigate to **Trading Partner > Digital Certificates > System** under the **Administration** menu of Sterling B2B 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

About this task

After a bank receives the INI and HIA order types, the corresponding user's status is set to Initialized. Sterling B2B 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:

Procedure

1. Log in to Sterling B2B 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 next to the Partner ID field.
User ID	Required. Specify the user ID. To select from a list of user IDs, click the Lookup icon next to the User ID field.
Identification and Authentication Key Hash Value (in Hex format)	Optional. If the certificate is CA-signed, 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: <ul style="list-style-type: none">• SHA256 (default)• SHA1
Encryption Key Hash Value (in Hex format)	Optional. If the certificate is CA-signed, 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: <ul style="list-style-type: none">• SHA256 (default)• SHA1
Electronic Signature Key Hash Value (in Hex format)	Optional. If the certificate is CA-signed, 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: <ul style="list-style-type: none">• SHA256 (default)• 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 bank through the order type HPB. The user can download the public bank certificates only after the user status is set to Ready.

About this task

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

Procedure

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.

Validate a Self-signed or a CA-signed certificate

When the incoming client certificate is self-signed, the EBICS Banking Server validates the date.

When the incoming client certificate is CA-signed or intermediate CA-signed, the EBICS Banking Server validates the following:

1. Online Certificate Status (OCSP) or Certificate Revocation List (CRL) – If the certificate status is revoked, the EBICS Banking Server suspends the user. By default, EBICS Banking Server validates OCSP. If OCSP is successful, the server does not validate CRL. If you want the server to validate CRL, set the `ebicsserver.ocsp` parameter to `false` in the `ebics_server.properties` file.
2. Date – validity of the certificate
3. Chained signature – the validity of the Certificate Authority

Validate OCSP for Incoming Client Certificate

The Online Certificate Status Protocol (OCSP) is a set of ASN.1 defined data structures for requesting and receiving information about certificate revocation status. These data structures can be sent and received by many transport protocols in principle. In practice, HTTP is used. An OCSP client sends questions and processes responses.

About this task

An OCSP responder answers questions and generates responses. To validate OCSP for an incoming client certificate, complete the following steps:

Procedure

1. Set up the certificate authority in the server database. Ensure that the issuer certificate has been checked in as a CA certificate.
 - For UNIX, run the following command: `./ManageCertAuthority.sh -a VPCA admin SHA1 <ca_cert_id> always,end-user none`
 - For Windows, run the following command: `ManageCertAuthority.cmd -a VPCA admin SHA1 <ca_cert_id> always,end-user none`
2. Set up basic profile with HTTP as the protocol and the OCSP responder as the End Point, for example, `http://ocsp.verisign.com` (when using Verisign as the Certificate Authority).
3. Set up OCSP responder for the authority in the server database.
 - For UNIX, run the following command: `./ManageOCSPResponder.sh -a VPCA admin SHA1 <ca_cert_id> <resp_cert_id> no <time_to_live_in_sec> <profile_id> HTTPClientSend 3600 no no`
 - For Windows, run the following command: `ManageOCSPResponder.cmd -a VPCA admin SHA1 <ca_cert_id> <resp_cert_id> no <time_to_live_in_sec> <profile_id> HTTPClientSend 3600 no no`

Each OCSP respond is cached in the server based on the <time_to_live_in_sec> value. Subsequent similar OCSP requests make use of the cached record as long as the record is valid.

Results

The server is now ready to validate OCSP for the incoming client certificate whose issuer matches the authority created. You can use the HTTPClientSend business process in Sterling B2B Integrator to send an HTTP request to the OCSP responder with a timeout value of 3600. You may have to configure the proxy settings in the HTTP Client adapter.

What to do next

For more information about OCSP in Sterling B2B Integrator, see http://www.ibm.com/support/knowledgecenter/SS3JSW_5.2.0/com.ibm.help.enhancement_ocsp_522.doc/ocspSupportInSI.html

Set Up Certificate Revocation List

Certificate Revocation List (CRL) validation occurs when OCSP validation has failed or the server has been configured not to validate OCSP.

Prior to validating CRL, configure the server to run a scheduled business process to download CRL from the CRL distribution point every four hours. You can obtain the CRL distribution point from the certificate authority website or from the certificate.

Use the GET_CRL_PROCESS business process to create a scheduled business process with necessary CRL distribution point and proxy settings.

If the server is unable to find the CRL of a certificate, the validation continues. If the certificate is revoked, the server suspends the user and no further transactions are allowed.

Validate Certificate using Order Types

INI and HIA

When processing the INI order type, the EBICS client sends its ES certificate to the server. When processing the HIA order type, the EBICS client sends its authentication and encryption certificates to the server.

The server validates the certificates for integrity before storing them in the server database. If all the certificates (ES, authentication, and encryption) are CA-signed and the user is configured as a signatory, the status of the user is automatically set to 'Ready' after successful processing of the INI and HIA order types.

If any of the certificate is self-signed, the server validates the hash value of the certificate against the hash value stored in the initialization letter.

FUL

When processing the FUL order type, after the initialization phase, the transfer phase is asynchronous. The client can upload multiple segments of order data. The order data can be signed by multiple signatories. The signatory may not be the submitter of FUL.

If the Prevalidate parameter in the server is set to 'On', the server unpacks and validates the ES certificates in the initialization phase before the client sends the order data. A partial validation (OCSP or CRL) is done at the transfer phase.

If the Prevalidate parameter in the server is set to 'Off', the server does not unpack the ES certificates and validates the certificates at the transfer phase.

Note: The server validates the authentication certificate at each phase regardless of the setting of the Prevalidate parameter. The client encryption certificate is not validated as it is not used in the FUL order type. The server uses its own private key to decrypt the order data.

The server validates the ES certificates that are used to sign the order data. If the ES certificate of the FUL submitter is not used to sign the order data, the server does not validate the ES certificate.

FDL

When processing the FDL order type, the server packs the order data to enable the client to download the order data. The authentication certificate is validated at each phase and the encryption certificate is validated at the initialization and transfer phases.

The encryption certificate of the client is used to encrypt the order data and is not signed. Therefore, the server performs a full validation on the authentication and encryption certificates.

Chapter 13. 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 file name when requests are sent from (or received 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
```

Chapter 14. 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 file naming 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
```

Chapter 15. 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 are 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 are collected from the user's archive mailbox.

Chapter 16. 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.ack 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.

Chapter 17. 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.
EBICS Server.log	Contains log messages for all EBICS Server services operations. Use this log when the EBICS Server service encounters an error.

Chapter 18. 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 B2B 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

About this task

The Data Flow Monitoring feature in Sterling B2B 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:

Procedure

1. Log in to Sterling B2B 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: <ul style="list-style-type: none">• Inbound• Outbound

Field	Description
Protocol	<p>Optional. Protocol for the data flows to search for. Valid values are:</p> <ul style="list-style-type: none"> • AS2 • AS3 • HTTP • FTP • SFTP • MBI • Mailbox Service • Sterling Connect:Direct • WebDAV • SWIFTNet • OFTP • SAP • EBICS
Status	<p>Optional. Current or final status of a data flow. Select one of the following options:</p> <ul style="list-style-type: none"> • Normal • Error
Document Name	<p>Optional. For data flows associated with a specific document, enter the document name.</p>
Data Size	<p>Optional. Range of the size of the data transferred. In the From and To fields, specify the size in KB, MB, or GB.</p>
DateRange	<p>Optional.</p> <p>From - The start date and time of the data flow to search for.</p> <p>To - The end date and time of the data flow to search for.</p> <p>Note: Click the calendar icon next the date to access the calendar.</p>
Save search results values by using tag	<p>Required. Enter a string that can be used to repeat the search in another session.</p>
Results per page	<p>Required. The number of results to be displayed per page. Valid values are:</p> <ul style="list-style-type: none"> • 10 • 25 • 50 • 100 • 200 • 250 • 400 • 500 <p>The default value is 10.</p>
List Directly	

Field	Description
By Data Flow ID	Enter the data flow ID you want to search for.

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 B2B 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.

About this task

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

Procedure

1. Log in to Sterling B2B 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.

Field	Description
Protocol	<p>Optional. Protocol for the communication sessions to search for. Valid values are:</p> <ul style="list-style-type: none"> • AS2 • AS3 • HTTP • FTP • SFTP • MBI • Mailbox Service • Sterling Connect:Direct • WebDAV • SWIFTNet • OFTP • SAP • EBICS
DateRange	<p>Optional.</p> <p>From - The start date and time of the communication session records to search for.</p> <p>To - The end date and time of the communication session records to search for.</p> <p>Note: Click the calendar icon next the date to access the calendar.</p>
Principal	<p>Optional. Search for a communication session associated with a primary participant.</p>
Secure Mode	<p>Optional. Search for a communication session in a secure mode. Valid values are:</p> <ul style="list-style-type: none"> • SSL • CCC
Locally Initialized	<p>Optional. Search for a locally initialized communication session record. Valid values are True and False.</p>
Status	<p>Optional. Current or final status of a communication session. Select one of the following options:</p> <ul style="list-style-type: none"> • Normal • Error
Connection	<p>Optional. Current or final status of a connection. Valid values are Active and Closed.</p>
Save search results values by using tag	<p>Required. Enter a string that can be used to repeat the search in another session.</p>

Field	Description
Results per page	Required. Select the number of results to be displayed per page. Valid values are: <ul style="list-style-type: none"> • 10 • 25 • 50 • 100 • 200 • 250 • 400 • 500 The default value is 10.
Search by Process ID	Type the business process ID you want to search for.
List Directly	
By Communication Session ID	Type the communication session ID you want to search for.

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

Chapter 19. Importing and Exporting EBICS Resources

You can import and export configuration data for resources pertaining to EBICS using the Resource Manager in Sterling B2B Integrator.

For example, you can export configuration data for file formats, offers, partner profiles, bank profiles, order types, and user profiles and store it on the system. You can also import this configuration data.

EBICS resources can be imported or exported as XML documents or Installation bundles. You can choose whether to export dependent records such as details of mailbox configuration, digital certificates, or identity records. The resources can also be exported based on a tag name.

For more information about managing resources, see *Resource Management* in the Sterling B2B Integrator knowledge center.

Exporting EBICS Resources

You can use the Resource Manager in Sterling B2B Integrator to export EBICS resources.

About this task

To export EBICS resources:

Procedure

1. Log in to Sterling B2B Integrator.
2. From the **Administration Menu**, select **Deployment > Resource Manager > Import/Export**.
3. Next to **Export Resources**, click **Go**.
4. In the Output Format Type page,
 - a. Select the format type your data will be exported to:
 - **XML Document** (.xml)
 - **Installation Bundle** (.jar)
 - b. Click **Next**.
5. In the Resource Group page, choose whether to export resources based on a tag name.
 - Select **No** to indicate that you do not want to export resources based on a tag name.
 - Select **Yes** to export an entire resource group based on a tag name. Choose the tag name from the drop-down list.

Click **Next**.
6. In the Export Type page, select **Standard - exports default version** and click **Next**.
7. In the Select Resources page, select **EBICS** and click **Next**.
8. In the Select EBICS Client Resource(s) page, select the resources you want to export:

Option	Description
File Format	Information about the file formats.
Offer	Information about the offer that includes details of the bank profile and file formats associated with the offer.
Partner Profile	Information about the trading partner (identity record).
Bank Profile	Information about the bank and the trusted certificates associated with the bank.
Order Type	Information about the order types.
User Profile	Information about the user, the partner, associated data such as, mailbox permissions, identity records, trusted, and system certificates.

Click **Next**.

9. In the page for each resource type selected, move the items to be exported from the **Available** list to the **To Be Exported** list.
 - a. Optional. Filter the data using **Filter Data**.
 - b. In the **Export Dependent Records** field, select **Yes** to export information configured for EBICS Client in Sterling B2B Integrator. For example, details of mailbox configuration, digital certificates, identity records, etc. Otherwise, select **No**.
 - c. Click **Next**.

Repeat as needed for each additional resource types page.

Note: Some pages may be set up differently. For these pages, follow the instructions on the page.

10. In the Security page, enter and confirm the system passphrase and click **Next**.
11. In the Confirm page, review the information for the resources to be exported and click **Finish**. The export file is created.
12. In the Finish page, select one of the following:
 - Click the icon next to **View Export Report** to review the export report.
 - Click the **Download** icon next to **Export data (.xml)** or **Export data (.jar)** to download the export file and save it to a hard disk.
13. Click **Return**.

Importing EBICS Resources

You can use the Resource Manager in Sterling B2B Integrator to import EBICS resources.

About this task

To import EBICS resources:

Procedure

1. Log in to Sterling B2B Integrator.
2. From the **Administration Menu**, select **Deployment > Resource Manager > Import/Export**.
3. Next to **Import Resources**, click **Go**.

4. In the Import File page, specify the values for the fields listed in the following table and click **Next**.

Field	Description
File Name	Required. Click Browse to locate and select the file to import. The file must be an XML document (.xml) or an installation bundle (.jar).
Passphrase	Optional. Specify a passphrase for the file when prompted.
Skip Backup Generation	Optional. Under Tuning Options , if you do <i>not</i> want to generate a backup of the updated entities, select the check box.
Import All Resources	Optional. Under Tuning Options , if you want to import all the resources, select the check box. For example, permissions associated with the mailbox, identity records, private key certificates are automatically imported. If you do not select this option, you are prompted to select entries to import for each resource type.

5. In the Create Resource Tag page,
 - a. This step is optional. If you want to associate the imported data with a resource group, then enter a **Tag Name** and a **Tag Description**.
 - b. Click **Next**.
6. In the Update Objects page,
 - Select **Yes** to update the objects that exist in the system.
 - Select **No** to import objects that do not exist on the system.
 Click **Next**.
7. This step may not be applicable for all imports. For each resource type selected, move the items to be imported from the **Available** list to the **To Be Imported** list. Click **Next**.
8. In the Confirm page, review the information for the resources to be imported and click **Finish**. The data is imported.
9. In the Finish page, you can perform the following actions:
 - Click **View Import Report** to review the import report.
 - Click **View Performance Report** to review the summary data in the performance report.
 - Click **Download** next to **Data in Sterling B2B Integrator before Import (xml)** to get a backed up copy of the data.

Note: If you selected the Skip Backup Generation option, the Download link is *not* displayed.
10. Click **Return**.

Chapter 20. HAC Processing

When an EBICS Customer Acknowledgment (order type HAC) is downloaded in Sterling B2B Integrator, data including status and reason code information is created as defined in EBICS Specification 2.5.

The HAC order type is a technical acknowledgment to the client providing processing status and details for submitted orders. This includes actions and results that occur while uploading, downloading, or signing files and may include information about the content of the file.

Users do not directly initiate HAC requests. Instead, HAC requests are automatically performed by the Sterling B2B Integrator EBICS Client according to defined schedules set up using the HAC scheduler. Each HAC response provides a full history of EBICS actions and status information since the last HAC request. Data from each HAC response is stored by Sterling B2B Integrator.

To view HAC data, use either the EBICS Client **Order search** viewer in Sterling B2B Integrator or **EBICS Search** in Sterling File Gateway.

Search results may contain HAC actions and reason codes as described in the following table:

Table 2. HAC Actions and Reason Codes

HAC Action	Type of Action	Reason Code	HAC Result
File submitted to the bank	FILE_UPLOAD	DS0C	User locked/certificate revoked
		DS08	Decompression error
		DS09	Decryption error
		TA01	Upload aborted
		TS01	Upload successful
File downloaded from the bank	FILE_DOWNLOAD	DS0C	User locked/certificate revoked
		DS08	Decompression error
		DS09	Decryption error
		TA01	Download aborted
		TD01	No data available for download
		TS01	Download successful
Electronic signature submitted to the bank	ES_UPLOAD	ID01	Original order folder has not been sent before
		DS0C	User locked/certificate revoked
		DS08	Decompression error
		DS09	Decryption error
		TA01	Upload of ES aborted
		TS01	Upload of ES successful

Table 2. HAC Actions and Reason Codes (continued)

HAC Action	Type of Action	Reason Code	HAC Result
Signature verification	ES_VERIFICATION	AM21	Amount exceeds limit
		DS01	ES(s) are correct
		DS0A	Number of ES(s) insufficient
		DS0B	ES(s) are not correct
		DS0C	Certificate is revoked/user is locked
		DS0D	Certificate is not valid/public key not activated
		DS0E	Certificate not present/public key doesn't exist
		DS0F	CA for certificate is unknown
		DS0G	Signer not allowed to sign this operation
		DS0H	Signer not allowed to sign this account
		DS08	Decompression error
		DS09	Decryption error
		DS10	Certificate revoked for first signer
		DS11	Certificate not valid for first signer
		DS12	Certificate not present for first signer
		DS13	CA unknown for first signer
		DS14	User (signer) is unknown on the server
		DS15	The same ES already has been sent to the bank
		DS16	Public key version not correct
		DS17	Order data and ES(s) don't match
		DS18	Repeat order (file not testable)
		DS19	Signer's ES rights are insufficient
		DS20	Certificate revoked for second signer
		DS21	Certificate not valid for second signer
		DS22	Certificate not present for second signer
		DS23	CA unknown for second signer
		DS24	Waiting time expired and file deleted by bank
		DS25	File deleted by bank (multiple reasons)
		DS26	Same user signed multiple times
		DS27	User (signer) not yet activated
TD02	File cannot be read		
TD03	The file format is invalid		
TS04	File with attributes "DZHNN" (not ES signed)		

Table 2. HAC Actions and Reason Codes (continued)

HAC Action	Type of Action	Reason Code	HAC Result
Forwarding to VEU	VEU_FORWARDING	DS06	Order transferred to the VEU
VEU signature verification	VEU_VERIFICATION	AM21	Amount exceeds limit
		DS01	ES(s) are correct
		DS0B	ES(s) are not correct
		DS0C	Certificate is revoked/user is locked
		DS0D	Certificate is not valid/public key not activated
		DS0E	Certificate not present/public key doesn't exist
		DS0F	CA for certificate is unknown
		DS0G	Signer not allowed to sign this operation
		DS0H	Signer not allowed to sign this account
		DS10	Certificate revoked for first signer
		DS11	Certificate not valid for first signer
		DS12	Certificate not present for first signer
		DS13	CA unknown for first signer
		DS14	User (signer) is unknown on the server
		DS15	The same ES already has been sent to the bank
		DS16	Public key version not correct
		DS17	Order data and ES(s) don't match
		DS18	Repeat order (file not testable)
		DS19	Signer's ES rights are insufficient
		DS20	Certificate revoked for second signer
		DS21	Certificate not valid for second signer
		DS22	Certificate not present for second signer
		DS23	CA unknown for second signer
		DS24	Waiting time expired and file deleted by bank
		DS25	File deleted by bank (multiple reasons)
		DS26	Same user signed multiple times
DS27	User (signer) not yet activated		
TD02	File cannot be read		
TD03	The file format is invalid		
End of VEU signature verification	VEU_VERIFICATION_END	DS05	Order was correct, forwarded for post-processing

Table 2. HAC Actions and Reason Codes (continued)

HAC Action	Type of Action	Reason Code	HAC Result
Cancellation of VEU order	VEU_CANCEL_ORDER	DS02	Order cancelled
		DS03	Order not cancelled
HAC end of order (positive)	ORDER_HAC_FINAL_POS	Not Provided	Final indication for successful processing of the order.
HAC end of order (negative)	ORDER_HAC_FINAL_NEG	Not Provided	Final indication for failed processing of the order.

Chapter 21. Return codes

When using EBICS Client, you may receive return codes and event messages.

Return codes for events

The tables here list the return code, the corresponding event message and a brief description of the return code.

Table 3. Return codes for events

Return Code	Event Message	Summary
EBICSCL2302	Order Data Compressed	Indicates that the order data of the transaction is compressed. No action required.
EBICSCL2303	Order Data Encrypted	Indicates that the order data of the transaction is encrypted. No action required.
EBICSCL2304	Order Data Encoded	Indicates that the order data of the transaction is encoded. No action required.
EBICSCL2305	Order Data Signed	Indicates that the order data of the transaction is signed. No action required.
EBICSCL2306	Order Data Decompressed	Indicates that the order data of the transaction is decompressed. No action required.
EBICSCL2307	Order Data Decrypted	Indicates that the order data of the transaction is decrypted. No action required.
EBICSCL2308	Order Data Decoded	Indicates that the order data of the transaction is decoded. No action required.
EBICSCL2309	Signature Data Compressed	Indicates that the signature data of the transaction is compressed. No action required.
EBICSCL2310	Signature Data Encrypted	Indicates that the signature data of the transaction is encrypted. No action required.
EBICSCL2311	Signature Data Encoded	Indicates that the signature data of the transaction is encoded. No action required.
EBICSCL2312	Signature Data Decompressed	Indicates that the signature data of the transaction is decompressed. No action required.

Table 3. Return codes for events (continued)

Return Code	Event Message	Summary
EBICSCL2313	Signature Data Decrypted	Indicates that the signature data of the transaction is decrypted. No action required.
EBICSCL2314	Signature Data Decoded	Indicates that the signature data of the transaction is decoded. No action required.
EBICSCL2300	EBICS Packaging Passed	Indicates that the packaging of the order data was successful. No action required.
EBICSCL2301	EBICS Packaging Failed	Indicates that the packaging of the order data was not successful. A few of the reasons for the failure of packaging may be a result of failure when compressing order data, or encrypting order data, or erroneous keys used in signature or encryption. Review the list of events using Event Viewer from the EBICS Client dashboard interface.
EBICSCL2500	EBICS Unpackaging Passed	Indicates that the unpackaging of the order data was successful. No action required.
EBICSCL2501	EBICS Unpackaging Failed	Indicates that the unpackaging of the order data was not successful. A few of the reasons for the failure of unpackaging may be a result of failure when decompressing order data, or decrypting order data, or erroneous keys used in signature verification. Review the list of events using Event Viewer from the EBICS Client dashboard interface.
EBICSCL2318	Valid Response Received	Indicates that you have received a valid response from the server when you submit an order type.

Table 3. Return codes for events (continued)

Return Code	Event Message	Summary
EBICSCL2319	Erroneous Response Received	Indicates that the server returned an erroneous response for a particular order request. For more information about the response, view the list of events using Event Viewer from the EBICS Client dashboard interface for technical and business return codes.
EBICSCL2320	EBICS Initialisation Request Passed	Indicates that the request has been initialized.
EBICSCL2321	EBICS Data Transfer Request Passed	Indicates that the request for transfer of data has been accepted by the bank.
EBICSCL2322	No Submitter Authority	Indicates that you do not have the user permission to submit an order. Configure the user permission for the role with authorization level set to T and permission type set to Submitter.
EBICSCL2323	Unpackaged data writing to Mailbox success	Indicates that the data was unpackaged and stored in the user mailbox.
EBICSCL2324	Unpackaged data writing to Mailbox failure	The failure to write unpackaged data to a mailbox may be a result of inadequate permission to access mailbox. For more information, see the ebicsClient.log file.
EBICSCL2325	Pending Tasks created for Authorizers	Indicates that pending tasks are created for the user. View the list of pending tasks to be signed using the EBICS Client dashboard interface.
EBICSCL2326	Pending Tasks created for Submitter	Indicates that pending tasks are created for the user who is authorized to submit orders. View the list of pending tasks to be submitted using the EBICS Client dashboard interface.
EBICSCL2327	Signature generation successful for Authorizer	Indicates that the signature generation was successful when a signatory signed an order that was pending for signature.

Table 3. Return codes for events (continued)

Return Code	Event Message	Summary
EBICSCL2328	Signature generation failed for Authorizer	Indicates that the signature generation was unsuccessful when a signatory signed an order that was pending for signature.
EBICSCL2329	OrderType is invalid	Indicates that the order type specified is invalid. Specify a valid order type.
EBICSCL2330	HostID is invalid	Indicates that the host ID or the bank ID specified is invalid. Specify a valid host ID.
EBICSCL2331	PartnerID and UserID combination is invalid	Indicates that the user ID and the associated partner ID combination is invalid. Specify a valid combination of user ID and associated partner ID.
EBICSCL2332	SystemID is invalid	Indicates that the system ID specified is invalid. Specify a valid system ID.
EBICSCL2333	Missing mandatory parameter in order metadata	Indicates that a mandatory parameter in the order metadata is not included. Review the ordermetadata.xml for the missing parameter and specify a valid value for the parameter.
EBICSCL2334	Security Medium is invalid	Indicates that the value specified for security medium is not valid. Enter a four-digit security number in the 0100 – 0499 range.
EBICSCL2335	Unable to parse Primary Document in Workflow	Re-check configuration and initiate transaction.
EBICSCL2336	Encryption Public Key not found for Bank	Upload a valid encryption key.
EBICSCL2337	Could not retrieve Key for usage	When signing or encrypting order data, the key to the alias could not be retrieved.
EBICSCL2338	Segment Upload to Host	The order data segment was successfully uploaded to the server.
EBICSCL2339	Segment Download from Host	The order data segment was successfully downloaded from the server.
EBICSCL2340	Calculated Total Number of segments to be Uploaded	EBICS Client calculates the total number of segments of an order data that is to be uploaded.

Table 3. Return codes for events (continued)

Return Code	Event Message	Summary
EBICSCL2341	Got Total Number of segments to be Downloaded	EBICS Client receives the total number of segments of an order data that is to be downloaded.
EBICSCL2342	Auto Submit value is invalid	Indicates that the value defined for autosubmit is not valid and therefore the order cannot be automatically submitted. Enter a valid value for the autosubmit parameter. Valid values are true and false.
EBICSCL2343	Country code value is invalid	Indicates that the abbreviation for a country is not valid. Specify a valid format for country abbreviations.
EBICSCL2344	Host not yet Active	Indicates that the server at the bank is not yet active. Download the bank keys using the HPB order type and validate the bank keys.
EBICSCL2345	User not yet Ready	Indicates that the subscriber initialization for the user is not yet complete. Generate the INI and HIA letters for the user associated with the partner and send them to the bank for validation.
EBICSCL2346	Response data writing to Mailbox success	Indicates that the response received from the bank was successfully stored in the mailbox.
EBICSCL2347	Response data writing to Mailbox failure	The failure to write response data to a mailbox may be a result of inadequate permission to access mailbox. For more information, see the ebicsClient.log file.
EBICSCL2348	Error putting message into Mailbox	Indicates that the message could not be uploaded to the mailbox.
EBICSCL2349	No Response from Server	Indicates that the server did not respond when a request was sent to the server.
EBICSCL2350	Invalid response from Server	Indicates that the server returned an invalid response when a request was sent to the server.

Table 3. Return codes for events (continued)

Return Code	Event Message	Summary
EBICSCL2392	Mandatory Parameter for HttpClient missing	Indicates that the name of the configured http client adapter is null, or adapter properties are missing, or if the host or port is not configured properly. If SSL is enabled, CA certificate is not configured.
EBICSCL2393	HttpClient Instance Not Found	Indicates that the http client adapter instance is missing.
EBICSCL2394	Error in Ending HTTP Session with Server	Indicates that an error occurred when ending the HTTP session with the server, which may be a result of not finding a valid session.
EBICSCL2395	Host Not Found	Indicates that the host or port is not configured properly.
EBICSCL2396	Handshake Failure	When connecting to the server using SSL. the connection may be unsuccessful, for example, because of invalid certificates.
EBICSCL2398	Could not complete connection to specified host	Indicates that the client was unable to connect to a host even when the session was successfully started.
EBICSCL2351	Invalid key length for signature	Indicates that the length of the bank-technical keys is invalid for signature. Ensure that the key length is equal to or greater than 1536 bit and equal to or lesser than 4096 bit. For information about defining EBICS-specific key lengths for electronic signature, encryption, and authentication, see <i>EBICS Specification, version 2.4.2</i> .

Table 3. Return codes for events (continued)

Return Code	Event Message	Summary
EBICSCL2352	Invalid key length for authentication	Indicates that the length of the bank-technical keys is invalid for identification and authentication. Ensure that the key length is equal to or greater than 1024 bit and equal to or lesser than 16384 bit. For information about defining EBICS-specific key lengths for electronic signature, encryption, and authentication, see <i>EBICS Specification, version 2.4.2</i> .
EBICSCL2353	Invalid key length for encryption	Indicates that the length of the bank-technical keys is invalid for encryption. Ensure that the key length is equal to or greater than 1024 bit and equal to or lesser than 16384 bit. For information about defining EBICS-specific key lengths for electronic signature, encryption, and authentication, see <i>EBICS Specification, version 2.4.2</i> .
EBICSCL2354	Error in starting HTTP Session with Server	Indicates that an error occurred when starting an HTTP session with the server.
EBICSCL2355	Error in parsing OrderMetadata Document with Message ID	Check whether the XML is well-formed or not.
EBICSCL2356	Technical Subscriber does not have permissions to be a delegate of the User specified	Configure technical user and associate the technical user with an existing user.
EBICSCL2357	Error while trying to retrieve message from Mailbox	Indicates that an error occurred when retrieving a message from the mailbox.
EBICSCL2358	Error in parsing OrderMetadata Document	Check whether the XML is well-formed.
EBICSCL2359	Signature Application Rejected	Signature application rejected because the signature requirements were already met for the order.
EBICSCL2360	Submission Application Rejected	Submission application rejected because the order has already been submitted to the bank.

Table 3. Return codes for events (continued)

Return Code	Event Message	Summary
EBICSCL2361	Ordermetadata file is not a zip file or no files present inside the zip	Ensure that the ordermetadata file is in a compressed format and that the zip file has valid content.
EBICSCL2362	Incorrect number of files present in Ordermetadata zip	Indicates that the number of files present in the ordermetadata.zip file is incorrect. For example, when submitting an FUL order type from back-end, if the zip file does not contain either the payload data or the ordermetadata.xml or both.
EBICSCL2363	Missing file with name ordermetadata.xml in Ordermetadata zip	Ensure that the zip file contains a file with the name ordermetadata.xml.
EBICSCL2364	Missing Payload file in Ordermetadata zip for OrderType FUL	Ensure that the zip file contains the payload order data for order type FUL.
EBICSCL2365	Error while trying to retrieve Transport URL or other mandatory transport parameters	Indicates that the host URL is malformed or the client is unable to retrieve HTTP configuration details from the database.
EBICSCL2366	Error while decrypting the data	An error occurred when decrypting the data. The error may be a result of, for example, encrypting the data with the wrong certificate or if the data is not complete.
EBICSCL2367	Error while encrypting the data	Indicates that the key was not found.
EBICSCL2368	Error while creating XML authentication	The error may be a result of , for example, certificate not configured or unable to retrieve the certificate.
EBICSCL2369	Error while verifying XML authentication	The error may be a result of , for example, certificate not configured or unable to retrieve the certificate.
EBICSCL2370	Unexpected Return code from Server	The server returned an error not defined in the client database.
EBICSCL2371	EBICS Client Internal Error	An internal error occurred when processing an EBICS request.

Return codes for HPB

Table 4. Return codes for HPB

Return Code	Event Message	Summary
EBICSCL1701	EBICS HPB Request Creation Failed	An error occurred when creating an HPB request.
EBICSCL1702	EBICS HPB Request Creation Passed	The HPB order request was created successfully.
EBICSCL1703	EBICS HPB Response Parsing Failed	An error occurred when parsing an HPB response.
EBICSCL1704	EBICS HPB Response Parsing Passed	The HPB response was parsed successfully.
EBICSCL1705	EBICS HPB Response Un-Packing Passed	The HPB response was unpacked successfully.
EBICSCL1706	EBICS HPB Response Un-Packing Failed	An error occurred when unpacking an HPB response.
EBICSCL1707	EBICS HPB Bank Certs Save Failed	An error occurred when saving the bank keys.
EBICSCL1708	EBICS HPB Bank Certs Save Pass	The HPB bank keys were saved successfully.

Return codes for keys

Table 5. Return codes for keys

Return Code	Event Message	Summary
EBICSCL2372 to EBICSCL2381	Could not retrieve Private Key for usage	<p>The following is a list of possible reasons for failure to retrieve private keys:</p> <ul style="list-style-type: none"> • SystemCertificate not found in Database • Certificate is Expired • Certificate Not Yet Valid • Certificate is Held • Certificate is Revoked • Invalid Issuer Signature for a certificate in the chain • CertPathValidation failed • Error in Certificate • Error in fetching Certificate • Error in fetching key from RSA KeyStore

Table 5. Return codes for keys (continued)

Return Code	Event Message	Summary
EBICSCL2382 to EBICSCL2391	Could not retrieve Public Key for usage	<p>The following is a list of possible reasons for failure to retrieve public keys:</p> <ul style="list-style-type: none"> • Key not found in Database • Certificate is Expired • Certificate Not Yet Valid • Certificate is Held • Certificate is Revoked • Invalid Issuer Signature for a certificate in the chain • CertPathValidation failed • Error in Certificate • Error in fetching Certificate • Error in fetching key from RSA KeyStore

Return codes for generating order IDs

Table 6. Return codes for generating order IDs

Return Code	Event Message	Summary
EBICSCL2399	OrderID generation re-initialized	Indicates that the last three alphanumeric values in the order ID, which can range from 000 to zzz, was re-initialized to 000.
EBICSCL2400	Order logging failed in the EBICS client system	The order ID already exists in the system for partner ID. Contact administrator for further action.
EBICSCL2401	OrderID generation failed	In a multi-node scenario, when one of the nodes fails to refresh the order ID cache and consequently fails to generate an Order ID for a particular order.
EBICSCL2402	OrderID Cache configuration error	Check the configuration for order ID cache under System Properties.

Technical return codes

Table 7. Technical return codes

Return Code	Event Message	Summary
ESRVT011000	[t011000] EBICS_DOWNLOAD_POSTPROCESS_DONE	The positive acknowledgment of the EBICS response that is sent to the client from the server.

Table 7. Technical return codes (continued)

Return Code	Event Message	Summary
ESRVT011001	[t011001] EBICS_DOWNLOAD_POSTPROCESS_SKIPPED	The negative acknowledgment of the EBICS response that is sent to the client from the server.
ESRVT011101	[t011101] EBICS_TX_SEGMENT_NUMBER_UNDERRUN	The server terminates the transaction if the client, in an upload transaction, has specified a very high (when compared to the number specified in the initialization phase) number of segments that are to be transmitted to the server.
ESRVT031001	[t031001] EBICS_ORDER_PARAMS_IGNORED	The supplied order parameters that are not supported by the bank are ignored.
ESRVT061001	[t061001] EBICS_AUTHENTICATION_FAILED	The bank is unable to verify the identification and authentication signature of an EBICS request.
ESRVT061002	[t061002] EBICS_INVALID_REQUEST	The received EBICS XML message does not conform to the EBICS specifications.
ESRVT061099	[t061099] EBICS_INTERNAL_ERROR	An internal error occurred when processing an EBICS request.
ESRVT061101	[t061101] EBICS_TX_RECOVERY_SYNC	If the bank supports transaction recovery, the bank verifies whether an upload transaction can be recovered. The server synchronizes with the client to recover the transaction.
ESRVT091002	[t091002] EBICS_INVALID_USER_OR_USER_STATE	Error that results from an invalid combination of user ID or an invalid subscriber state.
ESRVT091003	[t091003] EBICS_USER_UNKNOWN	The identification and authentication signature of the technical user is successfully verified but the non-technical subscriber is not known to the bank.
ESRVT091004	[t091004] EBICS_INVALID_USER_STATE	The identification and authentication signature of the technical user is successfully verified and the non-technical subscriber is known to the bank, but the user is not in a 'Ready' state.
ESRVT091005	[t091005] EBICS_INVALID_ORDER_TYPE	Upon verification, the bank finds that the order type specified is invalid.
ESRVT091006	[t091006] EBICS_UNSUPPORTED_ORDER_TYPE	Upon verification, the bank finds that the order type specified is valid but not supported by the bank.

Table 7. Technical return codes (continued)

Return Code	Event Message	Summary
ESRVT091007	(H003 protocol) [t091007] EBICS_USER_AUTHENTICATION_REQUIRED (H004 protocol) [t091007] EBICS_DISTRIBUTED_SIGNATURE_AUTHORISATION_FAILED	Subscriber possesses no authorization of signature for the referenced order in the VEU administration.
ESRVT091008	[t091008] EBICS_BANK_PUBKEY_UPDATE_REQUIRED	The bank verifies the hash value sent by the user. If the hash value does not match the current public keys, the bank terminates the transaction initialization.
ESRVT091009	[t091009] EBICS_SEGMENT_SIZE_EXCEEDED	If the size of the transmitted order data segment exceeds 1 MB, the transaction is terminated.
ESRVT091010	[t091010] EBICS_INVALID_XML	The XML schema does not conform to the EBICS specifications.
ESRVT091011	[t091011] EBICS_INVALID_HOST_ID	The transmitted host ID is not known to the bank.
ESRVT091101	[t091101] EBICS_TX_UNKNOWN_TXID	The supplied transaction ID is invalid.
ESRVT091102	[t091102] EBICS_TX_ABORT	If the bank supports transaction recovery, the bank verifies whether an upload transaction can be recovered. If the transaction cannot be recovered, the bank terminates the transaction.
ESRVT091103	[t091103] EBICS_TX_MESSAGE_REPLAY	To avoid replay, the bank compares the received Nonce with the list of nonce values that were received previously and stored locally. If the nonce received is greater than the tolerance period specified by the bank, the response EBICS_TX_MESSAGE_REPLAY is returned.
ESRVT091104	[t091104] EBICS_TX_SEGMENT_NUMBER_EXCEEDED	The serial number of the transmitted order data segment must be less than or equal to the total number of data segments that are to be transmitted. The transaction is terminated if the number of transmitted order data segments exceeds the total number of data segments.

Table 7. Technical return codes (continued)

Return Code	Event Message	Summary
ESRVT091112	[t091112] EBICS_INVALID_ORDER_PARAMS	<p>This error can have different causes.</p> <p>For example, in an HVT request, the subscriber specifies the order for which they want to retrieve the VEU transaction details. You can define an offset position in the original order file in the customer system. The order details are returned after the offset position. If the value specified for offset is higher than the total number of order details, the error EBICS_INVALID_ORDER_PARAMS is returned.</p> <p>The error EBICS_INVALID_ORDER_PARAMS may also be returned for FUL or FDL orders when there is a mismatch between the order type and file format set up in the server configuration and the request from the client.</p>
ESRVT091113	[t091113] EBICS_INVALID_REQUEST_CONTENT	The EBICS request does not conform to the XML schema definition specified for individual requests.
ESRVT091117	[t091117] EBICS_MAX_ORDER_DATA_SIZE_EXCEEDED	The bank does not support the requested order size.
ESRVT091118	[t091118] EBICS_MAX_SEGMENTS_EXCEEDED	The submitted number of segments for upload is very high.
ESRVT091119	[t091119] EBICS_MAX_TRANSACTIONS_EXCEEDED	The maximum number of parallel transactions per customer is exceeded.
ESRVT091120	[t091120] EBICS_PARTNER_ID_MISMATCH	The partner ID of the electronic signature file differs from the partner ID of the submitter.

Table 7. Technical return codes (continued)

Return Code	Event Message	Summary
ESRVT091121	[t091121] EBICS_INCOMPATIBLE_ORDER_ATTRIBUTE	The specified order attribute is not compatible with the order in the bank system. If the bank has a file with the attribute DZHNN or other electronic signature files (for example, with the attribute UZHNN) for the same order, then the use of the order attributes DZHNN is not allowed. Also, if the bank already has the same order and the order was transmitted with the order attributes DZHNN, then again the use of the order attributes DZHNN is not allowed.
(H004 protocol) ESRVT091219	[t091219] EBICS_CERTIFICATES_VALIDATION_ERROR	The server is unable to match the certificate with the previously declared information automatically.

Bank-technical return codes

Table 8. Bank-technical return codes

Return Code	Event Message	Summary
ESRVB011301	[b011301] EBICS_NO_ONLINE_CHECKS	The bank does not principally support preliminary verification of orders but the EBICS request contains data for preliminary verification of the order.
ESRVB091001	[b091001] EBICS_DOWNLOAD_SIGNED_ONLY	The bank system only supports bank-technically signed download order data for the order request. If the subscriber sets the order attributes to DZHNN and requests the download data without the electronic signature of the bank, the transaction initialization is terminated.
ESRVB091002	[b091002] EBICS_DOWNLOAD_UNSIGNED_ONLY	The bank system only supports unsigned download order data for the order request. When it is agreed that the subscriber can download order data only without the electronic signature of the bank, if the subscriber sets the order attributes to OZHNN and requests the download data with the electronic signature of the bank, the transaction initialization is terminated.

Table 8. Bank-technical return codes (continued)

Return Code	Event Message	Summary
ESRVB090003	[b090003] EBICS_AUTHORISATION_ ORDER_TYPE_FAILED	The subscriber is not entitled to submit orders of the selected order type. If the authorization is missing when the bank verifies whether the subscriber has a bank-technical authorization of signature for the order, the transaction is cancelled.
ESRVB090004	[b090004] EBICS_INVALID_ORDER_ DATA_FORMAT	The order data does not correspond with the designated format.
ESRVB090005	[b090005] EBICS_NO_DOWNLOAD_ DATA_AVAILABLE	If the requested download data is not available, the EBICS transaction is terminated.
ESRVB090006	[b090006] EBICS_UNSUPPORTED_ REQUEST_ FOR_ORDER_INSTANCE	In the case of some business transactions, it is not possible to retrieve detailed information of the order data.
ESRVB091105	[b091105] EBICS_RECOVERY_NOT_ SUPPORTED	If the bank does not support transaction recovery, the upload transaction is terminated.
ESRVB091111	[b091111] EBICS_INVALID_ SIGNATURE_ FILE_FORMAT	The submitted electronic signature file does not conform to the defined format.
ESRVB091114	[b091114] EBICS_ORDERID_ UNKNOWN	Upon verification, the bank finds that the order is not located in the VEU processing system.
ESRVB091115	[b091115] EBICS_ORDERID_ALREADY_ EXISTS	The submitted order number already exists.
ESRVB091116	[b091116] EBICS_PROCESSING_ERROR	When processing an EBICS request, other business-related errors occurred.
ESRVB091201	[b091201] EBICS_KEYMGMT_ UNSUPPORTED_ VERSION_SIGNATURE	When processing an INI request, the order data contains an inadmissible version of the bank-technical signature process.
ESRVB091202	[b091202] EBICS_KEYMGMT_ UNSUPPORTED_ VERSION_ AUTHENTICATION	When processing an HIA request, the order data contains an inadmissible version of the identification and authentication signature process.
ESRVB091203	[b091203] EBICS_KEYMGMT_ UNSUPPORTED_ VERSION_ENCRYPTION	When processing an HIA request, the order data contains an inadmissible version of the encryption process.
ESRVB091204	[b091204] EBICS_KEYMGMT_ KEYLENGTH_ ERROR_SIGNATURE	When processing an INI request, the order data contains an bank-technical key of inadmissible length.

Table 8. Bank-technical return codes (continued)

Return Code	Event Message	Summary
ESRVB091205	[b091205] EBICS_KEYMGMT_KEYLENGTH_ERROR_AUTHENTICATION	When processing an HIA request, the order data contains an identification and authentication key of inadmissible length.
ESRVB091206	[b091206] EBICS_KEYMGMT_KEYLENGTH_ERROR_ENCRYPTION	When processing an HIA request, the order data contains an encryption key of inadmissible length.
ESRVB091207	[b091207] EBICS_KEYMGMT_NO_X509_SUPPORT	A public key of type X509 is sent to the bank but the bank supports only public key value type.
ESRVB091208	[b091208] EBICS_X509_CERTIFICATE_EXPIRED	The certificate is not valid because it has expired.
ESRVB091209	[b091209] EBICS_X509_CERTIFICATE_NOT_VALID_YET	The certificate is not valid because it is not yet in effect.
ESRVB091210	[b091210] EBICS_X509_WRONG_KEY_USAGE	When verifying the certificate key usage, the bank detects that the certificate is not issued for current use.
ESRVB091211	[b091211] EBICS_X509_WRONG_ALGORITHM	When verifying the certificate algorithm, the bank detects that the certificate is not issued for current use.
ESRVB091212	[b091212] EBICS_X509_INVALID_THUMBPRINT	The thumb print does not correspond to the certificate.
ESRVB091213	[b091213] EBICS_X509_CTL_INVALID	When verifying the certificate, the bank detects that the certificate trust list (CTL) is not valid.
ESRVB091214	[b091214] EBICS_X509_UNKNOWN_CERTIFICATE_AUTHORITY	The chain cannot be verified because of an unknown certificate authority (CA).
ESRVB091215	[b091215] EBICS_X509_INVALID_POLICY	The certificate has invalid policy when determining certificate verification.
ESRVB091216	[b091216] EBICS_X509_INVALID_BASIC_CONSTRAINTS	The basic constraints are not valid when determining certificate verification.
ESRVB091217	[b091217] EBICS_ONLY_X509_SUPPORT	The bank supports evaluation of X.509 data only.
ESRVB091218	[b091218] EBICS_KEYMGMT_DUPLICATE_KEY	The key sent for authentication or encryption is the same as the signature key.
ESRVB091301	[b091301] EBICS_SIGNATURE_VERIFICATION_FAILED	Verification of the electronic signature has failed.

Table 8. Bank-technical return codes (continued)

Return Code	Event Message	Summary
ESRVB091302	[b091302] EBICS_ACCOUNT_AUTHORISATION_FAILED	Preliminary verification of the account authorization has failed.
ESRVB091303	[b091303] EBICS_AMOUNT_CHECK_FAILED	Preliminary verification of the account amount limit has failed.
ESRVB091304	[b091304] EBICS_SIGNER_UNKNOWN	The signatory of the order is not a valid subscriber.
ESRVB091305	[b091305] EBICS_INVALID_SIGNER_STATE	The state of the signatory is not admissible.
ESRVB091306	[b091306] EBICS_DUPLICATE_SIGNATURE	The signatory has already signed the order.

Return codes for VEU

Table 9. Return codes for VEU

Return Code	Event Message	Summary
EBICSCL1050	Error while Unmarshalling the ResponseOrderData and persisting into DB	Indicates that the response order data is not well-formed.

Return codes for console events

Table 10. Return codes for console events

Return Code	Event Message	Summary
EBICSCL9000	User created successfully	The user profile was created successfully.
EBICSCL9001	User updated successfully	The user profile was updated successfully.
EBICSCL9002	User deleted successfully	The user profile was deleted successfully.
EBICSCL9003	User creation failed	Creating of a user profile failed. This error may be the result of, for example, the user profile already exists or if the parameters in the user configuration have invalid values.
EBICSCL9004	User update failed	Verify that the parameters for user configuration have valid values or if the connection to the database is down.
EBICSCL9005	User deletion failed	Verify that the parameters for user configuration have valid values or if the connection to the database is down.

Return codes for login

Table 11. Return codes for login

Return Code	Event Message	Summary
EBICSCL9020	User Login was successful	The user was successfully logged onto the system.
EBICSCL9021 and EBICSCL9022	User Login failed	An attempt to log on to the hub was unsuccessful because of invalid user name or password or insufficient privileges.
EBICSCL9023	User does not have privilege to access the URI	Verify that you have the correct permission and role to access the URI.
EBICSCL9024	The following features must be licensed as EBICS Client	Obtain the license from IBM Support.

Return codes for file format

Table 12. Return codes for file format

Return Code	Event Message	Summary
EBICSCL9050	File format created successfully	The file format was created successfully.
EBICSCL9051	File format updated successfully	The file format was updated successfully.
EBICSCL9052	File format creation failed	Verify that the parameters for file format configuration have valid values or if the connection to the database is down.
EBICSCL9053	File format update failed	Verify that the parameters for file format configuration have valid values or if the connection to the database is down.
EBICSCL9054	File format deleted successfully	The file format was deleted successfully.
EBICSCL9055	File format deletion failed	Verify that the connection to the database is up or if the order type is associated with the appropriate file format.

Return codes for bank

Table 13. Return codes for bank

Return Code	Event Message	Summary
EBICSCL9070	Bank created successfully	The bank profile was created successfully.
EBICSCL9071	Bank updated successfully	The bank profile was updated successfully.

Table 13. Return codes for bank (continued)

Return Code	Event Message	Summary
EBICSCL9072	Bank creation failed	Verify that the parameters for bank configuration have valid values or if the connection to the database is down.
EBICSCL9073	Bank update failed	Verify that the parameters for bank configuration have valid values or if the connection to the database is down.
EBICSCL9074	Bank deleted successfully	The bank profile was deleted successfully.
EBICSCL9075	Bank deletion failed	Verify that the connection to the database is up.
EBICSCL9076	Bank key validated successfully	The bank key was validated successfully.
EBICSCL9077	Bank key validation failed	The hash value received from the bank does not match the hash value stored in EBICS Client system.

Return codes for order submission

Table 14. Return codes for order submission

Return Code	Event Message	Summary
EBICSCL9090	Order submitted successfully	The order was submitted successfully.
EBICSCL9095	Order submission failed	A few of the reasons for the failure of order submission are, if the submitter does not have the required permission, if the certificates are not valid, if the validation of bank keys failed, and so on.

Return codes for offer

Table 15. Return codes for offer

Return Code	Event Message	Summary
EBICSCL9101	Offer created successfully	The offer was created successfully.
EBICSCL9102	Offer creation failed	Verify that the connection to the database is up.
EBICSCL9103	Offer updated successfully	The offer was updated successfully.
EBICSCL9104	Offer update failed	Verify that the connection to the database is up.

Table 15. Return codes for offer (continued)

Return Code	Event Message	Summary
EBICSCL9105	Offer deleted successfully	The offer was deleted successfully.
EBICSCL9106	Offer deletion failed	Verify that the connection to the database is up.

Return codes for user permissions

Table 16. Return codes for user permissions

Return Code	Event Message	Summary
EBICSCL9120	User Permissions created successfully	The user permission was created successfully.
EBICSCL9121	User Permissions creation failed	Verify that the connection to the database is up.
EBICSCL9122	User Permissions updated successfully	The user permission was updated successfully.
EBICSCL9123	User Permissions update failed	Verify that the connection to the database is up.
EBICSCL9124	User Permissions deleted successfully	The user permission was deleted successfully.
EBICSCL9125	User Permissions deletion failed	Verify that the connection to the database is up.

Return codes for pending signature

Table 17. Return codes for pending signature

Return Code	Event Message	Summary
EBICSCL9141	Signature submitted	The signature was submitted successfully.
EBICSCL9142	Signature submission failed	Verify that the connection to the database is up or if the message was written successfully to the mailbox.
EBICSCL9143	Signature updated	The signature was updated successfully.
EBICSCL9144	Signature update failed	Verify that the connection to the database is up or if the message was written successfully to the mailbox.

Return codes for pending VEU signature

Table 18. Return codes for pending VEU signature

Return Code	Event Message	Summary
EBICSCL9151	VEU Signature submitted	The VEU signature was submitted successfully.

Table 18. Return codes for pending VEU signature (continued)

Return Code	Event Message	Summary
EBICSCL9152	VEU Signature submission failed	Verify that the connection to the database is up or if the message was written successfully to the mailbox.

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